

#3 721'

#4 1042' 1100-58'

#5 1159 1200-49

#6 1219

300	1:25
287	1:28
275	1:32½
249	3:03
235	3:06
218	3:07½
192	3:08
188	3:09
165	3:10½
160	3:11½
141	3:13
104	3:14
59	3:15
21	3:16½
10	3:17½

long 1 = falling edge
long 2 = both
long 3 = falling edge

~~For 1st 2 long 1, long 2, long 3~~
~~triggers 1st 2 long 1, long 2, long 3~~

10-26-2011

3rd file

Seismic @ 300 Level Hms

Check effects of time samples using
100 edge 5 shots to rail in
↓ 1 shot 100' 300 level;
set up
geophones
at entrance
1 high vent
1 low vent
2 horiz

6 100' 5 shots

~~130~~

7 100' shot toward
wall 5 stacks,
toward east

8 100' towards west

9 100' parallel to drift
toward setup

10 100' away from setup

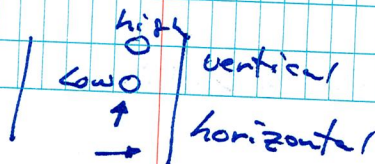
~~11 150' vertical~~

11 no good (150')

12 125' five shots vertical

13 150' 5 shots vertical

14 150' 5 shots vertical (repeat)



file # all at 100 msec
interval

15 200' one shot reverse

16 200' five shots

17 250' 1 shot

18 250 5 shots

19 300 1 shot

20 300 5 shots

3L250

file all at 250 msec & 1/2 sec
interval

① 300 1 shot

2 300 5 shots

~~3 250 1 shot~~ No good

4 250 1

5 250 5 shots

6 200 1 shot

7 200 5 shots

8 150 1 shot

9 150 5 shots

10 100 1 shot

11 100 5 shots

Sample interval 125 msec

3L125
file

1 100 1 shot

2 100 5 shots

3 150 1 shot

4 150 5 shots

5 200 1 shot

6 200 5 shots

7 250 1 shot

8 250 5 shots

all at 125 μ sec

9 300 1 shot

10 300 5 shots

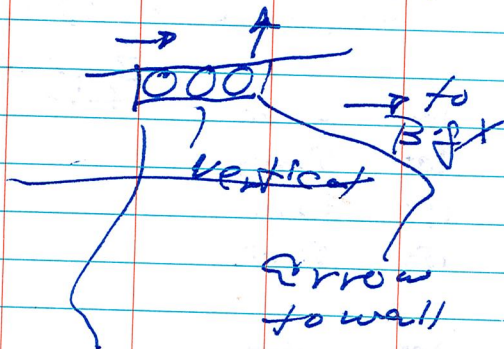
11 50 1 shot

12 50 5 shots

10-28-2011

on 4850/eu1

Set geophones on first
bracket at [200-25] ft.



Hooked up to channel 3

File
108K @ 1000 Hz

1:35:02 start
acquisition.

Record	Time	Receiver
Start at 2		at 1750 ft west of triangle tip
2	1:37:33	38 1:55:00 8
6	1:37:55	42 1:55:18 188
7	1:39:31	43 1:56:30 9
11	1:39:56	47 1:56:49 107
12	1:41:31	48 1:57:30 10
16	1:41:57	52 1:57:50 160
17	1:43:31	53 2:01:00 11
22	1:43:56	57 2:01:18 147
23	1:45:00	58 2:03:00 12
27	1:45:28	62 2:03:22 104
28	1:52	63, 64 good
32	1:52 23	65 2:05:00 59
33	1:54:00	69 2:05:30 13
37	1:54:18	70 2:06:30 21
		74 2:06:45 14
		75 2:08:15 10
		77 2:08:47 15

Record	Location	[200-50] location Time	file/08 l	Receive Station 150 ft
79-83	300	3:02:00		
73	287	3:00:30		150 ft
67	275	2:59		west of
61	249	2:57:30		triangle
56	235	2:56:30		tip
51	218	2:55		
47	192	2:53:30		
41	188	2:52:30		
36	165	2:50:30		
29	160	2:49:30		
24	147	2:48:00		
19	104	2:46:30		
13	59	2:44:00		
7	21	2:42:30		
1	10	2:41:30		

