Steam turbine power generation
arrangement overview and vibration type and location

Sensor type **Tag initial ID**

D-xxxx Eddy current, vibration signal was retreived from vibration console and captured by Bentley Nevada ADRE DAIU-208 and Technekon STD-3300

V-xxxx Velocity, vibration signal was retreived from vibration console and captured by Technekon STD-3300

A-xxxx Acceleration, separated ICP vibration sensor, signal was detected by Portable vibration analyzer, Technekon STD-3300

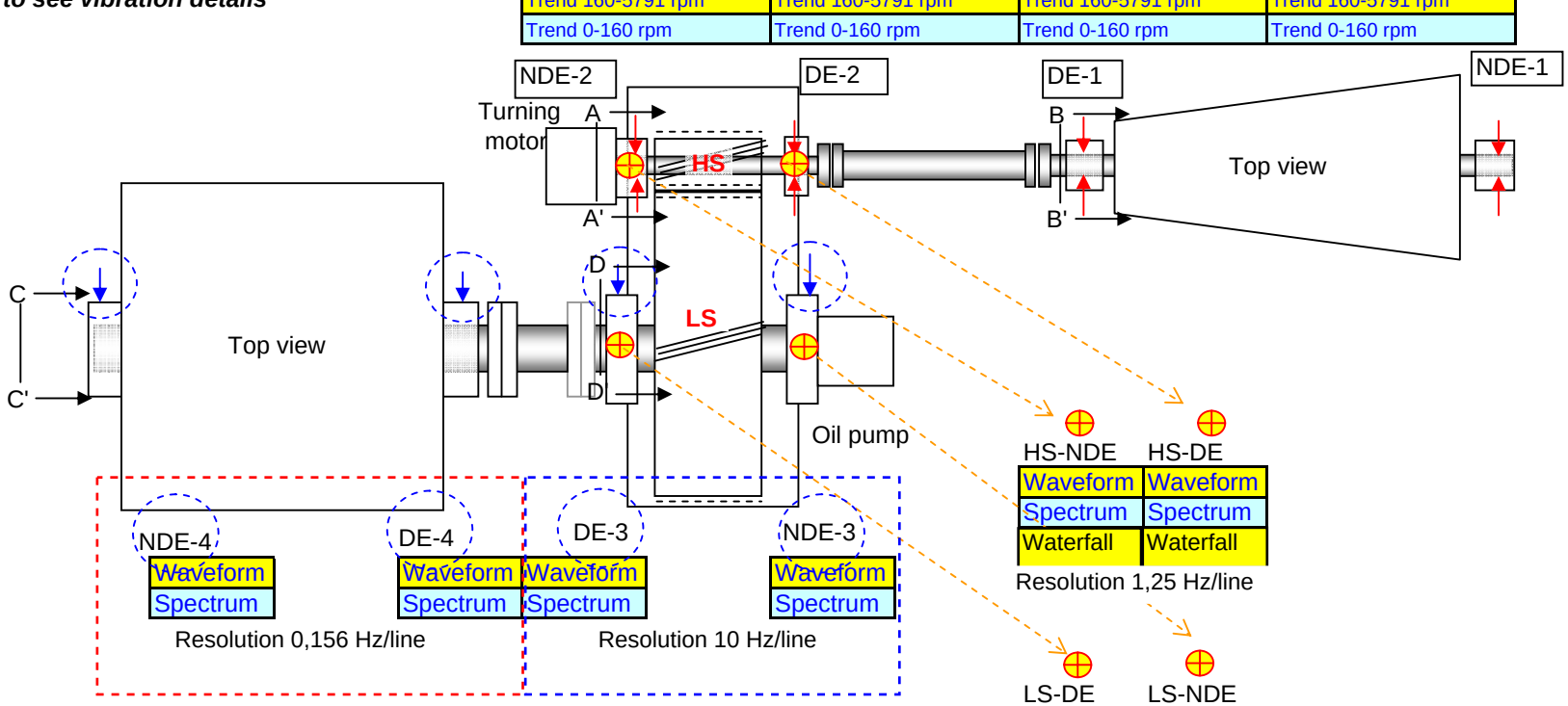
Steam tutbine and HS pinion shaft speed, 5791 RPM
Gear, HS gear 43 T
Gear, LS gear 166 T
Gen and LS shaft speed 1500 rpm
Gear service factor AGMA 421-06>1.3
Power 43 MW

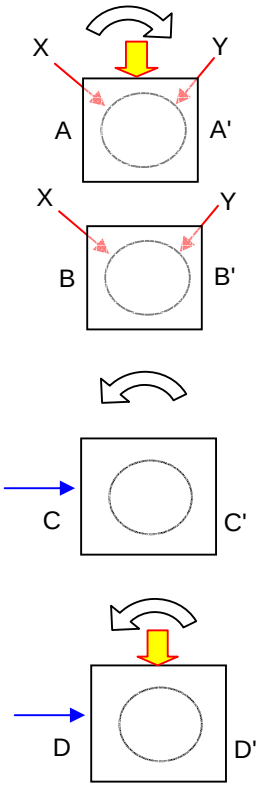
Please move cursor over the Text block to see vibration details

click

X-spectrum	X-spectrum	X-spectrum	X-spectrum
Y-spectrum	Y-spectrum	Y-sepctrum	Y-spectrum
Orbit	Orbit	Orbit	Orbit
Waterfall 160-5791rpm	Waterfall 160-5791rpm	Waterfall 160-5791rpm	Waterfall 160-5791rpm
Waterfall 0-160 rpm	Waterfall 0-160 rpm	Waterfall 0-160 rpm	Waterfall 0-160 rpm
DC gap 160-5791 rpm	DC gap 160-5791 rpm	DC gap 160-5791 rpm	DC gap 160-5791 rpm
DC gap 0-160 rpm	DC gap 0-160 rpm	DC gap 0-160 rpm	DC gap 0-160 rpm
Trend 160-5791 rpm	Trend 160-5791 rpm	Trend 160-5791 rpm	Trend 160-5791 rpm
Trend 0-160 rpm	Trend 0-160 rpm	Trend 0-160 rpm	Trend 0-160 rpm

Photo tool used





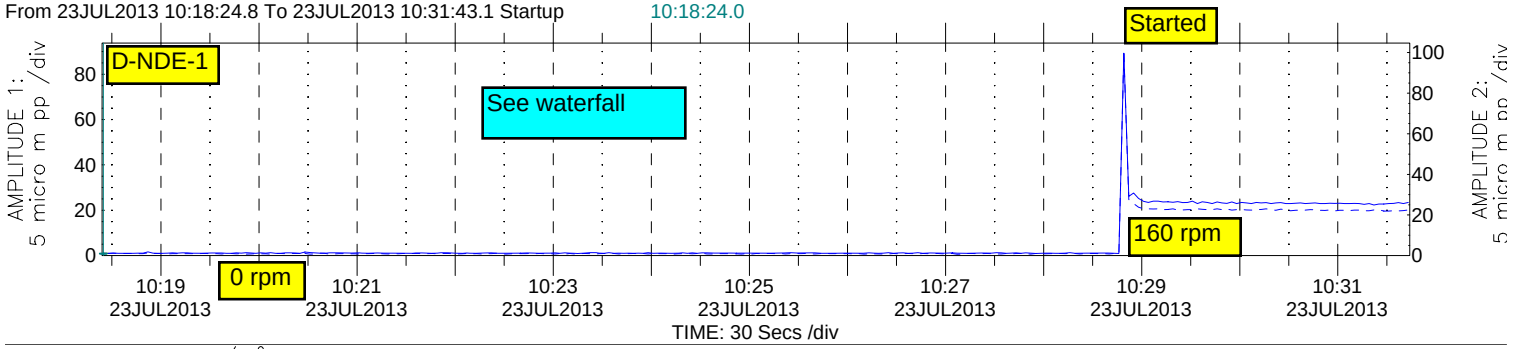
TREND PLOT
COMPANY: Bently Nevada Corp.
MACHINE TRAIN: Steam turbine

Non-subtract slow roll

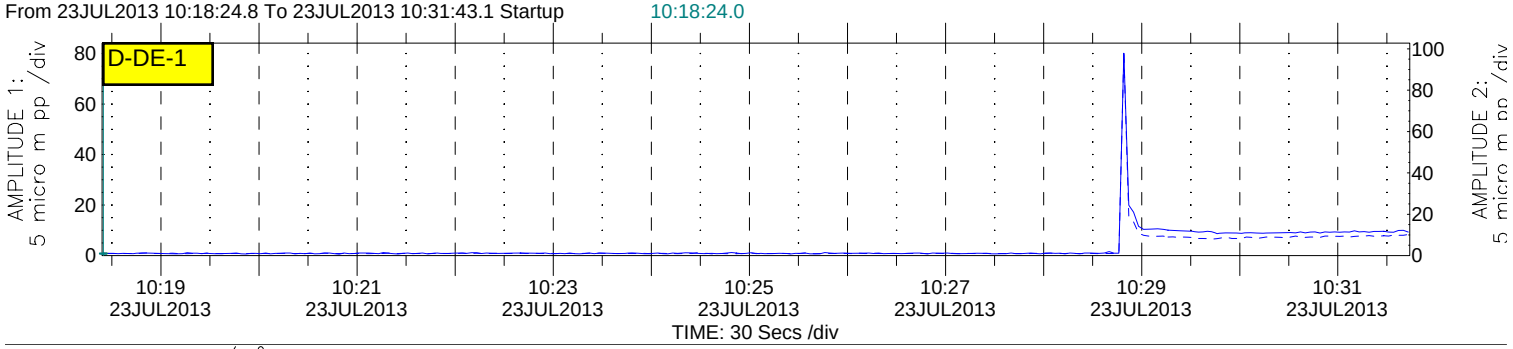
PLOT NO._____
PLANT: EGGO cogeneration
JOB REFERENCE: Steam turbine

Home

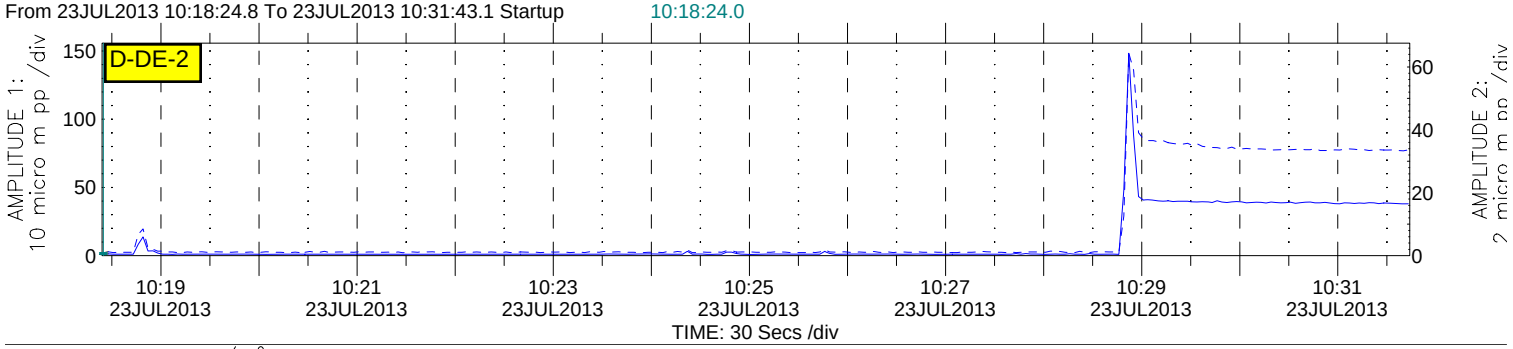
POINT: Channel 1 ∠45° Left DIRECT 1.04 micro m pp
POINT: Channel 2 ∠45° Right DIRECT 0.980 micro m pp
MACHINE: Machine 23JUL2013
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:43.1 Startup 10:18:24.0



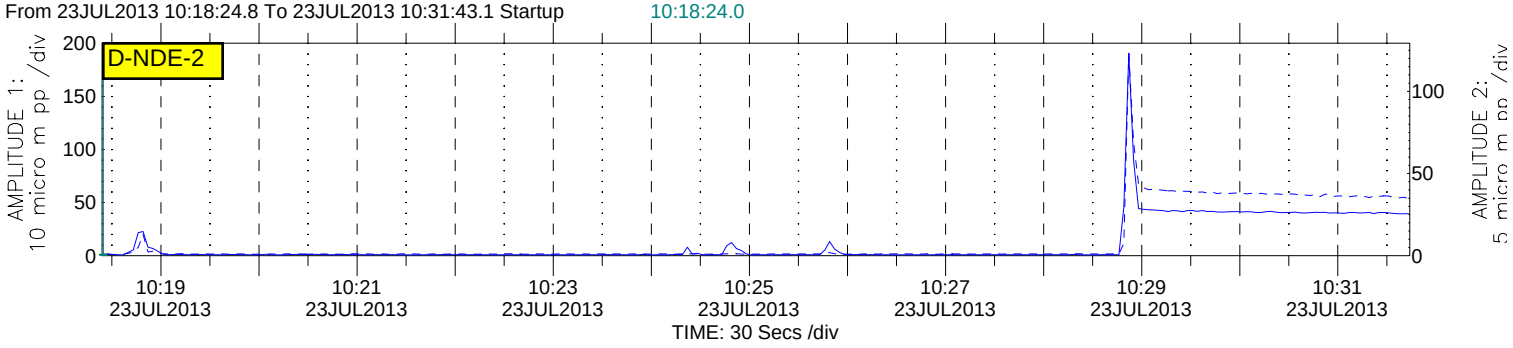
POINT: Channel 3 ∠45° Left DIRECT 1.04 micro m pp
POINT: Channel 4 ∠45° Right DIRECT 0.914 micro m pp
MACHINE: Machine 23JUL2013
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:43.1 Startup 10:18:24.0



POINT: Channel 5 ∠45° Left DIRECT 1.04 micro m pp
POINT: Channel 6 ∠45° Right DIRECT 0.914 micro m pp
MACHINE: Machine 23JUL2013
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:43.1 Startup 10:18:24.0



POINT: Channel 7 ∠45° Left DIRECT 0.914 micro m pp
POINT: Channel 8 ∠45° Right DIRECT 0.914 micro m pp
MACHINE: Machine 23JUL2013
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:43.1 Startup 10:18:24.0



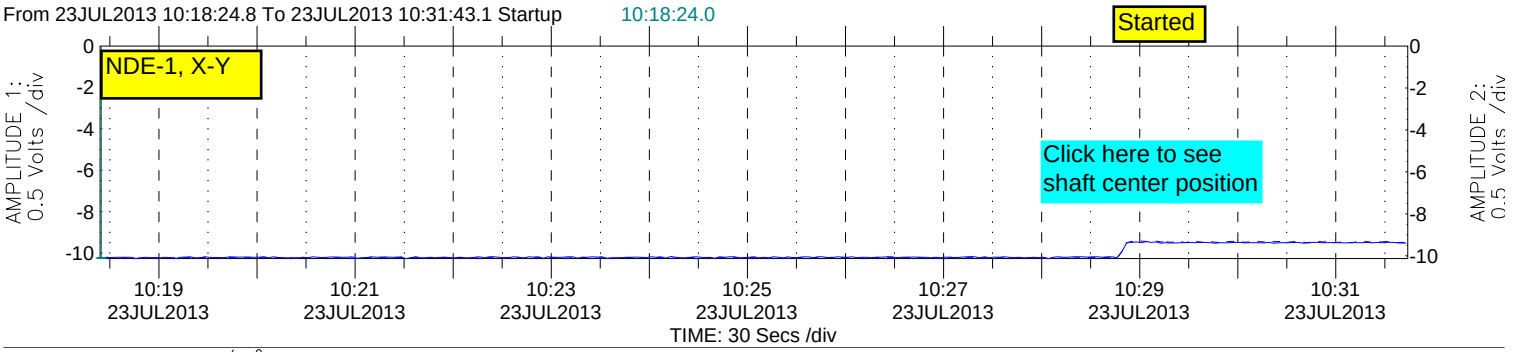
COMMENTS

TREND PLOT
COMPANY: Bently Nevada Corp.
MACHINE TRAIN: Steam turbine

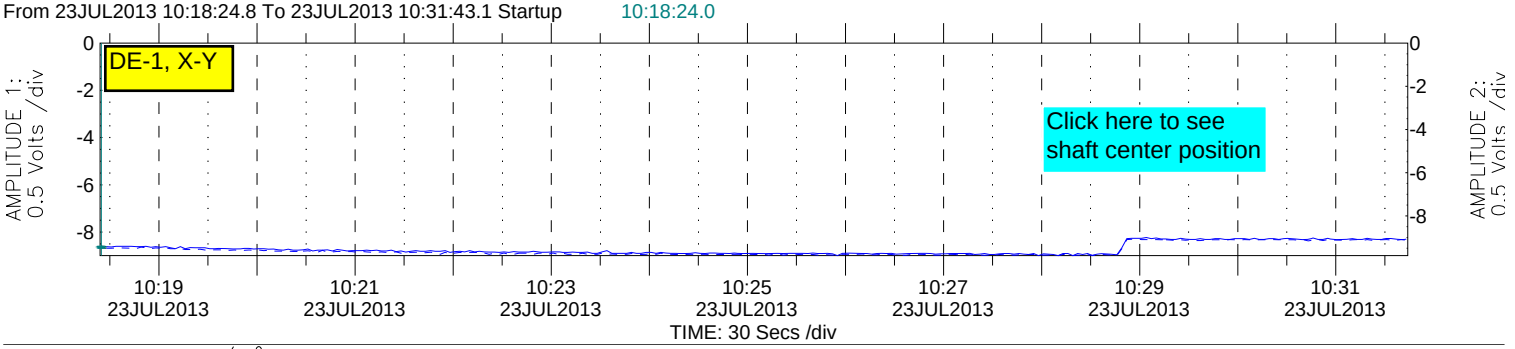
PLOT NO._____
PLANT: EGGO cogeneration
JOB REFERENCE: Steam turbine

Home

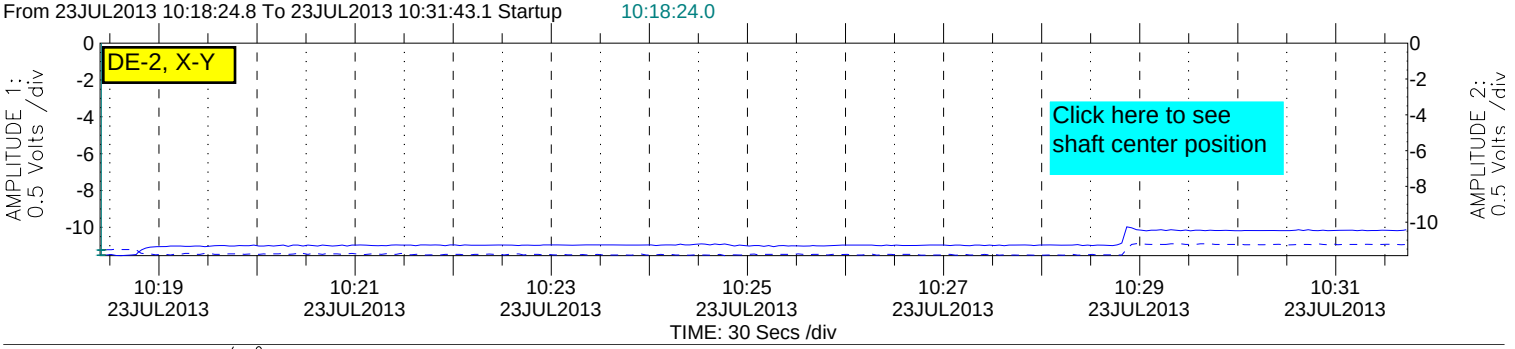
POINT: Channel 1 ∠45° Left GAP -10.2 Volts
POINT: Channel 2 ∠45° Right GAP -10.1 Volts
MACHINE: Machine 23JUL2013
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:43.1 Startup 10:18:24.0



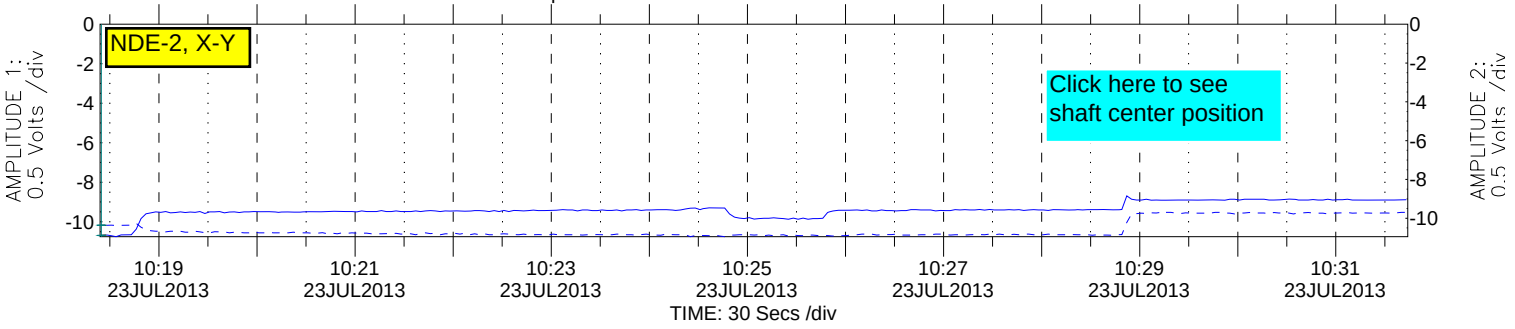
POINT: Channel 3 ∠45° Left GAP -8.59 Volts
POINT: Channel 4 ∠45° Right GAP -9.47 Volts
MACHINE: Machine 23JUL2013
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:43.1 Startup 10:18:24.0



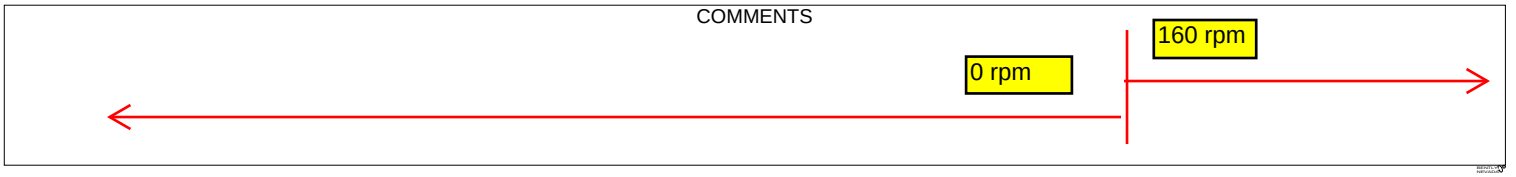
POINT: Channel 5 ∠45° Left GAP -11.5 Volts
POINT: Channel 6 ∠45° Right GAP -11.5 Volts
MACHINE: Machine 23JUL2013
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:43.1 Startup 10:18:24.0



POINT: Channel 7 ∠45° Left GAP -10.7 Volts
POINT: Channel 8 ∠45° Right GAP -10.4 Volts
MACHINE: Machine 23JUL2013
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:43.1 Startup 10:18:24.0



COMMENTS

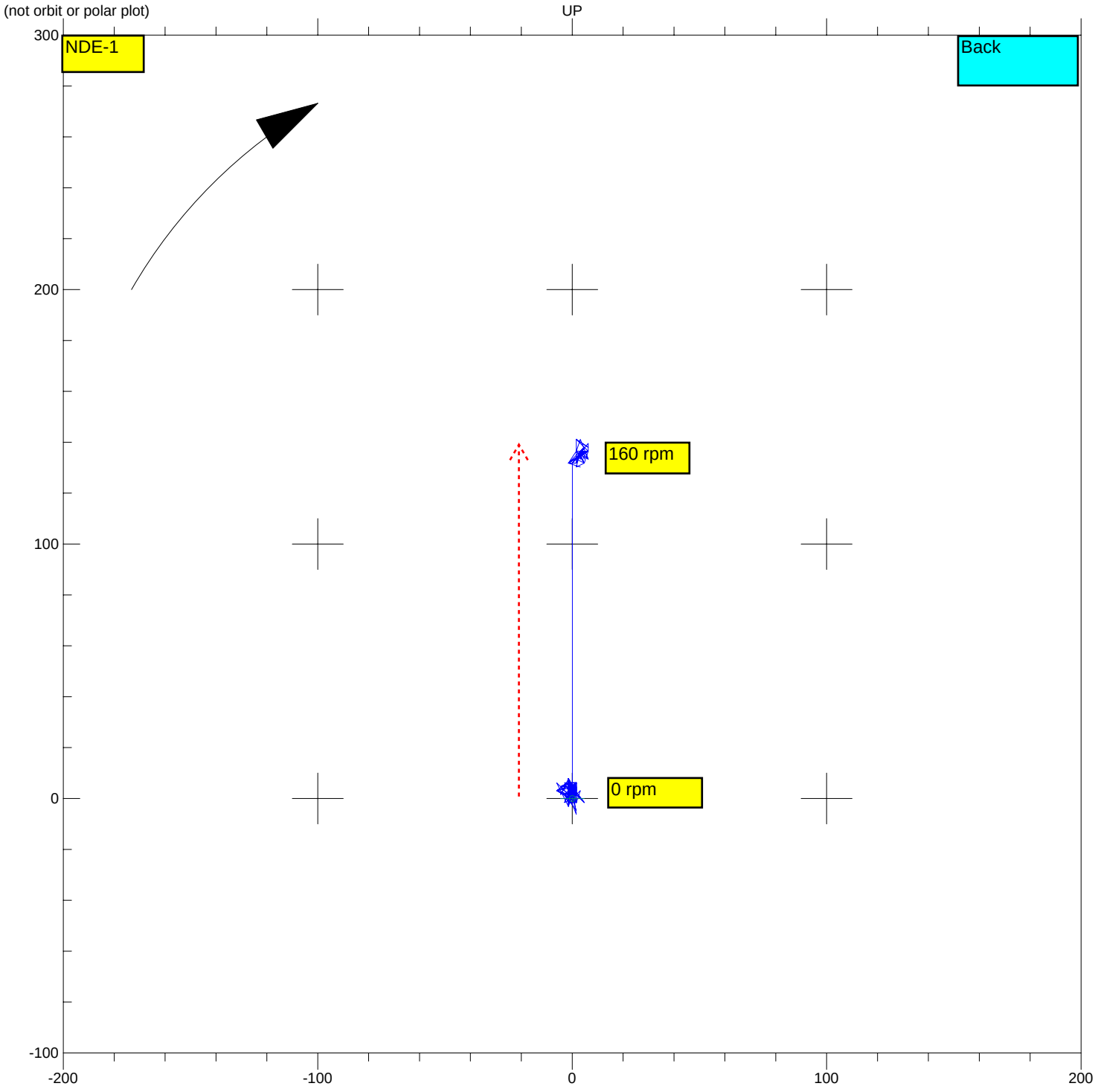


SHAFT AVERAGE CENTERLINE PLOT
COMPANY: Bently Nevada Corp.
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGGO cogeneration
JOB REFERENCE: Steam turbine

POINT: Channel 1 ∠45° Left REF: -10.2 Volts 0
POINT: Channel 2 ∠45° Right REF: -10.1 Volts 0
MACHINE: Machine (0, 0)
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:43.1 Startup

(not orbit or polar plot)



