

STATEMAP 2007-08

SMART

3 of 3

736 - 1108



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ALL-WEATHER
GEOLOGICAL

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ALL-WEATHER
GEOLOGICAL FIELD BOOK

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Project **STATEMAP 2007-2008**

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Location _____

Date 1. 8. 08

Project / Client _____

94

737 35 57 55.5 + 23
92 29 29.4 - 23

Assessing Big Creek Faults
standing in front of "scree" slope
and/or fault zone. trying to
see top of set (we could see
it from field last week; est ~20-30
need to climb up and check
looks like Osp in creek
to the north; De bluffs from
creek l to the south.

738 35 57 56.8 + 23
92 29 26.8 -

~80-100' above creek bed.
covered etc b/t De/Osp
maybe standing ~20' up from
etc (inferred due to slope change)

but print makes dominant
etc of Osp bluff (ledge)

96 ~30-40' thick to etc w/ Op above

739 35 57 56.5 + 23
92 29 27.9

pt taken @ Osp/Op. [on
down than side] However there
is ~8' of visible offset

Location _____

Date _____

Project / Client _____

Scale _____

739 would here. I'm a little disappointed
w/ only 8'...

Maybe a EW strike. to fault
hard to tell direction
(N80°E)

740 35 57 55.3 + 22
92 29 27.9

Real deallio fault zone.
standing on Osp/Op directly
adj to Osp bluff [down drop to N]
bearing to last weeks drainage
is N 50-70 W. Osp bluff
looks to continue ~20' below
will get another Osp/Op etc
on up than side etc → was
only ~20' of off set. de ledge
was just above

good view of opposite drainage
bearing is still N 65 W

741/ 35 57 55.3 ± 24
92 29 29.7

Op/Of or down thorn side
99 (the stain)

742/ 35 57 52.8 ± 21
92 29 29.7

Of/Msg on up thorn side

w/Msg ± 18-24"

Msg exposure is only ~1" visible
is v-p xtl white - lt gray pyritic
light Mn stain.

100
743/ 35 58 7.3
92 29 30.9 ± 25"

top of Of; no float obs above
this point. No msg obs though
either Op etc is 20-25" below
dip on Op creek N2°-3°

744/ 35 58 10.1 ± 22"
92 29 33.4

Op/Of on NW side of draw
doesn't feet too off set. Hard to see

102
745/ 35 57 50.5
92 26 32.4 ± 29"

Of rising up out of creek,
dip looks to be in the
downstream direction (generally)

Of is sandy dolomite; grey
NSW ~~cont~~ N65W

NSW strike

some def bands

103
N40W dip

746/ 35 57 48.2 ± 12
92 26 25.6

Of coming back down to creek
a small (4x6") chunk is v.s.ble
in creek bed 30 yds back. may have
been float (?). at this point, Of
forms bluffs on the banks (weathered
w/veg) that are ~20" high (broad)

dip direction is upstream now
as evident in ~~banks~~ or
bluffs on bank.

N10E 30E
Msg visible as float

1.9.08

104

747 35 57 46.6 + 20°
92 26 19.8

Osp / Osp of spring as usual.

dip (apparently) is greater here
in the bend. [N/5 50E]

105

748 35 57 48.2 + 16°
92 26 15.7

Osp / Mst adj. to road @ beginning
of smaller drainage to Cedar

Osp seemed thin; but that may be due

106 to dip visibility [N15W 90E]
749 35 57 7.6
92 25 55.6 + 18°

Hiked up the small drainage
b/t "7 point" hill and "pond hill"

[Nice people, neighbors to Ritter]

looking for more evidence of

the fault, but most all M_B

rocks were covered. The very few
(hill slopes) beds we did see

were flat lying. Wish

I knew enough M_B to break out
members.

1.9.08

107

750 35 57 8.0 + 18°
92 26 30.0

Hollow west of Young Hollow
looking for off set (?) pt marks
spring point of our search

* just down str (toward the main
channel)

there is a

bed of M_B in crack w/

108

751 35 57 7.5 + 25°
92 26 36.6

* sweet.

[N20E]

[16° ESE]

woah! looks like fault drag
on some M_B beds. impossible
to tell the off set though...

photo shows sequence of beds
at the base that could be distinctive
markers due to weathering. (massive
blocky thin units) but not visible
on the down draped side (which is
the hanging wall; down drag to N)



1.9.08

751 cont'd



Plane

N25W 31° ENE

109

752

35	56	37.1	± 18°
92	27	3.5	

M₀/M_{ST} [hiking down str.]

M_{ST} is dark grey w/ pink blobs
M₀ and pyrite throughout
some ~~dark~~ grey also.

looks like dip to the west
but may be just has tiny
fall in... hard to tell

M_{ST} is probably only 5' thick
Of lines creek about 50 yds
down.

1.9.08

10

753

35	56	30.6	± 23°
92	27	6.7	

Of/O_p; O_p is just peaking out
of creek bed. O_f knobs
still on the banks around the
bend. (Can see the old
road that is on the map!)

1/10.08

11

754

35	57	10.8	± 17°
92	24	19.0	

looking for fault in [Young Hollow]
W of wallis cemetery. pt
marks: last M₀ float in creek
bed ~~is~~ is increasingly shaly (clay)
w/ more M_{ST} as well. Not really
great evidence for fault.

112

755

35	57	12.6	± 24°
92	24	17.0	

silty shale banks w/ beds of M_{ST}
above. M_m/M_{ST} (Spring from here)

1.10.08

113

756 35 57 00.3 ± 19°
92 24 31.9

M_B/M_m coming down old road followed M_m/M_{or} around looking for faulting, but no evidence. going back to look in the creek

[N85E 11° N] → dip in creek on M_B presumably on the N side of the fault still no structure to be certain.

114

757 35 56 52.8 ± 20°
92 24 41.8

confluence area N5E 20°W on M_B surface different bed than before. (of s. blocks jointed up) ~~but~~ but don't know up or down section

115 or offset ...

758 35 56 59.7 ± 19°
92 24 41.1 N40E 15 NW

Dip changes direction, but vegetation and soils cover any possible offsets.

1.10.08

116

759 35 57 4.8 ± 16°
92 24 47.9

Seems like we are up pretty high on the hill in this field. A small drainage cuts through this top. I am sitting on a small eroded area of M_m (shaly, silty) on the WSW side of the drainage there is lots of chert M_B? will walk over & up to check it out see AFFIRMATIVE! wooded area shows distinct M_B

draw is the fault.
1.14.08

760 35 58 26.9 ± 22°
92 28 21.2

hiked up this drainage. pt marks potential loc for top of dp. only gully on flat. no steps. All M_B covered.

1.14.08

2

(761) 35 58 28.8
92 28 24.5 ± 15

Much better O_p / O_f . good etc. only slightly curved.

▲ $M_{SS} \approx 8-10'$ above the pt

[$O_f = 8-10'$ m]

(762) 35 58 21.6 ± 21
92 28 34.4 ± 21

hiked back down stream. found another section of O_f (1st below the pt here) w/o O_p .

pt marks O_f / M_{SS} ; looks like all is dipping into hillside rising up from creek below

4 possible faulting.

(763) 35 58 19.0 ± 21
92 28 38.6

O_f / M_{SS} looks again like M_{SS} is dipping into the hillside (strongly) so maybe cutting through O_f making it look like its thicker

1.14.08

Scale _____

(763 cont'd) K.H. tried to get S_{SD} ...

5 NSE 26° N

(764) 35 58 17.7 ± 21
92 28 39.8

O_p / O_f ; dip doesn't seem to be as strong. just a few degrees

so O_p must have thickened some? (or is there off set?) [5-8° dip]

(765) 35 58 15.5 ± 17
92 28 45.2 ± 17

Nice spring / seep @ top of O_p . good bluff $\approx 10-15'$ down

(766) 35 58 43.0 ± 17
92 28 40.0 ± 17

M_B / M_{SS} etc some really

▲ m_n rich M_{SS} (even a little hefty) some dig piles indicate past mining

good J_{SD} in M_B ab! ▲

1.14.08

8

(767) 35 58 39.4 ± 15
92 28 39.9

Op / Msj, Msj ~ 10-15 ft.

9/several dig pits in area.

(768) 35 58 38.0 ± 14-
92 28 40.0

top of Op; covered etc w/ Of
inferred @ top of float and
by contour of ad; otcps to
N.

(769) 35 58 37.4 ± 24-
92 28 45.3

Op / Op; little ~~of~~ b7

seepy. as usual.

11. cant really see any dipping.

(770) 35 59 00.6 ± 20-
92 28 27.0

Msj / Mb

small otcps w/ exposed
in the corner by Msj
seems slightly

higher (~ 20' perhaps) than @ quarry
not to mention the Op around the
corner. check w/ summer pt's for exact

Scale _____

(770) ~~contd~~

in fact Op is @ road level
looks like 2' ± 20' of Of ^{inferred}
but cant find any good otcps
or float.

revised... found a good Op up
higher on hill; leaves only 25'
for Of if at all. R.H. says 25-10
on opposite side of road.

(771) 35 59 2.2 ± 15-
92 28 27.3

top of Op; only room for
about 3' of Of (though absent)

13 before Msj.

(772) 35 58 57.6 ± 12-
92 28 32.6

Op / Of / Msj good otcps,
5-8'

Concerning 771/772; Op otcps all
the road (road cuts) show the Op
change up into the drainage. so...
maybe that covered number for Of in
some areas...

Location _____

Date 1.15.08

Project / Client Very cold today 2250
12)

(773) 35 54 1.8 ± 20.
92 36 59.6

last ledge of ~~Mp~~ Mp
yellowish some cooids, Pch float all
around. ^{covering} ~~covering~~ well, even to
~30' down toward highway

(774) 35 54 10.4 ± 23
92 36 58.5

last Mp around below the
old house. not as good
a ledge but nonetheless.

(775) 35 54 14.8 ± 22.
92 36 44.8

standing in Mp, etc w/ MFU

is prob ~40' below; steep
gully.

(776) 35 54 22.9 ± 24.
92 36 54.2

it is b/t the last shale +
first bio clastic @ MFU / Mp
etc. Higher on hill than we ~~thought~~
thought

Location _____

Date 1.15.08 17

Project / Client _____

Scale _____

18 (777) 35 54 42.0
92 36 42.9 ± 21'

MFU / Mp + pt. is prob.

~20' below, too steep to
climb down.

19 (778) 35 54 44.1 ± 26.
92 36 54.9

top of MFU (last shale
before massive)
probably 25-30' down last
from the field along the nose
above.

20 (779) 35 54 36.1 ± 16' [false
Batic]

top bed of Mp thin beds (on
remnants) of blackish-yellowish
silty shale taken to be Pch shales
no cooids noted thus far though.

- Following up the road (toward the high)
there seems to be plenty of Mp
float... no sand.

21

(780) 35 54 32.8 ± 21
92 36 12.8

top of last M_{FV} shale bed
directly above is vfg_r limst ^{strong} slight
Foss, petro.

▲ M_{FV} / M_P there are some pinkish
veins; maybe Fluorite.

22
(781) 35 54 30.0
92 86 38.7 ± 28

M_{FV} / M_P even a little
scrap and travertine.

@ top of last vfg_r, micritic
limst of M_{FV}

(782) 35 54 5.3 + 23
92 36 49.1 → only 2/ exposed

last M_P bed. Part sandstone

above. M_P is reddish grey + sandy

(783) 35 53 43.3
92 36 51.5 ± 16

M_{FV} / M_P

Scale _____

25

(784) 35 53 45.4 ± 20
92 33 0.4

• M_M / M_{BV} / M_{FV} shales, soft sed
dot w/ cst above
2 15-20' (calc cst)

of M_{BV} to road; M_{FV} above that.
Standing 2 15' above creek
(c+c)

M_{FV} has small scale, (wad side?)

• Xbeds. look like they're concentrated
in zones (channels?)

• Slope creep above this drainage
(fence posts creeping) GEORGE
probably a spring / seep up @
M_{FV} / M_P bringing Foss off of
Bene Mt.