108m	Receive at 75 ft.
300	3:30:00
287	3:31:00
275	3:32:00
249	3:33:00
235	3:34:00
218	3:35:00
192	3:37:30
188	3:38:30
165	3:40
160	3:40:30
147	3:40:45
104	
59	
21	
10	
147	3:44:30
104	3:45:30
59	3:46:40
21	3:48-
10	3:49-

d.I.I
miss
in
transfer

} lost
topple

) must be repeat

-NO

Nov 18, 2011

4850 feet

125 ft. 125R

Set up seismograph
Geophone location 25 ft

Station	Time	100 R	50 R
start			start
300	10:11:30	11:09:00	11:26:30
281	10:13:30	8:00	27:30
275	10:15:00	7:00	28:30
249	10:16:00	6:00	29:30
235	10:17:00	11:05:00	30:30
218	18:00	3:30	31:30
192	19:00	02:00	32:30
188	20:00	11:01	33:30
165	21:00	59:30	34:30
160	22:00	59	35:30
141	23:00	58:00	36:30
Δ 104	24:00	56:30	38:00
Δ 93	25:00	55:30	39:00
Δ 79	26:00	54:30	40:00
59	27:00	53:30	41:00
Δ 32	28:00	52:30	42:00
21	29:00	51:30	43:00
10	30:00	10:50:30	11:44:00

Start at 00

10

on file 125R
Record 1 horizontal struck
away from yates

Record 2 horizontal toward
yates

3 down

4 up.

25R

~~11:09:00~~
~~11:08:00~~

12:51:30

12:50:30

12:44:00

12:49:00

12:46:00

12:45

12:44:00

12:43:00

12:41:00

12:39:00

12:37:30

12:36:30

12:35

12:34:00

12:26:00

12:25:00

Repeat of
281 ~~285~~ 1:10:45

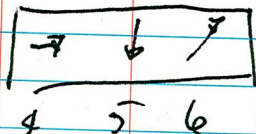
~~1:12:00~~

Probably
not very
useful
because
too close

File 12R
(at 12.5')

	12R	37R	62R
start	Time	Time	start Time
300	1:46:00	2:45:00	3:02:00
287	1:47:00	44:00	03:00
275	48:00	43:00	04:00
249	49:00	42:00	05:00
235	50:00	41:00	06:00
218	51:00	39:30	07:00
192	52:30	38:00	08:00
188	54:00	37:00	09:00
165	55:30	36:00	3:10:00
160	56:30	35:00	11:00
147	57:30	34:00	12:00
104	59:00	33:00	13:00
Δ 93	2:00:00	32:00	14:00
Δ 79	01:00	31:00	15:00
59	02:00	2:30:00	16:00
Δ 32	03:00	29:00	17:00
21	04:00	28:00	18:00
10	2:05:00	2:17:00	3:19:00

Start



on 12R 188 might have
pretriggered in
the middle (?)
maybe also on 218 (?)

12.2.201

87+112

Source
Locations

87+

112

As Recia.

75+

162

~~100~~

~~100~~

~~100~~

200-

MB

(motor
barn)

300	11:28	1:02-	1:49
287	11:29	1:01-	50:30
275	30:30	59-	52:00
249	32-	57:30	53:30
235	33:30	56-	55-
218	35:30	54-	57:30
192	40-	51:30	2:00:00
188	41-	50:30	01:00
165	42-	49-	2:30
160	43-	48:30	2:03:30
147	44:30	47-	5:30
104	46:00	45:30	7:30
93	47-	44-	9-
79	48-	43-	10-
59	49-	42-	11-
32	52:30	41-	12-
21	54-	39:30	13:30
10	55-	10:25:30	2:15:00

12:38:30

2:23:30

0:300

redo

MB 10, 11, 12

200 4, 5, 6

using channels

~~200~~

112 4, 5, 6

0	0	0
4	5	6

87

0	0	0
10	11	12

Did geophone test on 112

0	0	X
---	---	---

Checked --

Correct.

unhooked

6

75

--

3, 4, 5

162

--

10, 11, 12

on the
first
channels

FELE = file to test
leading edge vs.
falling edge trigger.

4100 inspection 12-21-11

in prep for DURA Video

Swifttech

120 outlets

Survey inside of cutout.
distance for switch to
infrastructure

15 amp 20 amp circuit

rrh files used Falling Edge
trigger

Reconstructing Bad record/good record history
of 75-162 on 1-1-12. (missing
notes for this bad/good record. looks ok though