20 micro m /div

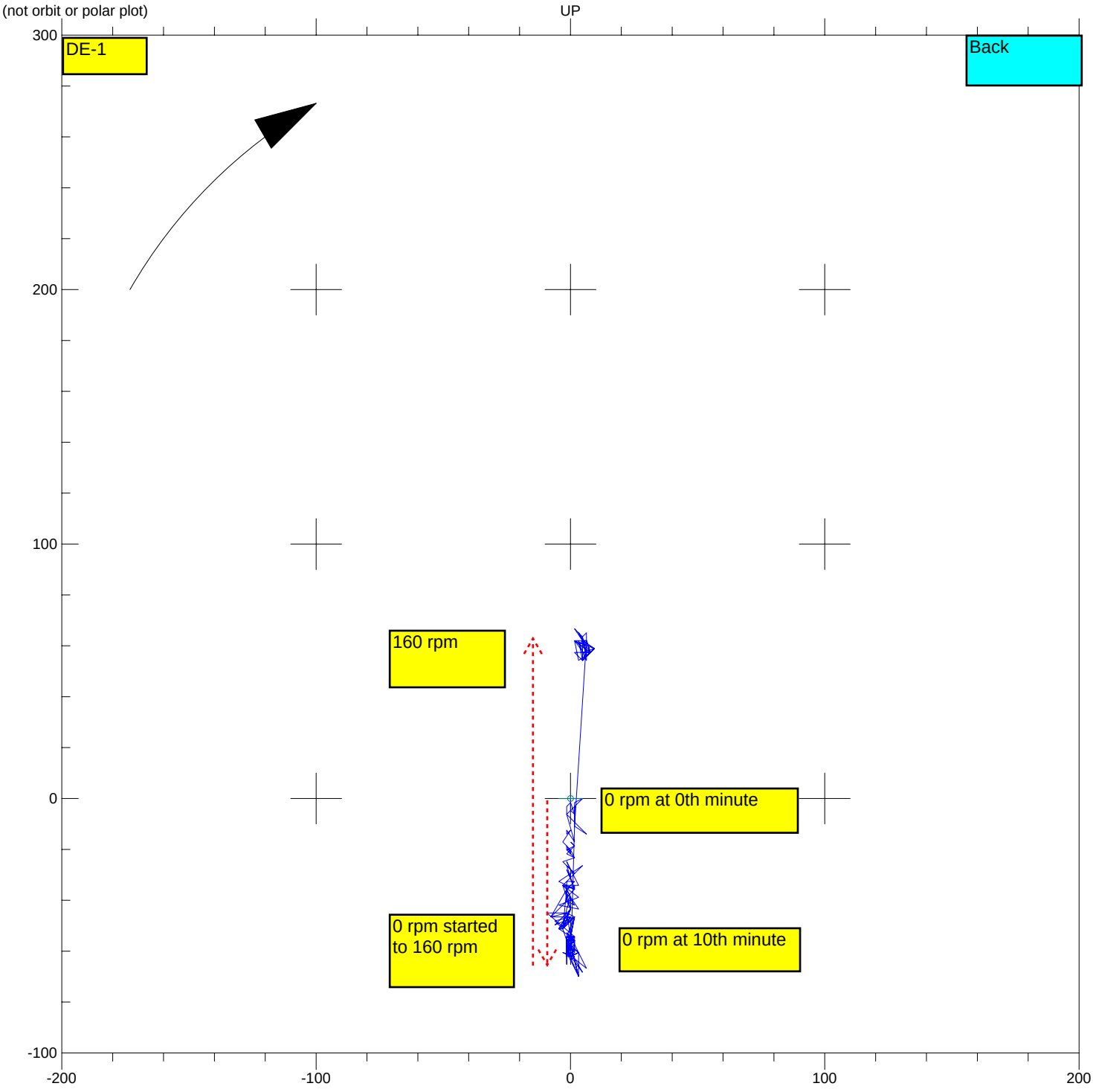
COMMENTS

SHAFT AVERAGE CENTERLINE PLOT
COMPANY: Bently Nevada Corp.
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGGO cogeneration
JOB REFERENCE: Steam turbine

POINT: Channel 3 ∠45° Left REF: -8.59 Volts 0
POINT: Channel 4 ∠45° Right REF: -9.47 Volts 0
MACHINE: Machine (0, 0)
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:43.1 Startup

(not orbit or polar plot)



20 micro m /div

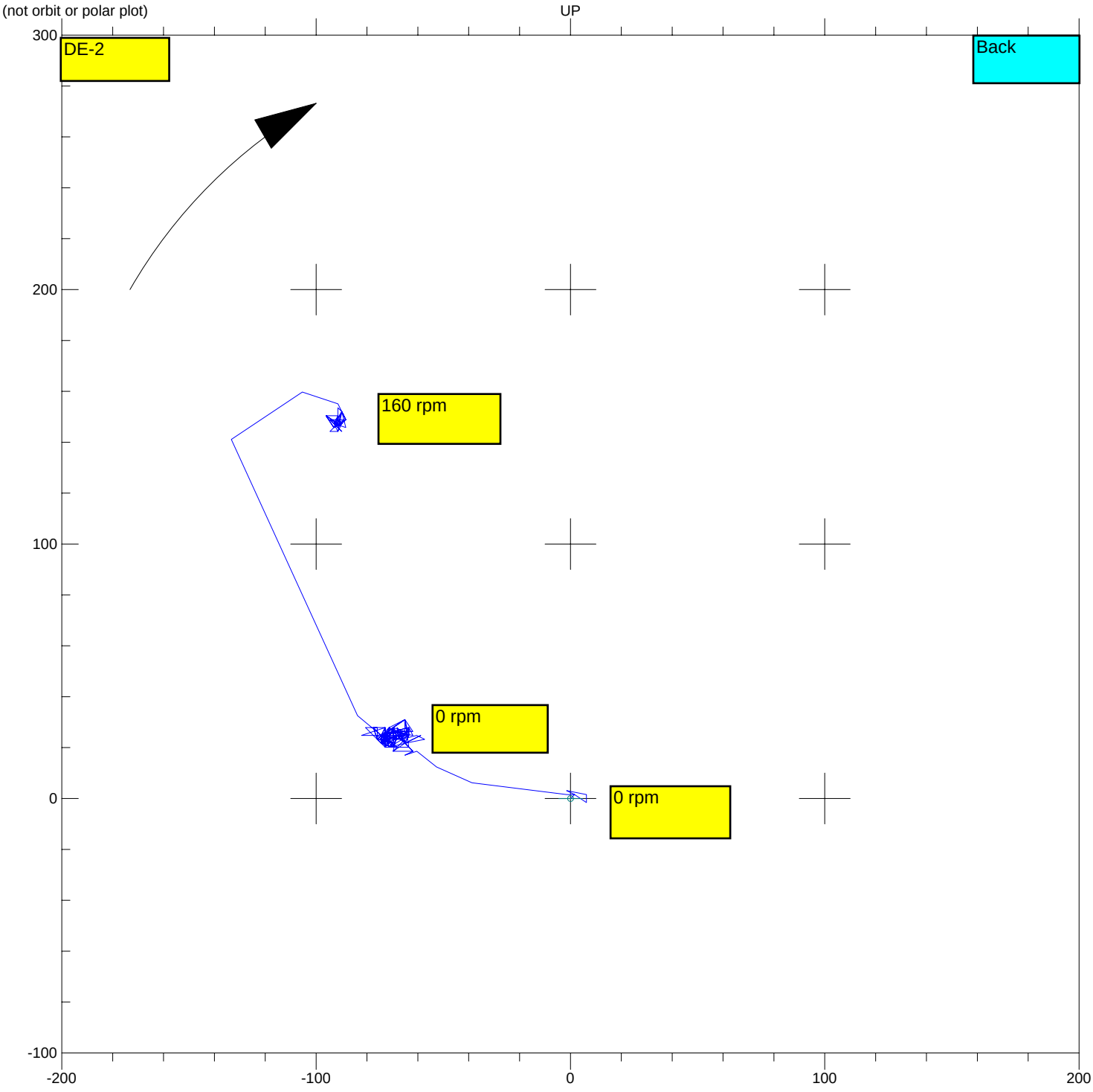
COMMENTS

SHAFT AVERAGE CENTERLINE PLOT
COMPANY: Bently Nevada Corp.
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGGO cogeneration
JOB REFERENCE: Steam turbine

POINT: Channel 5 ∠45° Left REF: -11.5 Volts 0
POINT: Channel 6 ∠45° Right REF: -11.5 Volts 0
MACHINE: Machine (0, 0)
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:43.1 Startup

(not orbit or polar plot)



20 micro m /div

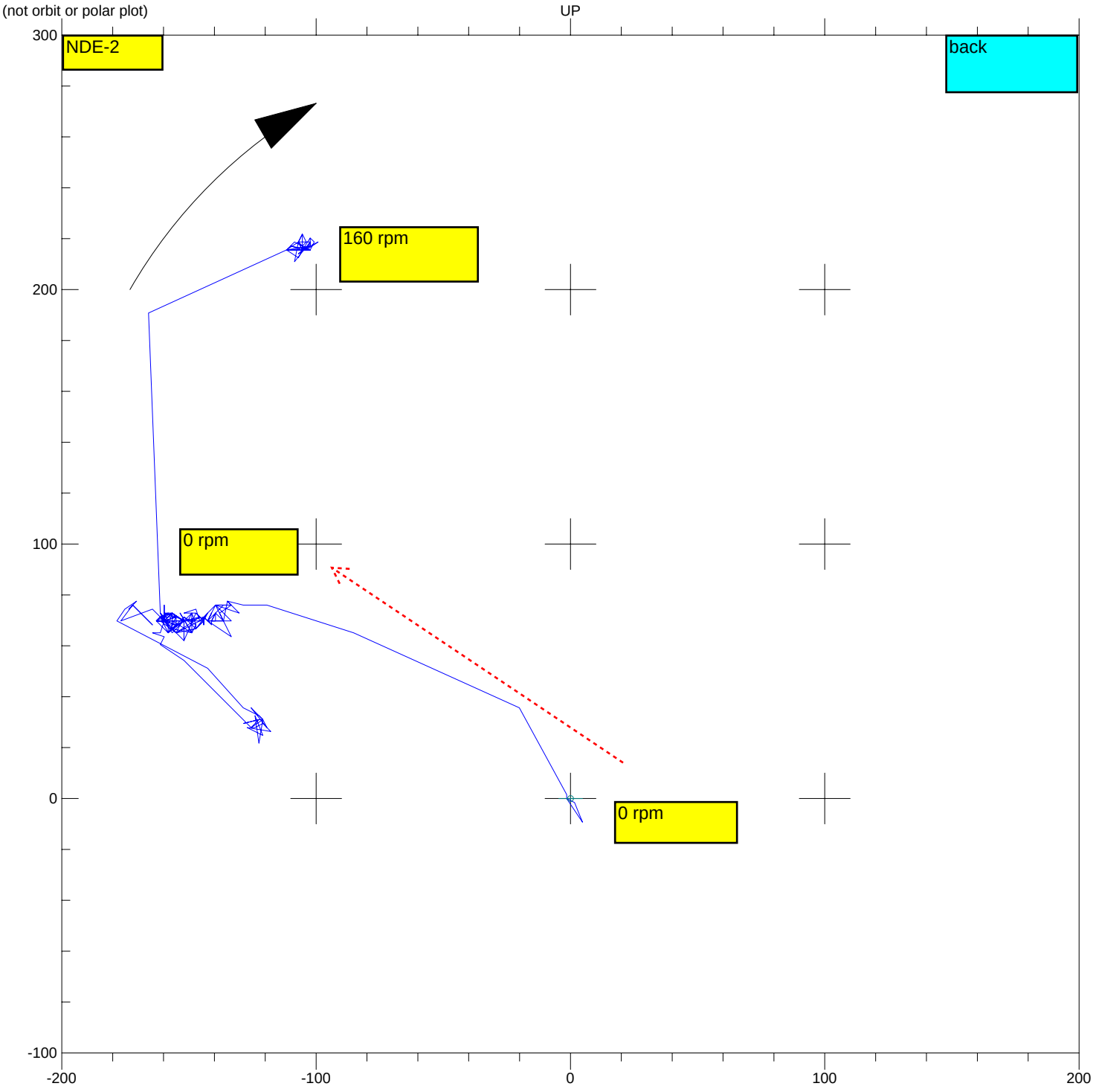
COMMENTS

SHAFT AVERAGE CENTERLINE PLOT
COMPANY: Bently Nevada Corp.
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGGO cogeneration
JOB REFERENCE: Steam turbine

POINT: Channel 7 ∠45° Left REF: -10.7 Volts 0
POINT: Channel 8 ∠45° Right REF: -10.4 Volts 0
MACHINE: Machine (0, 0)
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:43.1 Startup

(not orbit or polar plot)



20 micro m /div

COMMENTS

HALF SPECTRUM WATERFALL PLOT
COMPANY: Bently Nevada Corp.
MACHINE TRAIN: Steam turbine

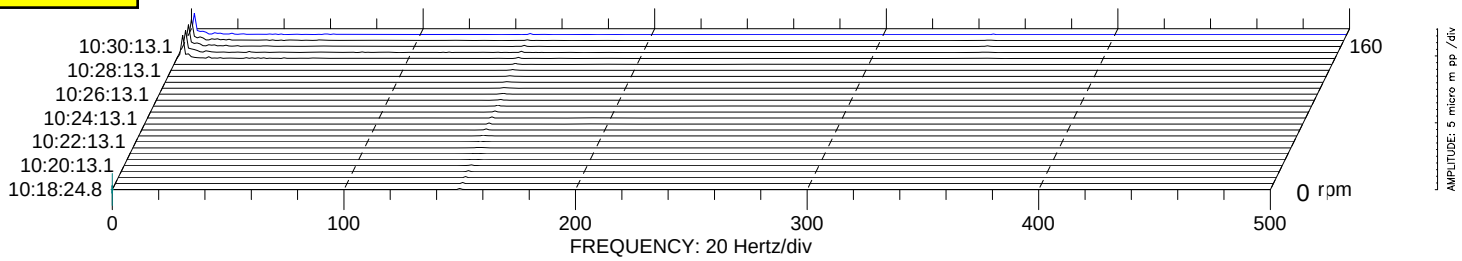
PLOT NO._____
PLANT: EGGO cogeneration
JOB REFERENCE: Steam turbine

POINT: Channel 1 ∠45° Left
MACHINE: Machine
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:13.1 Startup 10:18:24.8
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz

Home

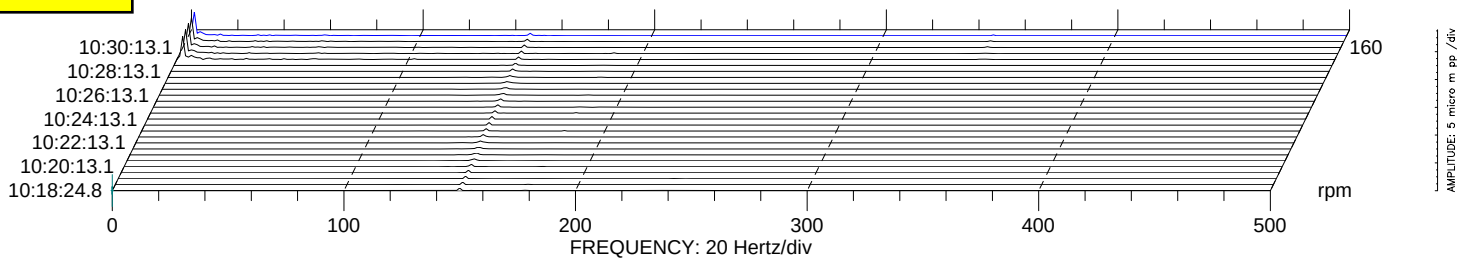
Back

D-NDE-1-X



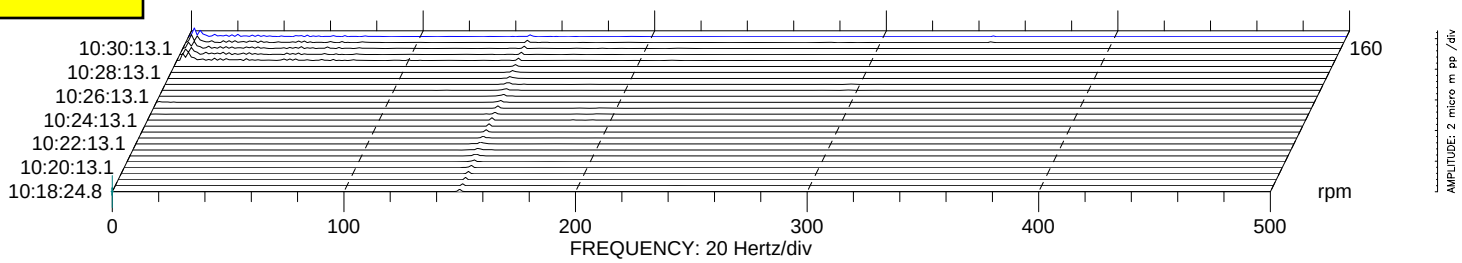
POINT: Channel 2 ∠45° Right
MACHINE: Machine
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:13.1 Startup 10:18:24.8
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz

D-NDE-1-Y



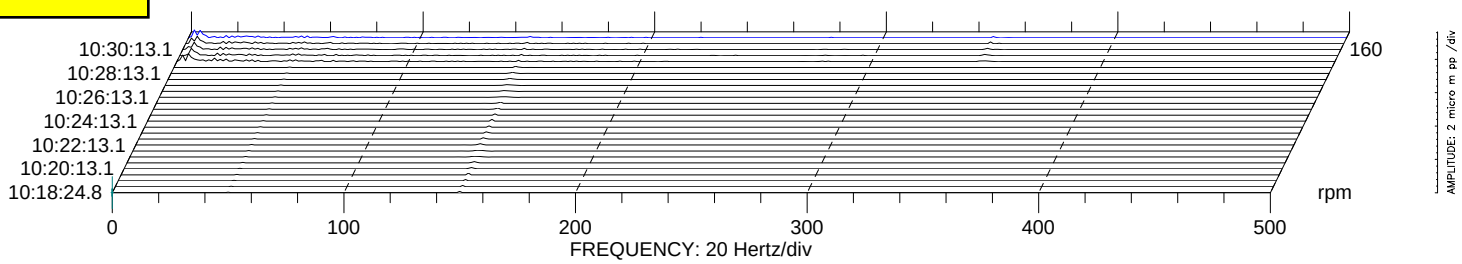
POINT: Channel 3 ∠45° Left
MACHINE: Machine
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:13.1 Startup 10:18:24.8
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz

D-DE-1-X



POINT: Channel 4 ∠45° Right
MACHINE: Machine
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:13.1 Startup 10:18:24.8
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz

D-DE-1-Y



COMMENTS

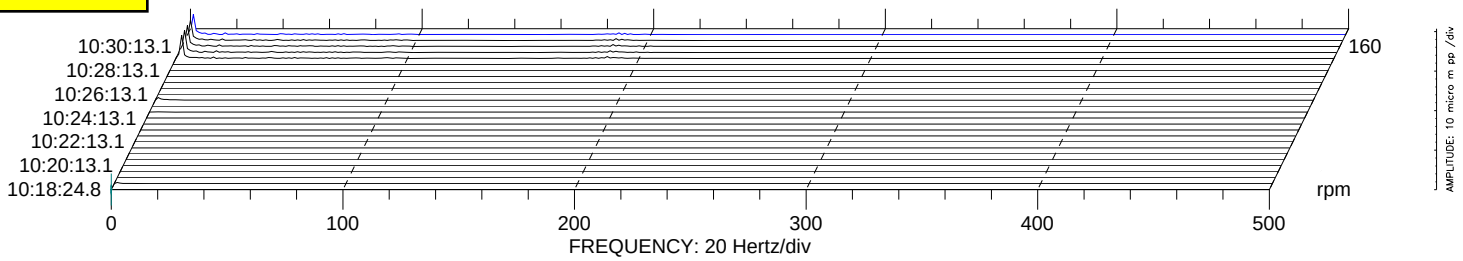
HALF SPECTRUM WATERFALL PLOT
COMPANY: Bently Nevada Corp.
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGGO cogeneration
JOB REFERENCE: Steam turbine

POINT: Channel 5 ∠45° Left
MACHINE: Machine
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:13.1 Startup 10:18:24.8
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz

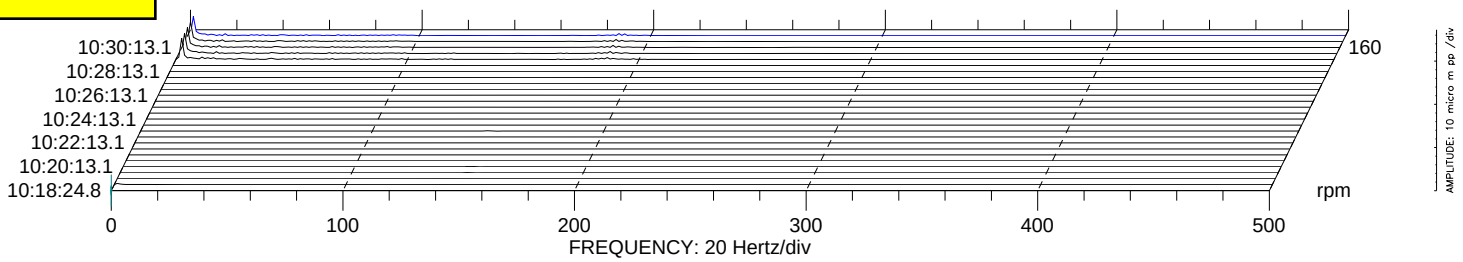
Home

D-DE-2-X



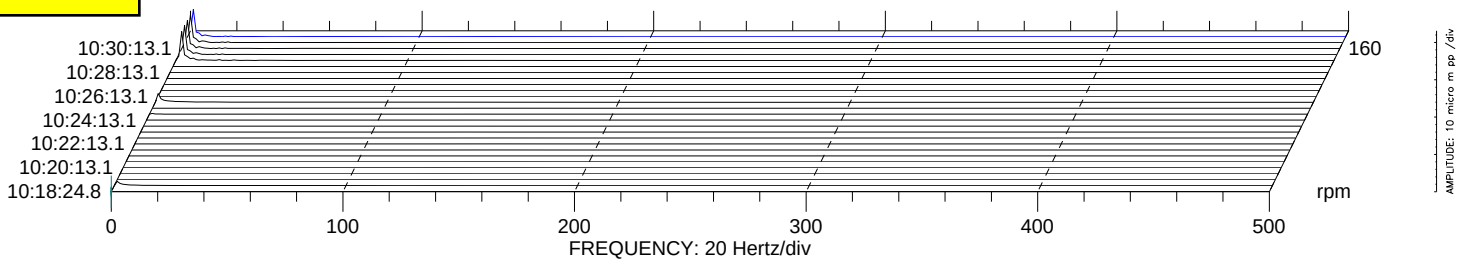
POINT: Channel 6 ∠45° Right
MACHINE: Machine
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:13.1 Startup 10:18:24.8
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz

D-DE-2-Y



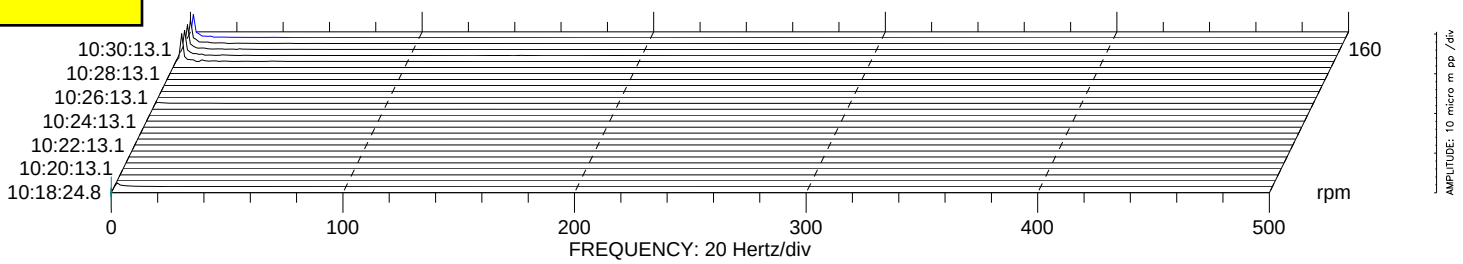
POINT: Channel 7 ∠45° Left
MACHINE: Machine
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:13.1 Startup 10:18:24.8
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz

D-NDE-2-X



POINT: Channel 8 ∠45° Right
MACHINE: Machine
From 23JUL2013 10:18:24.8 To 23JUL2013 10:31:13.1 Startup 10:18:24.8
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz

D-NDE-2-Y



COMMENTS

HALF SPECTRUM WATERFALL PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

Home

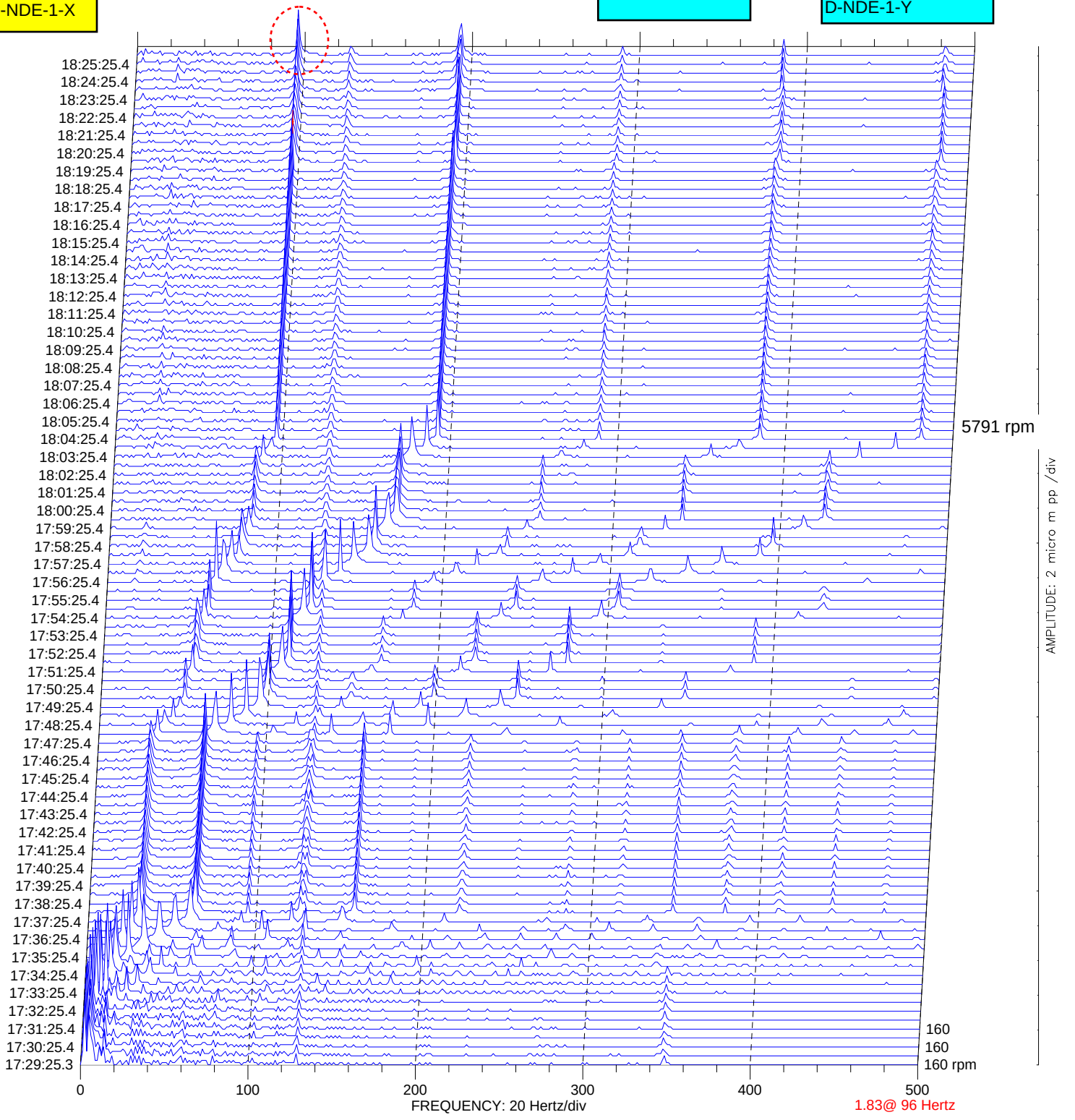
POINT: Channel 1 ∠45° Left
MACHINE: Machine
From 23JUL2013 17:29:25.3 To 23JUL201 tartup 18:20:25.4
WINDOW: None SPECTRAL LINES: 400 1.25 Hertz