(785) 35 53 38.6 ± 17
92 33 32.5

inferred c/c at M_{FV} / M_P

only have float of last Micritic

M_{FV} thin Foss M_P above

other clues in road up this slope

c/c forms good bluffs on this mt.

Location Barr Mountain Date _____

Project / Client _____

27

786

35 53 25.7 ± 17:
92 33 12.1

MP / Mp etc. w/ transitional zone. Some thin, cherty looking beds between. technically ~~it~~ etc is called where dark grey-black slight foss almost ends and light grey, microfoss begins.

787

35 53 28.4 + 8
92 33 1.2 - 8

last observable Mp bed; too much grass and thorn forest to tell for sure: pond is prob in Pch shales @ etc. also there is kind of a cedar rim up on the shales and the

29 grand ledges off below

788

35 53 23.7 + 20
92 32 53.0

pt makes steps of massive Pch ssts. m gr, slight foss, minor iron pyrite. buff to tan shred. med-massive bedded.

Location _____ Date _____

Project / Client _____

Scale _____

788 cont'd

more reddish orange
some banding of iron through
also some fragment

30

789

35 53 10.5 + 7
92 32 57.0 - 7

Whoa! on 'top' of the Pch ssts. 788 was 5-8 exposed.

here are 20-30' thick massive beds of the Pch ssts down to field level may cool. so thickened toward here or dipping? dip is not apparent. Joints are few M/S

790

35 53 8.7 + 24
92 32 53.8 - 24

32

Base of the massive 25" ssts

791

35 52 58.6 + 16
92 32 55.9 - 16

picking up some more Mp in the saddle (w/ pond) here. Pch above the point. → pond is dug in black to the shale

79 / cont'd here on the oppo. to (S) hill; we couldn't find any Mp up from the pond. It's very covered w/ grass, but any float we saw was Pch sst. also, the base of the massive seems to be lower than at the previous points... just visually est. also the elev is lower 1600 to 40 vs 1600-1700
Fault??

maybe that pond is still in Pch shales and upthrown mp is adj. to it on N hill.

33 / both drainage b/t runs NW/SE

712 35 52 49.5 ± 21
92 33 0.2 ± 21

Ok; first Mp coming down section on S hill.

Mp / Pch

34
793 35 52 49.4 ± 22
92 32 55.1
whoa! 60-80' thick beds (bluffs) of Mp on this side of the Mountain. pt makes first dark grey-black micritic linst flouder seen on the way down. very overgrown. faulting will be hard to see. lots of mass wasting. Also, just above this micrite, there are chert beds (apparently in place!) w/ fossil linst. so, pretty confident in the etc pt.

35 Mp / M_p
704 35 52 48.4 ± 17
92 32 53.3

Mp / M_p on N hill...

Seems just a tad higher ~ 15-20'

715 35 52 46.0 ± 21
92 32 48.1

M_p / M_p "tell me we're not higher"

Never really saw a fault plane or sig dip

37

(796) 35 52 47.5 ± 25'
92 32 37.5

M_{FV} / M_P

w/ cherty beds, we're thinking these
"siliceous shales" are in the M_{FV}.

(797) 35 52 56.3 ± 18'
92 32 41.4

inferred top of M_P. slope changes
to hill top above this point, gentle slope
below. most of car pushed off from
Reld appear to be all P_{CH}. @ base

35 not much @ M_P above

(798) 35 53 4.6 ± 17'
92 32 45.2

M_P / P_{CH}

(799) 35 53 14.2 ± 14'
92 32 36.1

M_P / P_{CH} small seep @
etc. inferred
mostly @ slant

Scale

(800) 35 53 19.3 ± 23'
92 32 36.8

May need to revise last pt.
Seems higher here these are
last beds of M_P over here.
could be rising or affected by
dip (due N/S) @ 5th R

(801) 35 53 26.0 ± 16'
92 32 36.2

M_P / P_{CH} below pond; contact pond

43 (802) 35 53 22.2 ± 22'
92 32 30.5

M_{FV} / M_P etc in ditch

44 11.17.2008

(803) 35 53 58.7 ± 24'
92 32 18.3

M_{FV} / M_{FV} in road side ditch

804 35 54 0.3 ± 17
92 32 8.1 ± 17
M_B / M_{MBV}

46

slightly covered inferred in road

805 35 54 9.1
92 31 49.1 ± 17

M_B / M_{MBV}

47

806 35 52 42.2 ± 20
92 28 39.9 ± 20

M_B / M_{MBV}

LANDIS Quad
Sellers Ck
Headwaters
2 FED HILL RD?

807 35 33 4.3 ± 20
92 80 22.4 ± 20

Dig pit beside road in ~~M_B~~ shale
~80 yds long 10' wide

808 35 53 42.3 ± 20
92 31 5.6 ± 20

M_p / P_{CH} on old log road

809 35 54 10.9 ± 23
92 31 7.2 ± 23

M_{RV} / M_p on old road to nose field
cherty shale @ top of M_{RV}

51

810 35 53 33.3 ± 17
92 31 10.2 ± 17

Massive P_{CH} sst 210-5' in
at top of M_T.

28.08

811 35 52 55.8 ± 19
92 25 45.9 ± 19

▲ Not shale. vfg calc sst?

M_{RV} float in creekM_p / M_{MBV} proximity (?)

grey vfg. med sorted calc sst.

Landis 0

812 35 53 35.7 ± 19
92 25 8.1 ± 19

Phala
loop

M_p / M_p covered etc; inferred
@ float + slope change

very fine
spicularitic brachiopods
crinoidal algal fossils
oreoidal
bioclastic almost.

One surface
was good for
dip / log (2/50)

Strike N80E

JOINTS: N/S; N55E

3

(813) 35 53 35.2 ± 24.
92 25 19.1

Pch / M_p top of M_p where slope changes and silty vfg, non calc block floaters are scattered on the upper ~ 20-25' of the hill top. Not typical ss boulders as usual of Pch.

4 / abundant chert float

(814) 35 53 39.8 ± 19.
92 25 22.2

Pch / M_p good shelf surf @ tp of M_p. area is prob old logging area.

▲ M_p is a bit silty crumbly grey on fresh; tan/buff on weather.

no surface is not apparent.

5 Joints: N 75E N/S

(815) 35 53 42.6 ± 24.
92 25 27.1

M_p / M_F inferred by floats. unweath. white field.

Scale _____

6 (816) 35 53 39.1 ± 35.
92 25 28.9
M_p / M_F

▲ good M_p w/ Fluorite xls

(817) 35 53 49.5 ± 18.
92 25 46.2

lied over here. still have M_F (grey cherty micrites) NO M_p around. but there are some of the blocky ss that were characteristic of what we called Pch or knob. Strange

(818) 35 53 36.3 ± 20.
92 25 13.3
top of M_p

Pch / M_p
(819) 35 53 41.9
92 24 46.4 ± 17

M_{BV} / M_n

↳ in pond ~ 10' down

M_F / M_{BV}

↳ top: A ~ 10' above road.

10

820 35 53 46.6 ± 19.
92 25 5.1

upper Mbv; top is ~ @ road level.
~ 20-25' here

there is a spring @ the base (where shale is!)

11
821 35 54 1.8 ± 15
92 24 48.5

Mbv / Mm

★ seep

891 for sand shale Boone seq.

↳ reddish weathered
of tan-black sh
a massive bed w/ i (@ base)
got to Mb pretty quick (~ 10')

12

822 35 54 45.0 ± 18
92 24 4.3

Mb dig / pit. 2 1/2 football (50-60 ft)
~ 20 ft wide
~ 15-20' high

Scale

13

823 35 54 14.3 ± 21
92 23 8.6

middle fork of Long Creek headwaters

awesome Mm / Mb
(right on road)

↳ dark tan-grey shaleo.
25-10' of Mm before Mbv.

14

824 35 55 16.0 ± 18
92 23 50.5

↳ (@ the fork of roads)

Mm / Mb

1.29.08

15

825 35 55 4.9 ± 17
92 27 36.5

Mbv / Mb

inferred etc; the Mbv (~ 10' above pt) is very clear, but Mm / Mb is not so clear. lots of road pasted over,

826 35 54 54.7 + 16
92 27 32.9 - 16

M_F / M_{MBV} inferred that there is a slope change and def M_F @ the road intersection but there is a pond on down this way that is in M_F and the road ditches are slightly shallower.

17

827 35 54 17.2 + 15
92 27 4.3 -

M_{BV} / M_M M_{BV} (215-20%) top is @ road level, nice water fall off the M_F / M_{BV} etc. however so no ss in the creek (v.l.) good xbeds in M_{BV}

Joints N28E
N80E

→ where banks are silty sh

18

828 35 54 20.9 + 22
92 26 59.6 - 22

Interesting stratigraphy
we see M_B beds (pt makes the top) [+ exit slight conoidal lmit]
above M_B one conoidal bioclastic white w/ grey-black replacement minerals looks like M_{SB} but w/ petrol odor... calling this a bed in M_M is med-thick bedded, (massive-ish) prob ~15 ft + etc w/ transitional shales.

M_M / M_B mottled appearance
it's a bit thicker ~20 maybe w/ increasing petro odor, increasing dark grey - black w/ micritic pebbles (rounded sub)

→ The shales above are grey - tan - reddish silty, w/ fshales, some x-lams, thin to thin beds but being so sandy is this a kinderville, batesville w/ little morefield?

1.29.08

827-828

cont'd

210-15' up from

sandy siltst - silty sh beds, there

are grey, calc fssst that are characteristic of Mbv. ^{great reddish blebs}

seem to be more silty but still thin beds

but then more of the same type shales (210' thick) below

thin Mbv @ road level. (827)

↳ changes to no reddish @ top w/ straight fssst

Seems like the typical sequence of vshaly Mm ~~is~~ Hindsville Batern. is unclean here. Maybe there is a Mbv / M₈ etc w/ no Mm present. need to review literature more carefully.

829 35 54 7.2 ± 25
92 26 50.9 ± 25

M₄ / M₇ inferred by lack of cherty M₇ and by slope change (175 a later post)

BEGIN
Buzzards
Roost hike

Buzzard Roost

1.29.08

Scale

20 35 54 10.0 ± 25
830 92 26 57.7 ± 25

M₄ / M₇ inferred by float. last m₀ to two pt. Pch float above. Slight slope change (steep to top)

831 35 53 57.2 ± 22
92 27 1.3 ± 22

▲ Pch is quite thick here.

↳ small tubarint not standing quite @ the top; but the unit is 15' thick. (also have some good size (246) x beds)

blocks are slumping down the slope

22 35 53 44.9 ± 23
832 92 26 52.2 ± 23

M₄ / M₇ inferred etc
hiking down the "spit" first beds of M₀ are starting to expose there is still a small (10-15') slope back up to the Pch bluffs. so maybe a few more ft. higher...

832 contd find some micritic, platiniferous
 rock in Mp on way down in wind
 unit is 25' thick; dark grey
 f-m xtl fossiliferous below it.

q3 (some coals)

833 35 53 39.3 ± 15
 92 26 43.9

Mp / MF

last 8 Mp knob
 hooding out the saddle
 point (210 yds from pt)
 15 in MF

pretty much
 they cleared the
 field to the etc.

24 35 53 38.9 ± 25
 834 92 27 41.9

▲ Hmm... exposure of siltst and weathered
 cherts that are apparently in the
 Mp. very similar to units taken
 to be MF @ pt 833. must
 confirm elev.

25 835 35 53 41.2 ± 21
 92 27 43.2 ± 21

pretty decent Mp / MF etc.
 good black cherts w/ v xtl black ls
 (petrol)

Mp bioclastics above.

etc is found in this ancient

Cold front is coming in on us
 clouds turning icy.

26 836 35 53 48.4 ± 24
 92 27 49.8 ± 24

Mp / MF

end of micritic, v of MF; begin
 (anartz)

Mp bioclastic/fossiliferous

Shiny up slope, there are some shaly,
 v xtl dark grey-black ls, w/ ~~thin~~-no

27 837 35 53 48.6 ± 25
 92 27 49.5 ± 25

Pot / MF Pot seems to be gasrading
 down in boulders from
 20' thick top. pt @ last Mp bed.