Bad Records

1	32	54	98
11	42	63	99
12	50	66	100
18	51	76	101
19	53	82	112

--

Start at 10 receiver location

2-6 ~~10~~ 10

9-13 ~~18~~ 21

16-21 ~~28~~ 32

22-27 59

29-33 79

34-37 93

39-43 104

44-45, 48 147

52-56 160

57-58, 60-61 165

63-66 188

67-71 192

73-77 218

79-83 235

84-88 249

89-93 275

98-102 287

103-107 300

Reconstructing 200-mb
as from previous page

Bad records

1	36	65
23	55	91
34	64	

--

Records

2-6	287
7-11	275
12-17	249
18-22	235
24-28	218
29-33	192
35-39	188
40-44	165
45-49	160
50-54	147
56-60	104
61-63	93
66-70	79
71-75	59
76-80	32
81-85	21
86-90	10
92-96	300

Note:

** All records
between Sept 2011
and January 2012
were set up for a
trigger on the
Falling Edge. This
yielded a
0.001702 sec
delay in the
start of
recording based
on a survey
using railroad
track steel.

311

Parameters

hi cut 2000

Lo cut 4

Samples 2000

100 msec

trigger Auto

Sensitivity 2

Falling Edge

31125

2-18-2012

RCT 1

100 msec sample interval

Rising edge
~~leading~~

RCT are tests for
delay and steel
velocity.

Railroad Calibration
test (1)

from 300 → 25 from source

The 300 shot was repeated (also
perhaps #5?).

Falling edge on same file starting
at 25' and going to 300

"Both" trigger at 300 → 25'

Took extra 300' shot before
setting "Both" on trigger.

high frequency geophone on
channel 3

and low on channel 4

RCTZ

500 unsec sample time

50 ms range

400 hicut

starting @ 25 → 300'

Then changed to falling
edge
300 → 25'

Then "Both" 25' → 300

Kctz =

at 75'

~~3 progressively harder~~

3 progressively harder
followed by Jones Soft.
width of track
2 5/8"

Removing data files from BISON

3-11-12

bcr1 Sample interval 250
sample length 2000
800
12

mode Auto

Both

bfg

SI 500
sample length 2000

bfj	Sample interval	Sample length	Hi Cut	Lo Cut	Trig
bfg	500	2000	500	10	Auto Falling edge
bfb	1000	1000	0	8	off Falling edge
bfc	500	2000	500	10	Manual Both
bfd	500	2000	500	10	Auto Both
bfe	500	2000	500	10	Auto Both
125r	100	200	2000	4	Auto Falling edge
100r	100	200	2000	4	Auto Falling edge
108K	100	200	1500	4	Auto Falling edge
108d	100	200	1500	4	Auto Falling edge
108m	100	200	1500	4	Auto Falling edge
50r	100	200	2000	4	Auto Falling edge
25r	100	200	2000	4	Auto Falling edge
12r	100	200	2000	4	Auto Falling edge
37r	100	200	2000	4	Auto Falling edge

Rile Name	Sample Interval	Sample Length	Hi-Cut	Lo-Cut	Trigger
62r	100	200	2000	4	Auto
75-162	100	200	2000	4	Falling E. Auto
200-mb	100	200	2000	4	Falling E. Auto
87-112	100	200	2000	4	Falling E. Auto
Katz	100	50	2000	4	Falling E. Auto

3-23-12

Returned 10 boxes of Core to Hms.
Hole C Box 49-58.

Picked up

C-62 533.1-542.2	C-68 587-596
C-66 569-578	C-31 264-273
C-38 316-325	C-45 379-388
C-37 307-316	C-44 370-379
C-65 560-569	C-43 361-370
C-63 542-551	C-46 388-397
C-67 578-587	C-47 397-406
35 300-307	C-41 343-352
34 291-300	C-40 334-343
33 283-291	C-42 352-361
64 551-560	C-48 406-415
69 596-598	
32 273-283	

Returned

4-17-12

~~Hole~~

165 is 6'8" north of LFA
@200 mark (200 South of
spiral Bix).

Picked up core 4-17-12

C17 138-146	C6 44-53
C19 155-165	C7 53-61
C20 165-174	C8 61-69
C18 146-155	C3 17-27
C30 255-264	C4 27-36
C29 247-255	C5 36-44
C28 237-247	C21 174-183
C13 103-112	C27 228-237
C12 94-103	C26 218-228
C11 85-94	C24 200-210
C16 122-138	C23 192-200
C15 121-129	C22 183-192
C14 112-121	C9 69-76
C2 8.4-17.8	C10 76-85
C1 0.0-8.4	C25 210-219
C60 514-524	C59 505-
C61 524-533	

Corat RESPE
Spring 2012

1 box 3' x 3 1/2' x 17"

filled w/ 6" core

mostly not Sub. red.

labelled w/ RESPECT number

1 pellet 1 sample deep

All subcored

40" x 48"

I pulled 6 "Core remnants"

8 core boxes from Hole 1A

Needs to go back to Sanford

1/4 pallet contents - not useful.