Connect to next plot

Back to trend

Click here to see D-NDE-1-Y

D-NDE-1-X

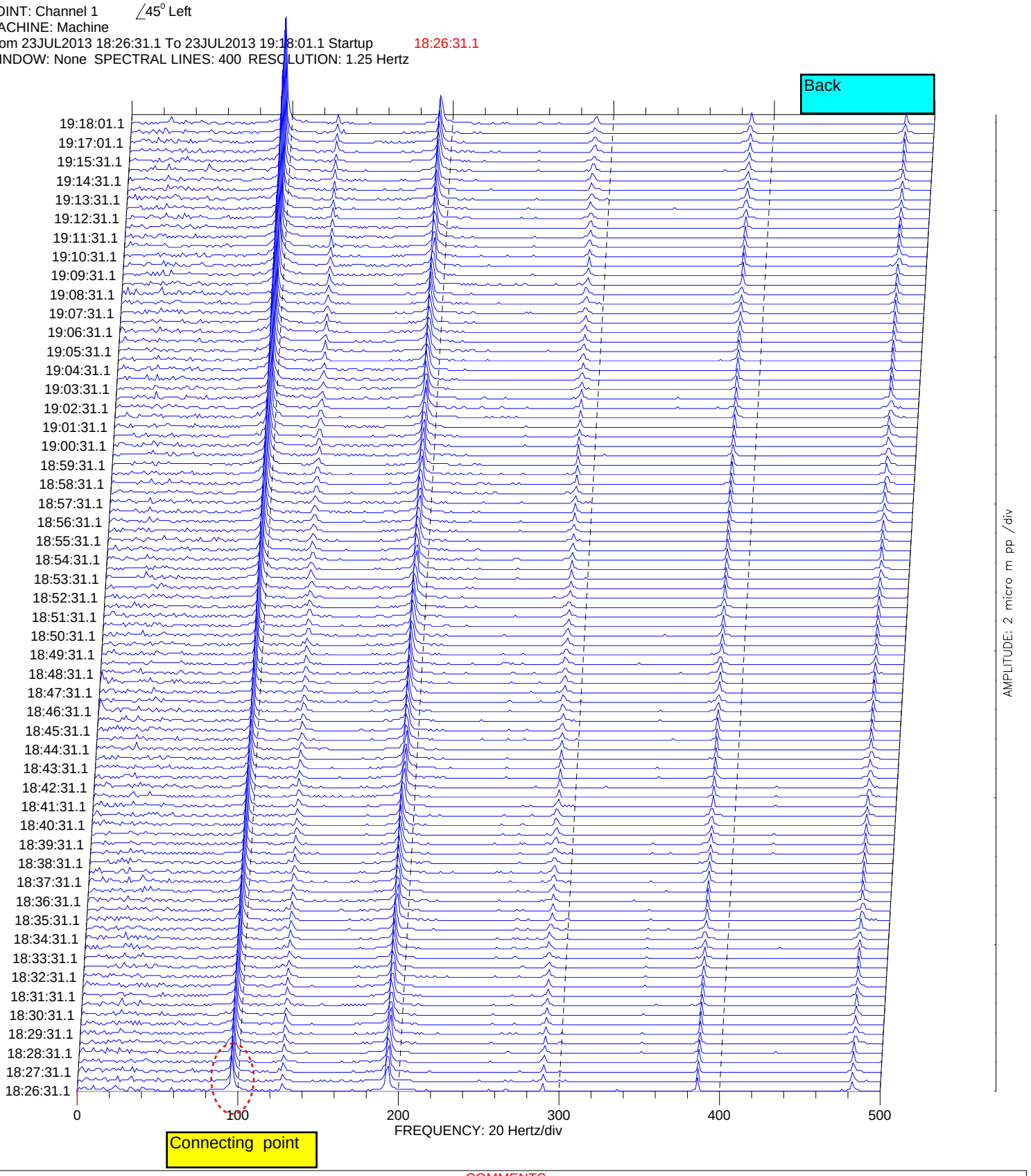


COMMENTS

HALF SPECTRUM WATERFALL PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

POINT: Channel 1 ∠45° Left
MACHINE: Machine
From 23JUL2013 18:26:31.1 To 23JUL2013 19:18:01.1 Startup 18:26:31.1
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz



COMMENTS

HALF SPECTRUM WATERFALL PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

Home

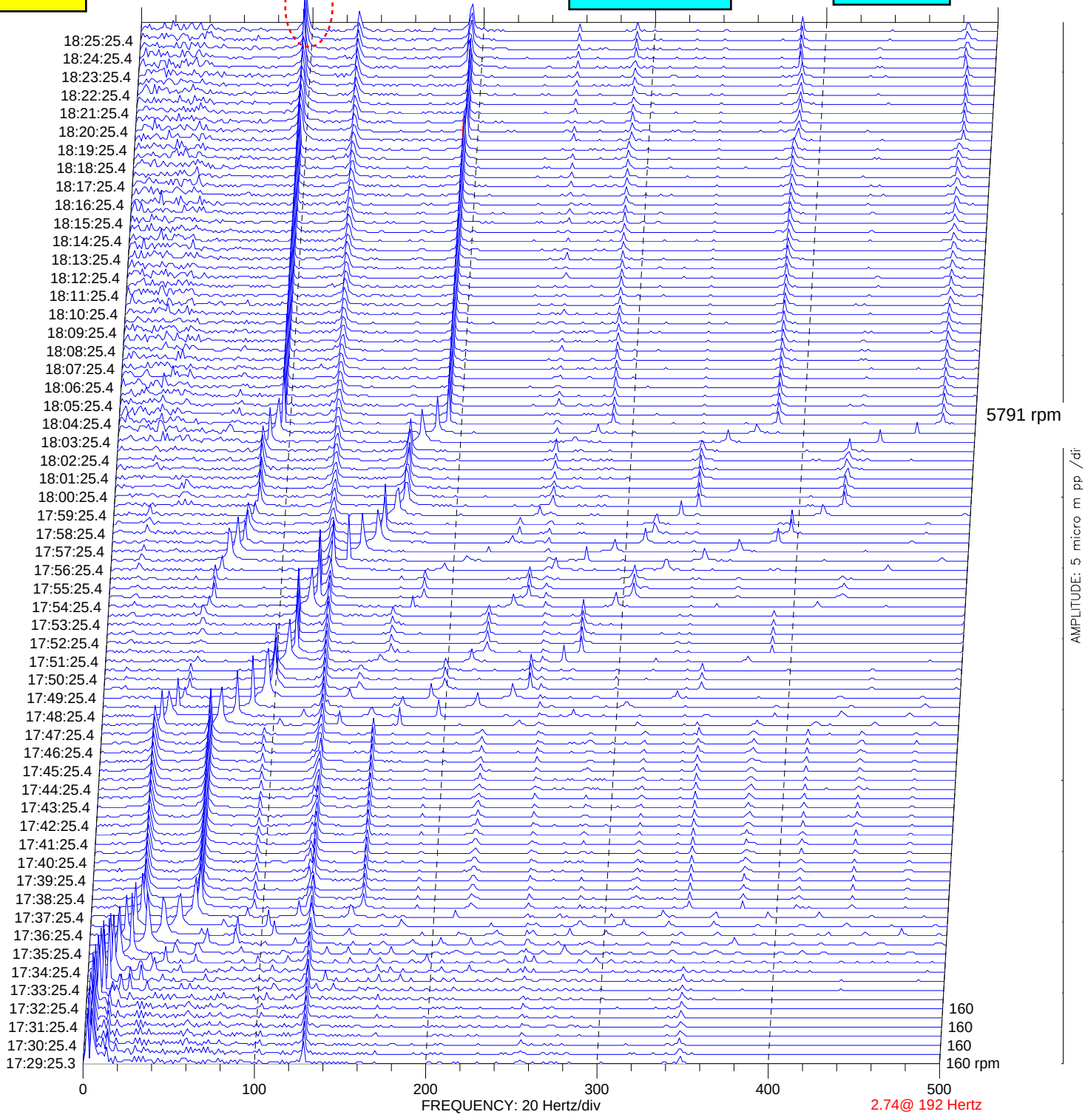
POINT: Channel 2 ∠45° Right
MACHINE: Machine
From 23JUL2013 17:29:25.3 To 23JUL2013 [illegible]artup 18:18:25.4
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz

Connect to next plot

Back to trend

Back to D-NDE-1-X

D-NDE-1-Y

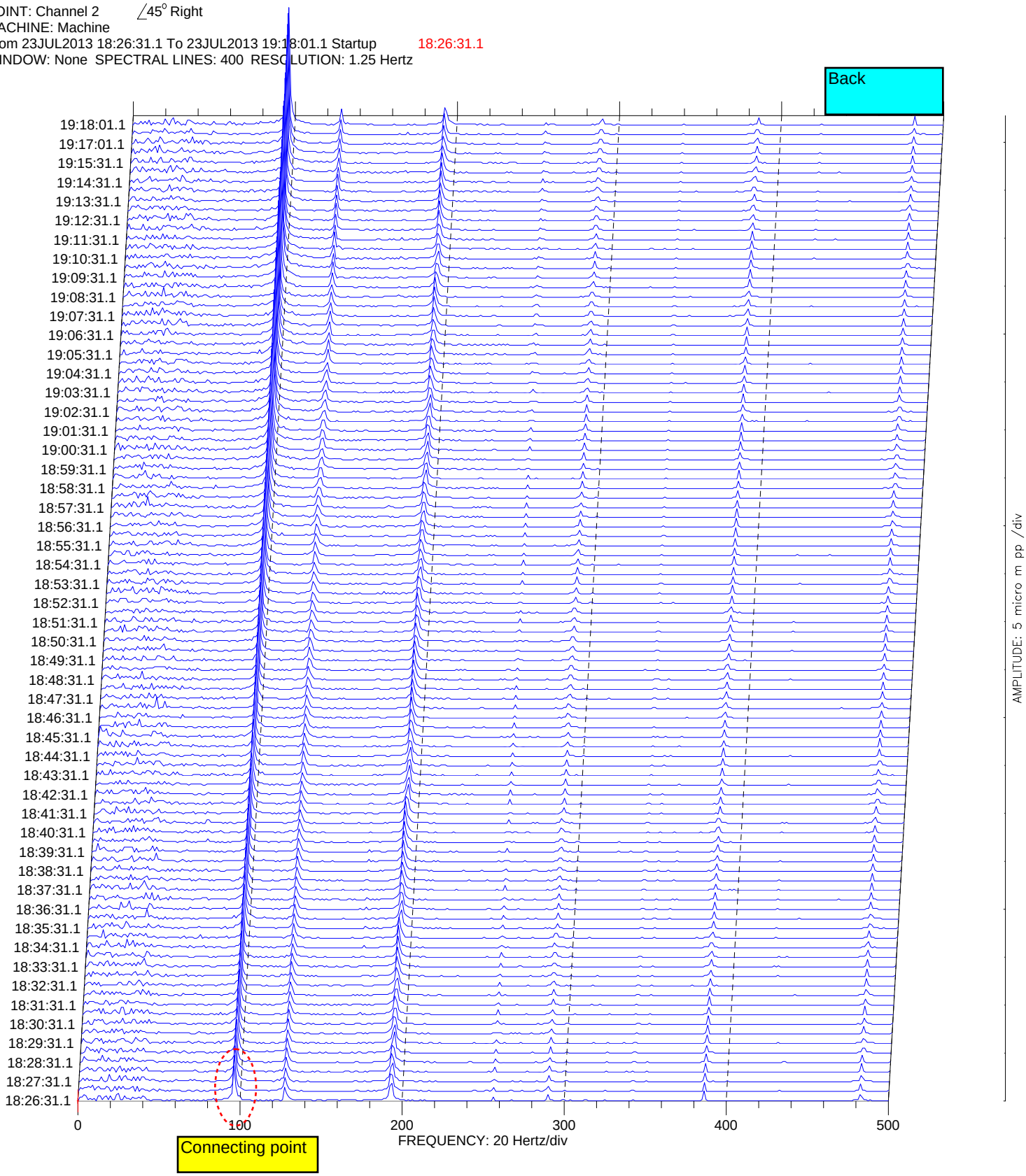


COMMENTS

HALF SPECTRUM WATERFALL PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

POINT: Channel 2 ∠45° Right
MACHINE: Machine
From 23JUL2013 18:26:31.1 To 23JUL2013 19:18:01.1 Startup 18:26:31.1
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz



COMMENTS

HALF SPECTRUM WATERFALL PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

POINT: Channel 3 ∠45° Left
MACHINE: Machine
From 23JUL2013 17:29:25.3 To 23JUL2013 18:25:55.4 Startup 18:12:25.4
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

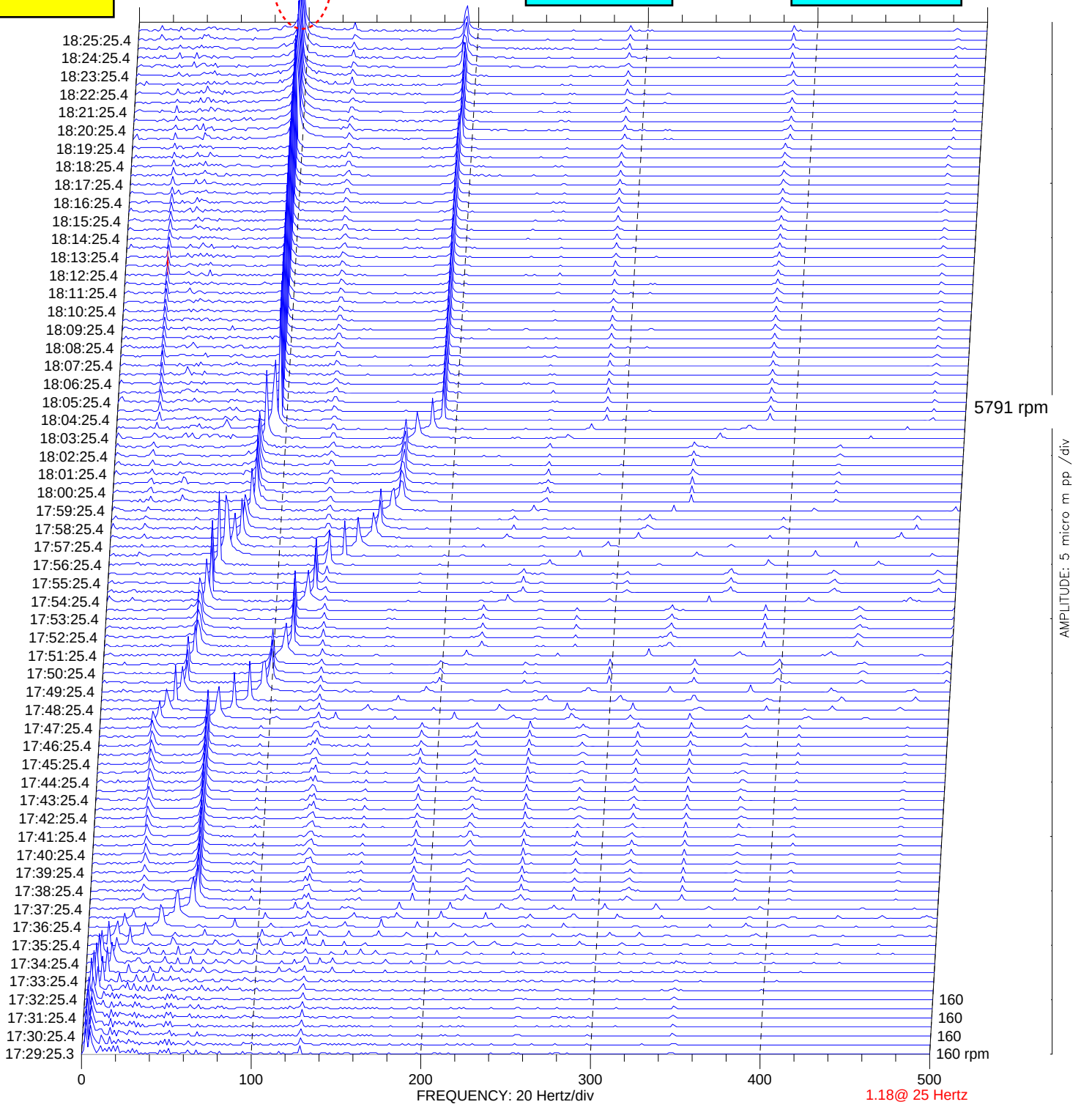
connect to next plot

Home

Back to trend

Click here to see D-DE-1-Y

D-DE-1-X

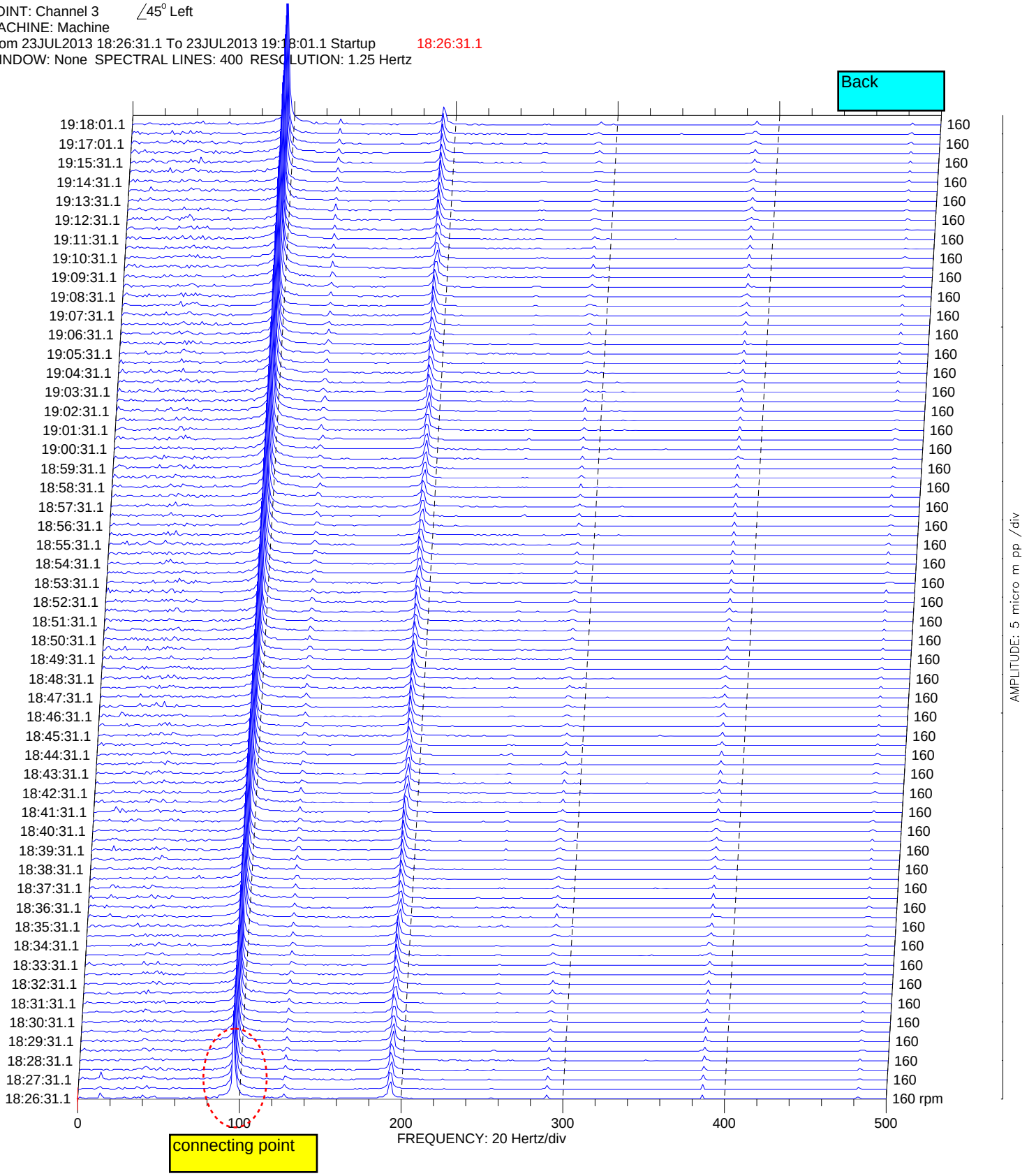


COMMENTS

HALF SPECTRUM WATERFALL PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

POINT: Channel 3 ∠45° Left
MACHINE: Machine
From 23JUL2013 18:26:31.1 To 23JUL2013 19:18:01.1 Startup 18:26:31.1
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz



COMMENTS

HALF SPECTRUM WATERFALL PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

POINT: Channel 4 ∠45° Right
MACHINE: Machine
From 23JUL2013 17:29:25.3 To 23JUL2013 18:25:55.4 Startup 18:16:25.4
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

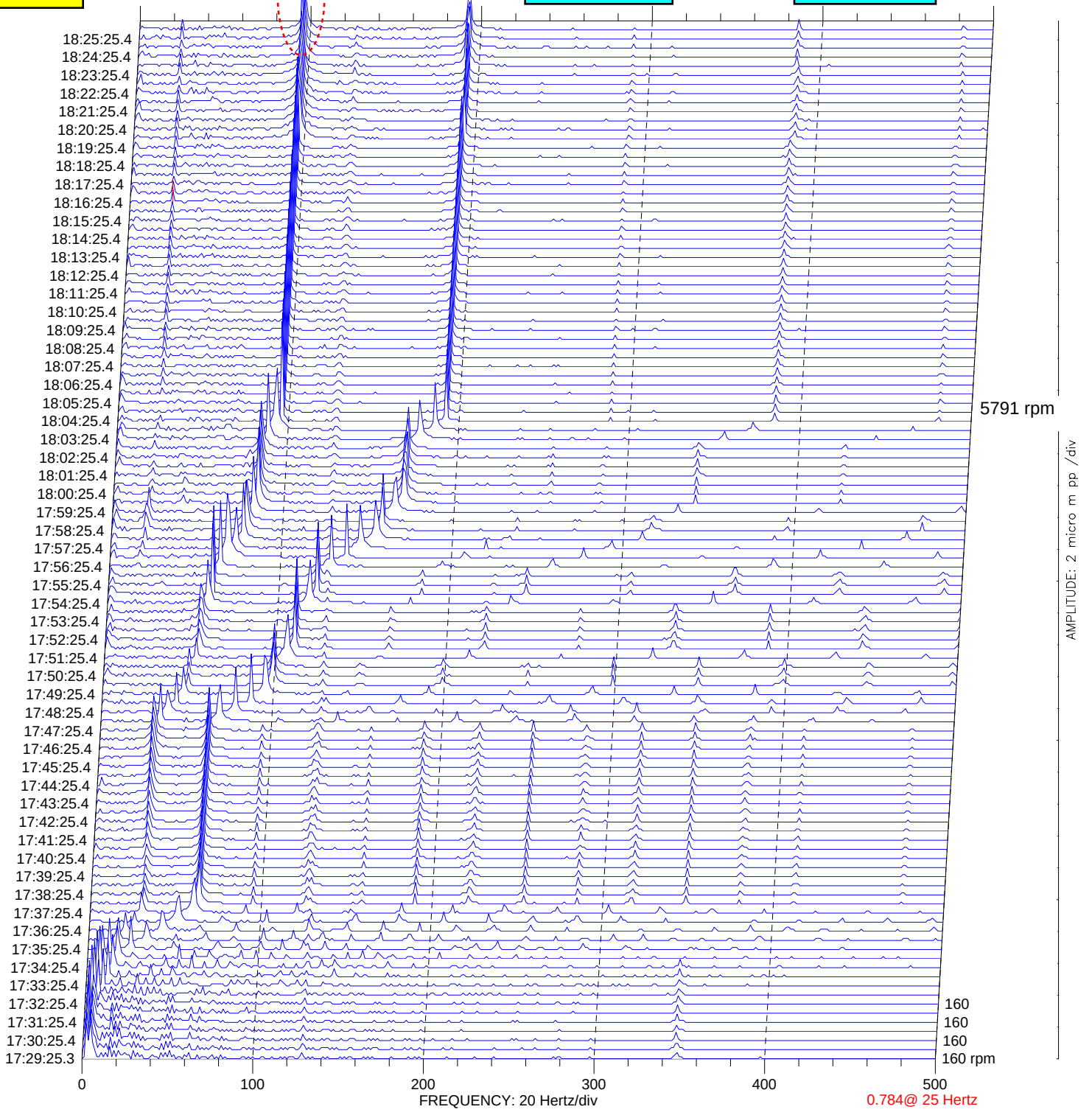
connect to next plot

Back

Back to trend

Back to D-DE-1-X

D-DE-1-Y

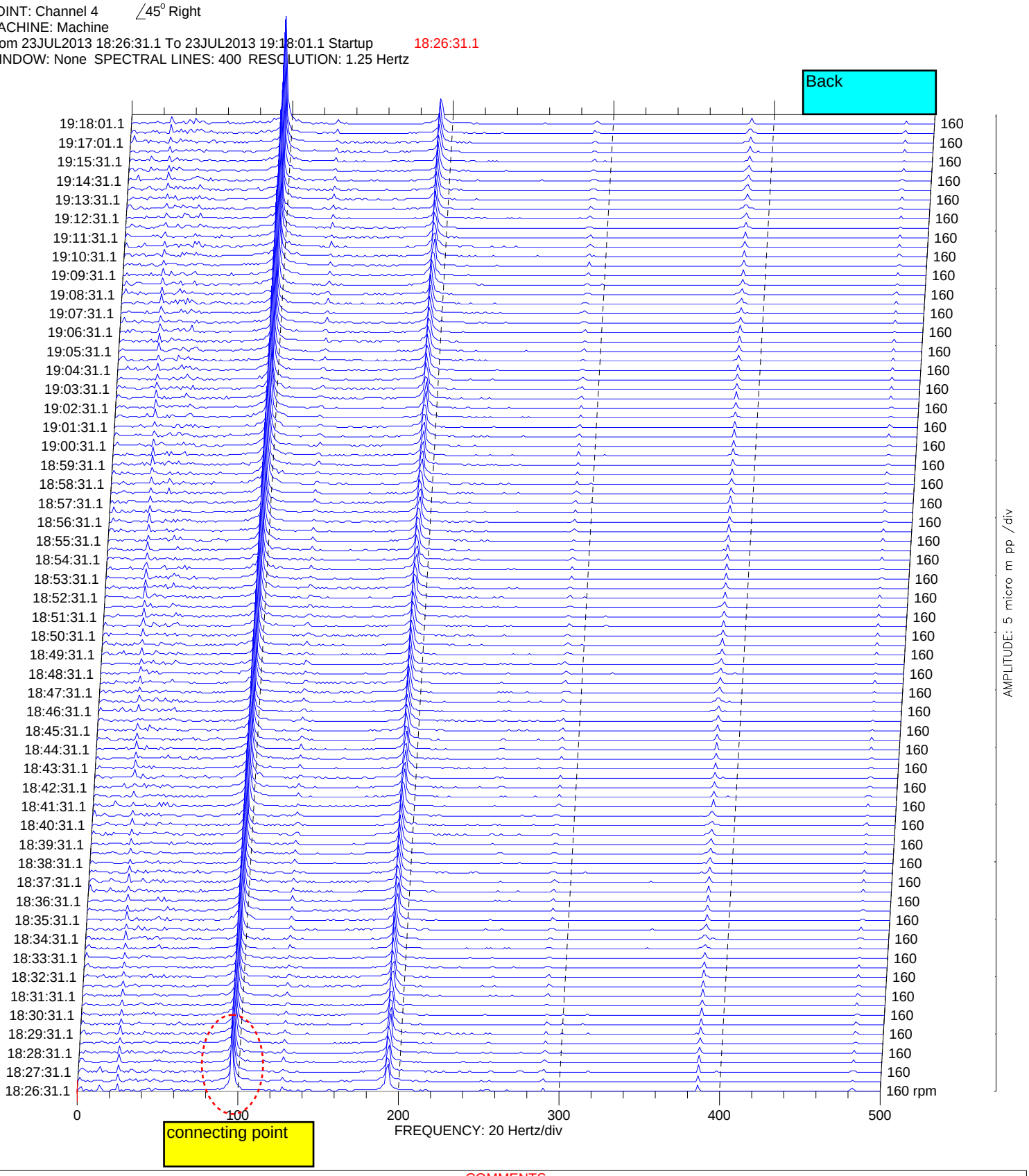


COMMENTS

HALF SPECTRUM WATERFALL PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

POINT: Channel 4 ∠45° Right
MACHINE: Machine
From 23JUL2013 18:26:31.1 To 23JUL2013 19:18:01.1 Startup 18:26:31.1
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz



COMMENTS

HALF SPECTRUM WATERFALL PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

Home

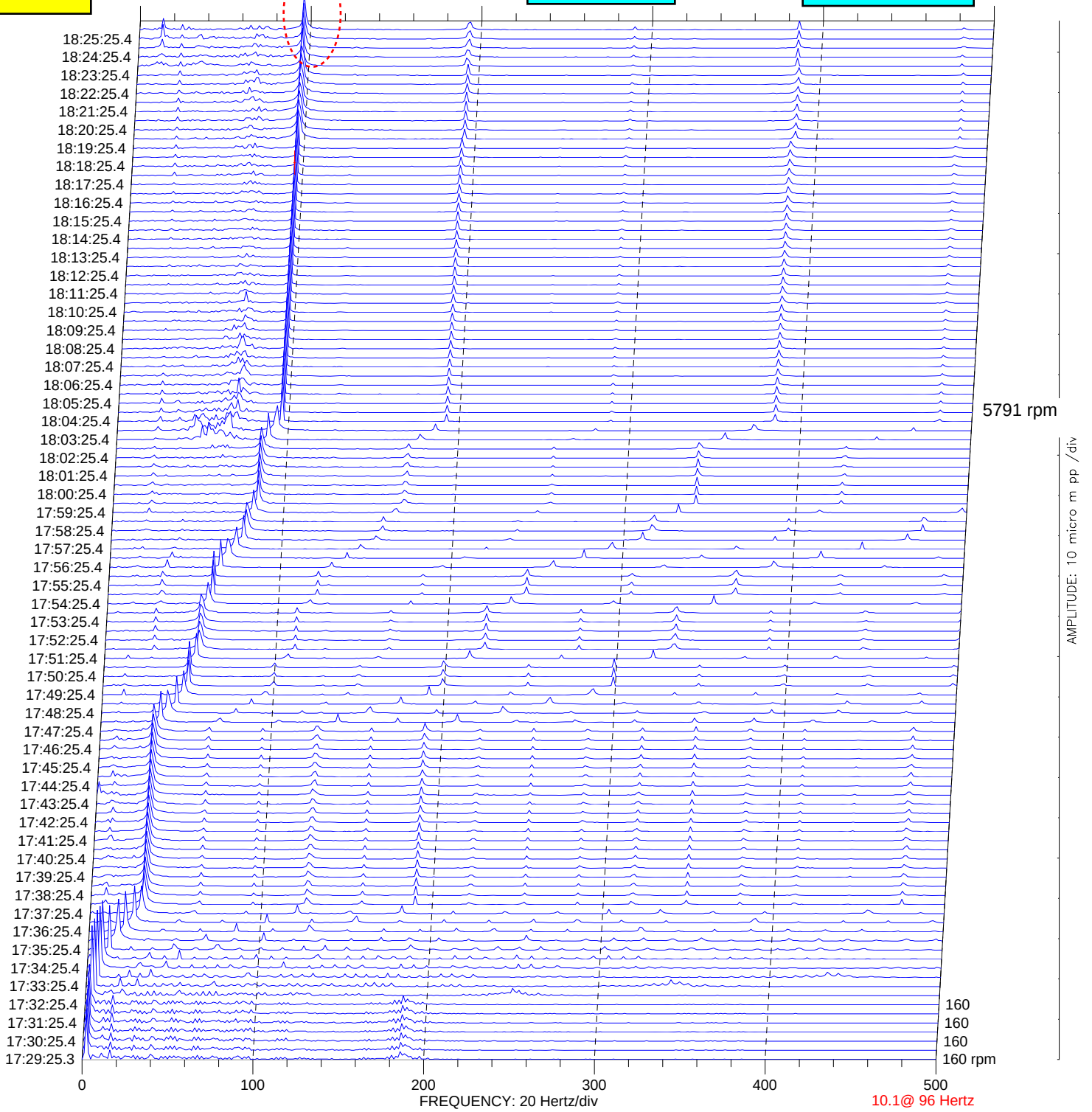
POINT: Channel 5 ∠45° Left
MACHINE: Machine
From 23JUL2013 17:29:25.3 To 23JUL20 tup 18:16:25.4
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz

Connect to next plot

Back to trend

Click to see D-DE-2-Y

D-DE-2-X

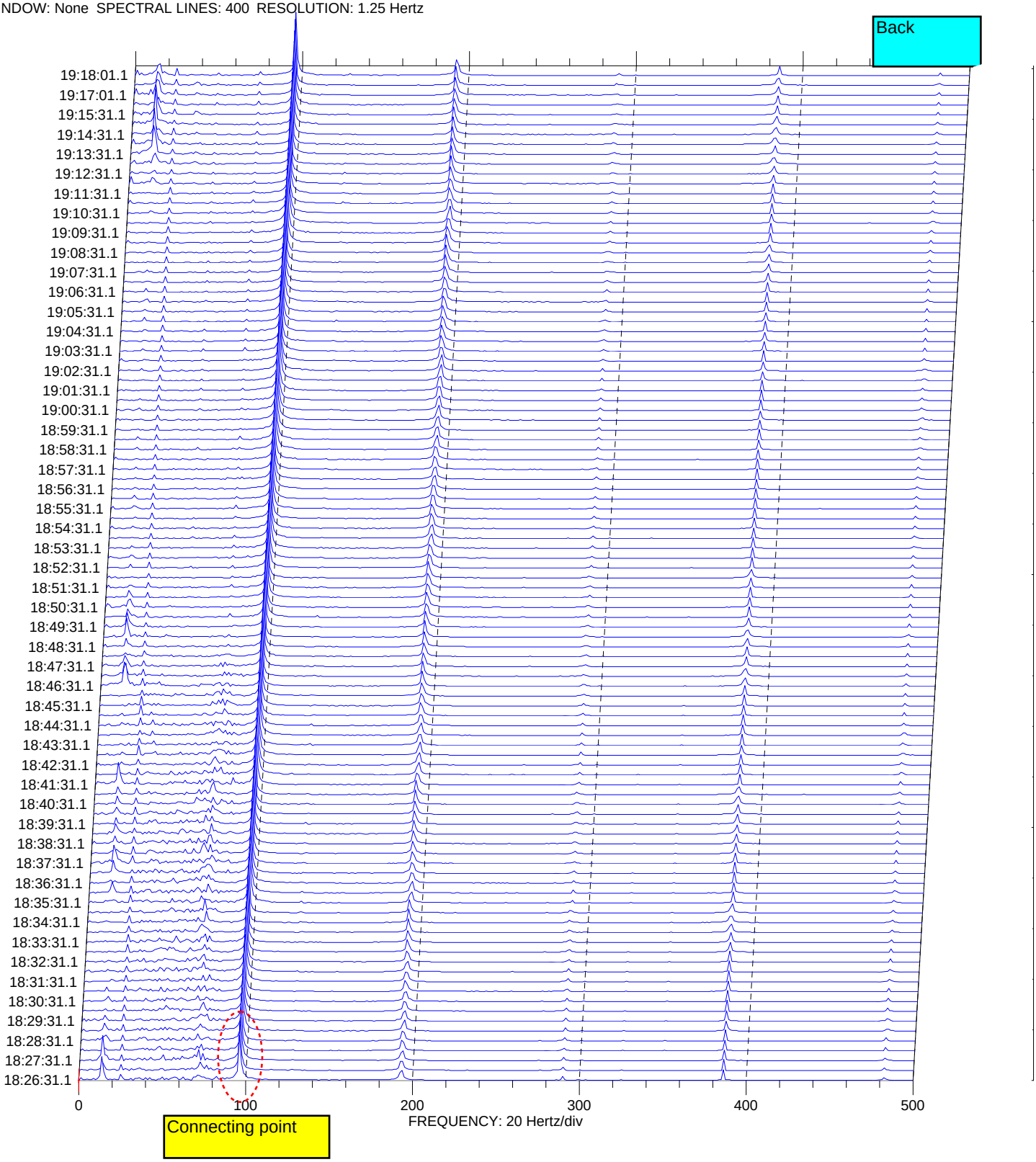


COMMENTS

HALF SPECTRUM WATERFALL PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

POINT: Channel 5 ∠45° Left
MACHINE: Machine
From 23JUL2013 18:26:31.1 To 23JUL2013 19:18:01.1 Startup 18:26:31.1
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz



COMMENTS

HALF SPECTRUM WATERFALL PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

Home

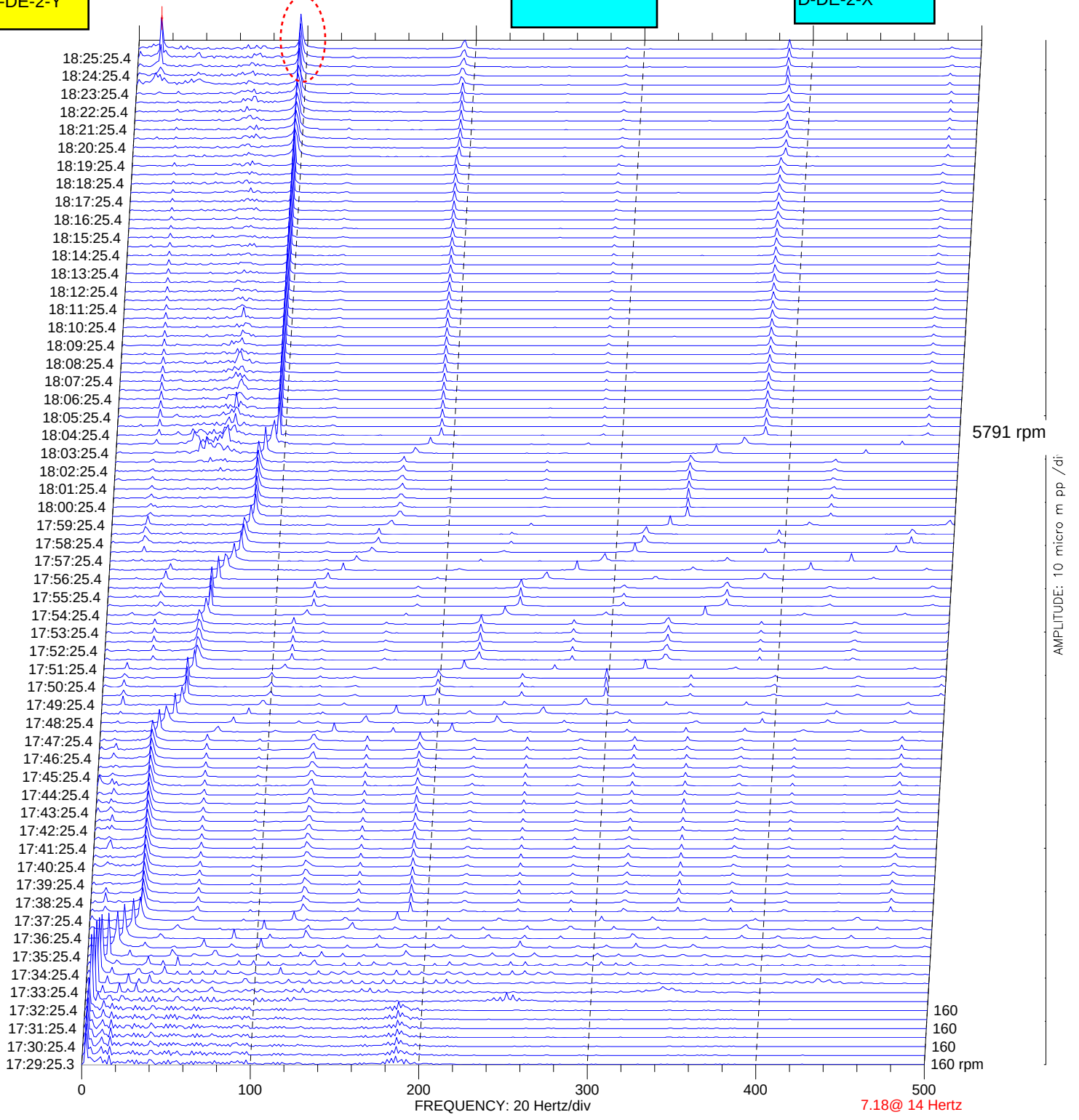
POINT: Channel 6 ∠45° Right
MACHINE: Machine
From 23JUL2013 17:29:25.3 To 23JUL20 up 18:25:55.4
WINDOW: None SPECTRAL LINES: 400 25 Hertz

Connect to next plot

Back to trend

Back to D-DE-2-X

D-DE-2-Y

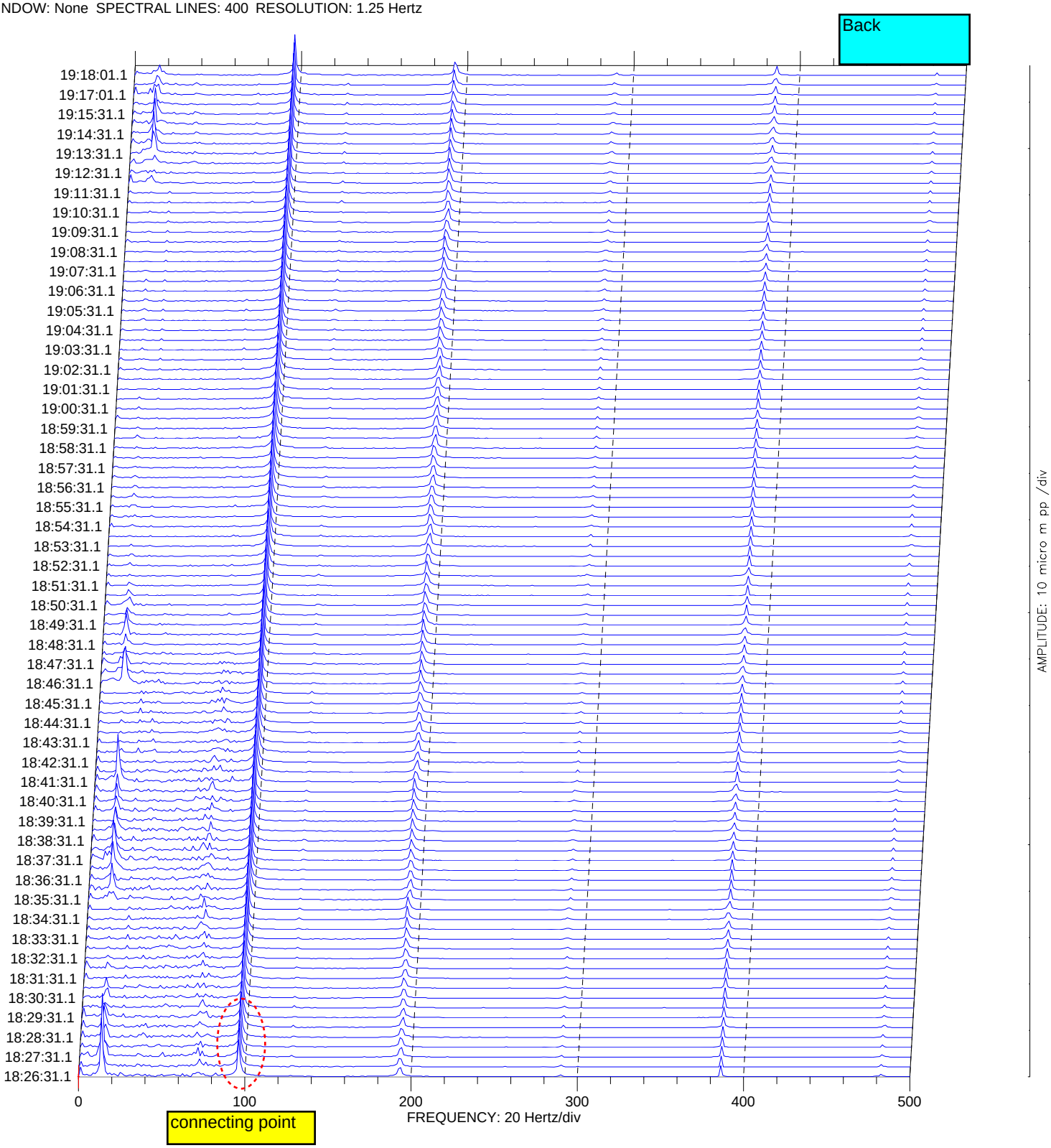


COMMENTS

HALF SPECTRUM WATERFALL PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

POINT: Channel 6 ∠45° Right
MACHINE: Machine
From 23JUL2013 18:26:31.1 To 23JUL2013 19:18:01.1 Startup 18:26:31.1
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz



COMMENTS

HALF SPECTRUM WATERFALL PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

Home

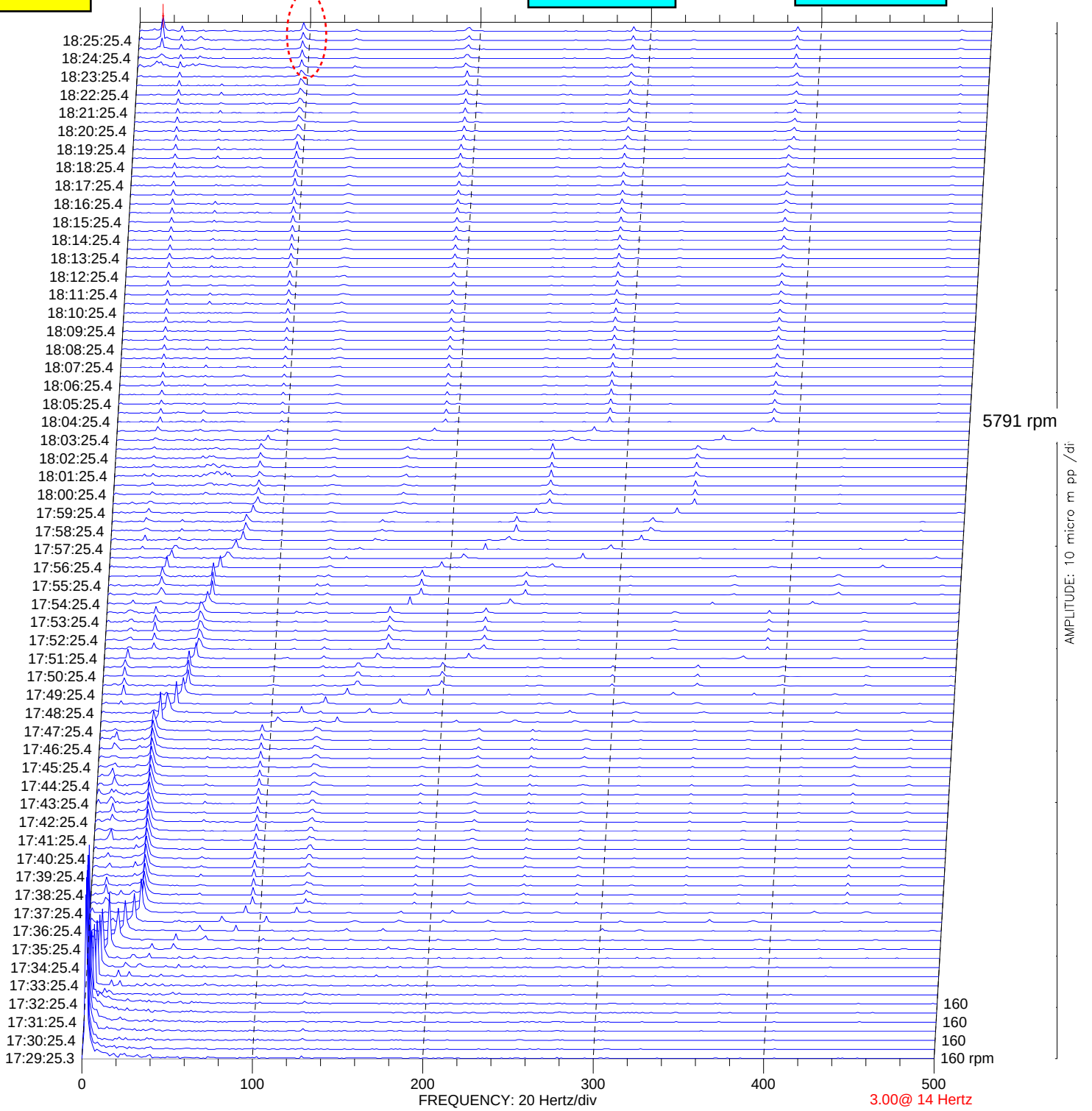
POINT: Channel 7 ∠45° Left
MACHINE: Machine
From 23JUL2013 17:29:25.3 To 23JUL20 rtup 18:25:55.4
WINDOW: None SPECTRAL LINES: 400 ..25 Hertz

Connect to next plot

Back to trend

Click to see D-NDE-2-Y

D-NDE-2-X

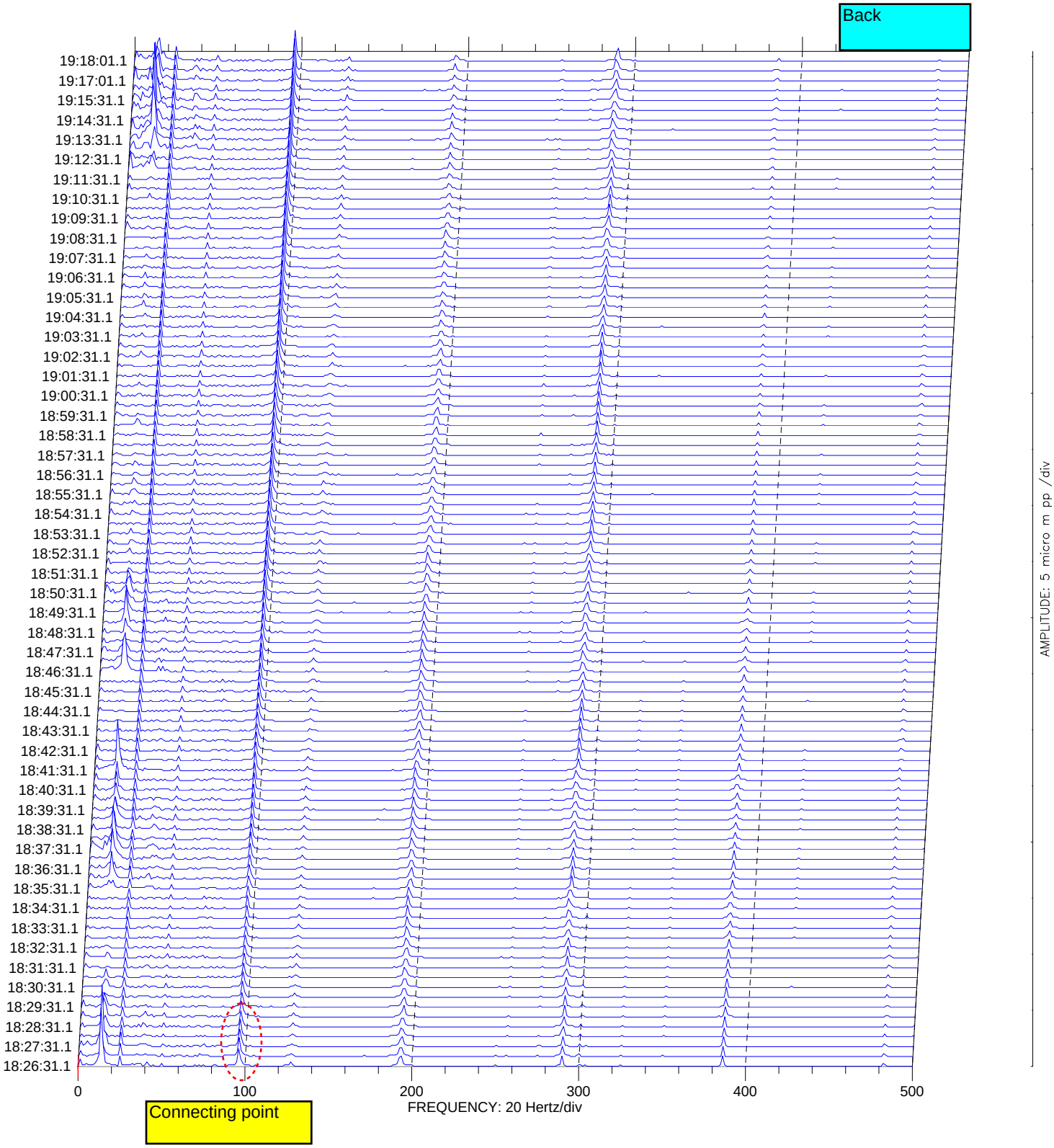


COMMENTS

HALF SPECTRUM WATERFALL PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

POINT: Channel 7 ∠45° Left
MACHINE: Machine
From 23JUL2013 18:26:31.1 To 23JUL2013 19:18:01.1 Startup 18:26:31.1
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz



COMMENTS

HALF SPECTRUM WATERFALL PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

Home

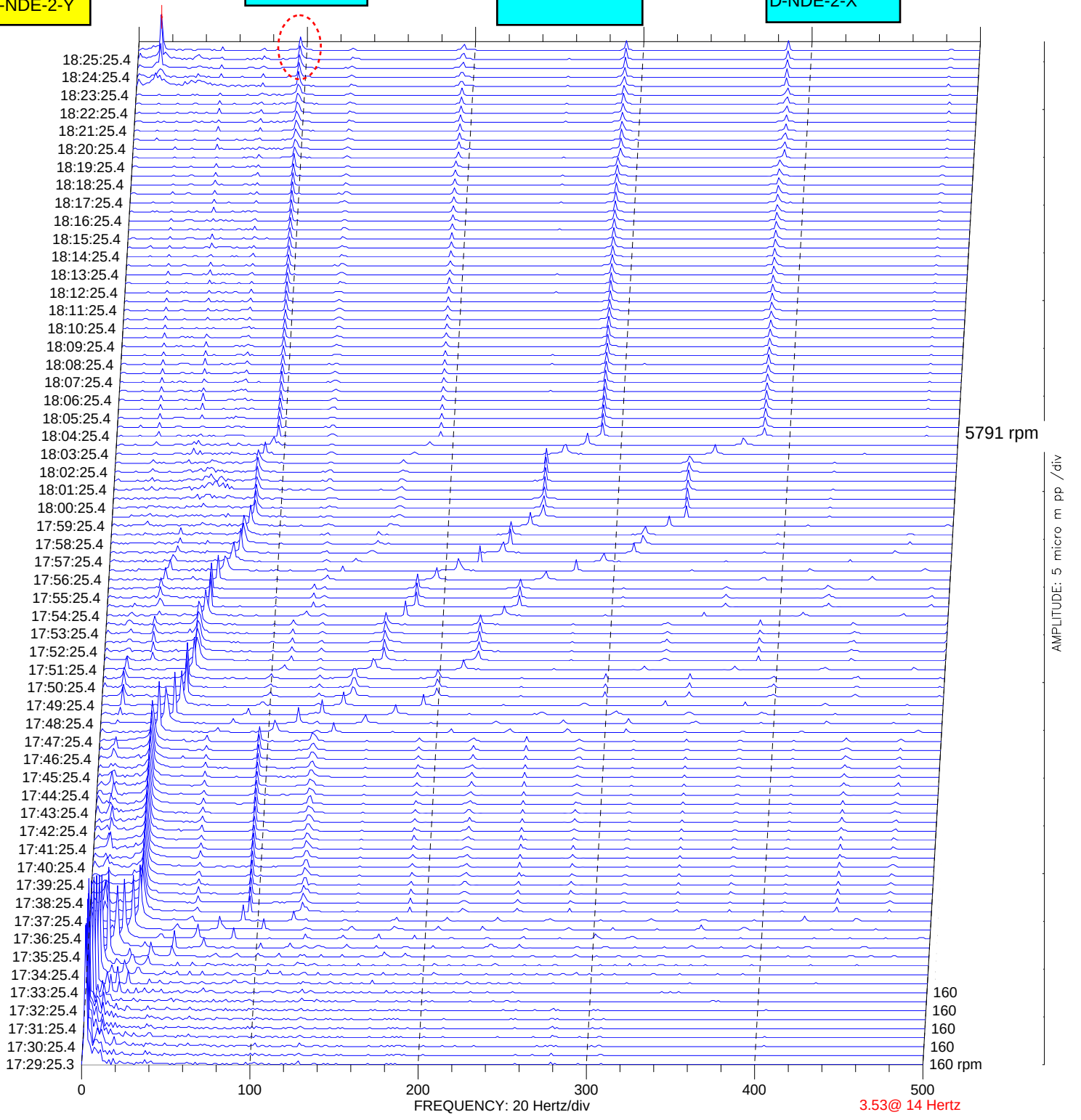
POINT: Channel 8 ∠45° Right
MACHINE: Machine
From 23JUL2013 17:29:25.3 To 23JUL2 rtup 18:25:55.4
WINDOW: None SPECTRAL LINES: 40 ..25 Hertz