(837 cont'd)

PEH tops on four knobs are
a heap, no (SE)

thick walls of steps

@ back @ top

(838) 35 53 40.4 ± 22
92 27 36.5 ± 22

PEH/Mp seems abt higher
than 837... but

27

(839) 35 53 55.2 ± 24
92 27 21.7 ± 24

PEH/Mp inferred @ loss of Mp
and slope change (flatter
out)
also PEH scattered above
no ~~big~~ big bluffs yet.

(840) 35 54 3.9 ± 19
92 27 23.2 ± 19

PEH/Mp inferred @ last Mp @ slope
change

31

(841) 35 54 2.9 ± 19
92 27 29.4 ± 19

Mp/Mp last chunky Mp; Mx+1 Mp

(842) 35 54 5.8 ± 19
92 27 18.9 ± 19

PEH/Mp inferred @ last Mp bod. PEH above

33

(843) 35 53 56.8 ± 19
92 27 55.6 ± 19

PEH/Mp better etc than 842.

appears to be a small PEH
land slide down from joint

(844) 35 53 52.7 ± 19
92 27 46.0 ± 19

Mp/Mp inferred where shales
and cherts are apparent
highly covered on this
orange trash.

Location LEC Mt. LANDIS @ 1.30.08

Project / Client

- FREEZING COLD

35

845

$$\begin{array}{r} 35 \ 53 \ 13.4 \\ 92 \ 27 \ 21.0 \end{array} \pm 20'$$

Flat/Mp on old logging road,
etc inferred @ last
Mp a float.

30

846

$$\begin{array}{r} 35 \ 53 \ 26.7 \\ 92 \ 27 \ 25.5 \end{array} \pm 23'$$

Mp/MF

foss
f m xl

↳ vast micritic - w/ all
petrol, cherty to

847

$$\begin{array}{r} 35 \ 53 \ 5.4 \\ 92 \ 27 \ 27.2 \end{array} \pm 17'$$

cave "single hole"

848

$$\begin{array}{r} 35 \ 52 \ 59.3 \\ 92 \ 27 \ 34.5 \end{array} \pm 23'$$

Mp/MF

Location LANDIS QUAD OLD 66 loop Date 2/4/2008

Project / Client

micro

ca

sw

cherts

sr

Goals

1

849

$$\begin{array}{r} 35 \ 53 \ 15.7 \\ 92 \ 22 \ 52.5 \end{array} \pm 17'$$

Mp/Mf = inferred etc in road
cut. (20' of cherty ls in MF)

Unseasonably warm today (68-70°)
appears to be higher chert etc in
Mp. but beds of MF are closely

2

850

$$\begin{array}{r} 35 \ 53 \ 8.1 \\ 92 \ 22 \ 49.8 \end{array} \pm 13'$$

Flat/Mp inferred at last end of
Mp. (taken from jeep) no

large block around flat.

3

851

$$\begin{array}{r} 35 \ 52 \ 46.7 \\ 92 \ 23 \ 21.2 \end{array} \pm 18'$$

(bluffs ~15m are in
up the hill)

Cave across all the cherts w/o
noticing, all covered by Pch
but the small drainage to the
E of the point, (right) is def MF

4
 (852) 35 52 44.9 + 18
 92 23 30.4 - 18

C/C @ top of M_r is last
 dark micritic ls w/ foss (archoned)
 ls above

5 M_p / M_r

(853) 35 52 47.1 + 19
 92 23 40.5 - 19

P_{th} / M_p on contact road. last
 good beds of M_p are ~5' below
 the road. assuming the last
 few feet are covered, contact road.

However, some black shales + cherts
 are noted in the road bed; could be similar
 to shale bench observed in mid
 M_p on Buzzard's road. Old map
 shows much more M_p than observed
 so far. lots of P_{th} float.

6
 (854) 35 52 49.7 + 17
 92 23 47.2 - 17

highest ls in M_p . P_{th} above
 in (apparent) beds and float. However,
 there are also floats of chert (black
 chert) (com in mid M_p ~ 5-10' up from P_{th})

→ good exposures of M_p are
 (below) 22-3' to

7
 (855) 35 52 43.3 +
 92 23 34.7 - 13

area where M_p blocks are
 bulldozed out. (maybe getting closer
 to road top?)

8
 (856) 35 52 41.9 Still same +5' up from
 92 23 34.2 + 20' it

Doon! good last chunk of M_p !
 Even @ an area of slope change
 (bench) w/ P_{th} (beeffs?) in dist. above

9

857 35 52 33.7 ± 16"
92 23 35.1 - 16"

edge of Post bluffs start here
good channel bedded (thin beds) silt/clay

~ 15" ~~thick~~

thick. Seems to be more shales
b/t M_o and these bluffs than
usual (see @ Lizard)

→ bluffs seem to be thicker (see) on other
side (S side) of mt.

10

858 35 53 20.7 ± 8"
92 22 44.1 ± 8"

▲ anomalous bed of rusty-orange brn
silty, of gr ss ^(calcareous) is highly weathered
mod friable thin-mod bedded, there
are shales (black-brn) above
and below, ss exposure is only
~ 1-2" thick.

↳ similar to diamond shaped
concretions in Stephenson Mt

Shales are thick; all the way to
highway!

858 cont'd ~ 5-8' from highway
~ 20 yds from intersection
the road cut is weathered orange

~~silt ss~~

sandy siltstone (within beds)

and silty sandstones ~~not~~ not
calcareous though (are attracted out)
also some thin beds of black
silty shales, interbedded with the thin
beds of orange (iron colored) beds
[they are almost laminations]

So, we have, from base,

~ 6" bed of apparently more massive
silty ss, weathered out orange
to grey, stony (not that apparent)
then black and orange silty sh
w/ more sandy within beds.

"

859

35 53 28.2 ± 9"
92 22 41.2 - 9"

top of M_{gr}; M_F / M_B

860 35 53 59.2 $\pm 15^\circ$
92 22 57.5 -15°

approximate Mbv/Mm as visible
in road ditches...

861

another Mbv/Mm bed, even
though it seemed wed core
down 20-15' from 800.

Looking @ E side roadcut there
is a 12-16" bed of Mbvss
w/ shales of Mm below

2.11.08

862 35 58 33.0 $\pm 16^\circ$
92 21 20.3 $\pm 16^\circ$

Roasting ear Creek Mb/Mss
etc 25' above creek level
@ top on N bank. 25' of Mb
visible (thin beds, flat) Mb
above.

863 35 59 41.1 $\pm 15^\circ$
92 23 18.0 -15°

climbed up small drainage, lots
of fault; only evidence was
at this point where Mb
had a pretty good dip @ a small
(~6" thick) exposure. N85W

864 35 59 20.4 $\pm 17^\circ$ 805
92 23 34.4 $\pm 17^\circ$

▲ top of slightly sandy, gray
slight foss-foss ~~beds~~ ^{strata}
laminated; taken to be Mm
(Hardsville) Mb and up is
covered etc. Unit exposed
is ~15" thick. Thin-bedded,

FF some xbeds / ripples

865 35 59 19.3 $\pm 21^\circ$
92 23 35.5 -21°

M_{whm} / M_b

18

(866) 35 59 11.8 ± 13
92 23 41.1

N55E 12° NW; strong dip
in M_B (but not too apparent
as in pt 864...)

possibly N side of fault.

(867) 35 59 22.5 ± 15
92 23 59.3

we were here.

all m_b w/ large M_{6v}
floats from main Murray
Treat stream to here.

M_{6v}'s are coming from
hill tops. Hill slopes are
M_b.

Setting dark time
to scout.

20

cold, icy. 2 1/4 - 1/2" on trees' Scale

(868) 35 58 6.5 ± 7

92 23 45.7 ± 7
M_{6v}/M₆

inferred etc

along highway end of Cherts
in roadbeats. Pond in sight
is shaly / ss. No cherts

loc. is prob pretty close
to that previously mapped.

(869) 35 57 13.7 ± 17
92 23 42.2 ± 17

inferred M_{6v}/M₆ small etc

hill in road. float... w/ M₆

came followed down to cemetery
small pond nearby last house
was still M_{6v}. Cemetery is

still M_{6v} most likely

(870) 35 57 24 ± 18
92 23 8.1 ± 18

M_{6v}/M₆ (standing 25' below M_{6v}
etc. good M₆ etc
along feet. float bit)

no Hindsels
apparent

hill is
prob 10 yds long
not big at all

23

871 35 57 3.8 +
92 23 17.2 - 18-

M_m/M_{BV}

top of M_B o/cp. standing
- 5' up from creek bed.

Good arinoidal - for ls. not
too cherty

872 35 57 19.3 + 19.
92 24 46.0

M_{BV}/M_m → some sh in M_{BV} - 20" to
good/great even!

etc. adj. to road. good water for

3 on M_m
N65E
N70W

today. M_m is shelving out
from under M_{BV}. some
concretions weathering out
of shales

still no ls apparent at M_{BV}
base. one smaller bed 21" to
weather is similar, but too
mud w/fer to check

Scale _____

872 (cont)

ok. so; still walking
further down (200) - from etc. at
there are more reddish, mottled
sh beds.

873 35 57 16.3 + 14'
92 24 45.5

top of M_B. seemed like above
was a seq of M_{BV}/M_m, M_{BV}/M_m
near fault so may be some
spindlers causing small offsets
M_{BV}/M_m will be lumped in
any case.

M_{BV}/M_B

→ or maybe there is only this
15' of M_m w/ M_{BV} above w/
some interbedded shaly silt/sh
and silty silt.

Project / Client _____

Dogwood Ln

(874) 35 57 11.6 ± 16"
92 25 2.5

M_B / M_m $M_{su} / M_m / M_B$ @ Inter. Sect

point where fault crosses the road. M_B is topographically higher than M_m (of the terr. off.) def. ls in ditches; also apparent color change in roadbed → prob

(875) 35 57 14.6 ± 17"
92 25 2.4

just pushed down by grader

M_B / M_w last M_B , as we

hiked up small slopes near "road fault" seems to go adj to M_{su} floaters.

(876) 35 57 9.0 ± 17"
92 25 9.4

some M_{su} float above M_m w/ M_B on top

ok, so this point is taken to be the fault pt. where it crosses the road

Project / Client _____

Scale _____

29 (877) 35 57 16.1
92 24 56.7 ± 18

top of M_m ; previous pts 232 and 233 may be slightly off, (or maybe fault the l. side)

but; add'l inspection shows M_m down to top of M_B at the dirt road on the top.

(878) 35 57 16.4 ± 19"
92 24 30.5

top of M_B rfc w/ M_m

31 (879) 35 57 33.7 ± 16"
92 24 13.7

top of Road Mt., seems to be all M_{su} . Some cherty floaters all rocks in place @ top have few fox tracks but no vtl, still vfg - magnetic dates

~~879 cont'd~~

before water tower was a good
fossiliferous boulder, prob
float, but very good evidence
that a small remainder of
M_{br} on top, only last carbon

~~880~~ 35 57 38.1 ± 23'
92 24 22.3

highest point where M_{br} float
is visible on hill side

12.13.08

33

~~881~~ 35 58 6.6 ± 18'
92 24 13.0

M_{br}/M_m M_m ~ 10-15' then
M_B (shugary-not
much char)

~~882~~ 35 58 8.5 ± 20'
92 24 15.9

M_{br}/M_m ~ 10-15' of M_m
good water fall

35

~~883~~ 35 58 29.7 ± 18'
92 24 47.9

top of M_B M_{br}/M_o
(contact road (off road))

pond ~ 20' above bt is likely
in M_m. just below M_{br}
base.

small M_o knobs peek out
of road bed here and float
is visible around.

~~884~~ 35 59 4.3 ± 15'
92 25 34.0

M_{br}/M_o pond is def in
M_m, M_{br} @
turn off from
highway.

evident in
road ditch/cuts
est M_m ~ 15'

~~885~~ 35 59 28.2 ± 16'
92 25 40.6

top of M_B, slightly covered but
inferred from road cuts M_m ~ 10-15'

2.13.08

38

(886)

35 54 59.4 + 19-
92 23 28.7 -M_{IV} / M_{OV}

good change in lith. (begin M_{IV} floats)
 coning down the hill here.