2 boxes $1' \times 2\frac{1}{2}'$ tested

Specimens in

Sandwich bgs.

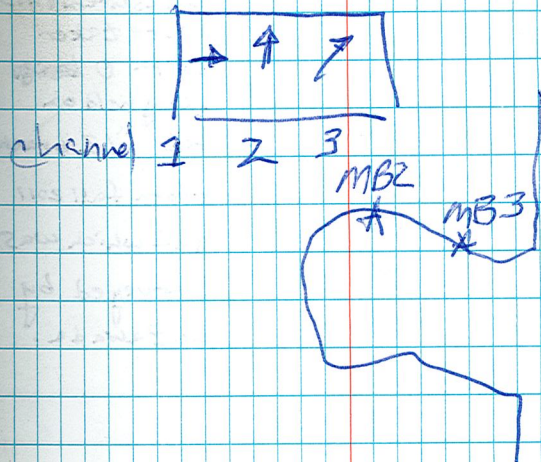
1/2 pallet tested 6" Core

$\frac{1}{2}$ pellet of shear test

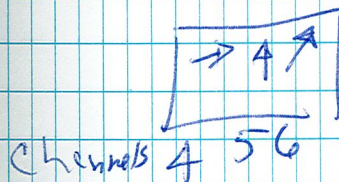
specimen - one sample deep.

June 1, 2012
on the 4850

MBZ



MB 3



typical
7 shots

first 3 is into hole
next 2 toward ditch
next 2 away from ditch
begin mbe

Station tape time

12 0 11:44:30

5 11:51:00

10 11:52

25 ~~15~~ 14

14 11:53:30

20 11:53:30

25 11:56:30

30 57:00

43 58-

62? ~~45~~ 45

45 0:30

75 ~~45~~ 52

50 2:30

55 3:30

60 4:30

100 64 1/2

64 6:00

72 7:30

77 9:30

83 10:00

Station 75.5

Station 89

89 11:00

~~94 12:30~~

93 13:00

All tape
measurements
were taken
with 0 being
being held on
the "12 bracket
from fall 2011
and which was
surveyed by
W. Zawada.

mon
tape (100 feet)

Station 2.5'

0 12:21:30

5 22:00

10 22:30

15 23:30

Station 1/8

20 24:30

26 25:00

31 25:30

37 26:30

Station
triangle 40

39 27:30

45 28:30

50 29:30

56 30:00

60 31:00

65 32:00

Station 65.5

70 ~~33:00~~ 33:00

76 33:30

Station 82.5

80 34:30

85 35:00

92 36:00

— end mbe

Start in Vent Drift Begin
mb3

Started at further point
and then passed Big X, in 3

Believe it is 300' 2 → South
2 ← North

Station Clerk time
300 0 1:40:00

20 41-

Station 25

25 42-

30 43-

~~35~~

70 44:30

Station 83

93 46-

Station 108.5

Station 113

Station 136

Station 154

Station 198.5

~~186~~

108 51-

115 52:30

120 53:30

127 54:30

Tape measurements were made
beginning 300 station be 0 and then measuring
toward "Big X".
SATA tape

136 55:30

142 56:30

149 1:57:30

155 2:24-

160 21:30

~~173 22:30~~

— end mb3

Times for mb2 at the recorder

Time Record

[one hour difference
between watches
due to saving time diff.]

10:44:30	1		
10:51:00	7	11:26:30	173
10:52:00	14	11:27:30	180
10:53:30	21	11:28:30	185
10:55:30	28	11:29:30	192
10:56:30	35	11:30:-	199
10:57:-	42	12:40:-	247
10:58:-	49	12:41:-	252
11:00:30	56	12:42:-	259
11:02:30	63	12:43:00	265
11:03:30	70	12:44:-	272
11:04:30	77	12:46:-	279
11:06:-	84	12:50:45	286
11:07:-	91	12:52:30	297
11:08:30	98	12:53:30	304
11:10:-	105	12:54:30	311
11:11:-	112	12:55:30	318
11:13:-	118	12:56:30	325
11:21:30	125	12:57:30	332
11:22:-	132	339	end mb2
11:22:30	138	start mb3	
11:23:30	145	1:21:-	1
11:24:30	152	1:21:30	7
11:25:00	159	ends here because	
11:25:30	166	ran out of battery.	

62 543-552

70 615-624

58 506-515

60 524-533

57 488-506

59 515-524

61 533-543