Connect to next plot

Back to trend

Back to D-NDE-2-X

D-NDE-2-Y

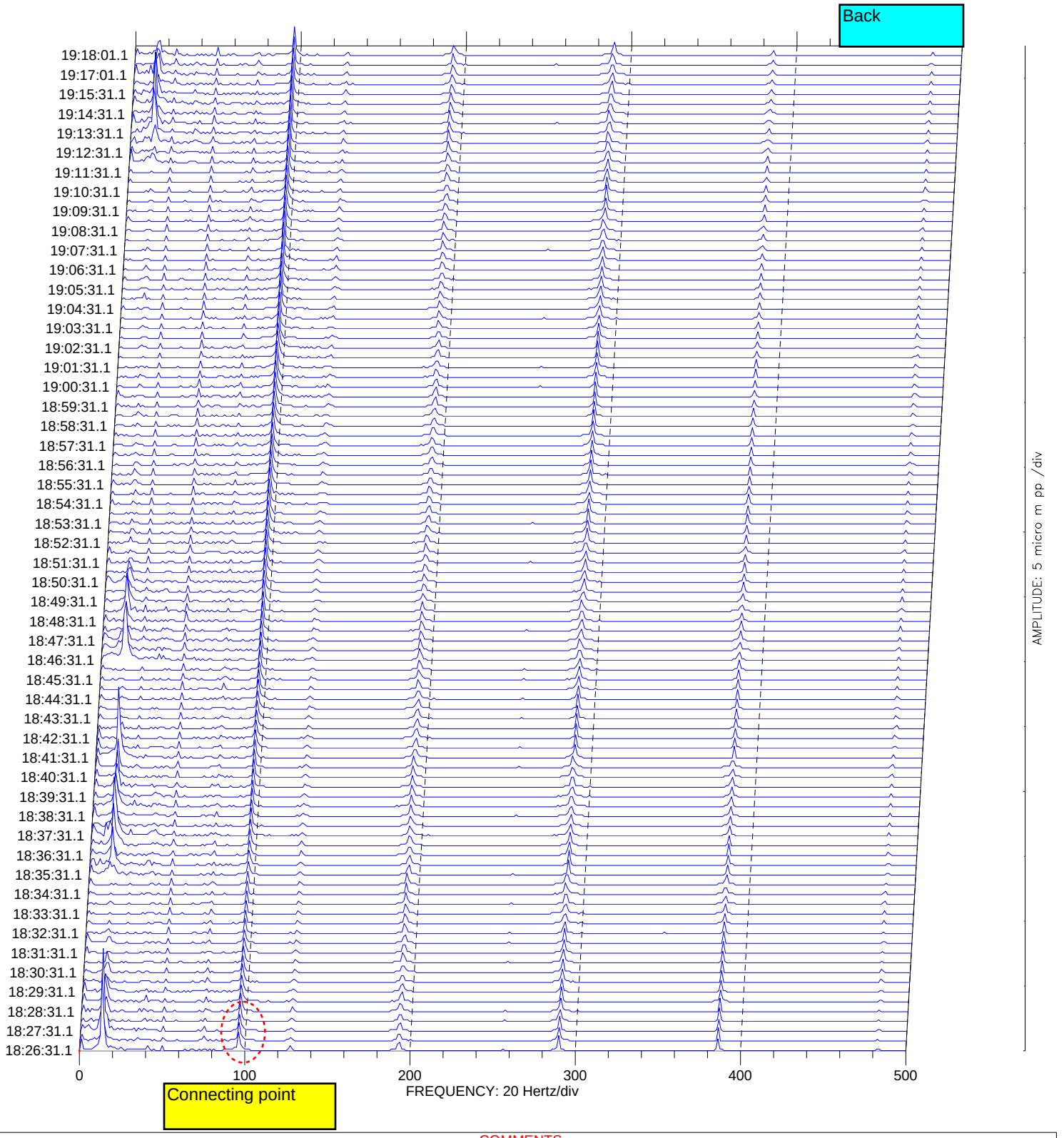


COMMENTS

HALF SPECTRUM WATERFALL PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

POINT: Channel 8 ∠45° Right
MACHINE: Machine
From 23JUL2013 18:26:31.1 To 23JUL2013 19:18:01.1 Startup 18:26:31.1
WINDOW: None SPECTRAL LINES: 400 RESOLUTION: 1.25 Hertz

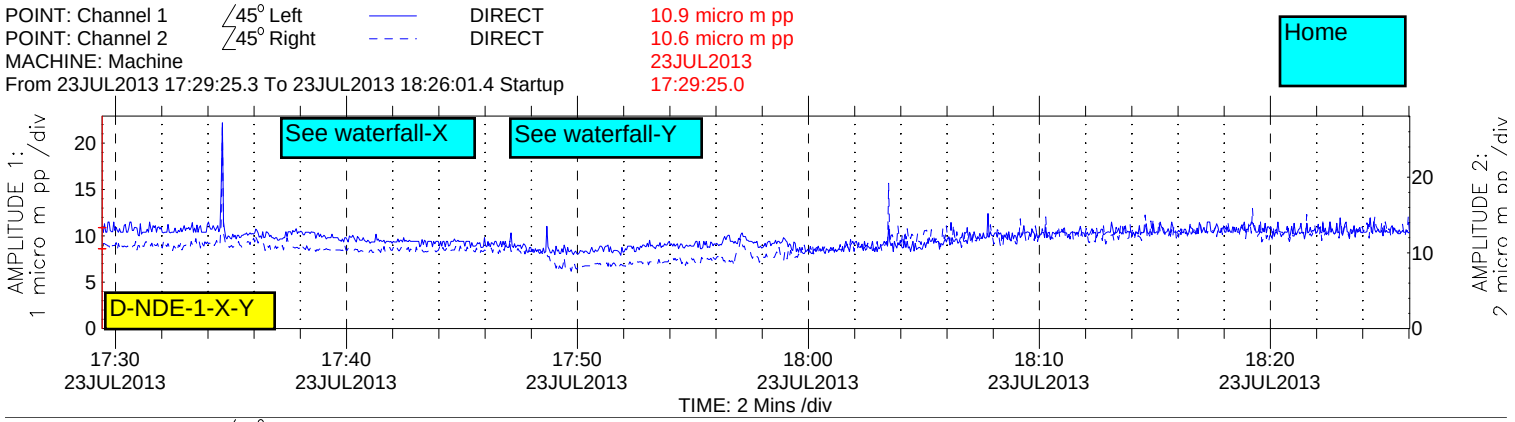


COMMENTS

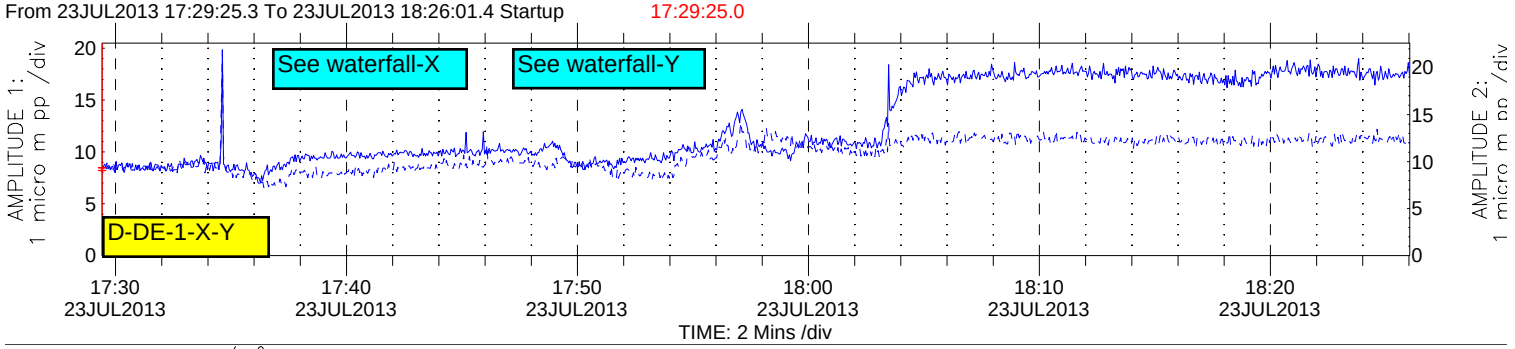
TREND PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

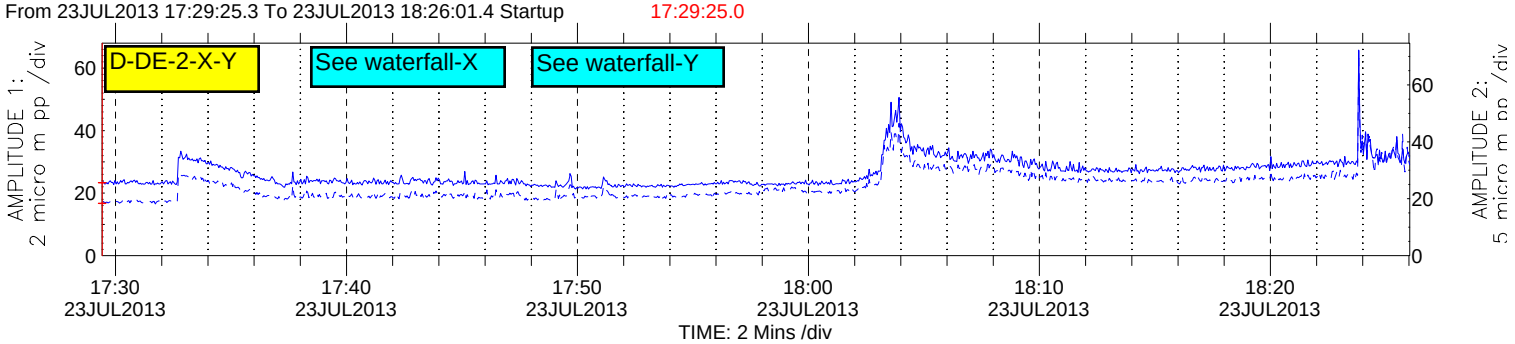
POINT: Channel 1 ∠45° Left DIRECT 10.9 micro m pp
POINT: Channel 2 ∠45° Right DIRECT 10.6 micro m pp
MACHINE: Machine 23JUL2013
From 23JUL2013 17:29:25.3 To 23JUL2013 18:26:01.4 Startup 17:29:25.0



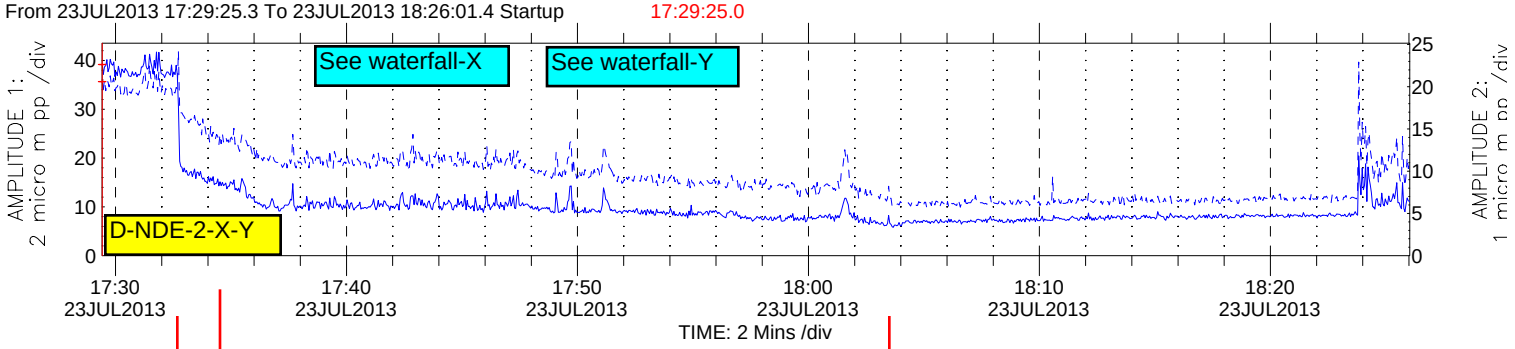
POINT: Channel 3 ∠45° Left DIRECT 8.49 micro m pp
POINT: Channel 4 ∠45° Right DIRECT 9.08 micro m pp
MACHINE: Machine 23JUL2013
From 23JUL2013 17:29:25.3 To 23JUL2013 18:26:01.4 Startup 17:29:25.0

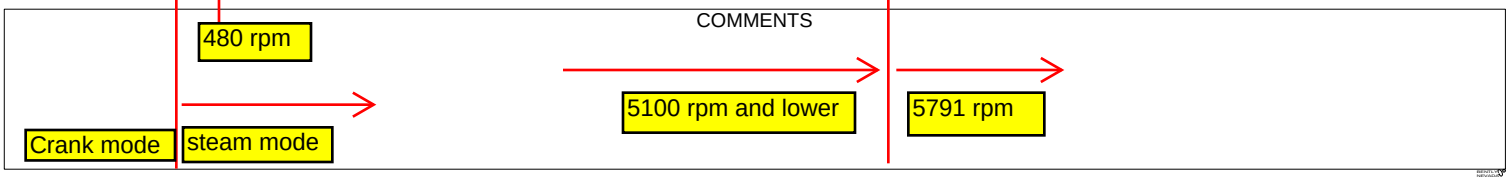


POINT: Channel 5 ∠45° Left DIRECT 23.4 micro m pp
POINT: Channel 6 ∠45° Right DIRECT 18.4 micro m pp
MACHINE: Machine 23JUL2013
From 23JUL2013 17:29:25.3 To 23JUL2013 18:26:01.4 Startup 17:29:25.0



POINT: Channel 7 ∠45° Left DIRECT 39.2 micro m pp
POINT: Channel 8 ∠45° Right DIRECT 20.6 micro m pp
MACHINE: Machine 23JUL2013
From 23JUL2013 17:29:25.3 To 23JUL2013 18:26:01.4 Startup 17:29:25.0

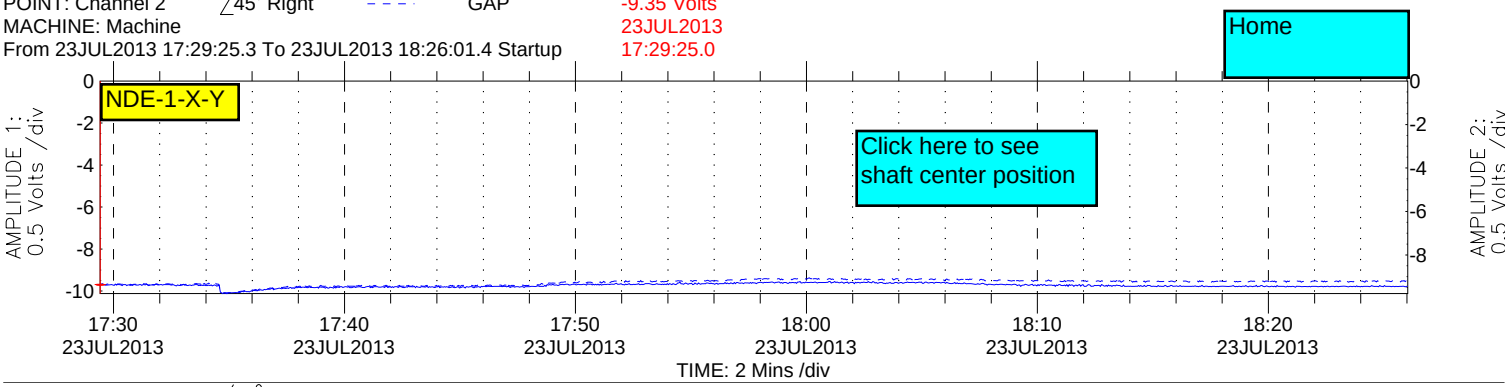




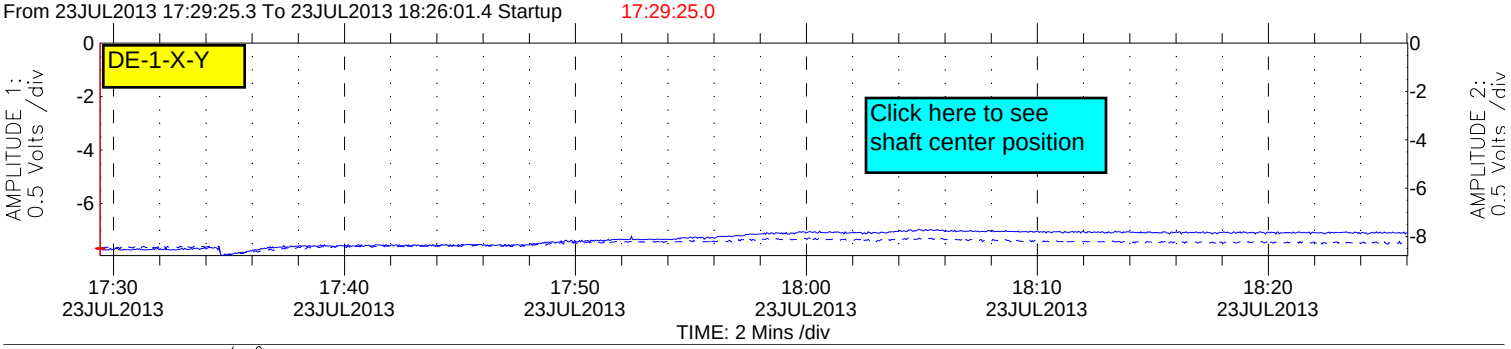
TREND PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

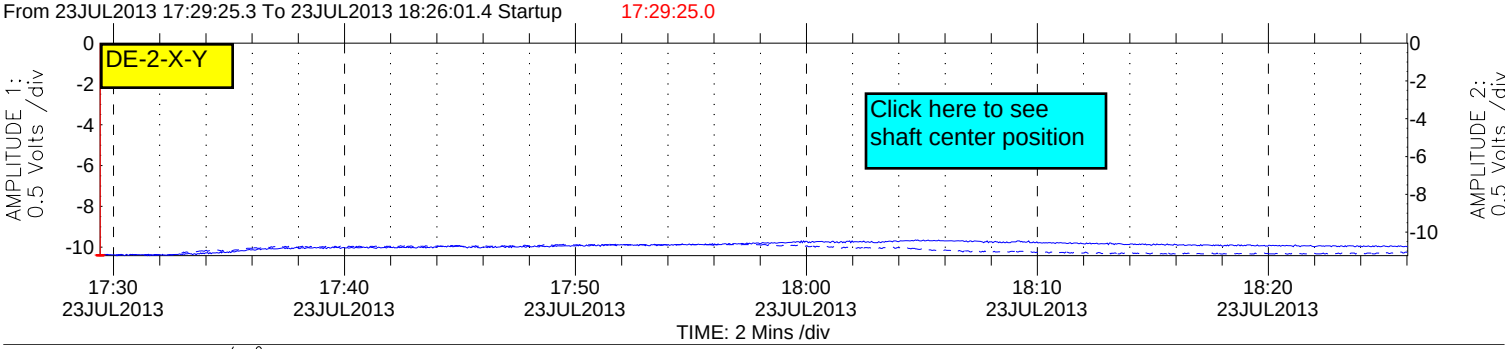
POINT: Channel 1 ∠45° Left GAP -9.69 Volts
POINT: Channel 2 ∠45° Right GAP -9.35 Volts
MACHINE: Machine 23JUL2013
From 23JUL2013 17:29:25.3 To 23JUL2013 18:26:01.4 Startup 17:29:25.0



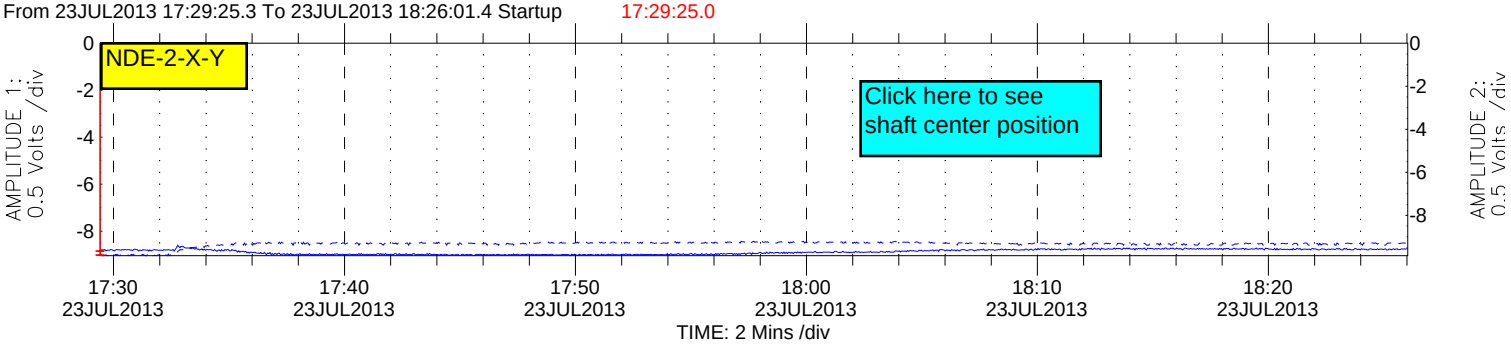
POINT: Channel 3 ∠45° Left GAP -7.69 Volts
POINT: Channel 4 ∠45° Right GAP -8.47 Volts
MACHINE: Machine 23JUL2013
From 23JUL2013 17:29:25.3 To 23JUL2013 18:26:01.4 Startup 17:29:25.0



POINT: Channel 5 ∠45° Left GAP -10.4 Volts
POINT: Channel 6 ∠45° Right GAP -11.2 Volts
MACHINE: Machine 23JUL2013
From 23JUL2013 17:29:25.3 To 23JUL2013 18:26:01.4 Startup 17:29:25.0



POINT: Channel 7 ∠45° Left GAP -8.84 Volts
POINT: Channel 8 ∠45° Right GAP -9.84 Volts
MACHINE: Machine 23JUL2013
From 23JUL2013 17:29:25.3 To 23JUL2013 18:26:01.4 Startup 17:29:25.0



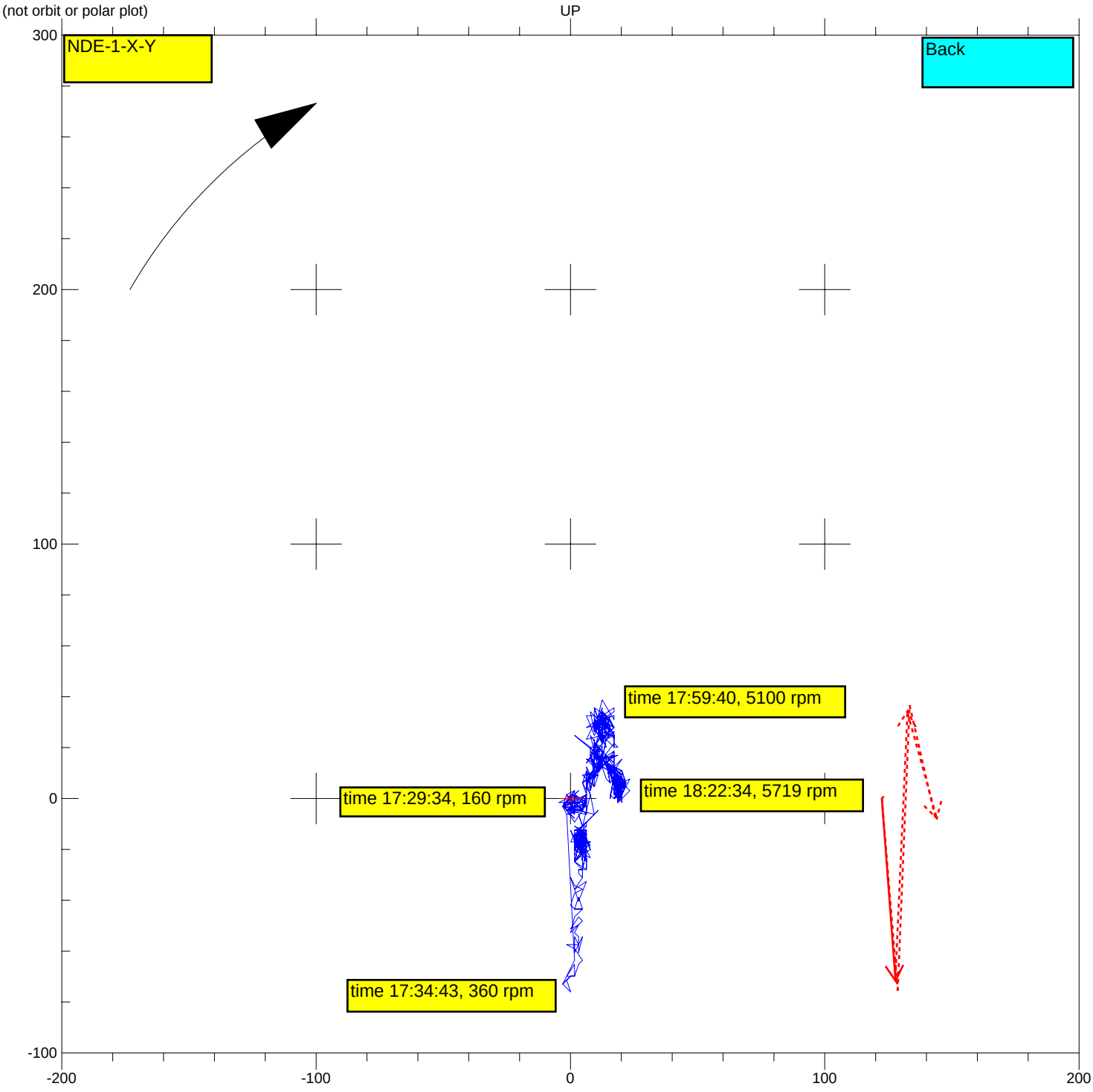
COMMENTS

SHAFT AVERAGE CENTERLINE PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

POINT: Channel 1 ∠45° Left REF: -9.69 Volts 0
POINT: Channel 2 ∠45° Right REF: -9.35 Volts 0
MACHINE: Machine (0, 0)
From 23JUL2013 17:29:25.3 To 23JUL2013 18:26:01.4 Startup

(not orbit or polar plot)



20 micro m /div

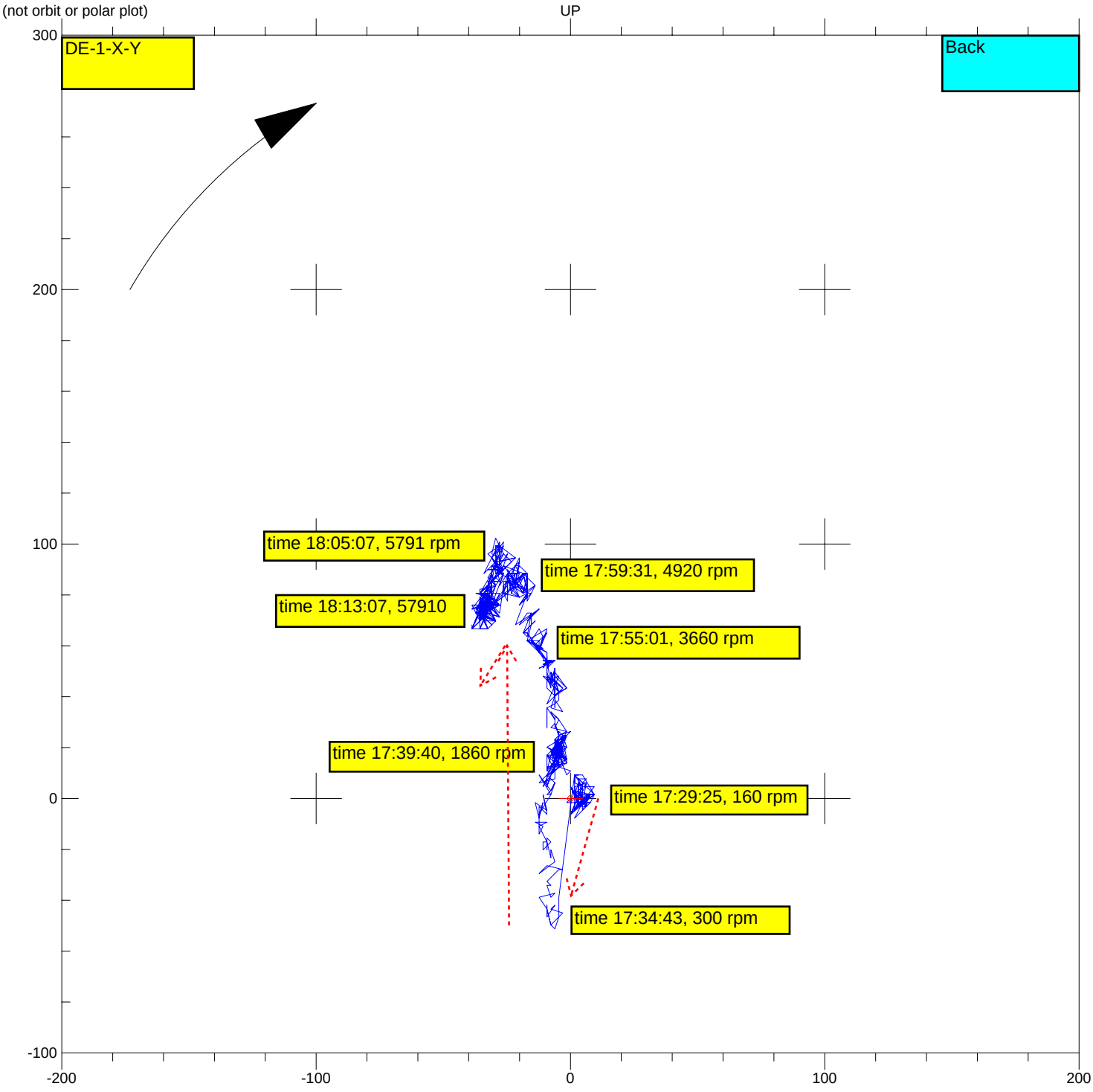
COMMENTS

SHAFT AVERAGE CENTERLINE PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

POINT: Channel 3 ∠45° Left REF: -7.69 Volts 0
POINT: Channel 4 ∠45° Right REF: -8.47 Volts 0
MACHINE: Machine (0, 0)
From 23JUL2013 17:29:25.3 To 23JUL2013 18:26:01.4 Startup