39

(887)

35 54 44.8 + 22-
92 23 29.1

Old house is built (most likely)
 on the flat M_{IV} sst bed.

A small (28" high) road bank on
 west east cut is pretty shaly
 but good sst floats around.

small drainage pass shale

(888)

35 54 31.9 + 19-
92 23 18.2 -

Starting to pick up black shales
 (seems to have ss float mixed in?)

M_I / M_{IV}

2.13.08

41

(889)

35 53 48.8 + 22-
92 23 24.00.2

Good drop of M_{IV} in top
 of road cut. at least 5' in M_{IV}
~~down from top~~

▲ Good fass + petrol odor.
 grey to dark grey
 above is dark grey silty sandy
 type. just below is same (M_{IV}?)
 crinoidal, light grey ld (Cr_{IV})
 w/o petrol odor. no shale M_{IV}?
 between... sorta similar to

def looks like dark mottled arg of
 crinoidal...
 based on inspection in creek below

M_{IV} / M_{IV}
no M_{IV}

(890)

35 53 46.0 + 19-
92 23 59.4M_{IV} / M_{IV} / M_{IV}
+ 20'

small
 silty sst
 in cut

crinoidal - dark m_{IV}?
 st petrol

Location _____ Date _____

Project / Client _____

(890) cont'd
 good M_B at creek /ul
 changes to darker crinoidal
 petrol (as seen on road @ 889)
 from ~15-20' of M_m above
 the M_B (draw from pt loc down)
 w/ M_{Bv} above; some small
 thin beds of sandy ls + ls @
 base of M_{Bv}