(not orbit or polar plot)



20 micro m /div

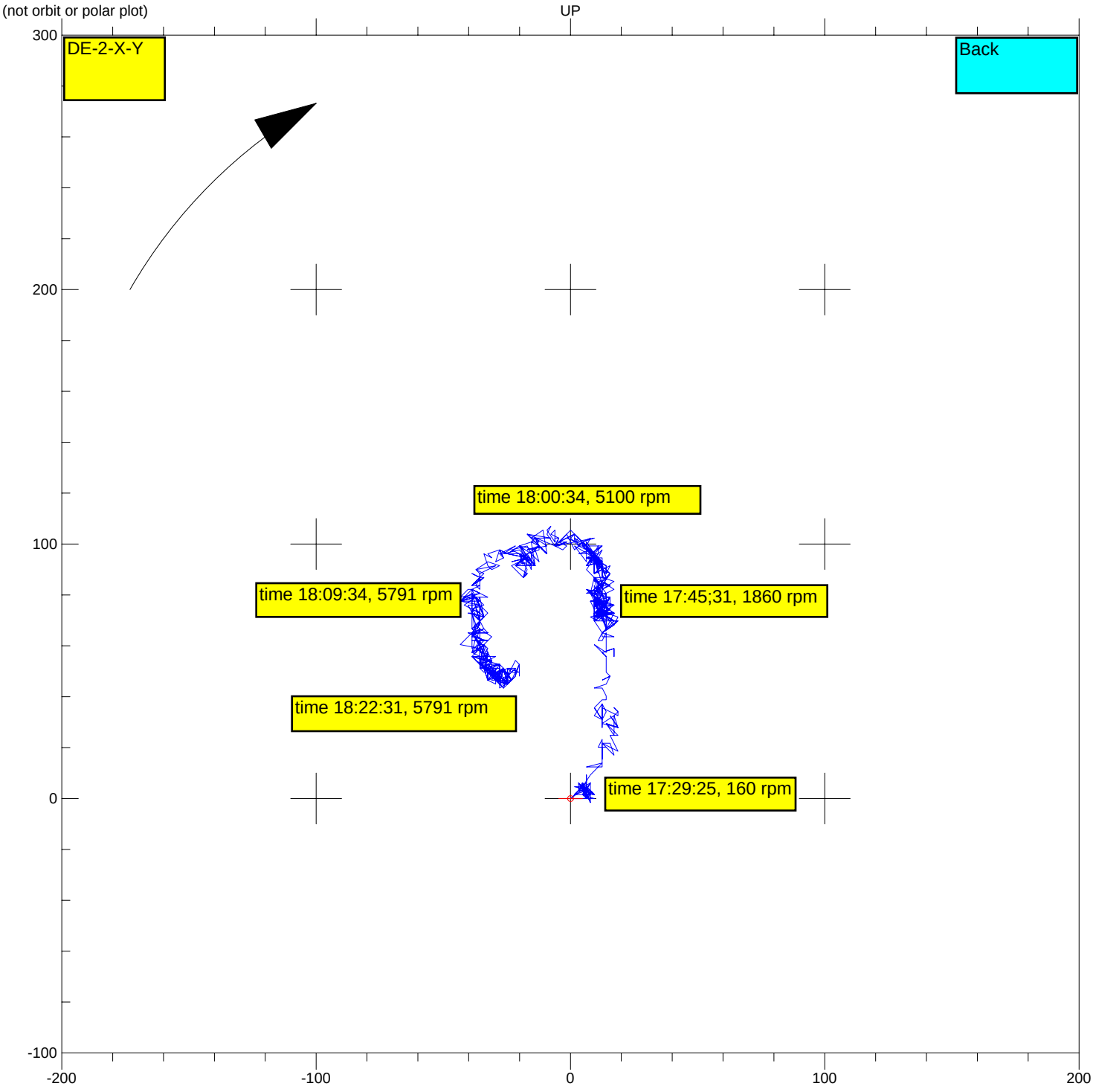
COMMENTS

SHAFT AVERAGE CENTERLINE PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

POINT: Channel 5 ∠45° Left REF: -10.4 Volts 0
POINT: Channel 6 ∠45° Right REF: -11.2 Volts 0
MACHINE: Machine (0, 0)
From 23JUL2013 17:29:25.3 To 23JUL2013 18:26:01.4 Startup

(not orbit or polar plot)



20 micro m /div

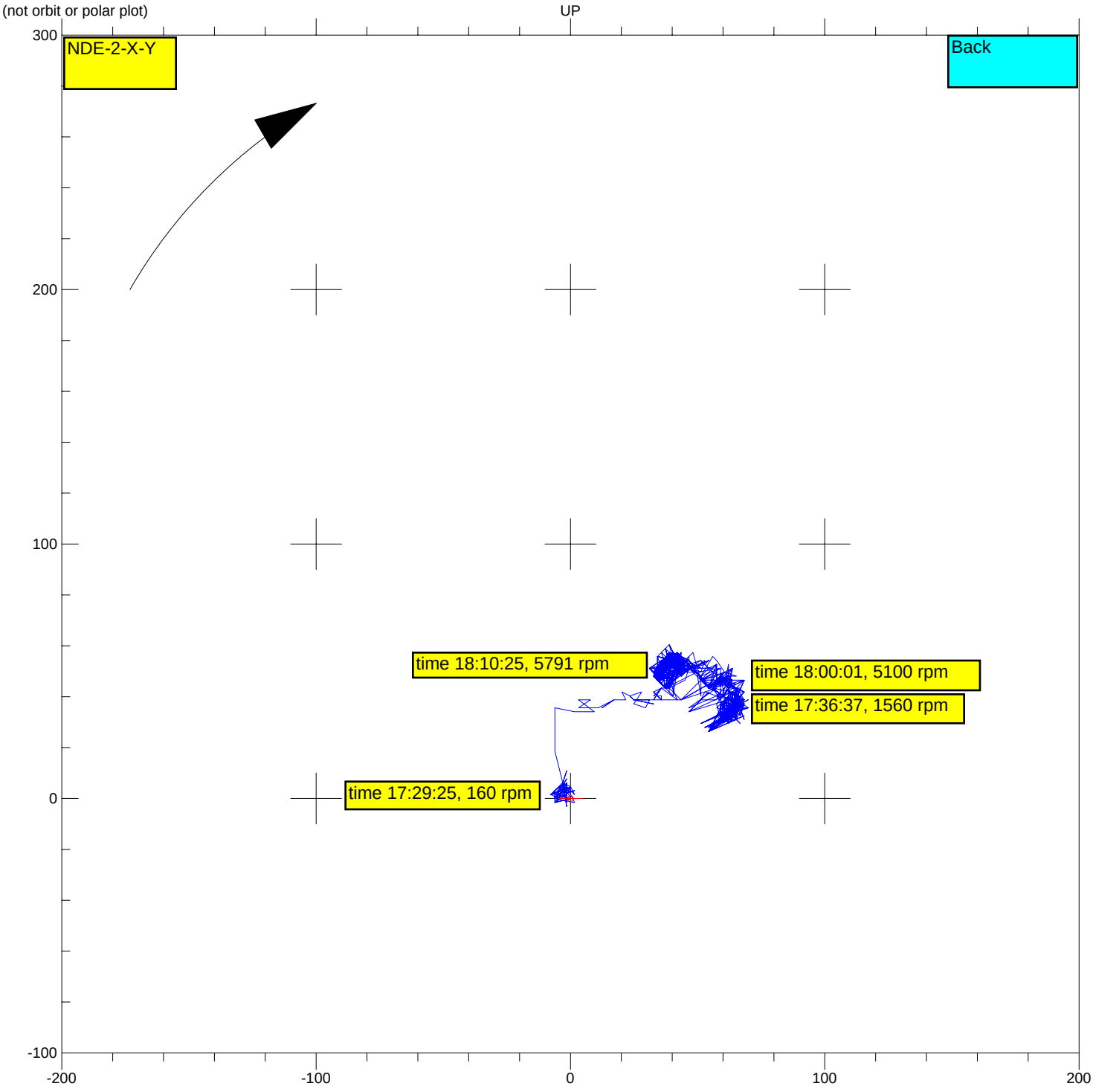
COMMENTS

SHAFT AVERAGE CENTERLINE PLOT
COMPANY: ESSGROUP
MACHINE TRAIN: Steam turbine

PLOT NO._____
PLANT: EGCO cogeneration
JOB REFERENCE: Steam turbine

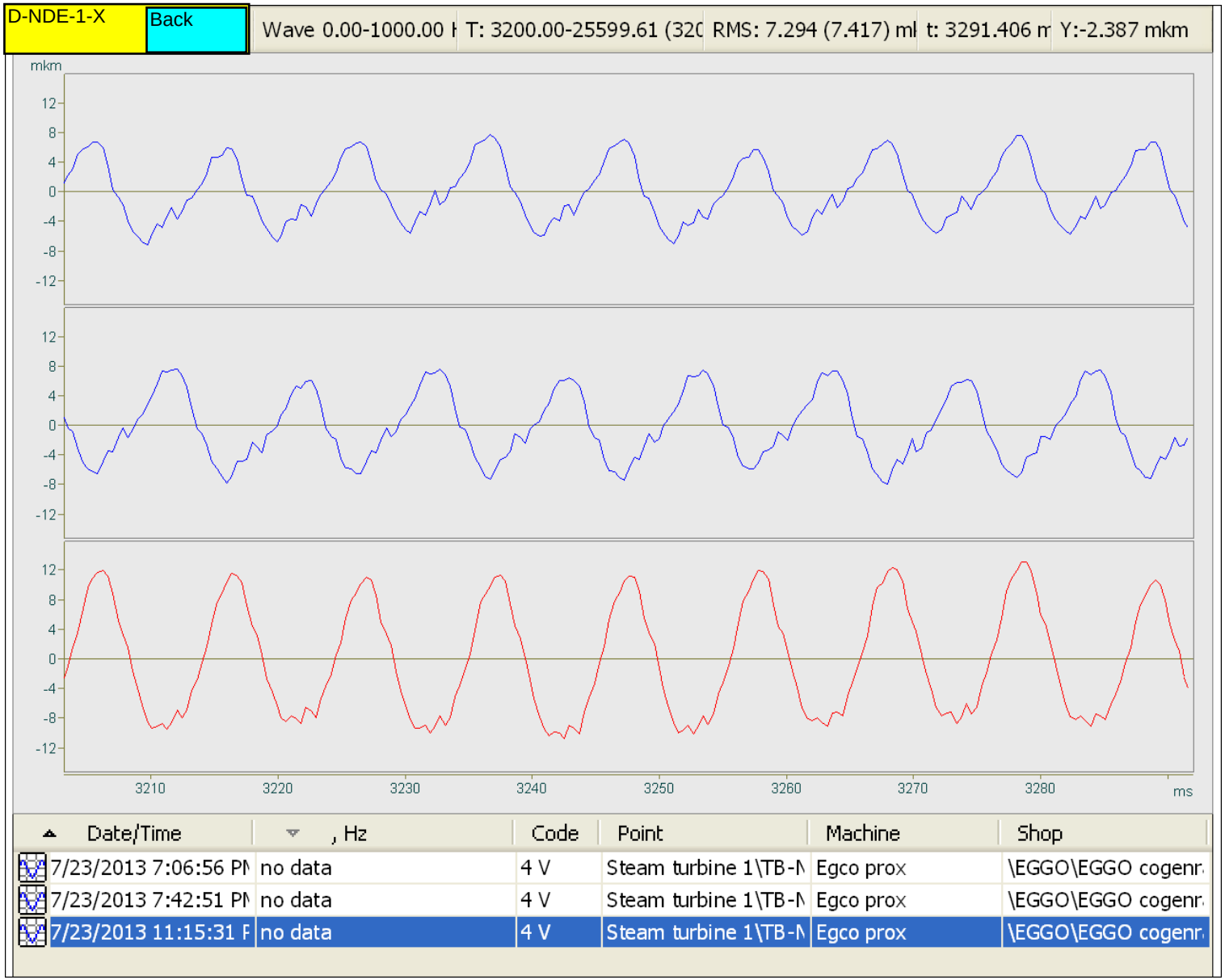
POINT: Channel 7 ∠45° Left REF: -8.84 Volts 0
POINT: Channel 8 ∠45° Right REF: -9.84 Volts 0
MACHINE: Machine (0, 0)
From 23JUL2013 17:29:25.3 To 23JUL2013 18:26:01.4 Startup

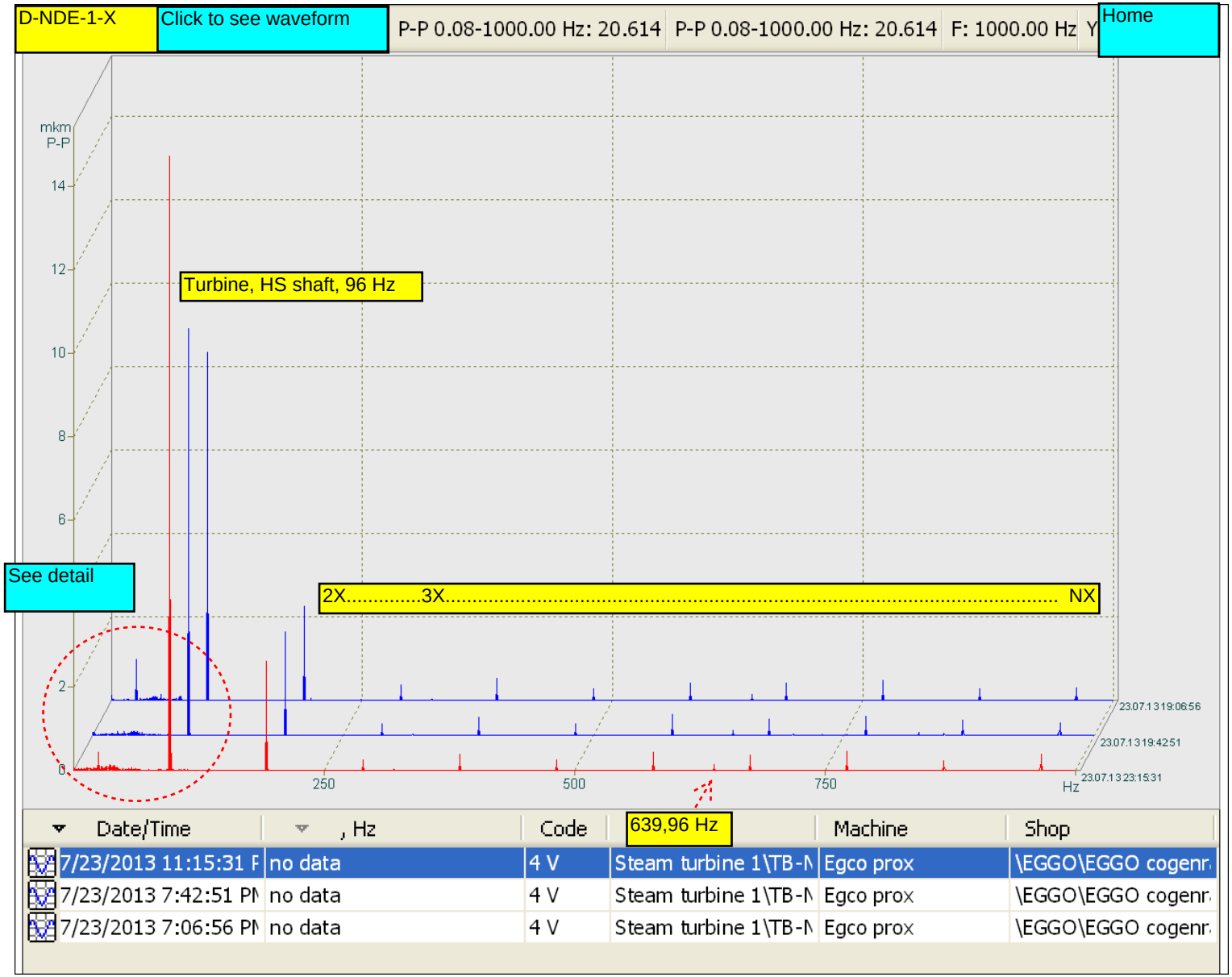
(not orbit or polar plot)

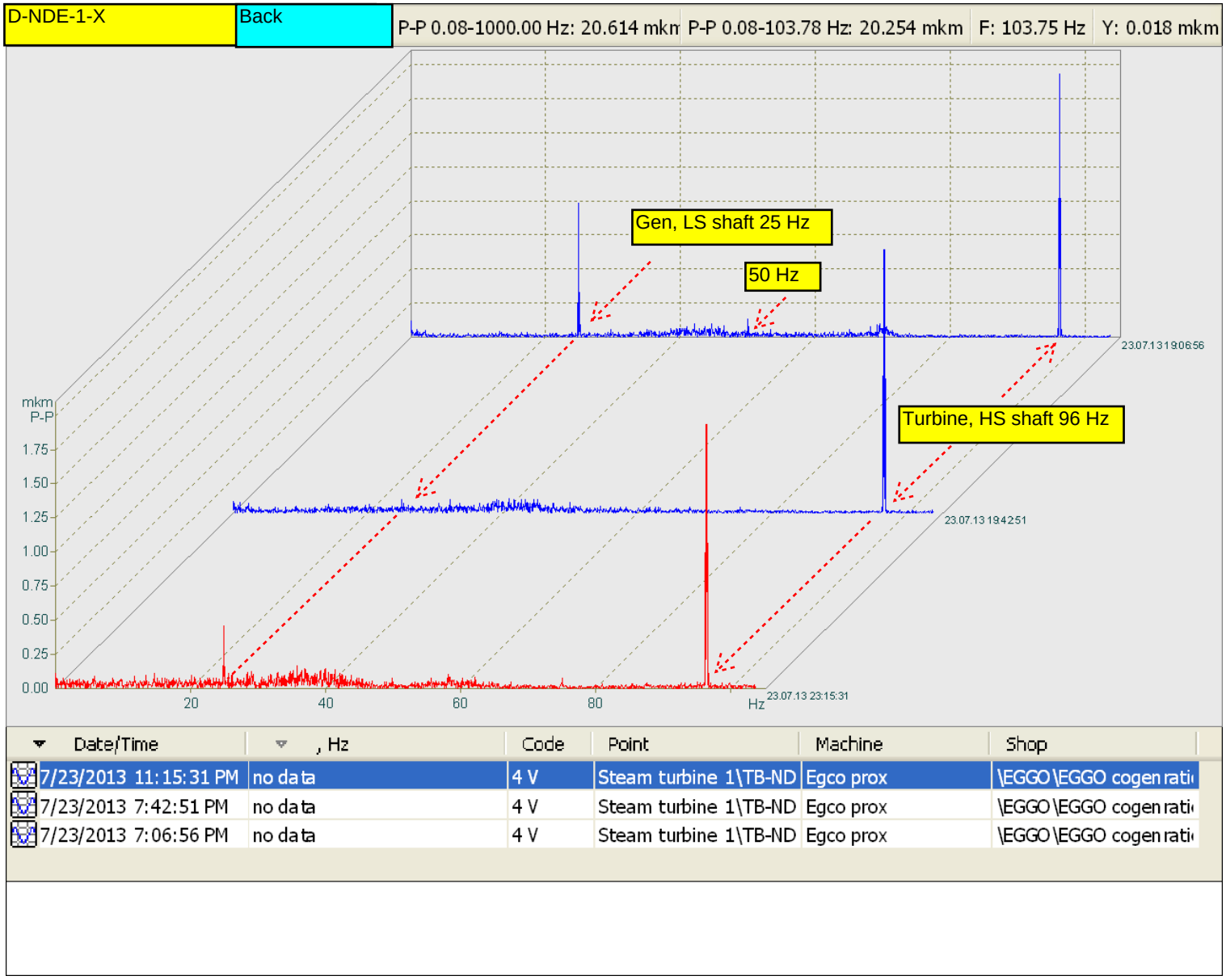


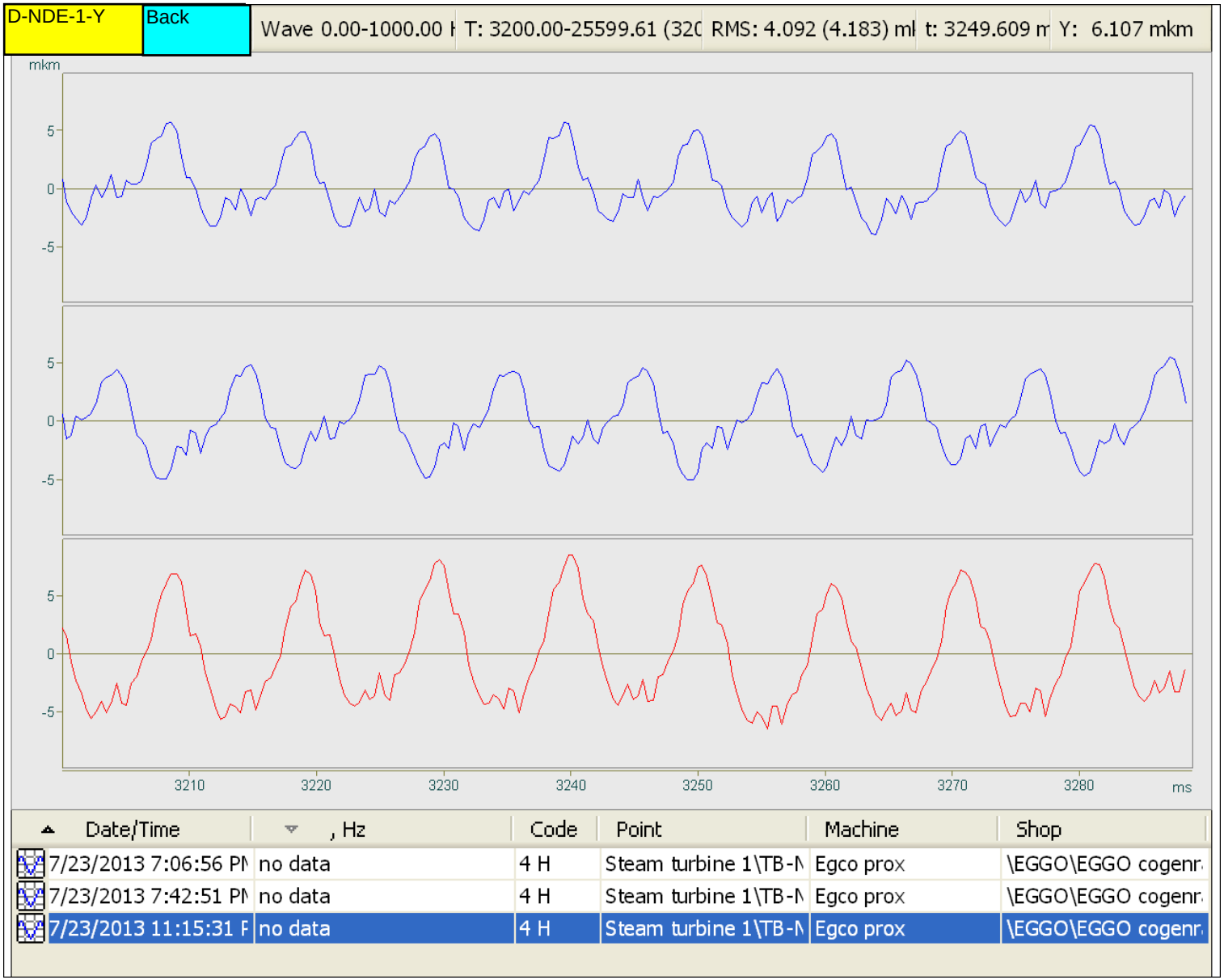
20 micro m /div

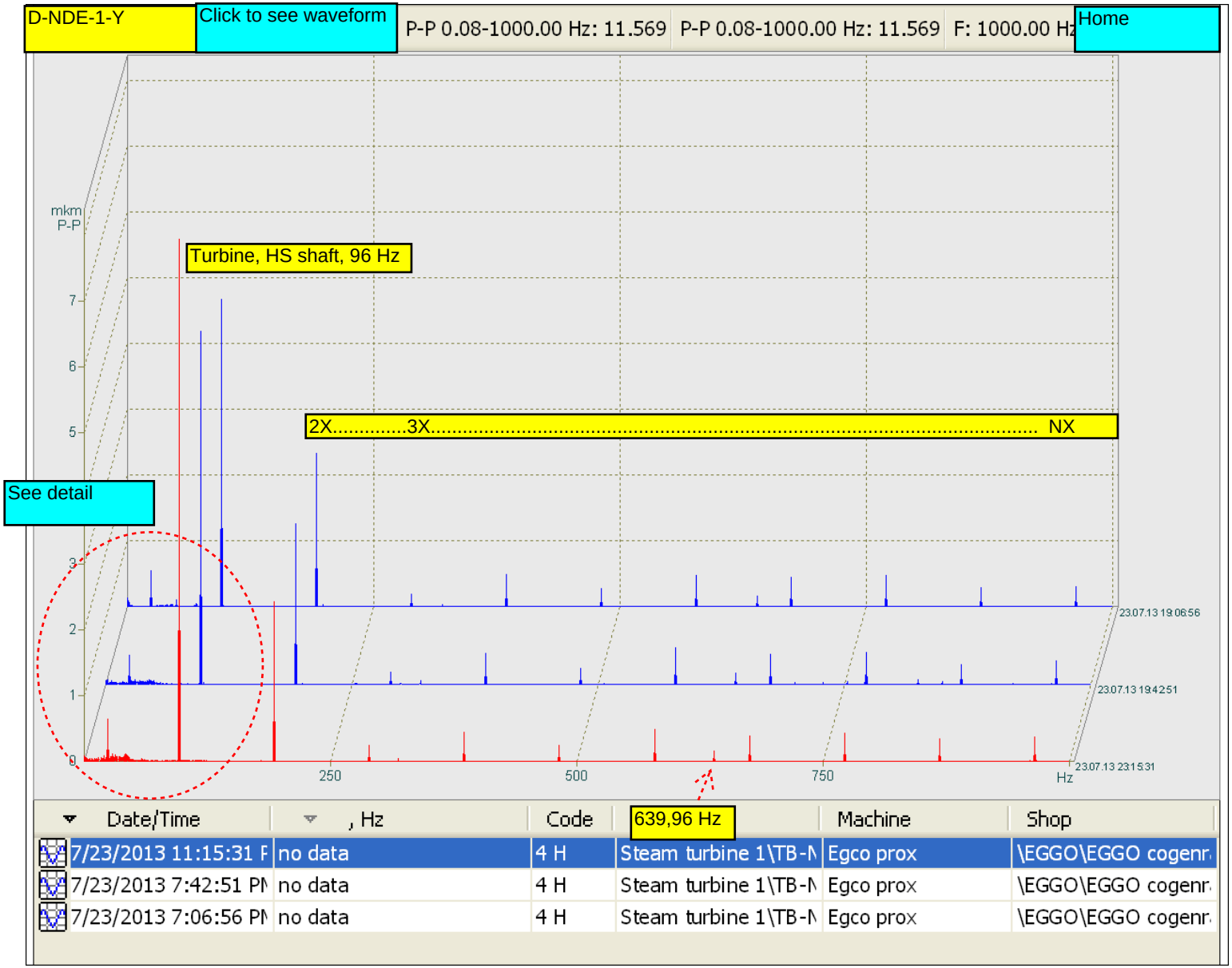
COMMENTS

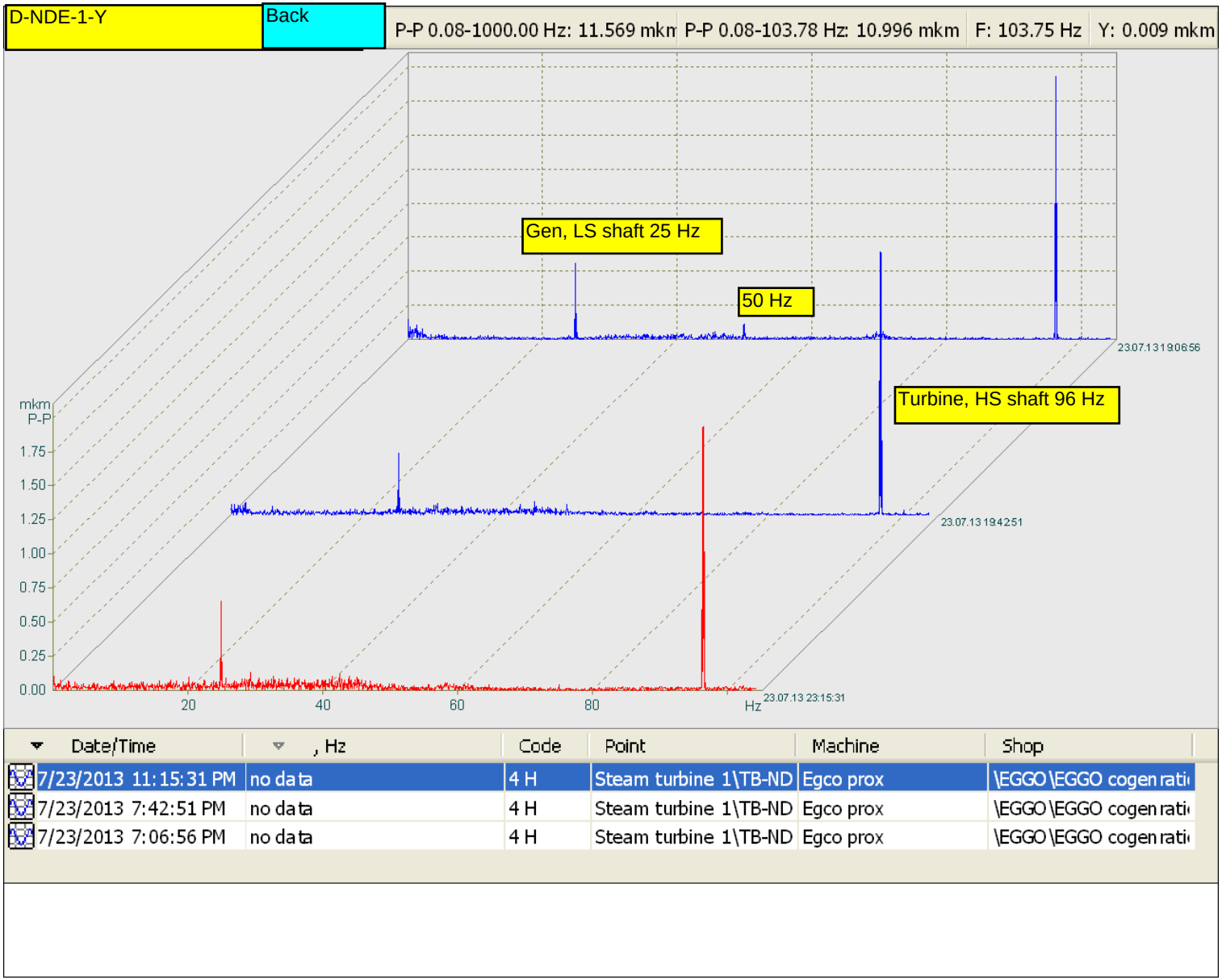

D-NDE-1-X
Back
Wave 0.00-1000.00 H
T: 3200.00-25599.61 (320
RMS: 7.294 (7.417) mk
t: 3291.406 m
Y:-2.387 mkm
mkm
12
8
4
0
-4
-8
-12
3210
3220
3230
3240
3250
3260
3270
3280
ms
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 7:06:56 PM
no data
4 V
Steam turbine 1\TB-M
Egco prox
\EGGO\EGGO cogenr
7/23/2013 7:42:51 PM
no data
4 V
Steam turbine 1\TB-M
Egco prox
\EGGO\EGGO cogenr
7/23/2013 11:15:31 P
no data
4 V
Steam turbine 1\TB-M
Egco prox
\EGGO\EGGO cogenr