43

(891) 35 53 56.9 + 22'
 92 24 40.1 -

M_m/M_B good cut into M_m , Apparent
 M_B in field below...

~~~15-20' of  $M_m$  to  $M_{Bv}$~~

$M_{Bv}/M_B$  scratch that  
 The  $M_B$  sandy siltst that  
 is more massive / competent  
 is only ~25' thick; more  
 red-dark brn blackish shales  
 above that, also change  
 pt 821 to ~~reflect~~  
 reflect this

Location \_\_\_\_\_ Date \_\_\_\_\_

Project / Client \_\_\_\_\_

44

Scale

(892) 35 54 2.31  
 92 26 22.2

$M_m/M_{Bv}$  in road cut, at the  
 point (adj to old home w/  
 $M_{Bv}$  wall)

There's sst of large shale  
 bank above is redish brn-black  
 w/ grayish mottles @ base

(893) 35 54 10.1  
 92 26 20.9 - 13'

$M_{Bv}/M_B$   $M_m/M_{Bv}$  about at  
 road level  
 Microspgs and  
 into adj fields

etc taken ~20' down from  
 the crinoidal, dark, petrol  
 beds we are calling the  
 top of the Boone, below the  
 Shaly / siltst section shown  
 @ Monahid.

2.14.08

894 35 54 38.3  
92 26 46.0 + 23-

probable top of  $M_0$  at  
the bottom of this nose.  
snaly bit  $M_0$  cherty limy  
float starts here

47  
895  $\frac{M_{\text{burn}}/M_0}{2.19.20}$   
35 59 55.6 + 16  
92 25 13.1

$M_{\text{burn}}/M_0$  inferred @ last  
contour where  
~10' of  $M_{\text{burn}}$   $M_0$  chert is present.  
where sst float  
begin etc of  $M_0/M_{\text{burn}}$  is too  
covered w/ float.

48  
896 35 59 41.1 + 17  
92 24 42.9  $M_{\text{burn}}/M_0$

last bit of  $M_0$  cherts. All covered  
terrible, horrible, no good, very bad, drainage

2.20.08

897 35 59 34.9 + 25- ← R.H.  
92 24 45.1 in creek

last  $M_0$  cherts noticed in  
this area, but all covered  
terrible, horrible, ...

$M_0$  pt ~ 15' - 20' above  
creek bottom

898 35 57 37.5 +  
92 24 44.6 = 22  
35 59 35.2 + 17  
92 24 51.8

$M_{\text{burn}}/M_{\text{burn}}$ , etc w/  $M_0$   
seems to just jump back up  
at this contour. followed  
pretty close to the etc from  
the headwaters, then just  
seemed to run right in to  
 $M_0$  again, but couldn't find  
a good area w/  $M_0$  against  
 $M_{\text{burn}}$ . just have to infer off  
from other pts.



2.20.08

51

(899) 35 59 31.1  
92 24 33.5 ± 13

~~MBV~~ MBV/Mm ? probably  
just some shaly siltstones  
in the MBV. Would have  
to account for ~ 20-25' of m.m.  
for this to be the etc. but  
there is a nice spring ~ 2.5 gal pm  
(2.5-5 gal pm)

etc shows some shaly/silty beds w/  
med bed - thin bed sst. above  
vs shaly below, brown - reddish brown

52

(900)

2.20.08  
35 59 30.0  
92 23 53.3 ± 14

top of M<sub>B</sub> etc w/ good  
Mm otc

M<sub>B</sub> exposure is ~ 2' to

Mm exposure is 10-15'

nite day so far. ~ also supposed  
to form cold fire later.



2.20.08

(900) circled

no first beds or float  
above Mm; Med beds are  
also absent. ~ 20-25' up from  
pt are some "dirty" (unottled)  
silty ss beds. Disturbed lam (post)  
looks blackish - dark brn. very  
weathered. Exposure is on  
W side of drainage & 2' exposed  
under some trees. good M<sub>B</sub>  
beds floats all about.

(901)

35 59 26.2  
92 24 11.5 ± 12'

top of M<sub>B</sub> inferred at least  
bed of M<sub>B</sub> visible in this  
drainage. very weathered not  
much

54

(902)

35 59 9.8  
92 24 24.5 ± 18'

probable top of M<sub>B</sub> sitting just  
above last visible bits of chert  
and neogolith.

55

903

$$\begin{array}{r} 35\ 59\ 15.2 \\ 92\ 22\ 53.9 \\ \hline \pm 19 \end{array}$$

- area where  $M_8$  has a strong dip [N45E 10° NW]

also ~~the~~ lithology is a bit different, w/ extl, crinoidal previous (by <sup>to text</sup> hiked up the drainage to the south saw some slight (3-4°) dips over there, were dipping downstream, here dips are in upstream direction still looking for REFault evidence.

→ weathering is crumbly and rounded. mass covered & similar to fernvale. coal. very unimodal at creek level and has m. thin bed appearance...

904

$$\begin{array}{r} 35\ 59\ 37.1 \\ 92\ 23\ 24.9 \\ \hline \pm 10 \end{array}$$

Round the top of the  $M_8$ . Good  $M_8$  outcrops on up ~ 20' thick. prob 30' overall

Scale \_\_\_\_\_

57

905

$$\begin{array}{r} 35\ 59\ 35.1 \\ 92\ 23\ 24.6 \\ \hline \pm 22 \end{array}$$

$M_8/M_9$  etc is covered

$M_8$  might be sliding just a bit.

no dust (midsville) around.

906

$$\begin{array}{r} 35\ 59\ 30.8 \\ 92\ 23\ 12.8 \\ \hline \pm 19 \end{array}$$

thought we already took a pt here, but its not plotted.

in case we need a new one

wee marks the start of some steeply bits on down the road

$M_8/M_9$  seems to be 1/2 as much  $M_8$  as 904

prob only came down to

to  $M_8$  start floating in woods.

59

907

$$\begin{array}{r} 35\ 59\ 54.3 \\ 92\ 22\ 42.9 \\ \hline \pm 20 \end{array}$$

N60W

10-19° N10E

Down trees everywhere. looks like a bank here. of. pretty evident  $M_8$  emerging in creek bed. mostly covered by  $M_8$  gravel bars. saw some sporadic flat down stc.

907 ~~could~~

standing out just up str from  
the confluence act, to the old  
chimney.

▲ The ms<sub>1</sub> is mottled dark black to  
grey w/ red blabs, Crinoidal some  
iron pyrite clst; Mb just down str ad  
on hill sides

- Joint, on Mt N60E

N10E  
looks like it's "downing" up  
due to dip changes...

- faulting possible; check  
last weeks ms<sub>1</sub>/mb from downstr  
in locating ear...

Exposure appears to extend only  
for ~20-30 yds, targets covered  
by gravel up Mb top at base of  
hill slope / creek level just where road  
crossed back ~~at~~ over the creek  
heading up stream. We've taken up  
the upstream branches... all Mb.  
prob @ base of Mb w/ undulations?

Met Mr Smith back up on the way out  
told us about the sink holes  
down on the williamson <sup>back</sup> of  
wanders if they're related to  
Anderson cave. Anderson  
cave supposedly mapped  
for 14 miles... cool.

2. 21. 08

908

35 57 56.7

92 23 37 = 241

only drainage or old float  
place - walking out w/ ELT front  
shows last Mb of Ms<sub>1</sub> float  
all around.

could be remainders of  
Ms<sub>1</sub> on upper knobs.

909

35 57 58.2

92 23 28 = 211

Ms<sub>1</sub>/Mb top of knob inferred  
at first float. good step - down

2.21.08

v2

(910) 35 57 55.7 + 20  
92 22 55.0

M<sub>8m</sub>/m<sub>m</sub> top of M<sub>8</sub> at last  
float above last bed.

v3

(911) 35 57 50.3 + 19  
92 23 31

M<sub>8m</sub>/M<sub>8</sub> inferred by float  
in road

v4

(912) 35 56 17.6 + 17 drizzle ~30°F  
92 22 36.6 street on ground

looking for fault evidence 25° E N10W

- massive rounded, crinoidal, fossil  
next. M<sub>8</sub> beds have been ~~rising~~  
rising up. dipping in upstr dir  
but no direct evidence yet.

2.25.08

(913) 35 52 26.0 + 24 Beagley Creek  
92 30 23.4

M<sub>8m</sub>/M<sub>8</sub> inferred by float (near road.)

2.25.08<sup>69</sup>

(914) 35 52 39.4 + 14  
92 30 37.3

M<sub>8</sub>/M<sub>8m</sub> inferred as first  
shells and cherts were noted

hiking down slope.

3

(915) 35 53 00.6 + 20  
92 30 42.3

probably nearing the top of

M<sub>8</sub> good joints in this area  
[N5W N85E,  
N45E]

looks like its dipping very

subtly, but its [12° NN60W]

4

(916) 35 53 5.3 + 11  
92 30 44.1

probable M<sub>8</sub>/M<sub>8m</sub> tried

to follow the end of upstr. micritic  
petrol floats in creek. steps

(possibly from slump) on banks

are dark, fossil, m-cxtl just  
of M<sub>8</sub> <sup>grey</sup> massive

Good crinoids washing out in ground  
bar

916 contd

wiking a bit further (30-40)  
from this pt. we see  
another of xtl, petrol, slightly  
shaly bed, we presume this  
to also be in the MF as we  
saw similar zones on  
Buzzards Roost / Lee Mt. so  
end of the chert ~ 915  
is prob the top of the MF

917

35 53 9.3 ± 19'  
92 30 49.0

another section of Shales, prop  
in MF, good discussion  
about 1ms; we've found  
a few conical nautilus w/  
the crinoidal gravel bars  
along the way. Sees as  
if MF may be "shaling out"  
will look for more 1ms

- thin bedded shaly beds @ creek cut
- great black - grey brn shales →

918

35 53 11.2 ± 16'  
92 30 51.0

last photo ass. w/ this  
pt. Another MF shale  
massive, crinoids in some  
of the floats up here.  
great stuff

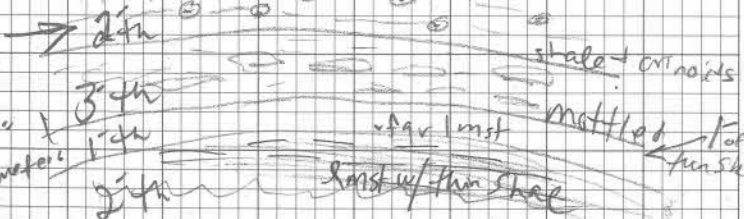
Nearing the top of the  
hollow. Joints: N/S

N45E

N80W

→ thickness  
exposure is ~ 8-10' thick  
big crinoids are a tiering out  
of top; has a chunky, mottled  
almost conglomeratic appearance  
below, thinner, flat bedded

bottom



big crinoids

1/2-1 1/2 inches

919 35 53 11.3 ± 17"  
92 30 56.5

Another shale sequence in  
the Mp! prob #4 (maybe 3)  
this one is hard to guess thickness  
lots of Pch float at least  
10' or maybe 15-20'

the shale ends ~ 5' up from  
the pt. there is one final  
2' thick lsst followed by 1' thin  
~~thin~~ thin bedded reddish-brown  
conglomerate lsst, ~ 1 1/2" of black  
shale, then cross bedded sst of  
Pch. .. a little 1 1/2" - 1 mo??

→ conglomerate transitions from the limy  
to a sandy shaly (sandy w/ sh clasts)

18.26.08

8  
920 35 58 31.5 ± 22"  
92 39 30.4

top of O<sub>f</sub> etc w/ M<sub>st</sub>

M<sub>ss</sub> ~ 5' thick before  
M<sub>B</sub>. all etc's are pretty  
covered, lots of Mo gravel  
seems to have been a slight  
rise, coming up str. from  
where we started down the  
hill. JOINTS:

N70W N20W  
N60E in mid M<sub>B</sub>

921 35 58 33.4 ± 26" 17.429  
92 39 28.6  
top of M<sub>ss</sub> still under ~ 5'  
thick.

10  
922 35 58 25.3 ± 12" exaggerated  
92 39 40.4 - 30" bottom ~ 10-12' above  
M<sub>ss</sub>/O<sub>f</sub> still only ~ 5' exposure  
covered etc. of a creek

922 cont'd

Oh! Op etc is just below this pt also, so Op = 10-15' before etc w/ msf. Some Op has a blocky weathering pattern w/ some sporadic iron-pyrite replacements.

923 35 58 7.3 ± 14'  
92 39 51.1 - 14'

likely last bed of Op, Op etc just above. the undulation may have brought the etc back down to this point. Op is at the confluence of the limbs on the South side. didn't notice a change from Op on the Northern branch we started in on. but there is a marker here today that is distracting. Op definitely looks thicker here. S/D on Op bed N5-WW 40° E

923 cont'd

Does continue into our initial drainage Great beds to take dips?

N15E 15-20° ESE

However, the "Op" here looks a lot like Msf. grey w/ pale

beds, w/ all minerals, pyrite very suspicious - roots just like sample from 922

12

924

35 58 11.3 ± 20'  
92 39 48.2

this is totally Msf - but wait. - they are barrel oriented

13

925

35 58 10.9 ± 26'  
92 39 46.5 - 26'

here is where Op starts back up in this fork  
Op/Op  
N10W N70E  
NS08

Location Smith follow Date 2.26.08Project / Client MARSHAL QUAD

14

926 35 58 3.9 ± 23-  
92 39 31.5

It marks where Op emerges  
at creek level in this fork.  
Above the Op is ~ 8-10" Ok  
then Op.

Ok looks like cross,  
blt on and Op; w-fx+1  
sugary, grey limst.

15 step on Ok surface yields ~ N20E

927 35 57 57.9 ± 21 3-4° wide  
92 39 25.7

last of beds in this fork  
all covered from here up

No steps.

16

928 35 58 2.8 ± 23-  
92 39 27.8

Op/Op looks like Op comes up in  
this drainage, but not in to  
the other fork. difference could be  
due to elev + or do effects

Location \_\_\_\_\_ Date ~~927~~

Project / Client \_\_\_\_\_ 2.26.08

Scale \_\_\_\_\_

929 35 58 5.2 ± 17-  
92 39 21.2

Op/Op Spring house @ top of Op etc  
w/ Moss. etc is covered  
w/ no steps, just inferred  
by float and spring.

Coming up one of two  
middle forks; found a good  
surface on of: N25W 8° WSW

930 35 58 12.3 ± 19-  
92 39 35.5

Op/Op to float was showing  
up just below, but there were  
first definite beds. almost  
have to the Op sugary texture  
but still darker grey; absolutely  
lining creek ~ 20 yds up from  
the pt.



19

(931) 35 58 13.7  
92 39 27.0 ± 19-

~ 20-15-yr from  
creek

sitting on the hill slope @  
~ loc of top of Of. Mss is  
~ 3 y- above. just down  
below in the creek, and  
~ 10 yds down stream is ~ loc  
of Of/Op being covered  
back up

50

Op/dp ~~to~~ Mss/Of  
28-10-yr

~ 20-yr

(932) 35 58 15.9  
92 39 17.2 ± 11"

Mss/Of Of had some 3-4 mm  
size

Mss is gray, w/ pink block iron-pyrite  
crinoidal filled vugs. Just  
at top.

(933) 35 58 17.2 ± 25  
92 39 13.4

top of Mss etc w/ MB

Sort of iron ferrud. Mss is  
iron ~ 2- up on banks from  
brush/pile covers everything

(934) 35 58 19.7 ± 18  
92 39 29.3

top of Mss

2. 27. 08

(935) 35 55. 57.0 ± 7"  
92 28 31.2

Of/Op no Op

Cambell Rd, Sellers Creek.

Elw 40S on Op  
looks like old dig pit just above

24

936 35 55 57.4 + 16"  
92 28 29.3 -

top of  $O_f$  etc of  $M_{st}$

$M_{st}$  may be more thick-bedded than normal, etc is broken up, wd covered; probably only 5-8' thick before  $M_b$ .

937 35 55 41.4 + 15"  
92 28 35.1 -

$O_f/O_p$  follows dip down to this point where the etc is 210' above the road,

good visibility around east drainage near here.

26 938 35 55 34.1 + 15"  
92 28 34.7 -

$M_b/M_{st}$  at road level!

$M_{st}$  top is 21' above road bed,  $O_p$  is etc on bluffs below road.  $M_{st}$  ~ 5' thick at most.

Scale \_\_\_\_\_

938 cont'd found ~ 2-3' of  $O_c$  w/ phosphate pebbles;  $O_f$  even makes it up above road bed just after the bend in the

27 road (R)  $M_{st}$  is ~ 2-3' (3-4')

939 35 55 37.4 + 19" Maxey  
92 28 43.0 - Huller

$O_f/O_p$  etc is ~ 12' above creek level; up to this pt

$O_p$  on N side,  $O_f$  on S side  
 $O_f$  lines creek bed here.  
good dip on  $O_p$

N75E 40 SSE (looks like)  
10-12'

Joints

940 35 55 34.7 + 24"  
92 28 33.1 -

also, dip dir has changed to the vester dir

$O_f$  begins to line the creek bed at about this pt. maybe 100' or 300'

back.  $O_d$  covers the etc  
found some  $M_{st}$  floats just up from here  
big block is 2' x 3' ~ 6" thick

29

(941) 35 55 21.0 ± 22' M<sub>SS</sub>/O<sub>f</sub>  
92 29 0.1 ± 22'

first M<sub>SS</sub> exposure in creek bed  
last O<sub>f</sub> is ~ 30 yds back.

Qal all ft; didn't see any M<sub>SS</sub> or  
O<sub>c</sub> along the way.

M<sub>B</sub> is just ~ 10 yds up.

so M<sub>SS</sub> is only 2-3' thick still  
5' would be optimistic.

30

(942) 35 55 21.0 ± 27' (18) 21.2  
92 28 57.7 57.3

→ 10<sup>-15</sup>  
gn

Good spring @ Me. Raglands  
up this limb of Sellers  
Creek. M<sub>B</sub>/M<sub>SS</sub> etc is visible

but O<sub>f</sub>/M<sub>SS</sub> is not visible (Qal)  
probably close to the etc  
given other thicknesses around.  
The spring overflow is coming  
out on top of O<sub>f</sub> at the  
Sellers creek confluence.

31

(943) 35 55 13.3 ± 12'  
92 28 45.5 ± 12'

Scale  
later visits  
suggest  
Bachelor  
ss lens  
cap text

M<sub>SS</sub>/O<sub>c</sub>/O<sub>f</sub> @ creek level  
210-15

thin M<sub>SS</sub>  
~ 2-3' in  
great  
pyrites

hard to est  
thickness, extends  
of the bluff down  
road, east ~~west~~ of  
→ has large phosphates

32

(944) 35 54 23.5 ± 18'  
92 29 7.7 ± 18'

→ show O<sub>c</sub> thickness of

area where M<sub>SS</sub>/O<sub>c</sub> is exposed  
M<sub>SS</sub> is v thin (no M<sub>SS</sub>) etc w/  
M<sub>B</sub> covered by Qal on up to  
low water crossing w/ M<sub>B</sub> on banks

\* "bluffs"

M<sub>SS</sub> is puritic as earlier and lt gray  
O<sub>c</sub> is lt gray to reddish brown  
some phosphate

exposure shows M<sub>SS</sub> as lenses in river bed  
of O<sub>c</sub> in exposed pits/wash outs

O<sub>f</sub> etc ~ 10-15 yds down str.

948 35 54 12.7 ± 19-  
92 30 32.7

Shiloh road.

top of MB; Mm w/ MB  
blocks pushed up on road. Shows

Mm to be  $\geq 10'$  thick  
black-brown sh w/ interbedded  
Sandy siltst. ~~at~~ in  
roadbed...  
maybe 15... haven't  
quite seen the MB yet

probably  $\sim 35-40'$  MBV showed up  
on the jeep trail  
ahead, but the  
horse and dozen dogs  
scared us off.

946 35 54 23.2 ± 21-  
92 31 7.2

likely lower MF

MBV is visible below road  
at the top of nearest drainage

946 cont. Sample is dark grey in  
fresh, tan on weathered  
face, from iron. Small decussate  
✓ good fizz micritic - v. fine  
also black dirt is coming down  
at slopes and on road banks  
→ maybe some Agr sand or silt, ...  
too hard to tell even w/ HCl.  
looks like some pyrite-replaced  
organics and fossils  
ooh, after fizzing the fossils  
really show up, bivalves (pellecyphoid?)  
and sand is less apparent.

947 35 54 43.4 ± 19-  
92 30 52.4

For sure this is MB at this  
point. Seems higher than  
945. Look at aerial photo:  
there is a pond up ~~there~~ here that  
looks MB, also some chest floats  
were scattered as much as 20-30  
feet above on higher knobs.

→ pond has MBV on closer  
inspection w/ shaly soils.

36

~~949~~ 35 54 7.8 + 17  
92 31 29.7

top of Mbv etc w/ Mfv

adj. ponds @ me R. England's white  
have looked sort of Mfv-ish.

~~949~~ 35 53 43.0 + 19  
92 31 33.3

Mbv/Mfv

still good

~~BOVS~~  
still  
or is it  
Mbv  
Mfv  
Mfv  
Mfv

N10E

10°E

dip on

Bv beds

good waterfall

dip apparent in cut

prob the H. floats

Mm is not visible below

Probably have 20-25' of Mfv here

6703

2.28.08

~~950~~ 35 53 8.3 ± 14  
92 32 11 ± 14

Inferred Mfv/Mbv. see  
sands downstr., shales up  
stream

39

~~951~~ 35 53 15.1 ± 16  
92 32 2.3 ± 16

Mfv/Mbv visible in roadside  
ditch on W side of road.

etc crosses over road

40

JOINTS: N5W N65W  
~~952~~ 35 53 39.2 ± 12 N35E  
92 32 18.7

Mfv/Mbv in drainage (good etc)

~~953~~ 35 54 11.3 ± 23  
92 32 16.0 ± 23

Mbv/Mm ~ 15' down from road  
w/ spring house  
Mm not visible

42

(954) 35 54 34.2 ± 19'  
92 32 32 11.0

top of Mb, etc w/ Mm inferred  
from road ditch and ad, hill slopes

M<sub>BM</sub>/M<sub>B</sub>

43

(955) 35 54 38.6 ± 19'  
92 32 32 38

M<sub>BM</sub>/M<sub>B</sub>

beds: strange b/c the Mb knob to the  
N is @ approx the same elev as the  
M<sub>BM</sub> area to the south.

the Mm exposed in the road cut  
is good. Could have as much  
as 15-20' of m here.

(956) 35 54 34.7 ± 22'  
92 32 17.2

inferred M<sub>BM</sub>/M<sub>m</sub> in road  
inf. from visible etc on hill slopes and  
in road bed.

45

(957) 35 53 51.8 ± 20'  
92 32 53.8

M<sub>FV</sub>/M<sub>BM</sub> in road ditch

(958) 35 53 50.6 ± 17'  
92 33 25.6

M<sub>FV</sub>/M<sub>BM</sub> M<sub>a</sub> gran pond  
probably in M<sub>F</sub>. & good  
M<sub>BM</sub> visible in road ditches

(959) 35 53 56.9 ± 13'  
92 33 40.5

M<sub>FV</sub>/M<sub>BM</sub> inferred

(960) 35 53 56.8 ± 17'  
92 33 50.8

M<sub>BM</sub>/M<sub>m</sub> in road ditch

215' of M<sub>m</sub>

(961) 35 53 55.4 ± 17'  
92 33 53.6

~~M<sub>m</sub>/M<sub>B</sub>~~

M<sub>BM</sub>/M<sub>B</sub>

Location \_\_\_\_\_ Date \_\_\_\_\_

Project / Client \_\_\_\_\_

962 / 35 53 30.5 ± 21'  
92 34 13.3

Mav / Mm ~ 5' up from road  
bed

Good etc w/ spring near  
Estes house (on the Mb)

963 / 35 53 34.6 ± 19'  
92 34 18.0

Mbm / Mb Estes house @ Boone  
level

probably 15' of Mm

going down Shiloh after 961; noted  
dip in the drainage on the North side

964 / 35 53 34.4 ± 25'  
92 34 35.8

Shiloh road off Baker Road

Mav / Mm is visible in the creek

~ 20' below the positive spring system

Location \_\_\_\_\_ Date \_\_\_\_\_

Project / Client \_\_\_\_\_

Scale \_\_\_\_\_

965 / 35 53 12.1 ± 20'  
92 33 58.7

MF / MBV good shale top on up  
from here in the E road ditch

54 Mav in near drainage.

966 / 35 53 6.1 ± 9'  
92 34 1.2 - 9'

MAPLE Grove  
Road

MF / MBV again in the  
top of the drainage. Good  
shale bank on SE side of road

Top of Mav or Bottom of Mm  
is a limestone, like yesterday  
(9416)

1. 3.6.08  
967 / 35 53 14.7 ± 22'  
92 38 9.5

2

Pch / M<sub>p</sub>  
968 / 35 53 25.5 ± 20'  
92 36 54.9  
Pch / M<sub>p</sub> @ Highway

3 ✓

969

35 53 36.6 ± 20°  
92 86 53.4M<sub>E</sub>/M<sub>F</sub> approximate on  
Highway

4 ✓

970

35 53 46.0 ± 20°  
92 37 39.3

inferred

M<sub>BV</sub>/M<sub>M</sub>  
in road ditch

heavy sleet now

drive all along this road never  
really saw the M<sub>E</sub>/M<sub>BV</sub> etcM<sub>M</sub> seems thick here. at  
least 20' down to creek bed↓ (see pt ~~970~~) →  
973

5 ✓

971

35 53 52.9 ± 22°  
92 37 40.0M<sub>BV</sub>/M<sub>M</sub>\* thin bedded sand on  
road, possibly  
still in contact

6 ✓

972

35 54 7.1  
92 37 38.5 ± 24top of good M<sub>M</sub>  
shale bank butno great sand steps  
all the houses have  
sand walls and brick

7 ✓

973

35 54 10.9 ± 20°  
92 37 50.7good M<sub>BV</sub>/M<sub>M</sub> stepon highway. M<sub>BV</sub> is covered  
w/ ivy so hard to see, but  
its best yet!

8 ✓

974

35 54 8.8 ± 15°  
92 38 10.6M<sub>B</sub>/M<sub>M</sub> (M<sub>M</sub>/M<sub>E</sub>)Seems higher than some  
previous sites of M<sub>BV</sub>/M<sub>M</sub>but good M<sub>B</sub> at this house  
valley below looks shaly

its snowing now.



Location \_\_\_\_\_ Date \_\_\_\_\_

Project / Client \_\_\_\_\_

975 35 54 20.5 ± 13-  
92 38 3.6 ±

inferred Mm/MB on  
camp's road. school is  
on MBV fashu.

10  
976 side ways snow  
35 54 26.6 ± 15.  
92 38 7.0

snows starting to accumulate  
have a good MBV wall  
on the Mm shale.

977 35 54 25.1 ± 17-  
92 38 11.9 ±

best guess for Mm/MB on  
a snow day. there was  
a small float of MB on  
the creek cross. of below  
the house above looks like  
some Mm on the slopes.

Location \_\_\_\_\_ Date \_\_\_\_\_

Project / Client \_\_\_\_\_

Scale \_\_\_\_\_

978 35 53 46.5 ± 11  
92 39 14.2 ±

Mm/MB just at  
the road here. some  
banks on the N side of  
the road here had bad  
charts. this guys drive way  
has a small knob of MB  
poking out. then there's

Mm banks 10-15" thick  
behind the house! Look.  
979 35 53 21.8  
92 41 18.2 ± 21

Beautiful snow

MB / Mm / MBV probably only  
15-20" of Mm  
to MB  
MBV allowed the road over  
here did not see MF

are  
ered.

Location \_\_\_\_\_ Date \_\_\_\_\_

Project / Client \_\_\_\_\_

1  
 980 35 55 2.7 - 18  
 92 38 25.5 -

M<sub>BV</sub>/m<sub>m</sub>

looks like a Great 20-25"  
 m<sub>m</sub> below the house here.

13.10.08

981 35 53 1.0 ± 19 -  
 92 24 33.2 ±

near top of M<sub>BV</sub> house  
 is prob on M<sub>BV</sub> top. assuming  
 around 1000' elev contour

982 35 53 17.1 ± 17  
 92 25 46.7 ± 17

Good for  
 Fine p.f.

point on top of M<sub>BV</sub>  
 joint etc w/ MP is closer to highway

NSW

N7E

NSOE

E/W  
 (NSSE)

2° SW

cross beds?

probably

would expect a  
 more JF

Dip from map plots

Location \_\_\_\_\_ Date 3.10.08

Project / Client \_\_\_\_\_

Scale \_\_\_\_\_

3  
 983 35 53 18.3 ± 15  
 92 25 26.3

Good sandst stops at the  
 top / near the top of the M<sub>BV</sub>  
 could be 10-15' up from here  
 but beds we saw were silty

Shaly...