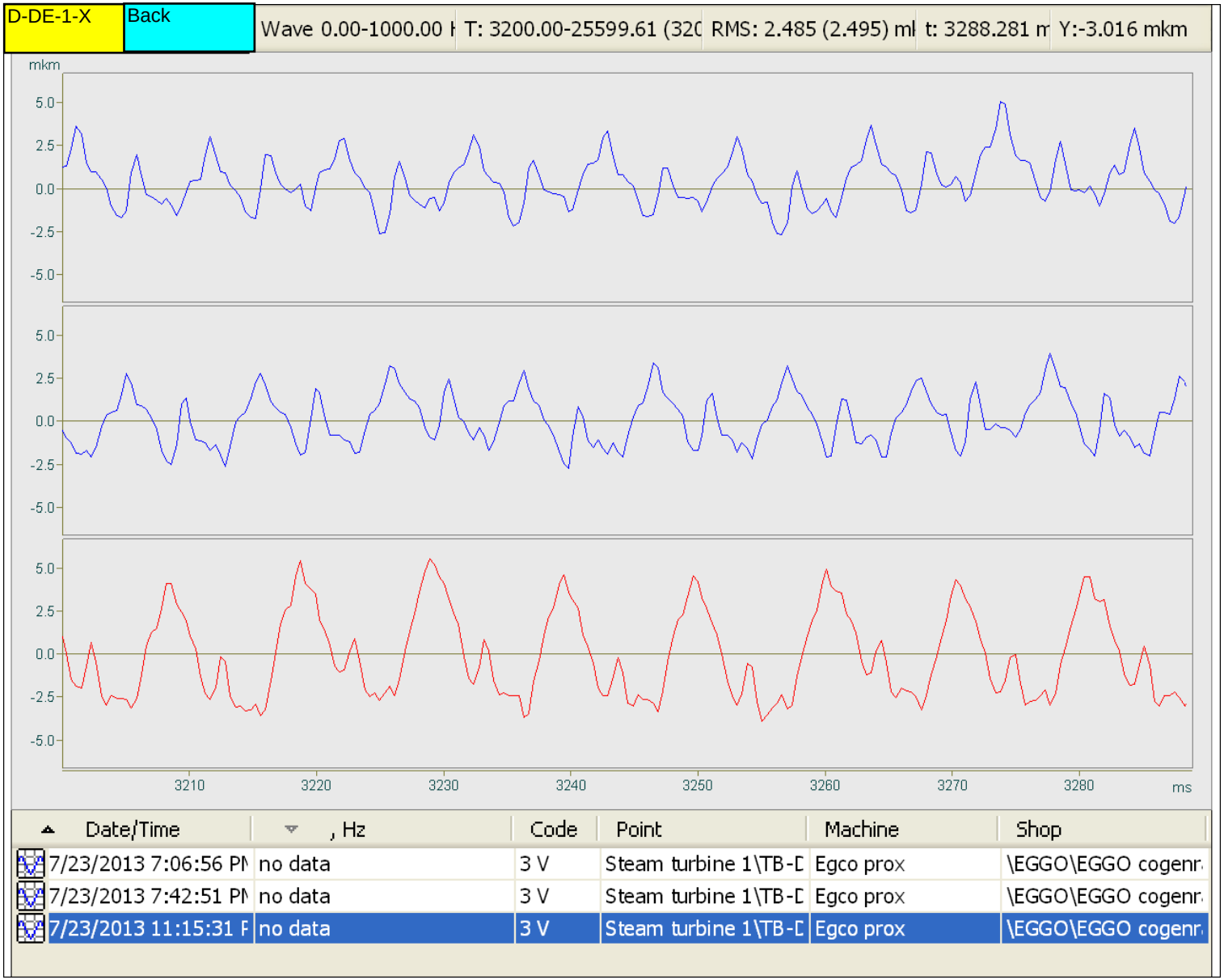

D-NDE-1-X
Click to see waveform
P-P 0.08-1000.00 Hz: 20.614
P-P 0.08-1000.00 Hz: 20.614
F: 1000.00 Hz
Y
Home
mkm
P-P
14
12
10
8
6
2
0
Turbine, HS shaft, 96 Hz
See detail
2X.....3X..... NX
250
500
750
Hz
23.07.13 19:06:56
23.07.13 19:42:51
23.07.13 23:15:31
639,96 Hz
Date/Time
, Hz
Code
Machine
Shop
7/23/2013 11:15:31 F
no data
4 V
Steam turbine 1\TB-N
Egco prox
\EGGO\EGGO cogenr
7/23/2013 7:42:51 PM
no data
4 V
Steam turbine 1\TB-N
Egco prox
\EGGO\EGGO cogenr
7/23/2013 7:06:56 PM
no data
4 V
Steam turbine 1\TB-N
Egco prox
\EGGO\EGGO cogenr

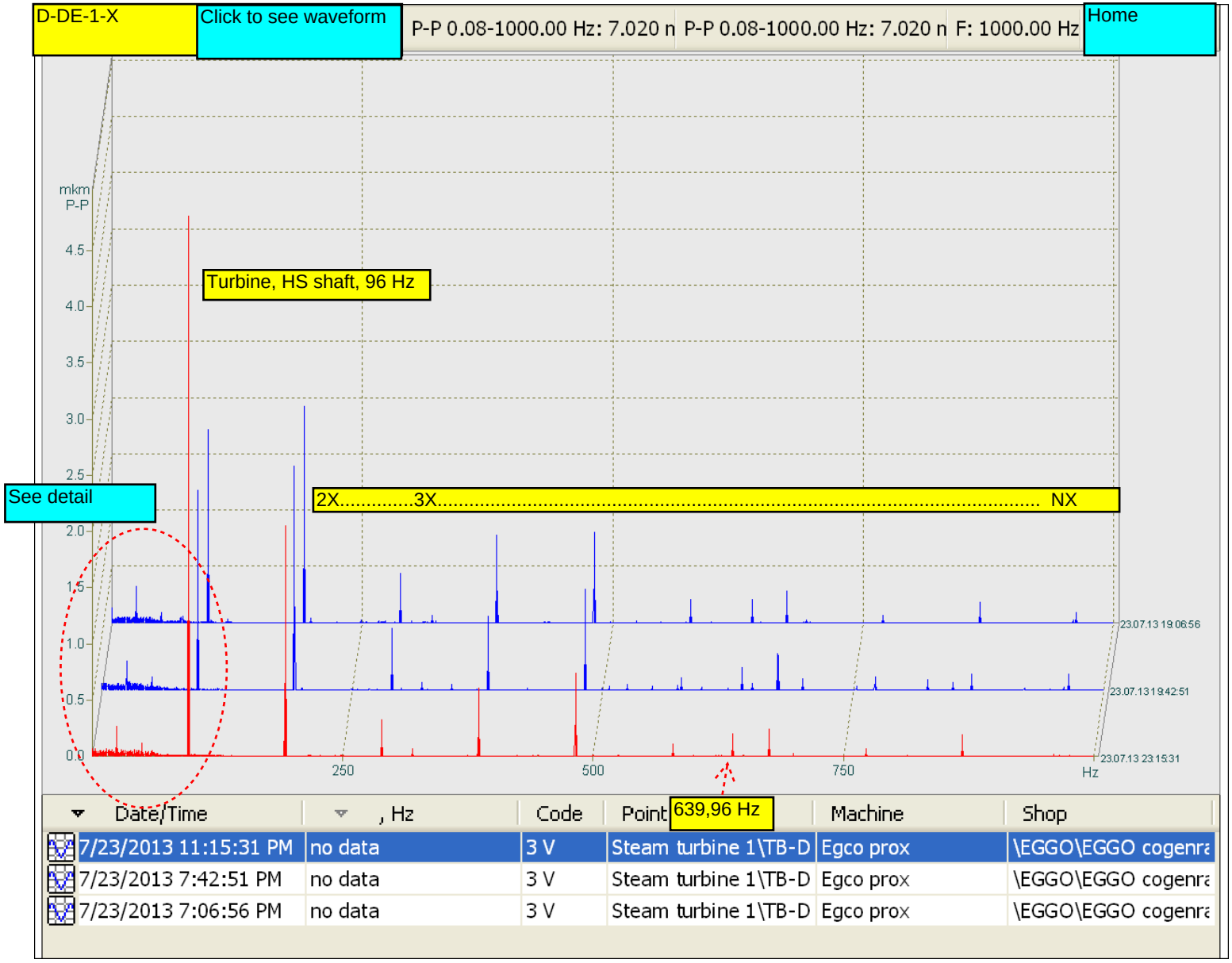

D-NDE-1-X
Back
P-P 0.08-1000.00 Hz: 20.614 mkm
P-P 0.08-103.78 Hz: 20.254 mkm
F: 103.75 Hz
Y: 0.018 mkm
Gen, LS shaft 25 Hz
50 Hz
Turbine, HS shaft 96 Hz
23.07.13 19:06:56
23.07.13 19:42:51
23.07.13 23:15:31
mkm
P-P
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
20
40
60
80
Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:15:31 PM
no data
4 V
Steam turbine 1\TB-ND
Egco prox
\EGGO\EGGO cogen rati
7/23/2013 7:42:51 PM
no data
4 V
Steam turbine 1\TB-ND
Egco prox
\EGGO\EGGO cogen rati
7/23/2013 7:06:56 PM
no data
4 V
Steam turbine 1\TB-ND
Egco prox
\EGGO\EGGO cogen rati

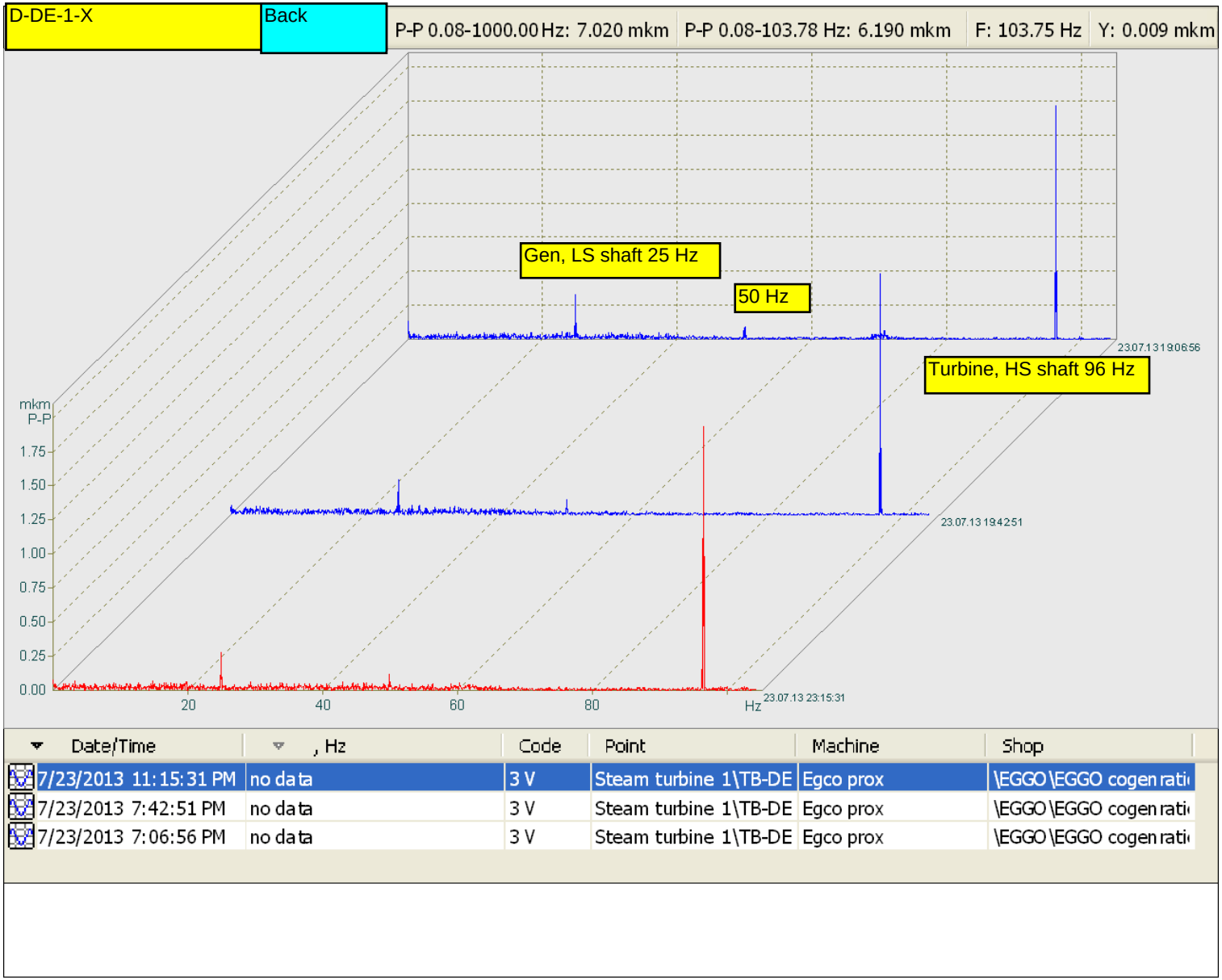

D-NDE-1-Y
Back
Wave 0.00-1000.00 H
T: 3200.00-25599.61 (320
RMS: 4.092 (4.183) mk
t: 3249.609 m
Y: 6.107 mkm
mkm
5
0
-5
5
0
-5
5
0
-5
3210
3220
3230
3240
3250
3260
3270
3280
ms
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 7:06:56 PM
no data
4 H
Steam turbine 1\TB-M
Egco prox
\EGGO\EGGO cogenr
7/23/2013 7:42:51 PM
no data
4 H
Steam turbine 1\TB-M
Egco prox
\EGGO\EGGO cogenr
7/23/2013 11:15:31 P
no data
4 H
Steam turbine 1\TB-M
Egco prox
\EGGO\EGGO cogenr

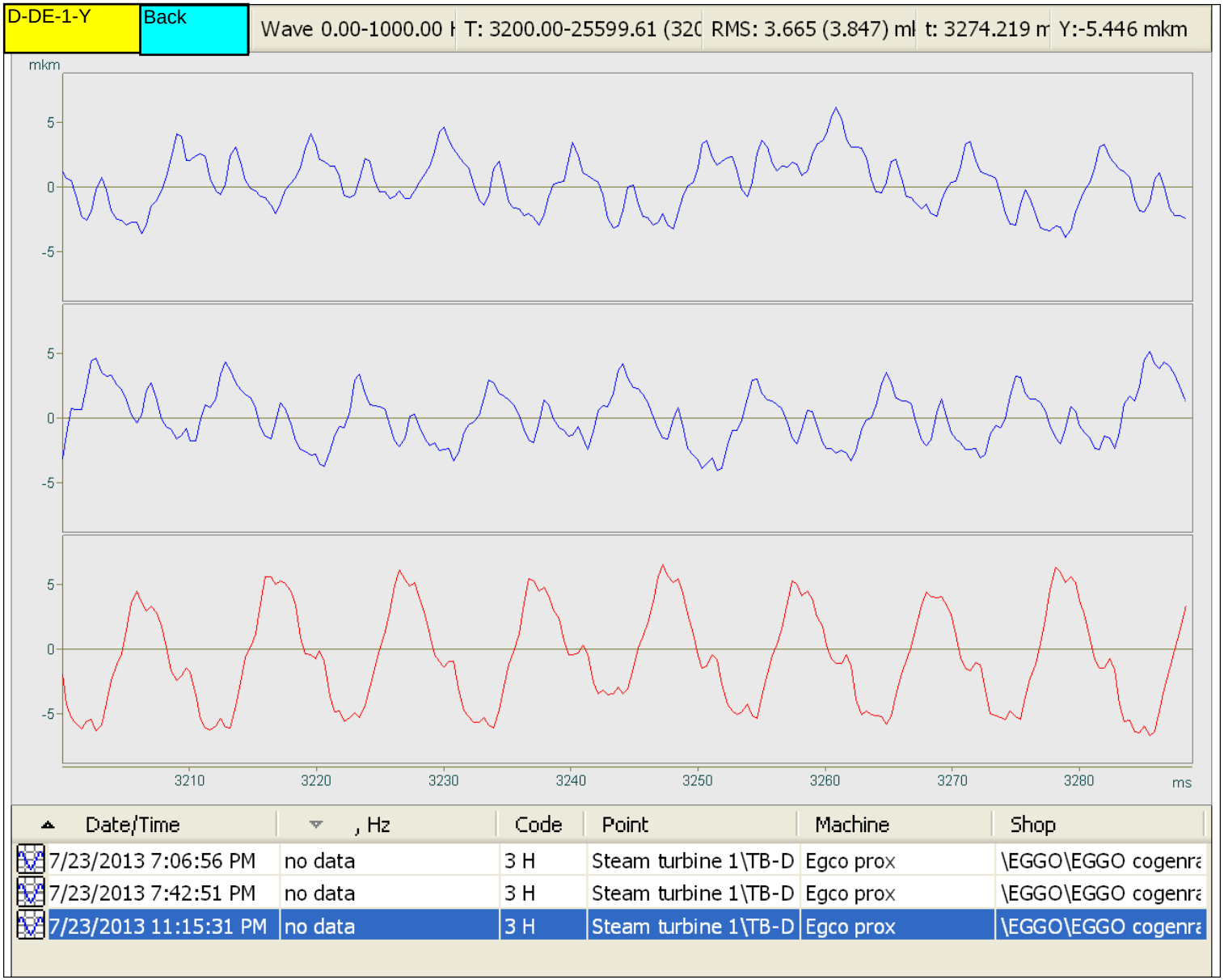

D-NDE-1-Y
Click to see waveform
P-P 0.08-1000.00 Hz: 11.569
P-P 0.08-1000.00 Hz: 11.569
F: 1000.00 Hz
Home
mkm
P-P
Turbine, HS shaft, 96 Hz
2X.....3X..... NX
See detail
7
6
5
3
2
1
0
250
500
750
Hz
23.07.13 19:06:56
23.07.13 19:42:51
23.07.13 23:15:31
639,96 Hz
Date/Time
, Hz
Code
Machine
Shop
7/23/2013 11:15:31 F
no data
4 H
Steam turbine 1\TB-N
Egco prox
\EGGO\EGGO cogenr
7/23/2013 7:42:51 PM
no data
4 H
Steam turbine 1\TB-N
Egco prox
\EGGO\EGGO cogenr
7/23/2013 7:06:56 PM
no data
4 H
Steam turbine 1\TB-N
Egco prox
\EGGO\EGGO cogenr


D-NDE-1-Y
Back
P-P 0.08-1000.00 Hz: 11.569 mkm
P-P 0.08-103.78 Hz: 10.996 mkm
F: 103.75 Hz
Y: 0.009 mkm
Gen, LS shaft 25 Hz
50 Hz
Turbine, HS shaft 96 Hz
23.07.13 19:06:56
23.07.13 19:42:51
23.07.13 23:15:31
mkm
P-P
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
20
40
60
80
Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:15:31 PM
no data
4 H
Steam turbine 1\TB-ND
Egco prox
\EGGO\EGGO cogen rati
7/23/2013 7:42:51 PM
no data
4 H
Steam turbine 1\TB-ND
Egco prox
\EGGO\EGGO cogen rati
7/23/2013 7:06:56 PM
no data
4 H
Steam turbine 1\TB-ND
Egco prox
\EGGO\EGGO cogen rati

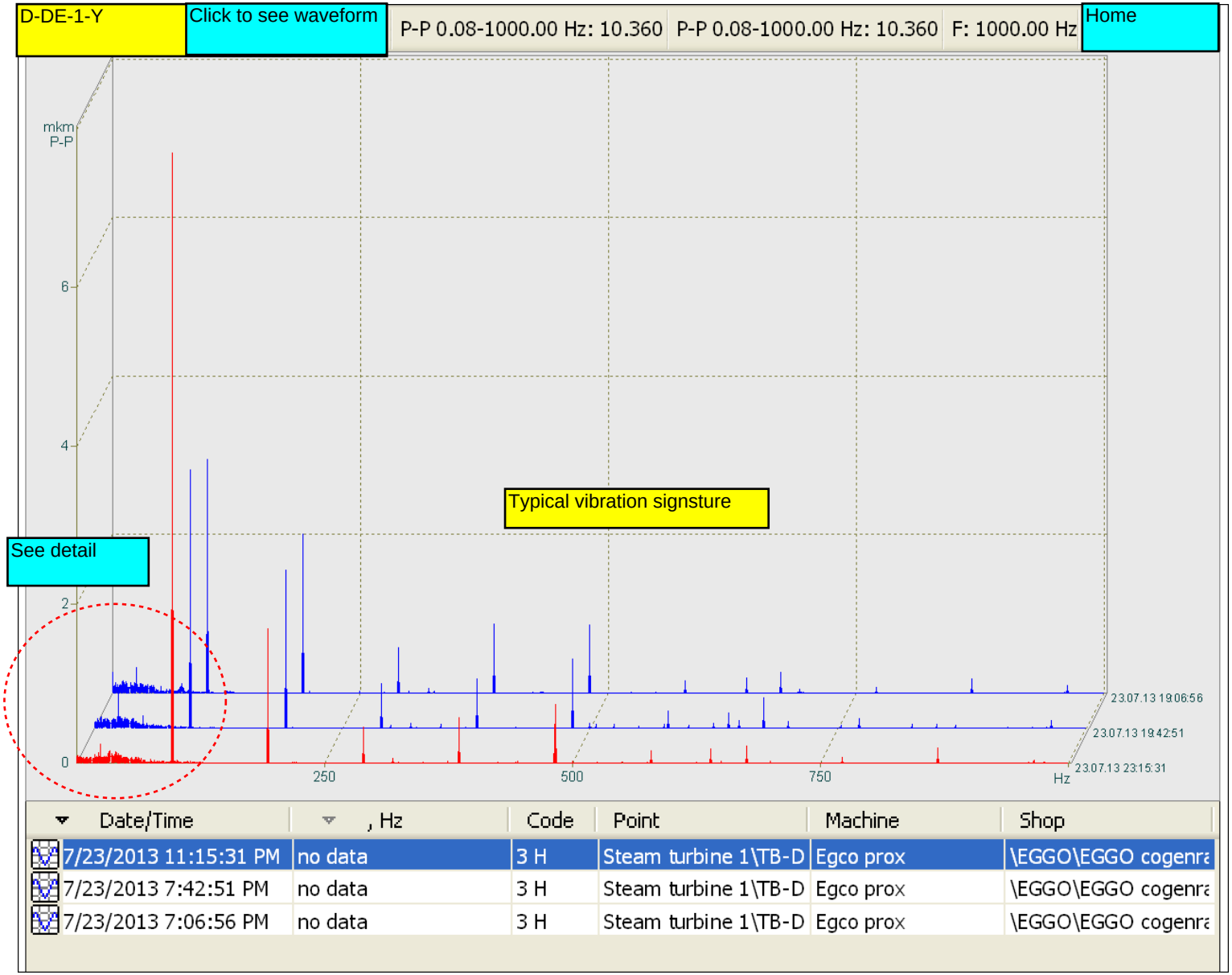

D-DE-1-X
Back
Wave 0.00-1000.00 H
T: 3200.00-25599.61 (320
RMS: 2.485 (2.495) mk
t: 3288.281 m
Y:-3.016 mkm
mkm
5.0
2.5
0.0
-2.5
-5.0
3210
3220
3230
3240
3250
3260
3270
3280
ms
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 7:06:56 PM
no data
3 V
Steam turbine 1\TB-D
Egco prox
\EGGO\EGGO cogenr
7/23/2013 7:42:51 PM
no data
3 V
Steam turbine 1\TB-D
Egco prox
\EGGO\EGGO cogenr
7/23/2013 11:15:31 P
no data
3 V
Steam turbine 1\TB-D
Egco prox
\EGGO\EGGO cogenr