984 35 53 15.5 ± 17  
 92 25 17.3

base of M<sub>BV</sub> w/ good fossilif  
 (trials) of Hindsville @ base,  
 some *ocinodonta*, *ocinodonta*, *ocinodonta*  
 etc w/ M<sub>m</sub> which lives the  
 creek.

The exposure of M<sub>m</sub>  
 at this location is 23' thick  
 m-thick beds of fossiliferous  
 (26' - 1') w/ some sandy, grey  
 to lt grey. Some thin bedded  
 to thin beds between  
 Gradig up into the sandst above  
 the last thin bedded units,  
 silty, sandy, thin bedded, units are  
 more tan-buff or weathered.

984 unit

unit could be ~ 5-8' thick  
w/ the hard beds. also  
found some float w/ petrodiferous  
odor

Joints on Main creek:

N65E N30W N10W N1S N25E

985 35 53 17.9 ± 17  
92 24 58.8

conglomer down at the creek below  
w/ rounded chert nod road. The  
for dating point marks where great  
expos/exposures of the  
Moore field are found. water is  
high today so we cant see the  
bottom but the lithologies consist of  
of a dark ~~ss~~ of gr lsmt → conglomeratic  
bed (thin) up to sequenced silty  
black-brown shales → limy siltstones  
AC silty lsstones → sandy siltstone  
[med-th bedded]

M<sub>B</sub> was found by R.H. ~ 150 yds down  
found some ~~float~~ ~~above~~ ~~M<sub>B</sub>~~ ~~so~~ ~~here~~.

986 35 53 22.4 ± 16  
92 24 46.6 ± 16

M<sub>B</sub> top project + down 200-  
to creek.

987 35 53 24.7 ± 16  
92 24 55.3 ± 16

M<sub>F</sub>/M<sub>BV</sub>

988 35 53 56.7 ± 15 M<sub>F</sub>/M<sub>BV</sub>  
92 25 31.5 ± 15

Small pond on W of road sits on  
shipp silty lsmt

M<sub>F</sub>/M<sub>B</sub> etc 25' down from road  
989 35 54 22.7 ± 16  
92 27 57.3 ± 16

M<sub>F</sub>/M<sub>BV</sub>

990 35 54 22.7 ± 16 M<sub>M</sub>/M<sub>D</sub>  
92 27 57.3

Great morefield expos.  
here ~ 40+ thick

991 35 54 24.1  
92 27 52.9

M<sub>BV</sub>/M<sub>M</sub>

good fss lsmt rotates  
the hands, etc

12

997 35 54 13.0 ± 14  
92 27 56.1

pond on E side of road is in

~~Mm~~ MF MF/MBV crosses the road here.

993 35 54 14.8 ± 20  
92 28 10.1

Mm/MB

just here in the road

we can see chart emerge

in the fields

14  
994 35 54 11.8 ± 14  
92 28 1.7

possible M<sub>av</sub>/m<sub>m</sub>

995 35 53 59.5  
92 27 44.5 ± 18

MF/MBV good and stop below road, MF above

996 35 53 33.5 ± 18  
92 27 54.8

the ~~MF~~ lens is above.

the top of M<sub>av</sub> comes out again is 2-3' above road.

Scale \_\_\_\_\_

997 35 53 20.1 ± 18  
92 28 15.2 ± 18 Mm/MB

great M<sub>m</sub> exposure here is about 25-30'

only one observable bed at the more massive, med-thick bedded lens siltstones though. not like others seen today that were more interbedded. Mostly shale here.

998 35 52 41.0 ± 21  
92 28 40.3 Mm/MB

999 35 54 9.0 ± 28  
92 35 46.4 MF/MBV

1000 35 53 53.2 ± 24  
92 31 52.1

MF/MBV

Location \_\_\_\_\_ Date \_\_\_\_\_

Project / Client \_\_\_\_\_

~~1001~~ 35 53 24.8 ± 23  
 92 31 23.4

$m_p / m_f$

~~1002~~ 35 53 23.6 ± 26  
 92 31 19.8

$P_{CH} / m_p$

~~1003~~ 35 53 12.8 ± 14  
 92 31 26.9

$P_{CH} / m_p$

~~1004~~ 35 53 2.7 ± 18  
 92 31 30.3

$P_{CH} / m_p$

Location \_\_\_\_\_ Date \_\_\_\_\_

Project / Client \_\_\_\_\_

Scale \_\_\_\_\_

~~1005~~ 35 53 24 ± 23  
 92 31 41.7

$2 m_p / m_f$

~~1006~~ 35 53 12.1 ± 20  
 92 31 42.8

$M_F / M_{BU} / M_m$   
 20-25 m

Joints N85E N30E  
 NSW

~~1007~~ 35 53 28.1 ± 20  
 92 31 49.3

$M_{burn} / M_b$

~~1008~~ 35 53 3.4 ± 20  
 92 30 20.7  $P_{CH} \times beds$

~~1009~~ 35 52 58.5  
 92 30 22.7  $P_{CH} / m_p$

100

Location \_\_\_\_\_ Date \_\_\_\_\_

Project / Client \_\_\_\_\_

19

1010 35 54 56.1 + 22"  
92 36 37.1 - 22"

parked in front of brown trailer  
owner has dug out of M<sub>F</sub> just  
behind the house here. There  
are MBU stops just at the  
water tower.

pt marks top of MBU

M<sub>F</sub>/MBU

20

1011 35 55 23.5 + 16"  
92 36 56.8 - 16"

pt is taken at an old saw mill  
just down from the highway. taken  
to be the top of the M<sub>e</sub>. M<sub>m</sub>  
is all the way to highway where  
the etc w/ MBUs located

21

1012 MBU / M<sub>m</sub> / M<sub>0</sub>  
35 55 17.4 ± 15"  
92 37 4.0 - 15"  
MBU / M<sub>m</sub>

Location \_\_\_\_\_ Date \_\_\_\_\_

Project / Client \_\_\_\_\_

Scale \_\_\_\_\_

1013 35 56 22.0 + 15"  
92 36 42.0 - 15"

MBU / M<sub>m</sub>

looks to diagonal across the highway  
toward the SW. FROLIC LN is in MBU

22

1014 35 56 17.6 + 17"  
92 36 45.8 - 17"

M<sub>m</sub> / M<sub>0</sub>

Small ls knobs mark  
the top of the M<sub>0</sub>.

NOT too cherty here.

knobs covered by sh + sst

1015

1015 35 55 55.0 ± 16"  
92 36 00.0 - 16"

came up to the top of this  
knob in search of M<sub>0</sub> but  
I am sitting on the top w/ some  
chert at my feet. It's a field so it  
may have been pushed, but there  
are no M<sub>0</sub> stops. Only lots  
of float along the way. The  
road down from here is M<sub>e</sub> rag.  
looks like all M<sub>0</sub> to top  
or only a few inches

Location \_\_\_\_\_ Date \_\_\_\_\_

Project / Client \_\_\_\_\_

~~1016~~  
35 56 30.4 ± 18  
92 36 42.9 ± 18

Mm/Mb Just found some  
Mb float at the  
drainage ditch

Mbv at the top of the roaded  
only ~ 20' of Mm

~~1017~~  
35 53 11.1 ± 20  
92 41 30.1 ± 20

pt taken at gate to old house  
there is sand in ditch below

27/ MF knobs behind the old house

~~1018~~  
35 53 26.2 ± 16  
92 41 51.2 ± 16

top of Mb; Mm ~ 15-20'  
here  
not a good visible c/w/Mbv  
but cementery was sand/clay

Location \_\_\_\_\_ Date \_\_\_\_\_

Project / Client \_\_\_\_\_

Scale \_\_\_\_\_

~~1019~~  
35 53 36.8 ± 16  
92 41 19.8 ± 16

pt on road make above spring house  
are loc on the Mbv/Mm ct -  
~ 10-15' down from road

~~1020~~  
35 53 33.8 ± 21  
92 41 9.1 ± 21

top of Mb

Mm/Mb

~~1021~~  
35 54 34.4 ± 15  
92 34 50.4 ± 15

Very poor evidence of Mbv  
There is a small knob of  
sandst apparently in place  
on the W side of the road  
Could it be st/st in MF  
Not sure

MF/Mbv

1022 35 54 43.9 ± 16  
92 35 12.4

Some sand steps just down  
the road from here. This pt  
shows some thin sands and clays  
possibly residual. So, is

the house in front of us  
32 in the MBV as well?

1023 35 54 52.7 ± 18  
92 35 3.0

prob MBV/MI=

good sst floats back toward  
houses, then the road to the  
north starts to show def MI=

1024 35 54 54.1 ± 14  
92 34 45.9

Road is sandy and there are  
some sands in the field  
~15-20 down below the road  
you can see Mm top w/springs.

1025 35 54 50.2 ± 14  
92 34 31.3 ± 14 N30W

sink hole beside the  
road is only ~10-15' in

For details  
of this  
sink hole  
3m and  
thick  
house

1026 35 54 43.9 ± 14  
92 34 23.7

30 1027 35 55 39.8 ± 18  
92 35 1.4

MI/MBV in road ditch  
37 def MBV @ stream.

1028 35 55 47.3 ± 18  
92 35 47.4

Road turns cherty at the this  
point. there is a now cabin  
here

MBV/MB



1029 35 55 41.4 ± 17  
92 35 26.5 ± 17

Mm / Mb  $\rightarrow$  starts to get cherty  
doesn't quite cross  
the road here, just a bit further  
down, but Mb knobs are to the  
E of the road.

1030 35 55 37.5 ± 15  
92 35 25.7

Sand begins to line  
the road bed/ditch

1031 35 55 17.2 ± 15  
92 35 23.1 ± 15

Sketching but beautiful  
Mm / Mf at the  
intersection

Climbing up the two Mp knobs on  
Harriet (Red Hill Road subdivision)

got to the Mp / Mf etc sooner than  
expected, this pt. is @ the last  
chert bed. thin sl. of chert / fine Mp  
red oolite above the chert.

1032 35 55 14.6 ± 17  
92 35 19.8

likely top of Mf on the  
S side; it's a bit less clear

etc inferred where last  
microitic / cherty float occurs  
defiant Mp knobs

42 above.

1033 35 55 11.5 ± 18  
92 35 36.9 ± 18

Mp / Mf @ last microitic / cherty  
bed before foss, thin beds

1034 35 55 4.6 ± 19  
92 35 37.7 ± 19

Mp / Mf on S side of  
W knob (?)

1035 35 55 28.0 ± 22  
92 35 27.5

stop in drainage  
Mm / Mf good reddish-gray sst  
not almost as  
near by 27

45

1036 35 55 27.4 ± 18  
92 35 30.3 - 18

pt taken at about eyeball level where Mg steps down stream above creek level. exact contact in creek is covered but the highest Mg on hillslopes should project to here

there is about 10-15' of Mm then a foss, sandy/silty limst at base of Mbv (Hindsville)

Mb / Mm / Mbv

→ there are also some chunky whitish limst floats that are floating around in the hillside just above the hindsill / ~~base~~ baseville area. <sup>what</sup> are these? they are <sup>great</sup> white, micritic limstones that look similar <sup>(green)</sup> to M<sub>u</sub> upper or ~~M<sub>u</sub>~~ <sup>but some yellowish</sup> but no other floats were found to this pt.

1037 ~~cont~~

up the easterly fork of White the drainage the limst really start to express themselves lots of float; looks exactly like ~~Op!~~ Richard is reminded that he saw the exact lith at the M<sub>u</sub>/M<sub>bu</sub> etc on Monday. 2 ft #989, 990.

There's not a lot of it ~ 25% of float that is around.

46

1037

35 55 30.6 ± 19  
92 35 29.9 - 19

last sand up this side. M<sub>mb</sub> looks like Pot sand float and M<sub>u</sub> to the southerly bank

1038

35 55 47.0 ± 21  
92 35 13.8

Mm/M<sub>u</sub>

pond

probably close to top of M<sub>u</sub> we ~~lose~~ the chart, ~~green~~ gain tons of SP in hill slopes but no good otcps

46

1039 35 55 34.5 ± 18  
92 35 37.0 ± 18

another pond at top of the Mb, pretty good etc inferred although. g cherts are on banks of pond; ~~standing~~ no cherts above.

50 ✓ 3.17.08

1040 35 54 32.4 ± 20-  
92 42 38.2 - 20-

top of Mb; covered etc inferred @ 20 where cherty stops being predominant.

Good Mm atop on up

exposure 12/15" thick w/ house on hill top (see aerial) probably on Mm. (lots of slabs of it around)

silver  
roof.

1041 35 54 23.3 ± 21-  
92 42 30.2

other side; Mm/Mb see cherts in drainage

probably as far down as the next road (Meadow Ln) its further

✓ add ~ 2-3-

1042 35 54 20.4 ± 16-  
92 42 26.2

Meadow Ln starts up into Mm!

53 Mm/Mm

1043 35 54 15.7 ± 8-  
92 42 22.0 - 8-

54 Good Mm/Mb

1044 35 55 8.5 ± 16-  
92 37 20.5 - 16-

"Nixon Heights"?

Good Mm/Mm in ditch  
Mm ~ 20-25" fr

52  
 (1045) ✓ 35 55 6.7 ± 30-  
 92 36 1.3

MB is 2<sup>5</sup> 10' down from here. come out that Op-loading stuff w/ the MBu. twin  
 ↓ MM (210-)

(1046) 35 55 22.9 ± 19-  
 92 35 54.9

M<sub>bu</sub>m / M<sub>B</sub> ??? big M<sub>B</sub> chucks in the road here

Access Rd ↓

but we don't seem to come too far down section? Fault?

(1047) 35 55 47.3 ± 15-  
 92 34 30.2

M<sub>F</sub> / M<sub>bu</sub> trap pond is still M<sub>F</sub>.  
 M<sub>B</sub> in culvert ditch just beyond pond.

(1048) 35 55 53.2 ± 17-  
 92 34 17.1

M<sub>bu</sub>m / M<sub>B</sub> M<sub>m</sub> is fine

M<sub>B</sub> at Cemetery w/ etc seem to be rising up along a M<sub>B</sub> undulation?

(1049) 35 55 51.4 ± 17-  
 92 35 51.3

M<sub>bu</sub>m / M<sub>m</sub>

60  
 (1050) 35 56 49.8 ± 18-  
 92 32 54.3

● M<sub>B</sub> / M<sub>st</sub> some M<sub>st</sub> float down str from here but no OTCF  
 Some calcareous! N 65 W

Joints  
 N15 W  
 N50 W

61  
 (1051) 35 56 30.8 ± 16-  
 92 31 15.4

Osp on S side of highway. etc w/Osp is not evident. Oc in creek E 110- below [Osp OTCF ~ 6-10' in]

Location \_\_\_\_\_ Date \_\_\_\_\_

Project / Client \_\_\_\_\_

1052 35.55 54.2 ± 22  
92 27 49.5

63 ↓ poss Op / Op ~ 15' up from road

1053 35.55 49.2 ± 17  
92 27 56.4

64 ↓ bonafied Op / Op

1054 35.55 44.5 ± 18'  
92 28 0.7

Mass / Op only thin exposure  
of Mas. Old home place near etc

ooonk... some Sb white pink blobs  
But found Op just below m-critic  
so... could just all be Op...

3.24.08

1055 25.59 25.3 ± 17  
92 31 42.1  
sinkhole beside the road North  
of Hwy. in Mb  
~ 20 x 15 x 10

Location \_\_\_\_\_ Date 3.24.08

Project / Client \_\_\_\_\_

Scale \_\_\_\_\_

2 ✓ 1056 36.00 21.6 ± 17 - Big Flat Quad  
92 29 34.8

Mass / Op / Op pt makes Mass / Op

Walked down <sup>up</sup> from field to  
the old barn. Osp w/ spring  
(old pond) just ~ 10-20 yds  
behind barn. prob Op / Osp  
The area is very covered there  
looked like Osp / Mb but  
found a small 1' x 2' float of  
Op.

Walked up to old dig pits  
beside the road and  
found the Mass / Mb etc.

w/ some Op steps below  
Mas looks massively bedded  
and strange Mn replacement.  
Op juts steps as small  
knobs peeling out from des-  
bris piles.

R.H. just found Mass thrown aside  
the piles  
Maybe pass faults but all covered <sup>in the area</sup> sinkholes

1057 35 00 19.0 ± 23"  
92 29 35.2

Info mod top of Osp; cfc w/ Op is covered  
Op/Osp

1058 35 00 20.1 ± 24"  
92 29 43.9

sink holes on Map are large dig pits! Very mn rich Ms and Mo!  
top bed of Ms is ~3" thick. Massive  
found good red cherts w/ a clay bed in Ms??

Mo/Mss

1059 36 00 8.9 ± 24"  
92 29 36.8 N55W  
Dip on Osp 10° SW  
Joints: } taken on ~40-50 yds back  
N15W N85E  
N70W

→ ~~OSP~~ FAULT! Oooooh! AAAAAH!

159 contd

Sink holes! dig pits on mn  
non diagenetic mineralization! and some  
fault drag! Oe may be just a fracture  
th. sez to break up top

Osp is at creek level

again at this pt. prob  
30' ~~of~~ of offset. Osp down str  
is dipping the opposite way.

Osp ~40' thick w/ visible  
Op above. Spring trickles  
down fault plane.

1060 36 00 12.2 ± 30"  
92 29 36.0

Osp/Oe

probable  
plane  
S4D  
N42W

3.25.08

1061 35 58 41.6 ± 243"  
92 29 37.1 Osp/Oe

Looking for Wildcat Faults  
again today. pt marks Osp/Oe  
on high hill up from jeep parking.

1061 No sat reception.!!

Op/Osp on high maybe  
100' up from drainage. Osp was  
prob. 40-50' thick.

1062 35 58 48.9 ± 22'  
92 29 37.4

walked a bit further NW  
Op/Osp seems to be rising  
up... but dip's not apparent.

1063 35 58 51.8 ± 21'  
92 29 37.3 Op/Osp

good dip surface on Osp  
just @ etc w/Op

10 1064 35 58 54.9 N40W  
92 29 35.8 ± 29 16° SW

Op/Osp at top.

1065 35 58 57.9 ± 30'  
92 29 30.8

Msp/Op/Osp prob about 20' of  
25' 20' of thin Msp just  
below highway.

12 1066 35 58 55.8 ± 22'  
92 29 38.1

Msp/Op/Osp about the same thickness

13 1067 35 58 51.5 ± 19'  
92 29 43.8

Op/Osp Op looks to dip

14 1068 35 58 44.5 ± 23'  
92 29 39.0

Op/Osp Msp is hiding

15 1069 35 58 40.3 ± 17'  
92 29 44.7

Op/Osp on "upturn" side. drainage  
looks like the fault, opposite hill  
15 m.B. approx dip on Op

NSW 4°E 13°N NSW

Location \_\_\_\_\_ Date \_\_\_\_\_

Project / Client \_\_\_\_\_

16 ✓

(1070) 35 58 39.5 ± 9'  
92 29 44.7 ± 9'

~~Op/Op~~ Op/Op

i think in on the down town side, but I haven't walked too far from where i came down across MB.

There is probably only 20' of Off set here. will have to look for other offsets...

might show Op/Op cross (Yep!)

Strike on fault looks ~ N85W

will cut up and across the 7 adj drainage.

(1071) 35 58 38.6 ± 18'  
92 29 52.0 ± 18'  
Op/Op

Location \_\_\_\_\_ Date 3.26.08

Project / Client \_\_\_\_\_

18 ✓

Scale \_\_\_\_\_

(1072) 35 54 32.3 ± 25'  
92 37 31.2 ± 25'

MB/Mm/MB pt @ Mm/MB

19 ✓

225-35-

(1073) 35 57 2.7 ± 18'  
92 28 54.4 ± 18'

Joints on Dsp @ Fairview Rd  
N35E N85W N45W  
N65W inferred

→ pt makes Op/Osp up the creek. probably just past the Osp top and into two Op 20-30 yds. all covered. looks like Op is only 30-40' thick. can see of.

20 ✓

(1074) 35 57 6.0 ± 40'  
92 28 35.4 ± 40'

im standing in adj road

Op/Op crosses creek at this point. Op was prob rising slightly to this pt or we crossed a fault w/o noticing???



22  
 1075 ✓ 35 57 10.2 ± 25-  
 92 28 25.2

Mst / Of pass some Mss  
 sandy ls w/ phos  
 low chnd. w.  
 maybe ss, may be Mss

1076 ✓ 35 57 3.3 ± 17-  
 92 29 0.5

Op / Ose pass just past the top ~ 5-10' down standing on road w/ Op in the bed

23  
 1077 ✓ 35 57 12.4 ± 18-  
 92 29 5.1

Op / Osp in sitting ~ 20-25' up from the etc. R.H. below photographing the spring we are above the "swimming hole" w/ great ferns and falls. Op is ~ 25-20 feet above marsh.

107 Fronte we could see the Op / Op etc as we followed the road over. it was ~ 10-15' above the road bed. also kept seeing the sandy-tan Op bed at the top of Op. near SSS

24 Gorgeous Day.

1078 ✓ 35 57 13.0 ± 22-  
 92 29 2.9

Op / Op in side drainage

(walked around past house/barn to Ose bluff good dip surface

N25E 40ESE

JOINTS

N65W N40E N65E N10E

25

(1079) 35 57 17.3 ± 18'  
92 29 19.7

Osp/Oe ~ 50-60' up from  
creek lul

- SSS doesn't get much better than this; great cuts down into Oe by Osp.

(1080) 35 55 17.0 ± 26'  
92 28 44.3

Sylamore sst? w/ chat sh?

name back to look at the Oe otep  
after the floods. R.H. found a  
phosphatic gtz sst. below the shale  
and above the inferred Oe.

looks like an undulation as the  
sequence rises w/ the road would  
be good evidence

Mss/Dc/Ds/Of ...

exposures of the  
sst include a nice  
size float on W side of  
road and small 1<sup>st</sup> oteps on E drainage  
at the pt.

(1080) however, I did sketch  
a fault through here, just  
as R.H. was finding the otep.  
but; the simplest answer  
is usually the best... ??  
[marked by skull.] cool

→ faulting connects w/ M<sub>3u</sub>/M<sub>m</sub>/M<sub>g</sub>  
off/set in Scribner Csm  
and nearby areas...

(1081) 35 54 32.9 ± 16  
92 25 24.2

good Mm otep just south of  
here. drove down both roads  
M<sub>g</sub> oteps quickly to E, but  
Mm continues to SW, Mm follows  
road down, but M<sub>g</sub> is visible  
on hill slopes opposite the drainage  
drew lines while driving.

28

1082 35 53 9.9 ± 21'  
92 23 38.3

MF/MBV at road level  
MF reappears at the <sup>MOBILE HOME</sup> ~~house~~ to E.  
looking down the drainage #  
(poor access) looks like there is  
a ls bed about 30' down w/  
fcr shaly otop in E side of bank (Mm?)

29

1083 35 53 13.6 ± 21'  
92 23 14.6

MF/M<sub>BV</sub> just below house on map  
can see MF on hill slopes to  
south; MBV dam. in drainage

1084 35 53 22.9 ± 18'  
92 23 38.6

Mm/MB

50ms  
in silty  
Mm

|       |       |
|-------|-------|
| N 75W | N 80E |
| N 60E | N 35E |
| N 50E | N 80E |

1085 35 54 8.9 ± 25'  
92 23 45.6

Mm/MB inferred by  
cherty chunks in drainage  
and road ditches. field to  
N is prob MB too...

30

1086 35 55 7.2 ± 17'  
92 23 51.6

pretty decent MBV/Mm  
etc in road ditch  
I can't quite tell exactly where  
to draw on map yet, but the  
pt will be great!

Mm look only 10-15' thick!  
WTF? Time to go

4.7.08

std on the surface downstream toward  
Big Creek in wildcat hollow

N 60W 270ssw

1  
 1087 35 58 38.4 ± 17'  
 92 29 18.1

Osp / Oe looks like our  
 etc at the Yew Mt (road)  
 house is higher than here  
 approx 20-40' offset along  
 the "fault". haven't seen  
 direct offset, assuming that  
 the fault directly follows  
 the hollow.

down @ creek lol good dips  
 on Oe: N25E 18° ESE  
 dipping ~ downstr.

2  
 1088 35 58 41.5  
 92 29 0.9 ± 25'

Osp / Oe w/ good out and folds  
 "Z"



1089 35 58 38.9 ± 24' (180)  
 92 29 21.6

Broken, Rubbery, Dippy

4

Faulty??  
 1090 35 58 40 ± 20'  
 92 40 25.8

Osp / Oe in Hensley Hollow

JOINTS in PLATING  
 N62W N40E N1S N75E

1091 35 58 20 ± 14'  
 92 40 28.4

M<sub>s</sub>/S/O<sub>f</sub>

Silurian rx one more lenticles  
 in lithology, but grade <sup>equivalent</sup>  
 upward with a coarser ground  
 chondal, radiolites. more  
 mesoigne between a natural <sup>vs</sup>  
 at all etc w/ M<sub>s</sub>

6  
 1092 35 58 00.0 ± 20'  
 92 40 28.3

seems to be more  
 ext<sub>l</sub> @ the M<sub>s</sub>  
 etc...

M<sub>s</sub>/M<sub>ss</sub>/S (or is it O<sub>f</sub>?)

↓  
 Some clear (recrystallized)  
 glaucous is more silty. also  
 Sample has pyrite replacement / contact

1093 35 57 20.6 ± 14'  
 92 40 38 ± 14' ~ 5-8" thick

M<sub>s</sub>/O<sub>f</sub> inferred "O<sub>f</sub>" piece looks like  
 it has vugs of calc + silty like  
 St. Clair

4.8.08

8

(1094) 35 57 16.1 + 19.  
92 39 33.0 - 19.

- stand. up @ base of M<sub>55</sub> o'rop.
- Sil/LAF - type rocks are float in creek below

M<sub>55</sub> / S / O<sub>F</sub>

etc is across

the way on road looks to be ~2' lower

→ inferred to be in area

"Sil" is still of light gray w/ m-crill above

9

(1095) 35 58 54.3  
92 39 9.9 ± 14-  
O<sub>F</sub>? or Sil?

first o'trip of M<sub>55</sub> in drainage we had of at jeep, parked ~ 80 yds down str.

M<sub>55</sub> / O<sub>F</sub>St Don M<sub>55</sub>

N 50W 4-5' SW

(1096) 35 59 32.9 + 22-  
92 39 31.5  
top of M<sub>55</sub> Mo / M<sub>55</sub>

4.8.08

Scale

(1097) 35 59 33.6 + 15-  
92 39 39.9 - 15-  
S / O<sub>F</sub> / O<sub>F</sub>

"Sil" Rox are white r-ll (f.m)  
smaller nodules w/ black 'phos(?) grains... poss.

great conglomerate  
b' mass float at the

St. Clair?

S / O<sub>F</sub> etc.

12

(1098) 35 59 33.4 + 21-  
92 39 35.1 - 21-

M<sub>55</sub> / S phosphate flakes in the  
St. Roxs at top of S /

are later type (w/ r-ll  
red streak)

Sil looks to be

~~28~~ 10.5-8"

(1099) 36 00 16.4 + 20-  
92 39 36.1 - 20-

14 O<sub>F</sub> / O<sub>F</sub> off the quad.

(1100) 36 00 7.4 = 22-  
92 39 28.4 = 22-  
S / O<sub>F</sub>

15

(1101) 35 59 33.5 + 22'  
92 39 27.3 - 22'

M<sub>S</sub>/S: lots of S<sub>L</sub> here

16 BNP shall w/ exll red bed between  
so, form. is unclear but mostly  
laferty type.

17 4.9.08

(1102) 35 59 43.5 ± 30'  
92 27 30.8 ± 30'

strongly dipping O<sub>sp</sub> w/ def bands

[N20E 29°WNW]

(1103) 35 59 46.8 + 9'  
92 27 34.4 - 9'

great def bands in O<sub>sp</sub> w/ atrops

AC ending! where did it go? recall

O<sub>trpy</sub> beyond the white trailer (? upthrown)  
not able to see fault trends..?

also stays quite consistent on top.

(1104) 35 59 53.4 +  
92 27 43.9 - 22'

O<sub>sp</sub>/O<sub>e</sub> ~ 10' above creek ut. demark  
inferred off the atrops

O<sub>sp</sub> bluff ~ 30-35'

(1105) found the "throne" area.  
consists of a plethora of  
sandstone pipes, the vicinity  
of the monocline and deformation  
bands, may indicate area where  
upwelling of fluids occurred around  
the structural changes (??)  
really cool!

21  
(1105) 35 59 10.7 ± 10'  
92 28 52.7

standing on old sand bar @ Big Creek  
E side bluff has the following  
sequence: + O<sub>sp</sub> / O<sub>sp</sub> / O<sub>e</sub>

above 100-350' creek cut - 20'

(1106) 35 59 11.0 ± 18'  
92 28 41.8 ± 18'

O<sub>sp</sub>/O<sub>e</sub> across from highway  
can see "fault area (?)" along  
road cut (pt 176?)

(1107) 35 59 13.3 + 20'  
92 28 32.6 - 20'

O<sub>sp</sub>/O<sub>e</sub> crossing creek (O<sub>e</sub> lines w/ O<sub>sp</sub> 10-15')  
not seen any def bands until this pt.

good  
beds  
over  
O<sub>sp</sub>  
(1108) 35 59 8.6 ± 20'  
92 28 31.2 - 20'

offset of O<sub>e</sub>/O<sub>sp</sub> w/ previous pt. RH N50W  
Fault trend