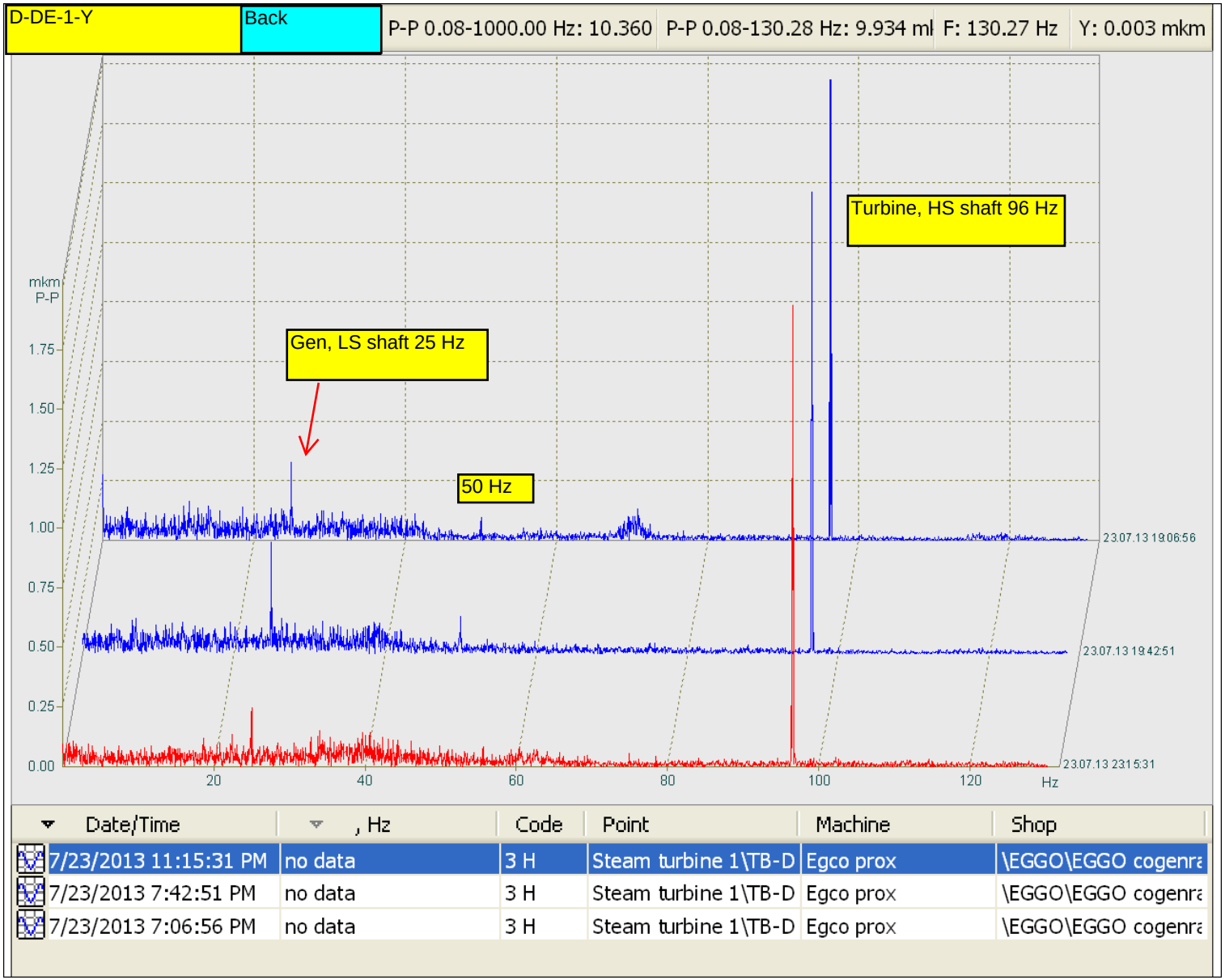

D-DE-1-X
Click to see waveform
P-P 0.08-1000.00 Hz: 7.020 n
P-P 0.08-1000.00 Hz: 7.020 n
F: 1000.00 Hz
Home
mkm
P-P
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Turbine, HS shaft, 96 Hz
See detail
2X.....3X..... NX
23.07.13 19:06:56
23.07.13 19:42:51
23.07.13 23:15:31
250
500
750
Hz
639,96 Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:15:31 PM
no data
3 V
Steam turbine 1\TB-D
Egco prox
\EGGO\EGGO cogenra
7/23/2013 7:42:51 PM
no data
3 V
Steam turbine 1\TB-D
Egco prox
\EGGO\EGGO cogenra
7/23/2013 7:06:56 PM
no data
3 V
Steam turbine 1\TB-D
Egco prox
\EGGO\EGGO cogenra


D-DE-1-X
Back
P-P 0.08-1000.00 Hz: 7.020 mkm
P-P 0.08-103.78 Hz: 6.190 mkm
F: 103.75 Hz
Y: 0.009 mkm
Gen, LS shaft 25 Hz
50 Hz
Turbine, HS shaft 96 Hz
23.07.13 19:06:56
23.07.13 19:42:51
23.07.13 23:15:31
mkm P-P
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
20
40
60
80
Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:15:31 PM
no data
3 V
Steam turbine 1\TB-DE
Egco prox
\EGGO\EGGO cogen rati
7/23/2013 7:42:51 PM
no data
3 V
Steam turbine 1\TB-DE
Egco prox
\EGGO\EGGO cogen rati
7/23/2013 7:06:56 PM
no data
3 V
Steam turbine 1\TB-DE
Egco prox
\EGGO\EGGO cogen rati



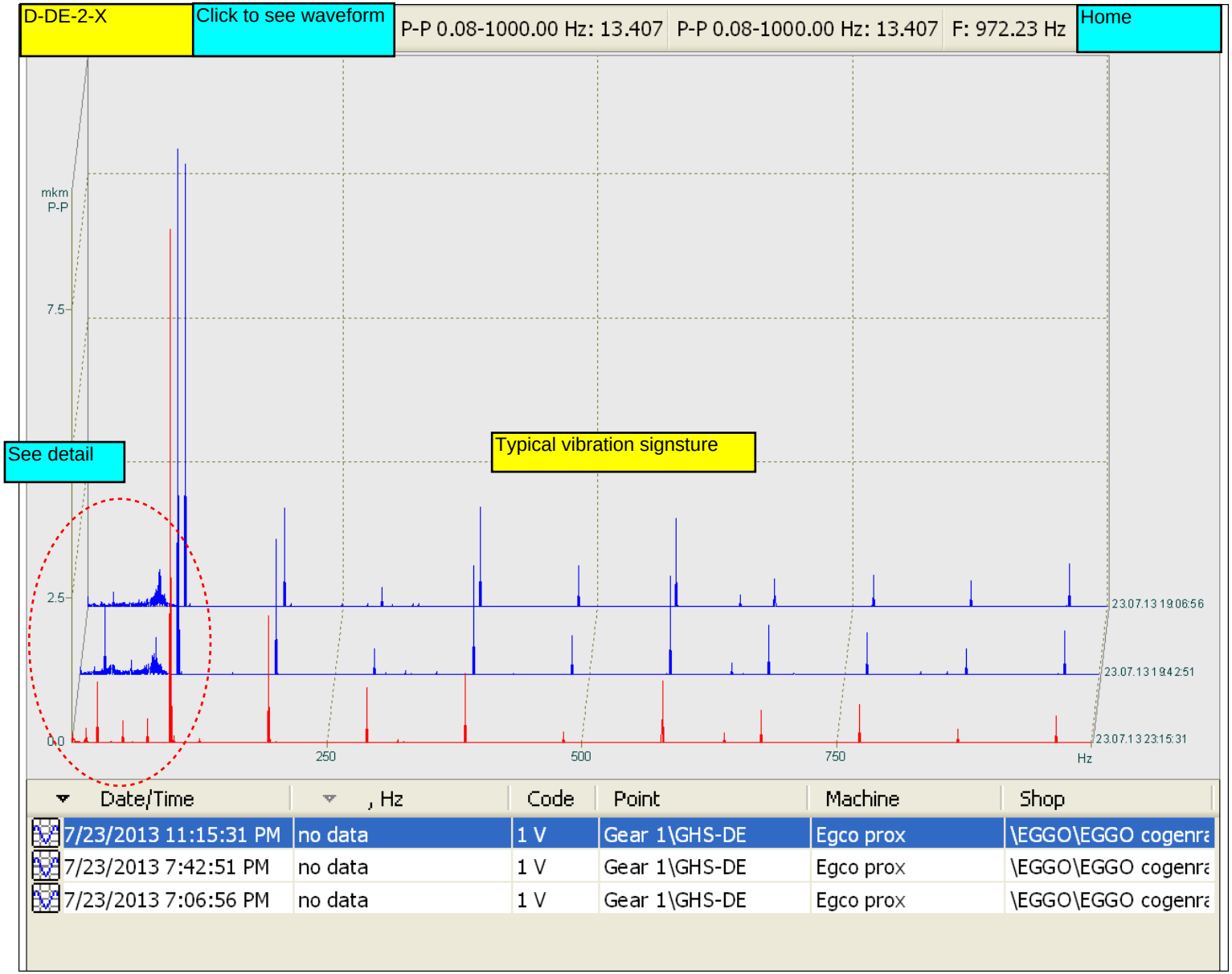
Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 7:06:56 PM	no data	3 H	Steam turbine 1\TB-D	Egco prox	\EGGO\EGGO cogenra
7/23/2013 7:42:51 PM	no data	3 H	Steam turbine 1\TB-D	Egco prox	\EGGO\EGGO cogenra
7/23/2013 11:15:31 PM	no data	3 H	Steam turbine 1\TB-D	Egco prox	\EGGO\EGGO cogenra

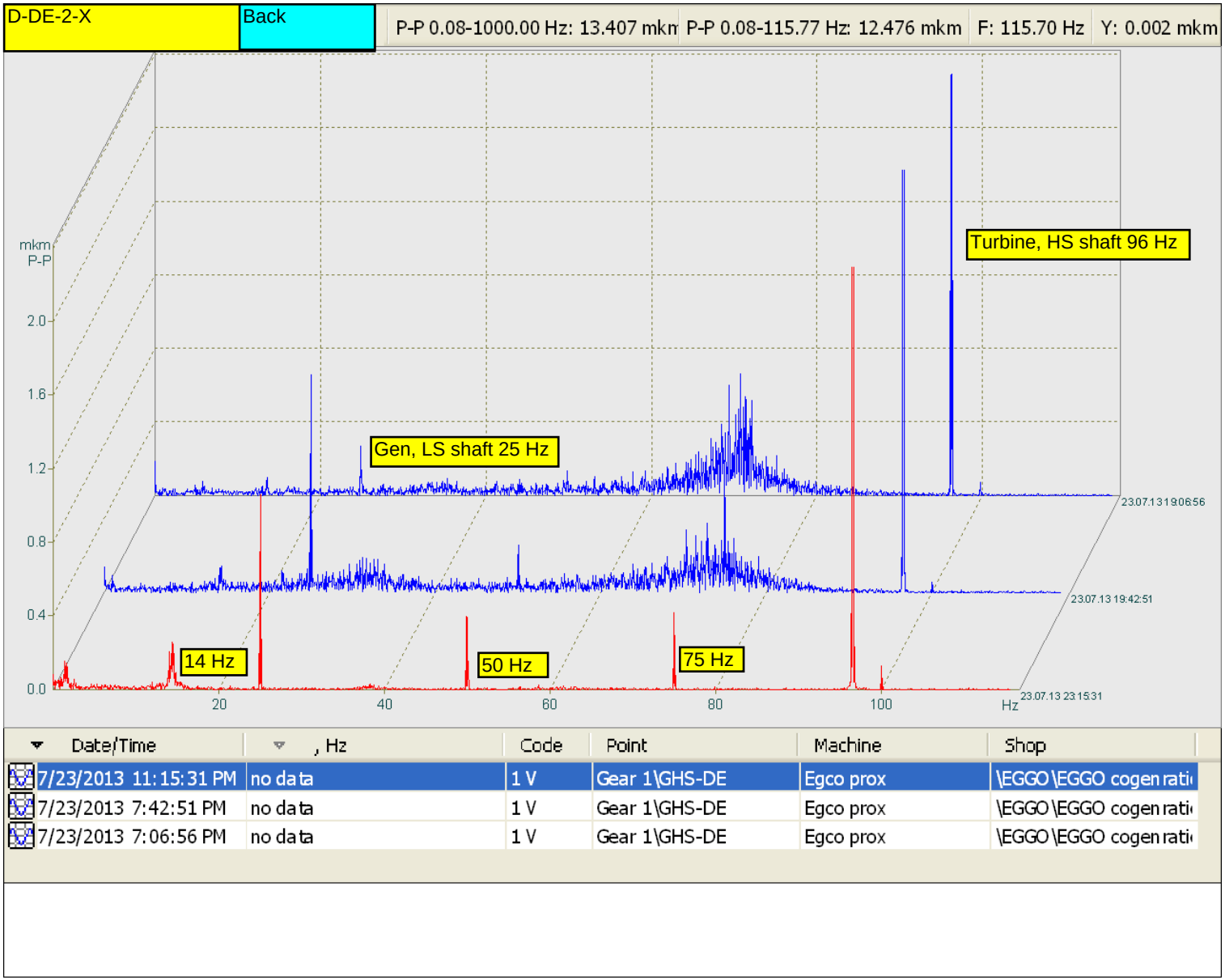

D-DE-1-Y
Click to see waveform
P-P 0.08-1000.00 Hz: 10.360
P-P 0.08-1000.00 Hz: 10.360
F: 1000.00 Hz
Home
mkm
P-P
6
4
2
0
Typical vibration signsture
See detail
250
500
750
Hz
23.07.13 19:06:56
23.07.13 19:42:51
23.07.13 23:15:31
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:15:31 PM
no data
3 H
Steam turbine 1\TB-D
Egco prox
\EGGO\EGGO cogenra
7/23/2013 7:42:51 PM
no data
3 H
Steam turbine 1\TB-D
Egco prox
\EGGO\EGGO cogenra
7/23/2013 7:06:56 PM
no data
3 H
Steam turbine 1\TB-D
Egco prox
\EGGO\EGGO cogenra

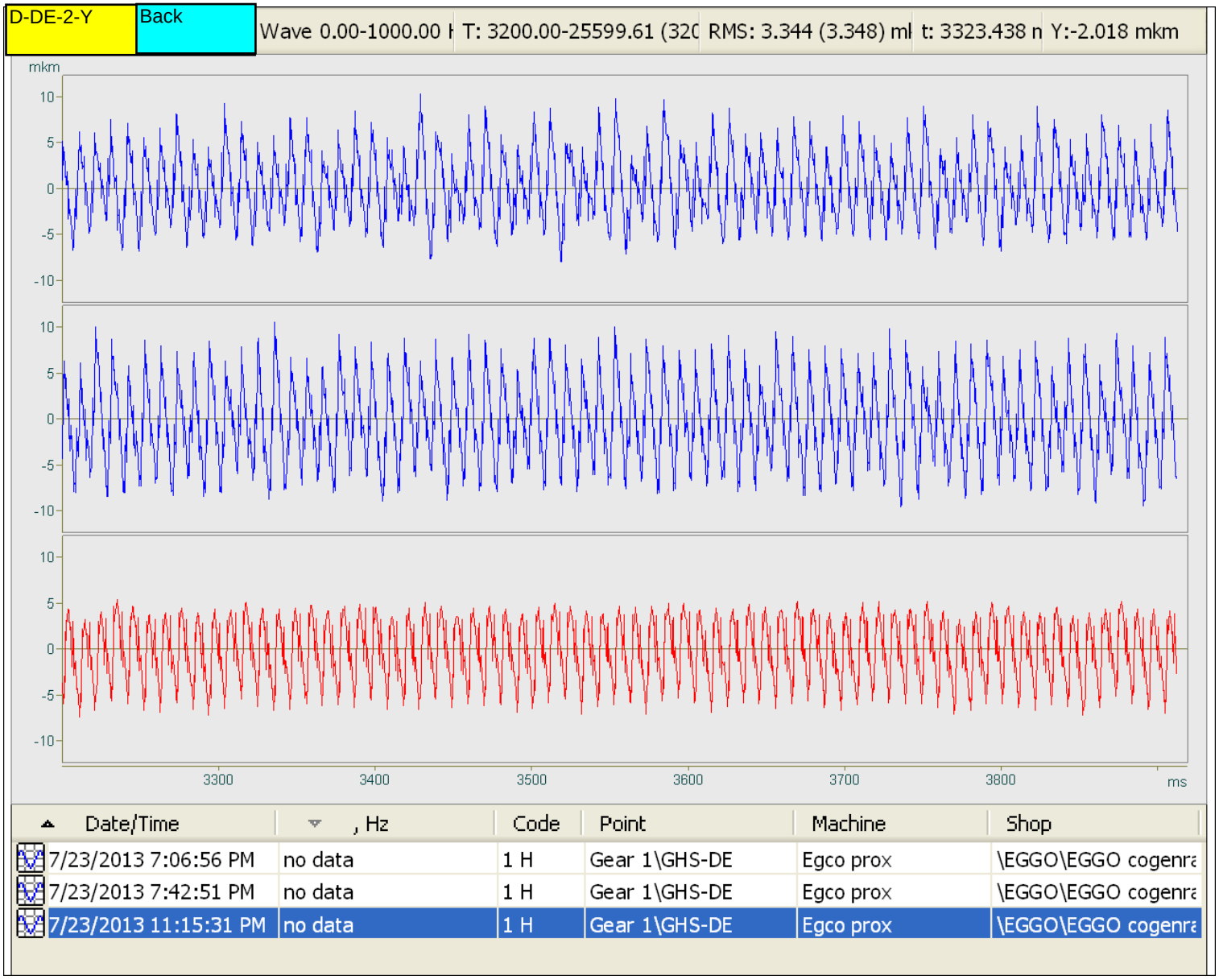


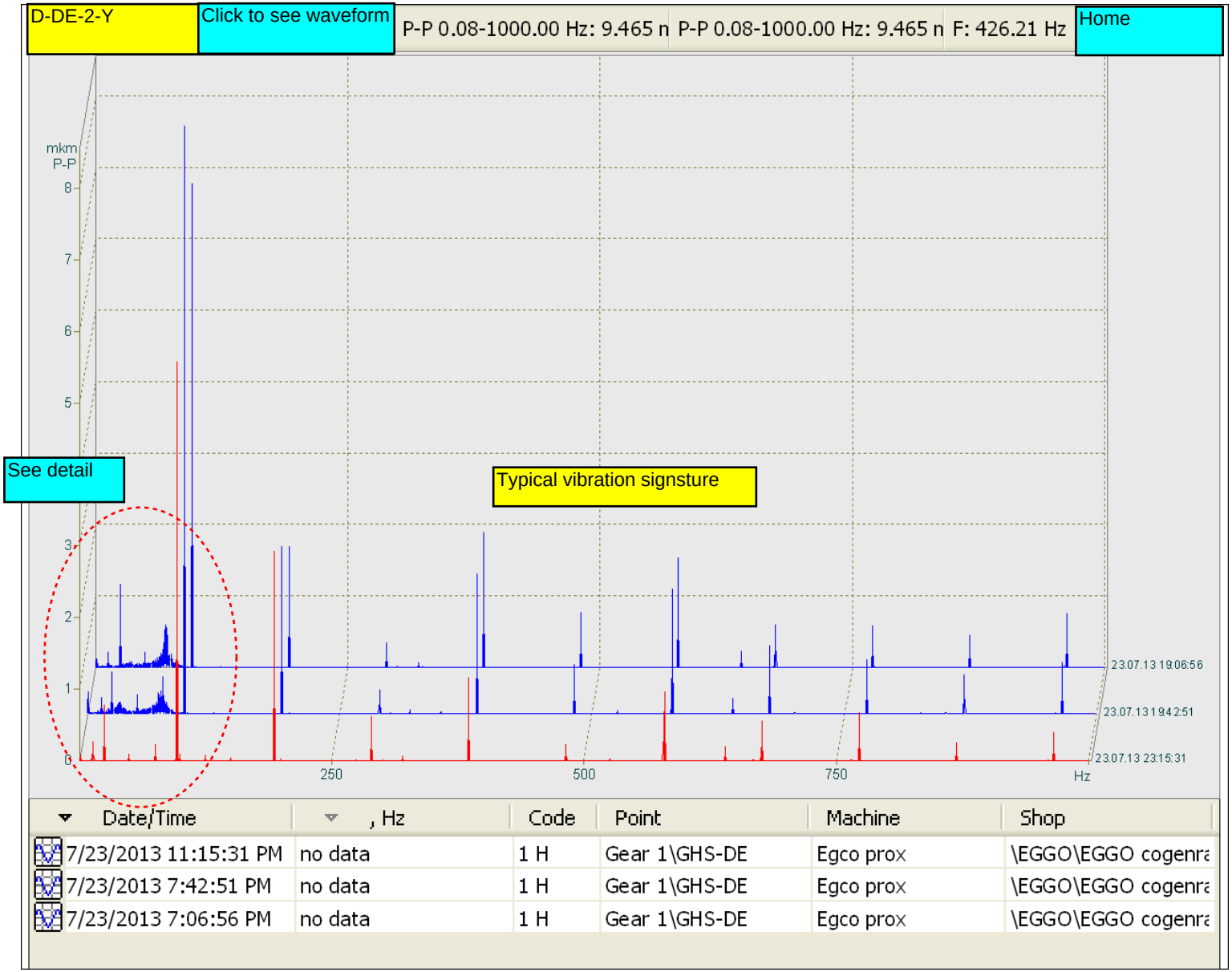
Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:15:31 PM	no data	3 H	Steam turbine 1\TB-D	Egco prox	\EGGO\EGGO cogenra
7/23/2013 7:42:51 PM	no data	3 H	Steam turbine 1\TB-D	Egco prox	\EGGO\EGGO cogenra
7/23/2013 7:06:56 PM	no data	3 H	Steam turbine 1\TB-D	Egco prox	\EGGO\EGGO cogenra

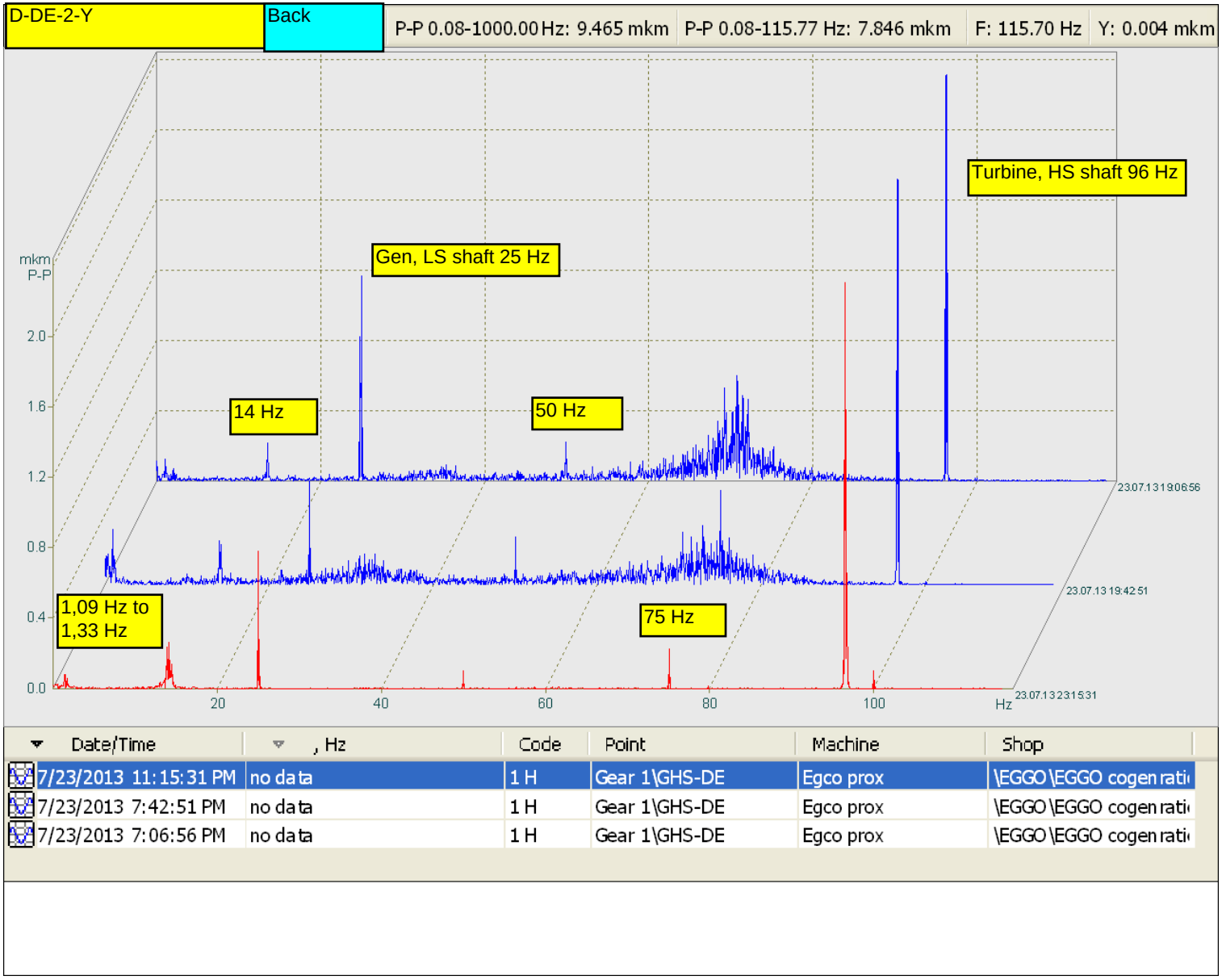
Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 7:06:56 PM	no data	1 V	Gear 1\GHS-DE	Egco prox	\EGGO\EGGO cogenra
7/23/2013 7:42:51 PM	no data	1 V	Gear 1\GHS-DE	Egco prox	\EGGO\EGGO cogenra
7/23/2013 11:15:31 PM	no data	1 V	Gear 1\GHS-DE	Egco prox	\EGGO\EGGO cogenra

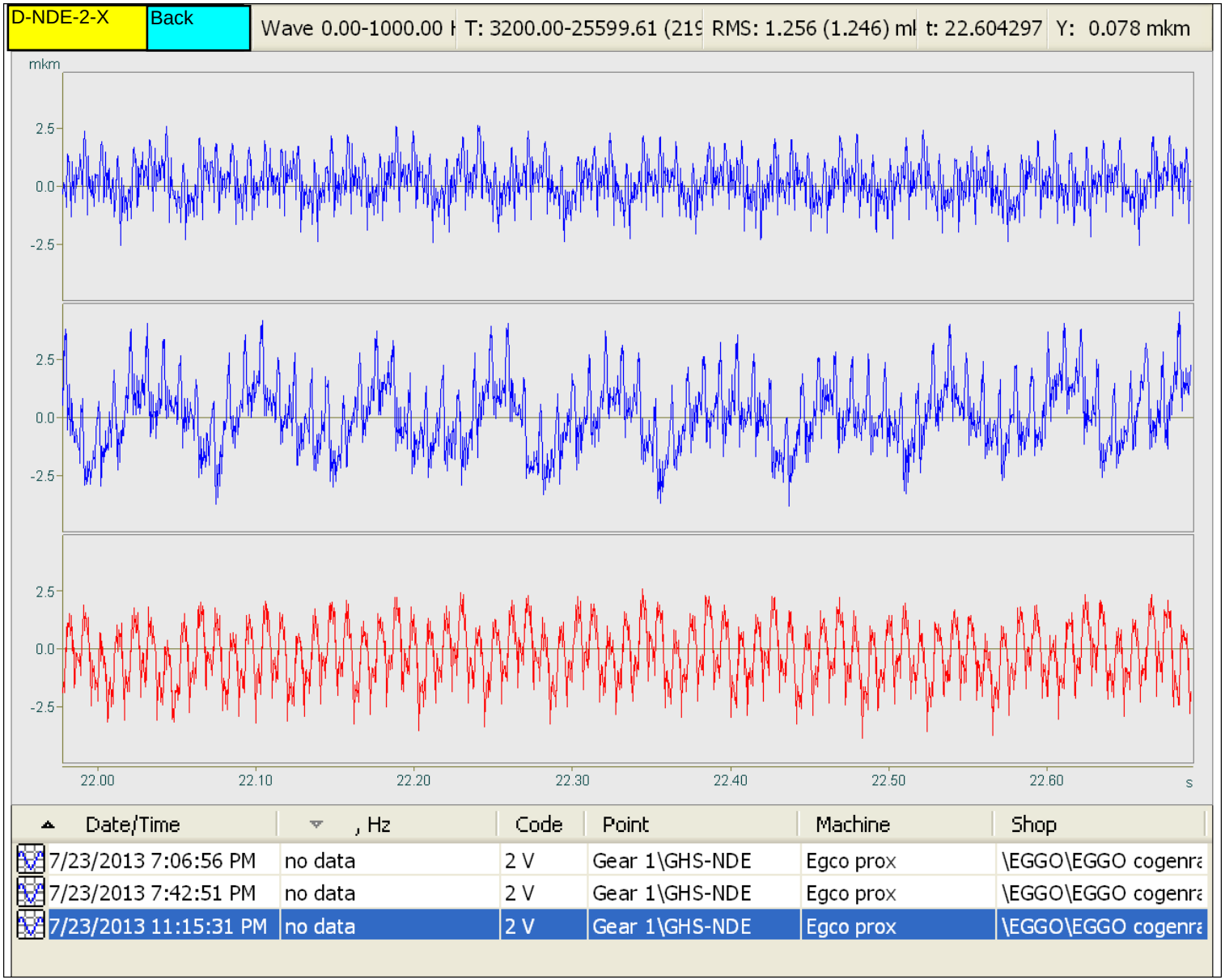

D-DE-2-X
Click to see waveform
P-P 0.08-1000.00 Hz: 13.407
P-P 0.08-1000.00 Hz: 13.407
F: 972.23 Hz
Home
mkm
P-P
7.5
2.5
0.0
See detail
Typical vibration signsture
250
500
750
Hz
23.07.13 19:06:56
23.07.13 19:42:51
23.07.13 23:15:31
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:15:31 PM
no data
1 V
Gear 1\GHS-DE
Egco prox
\EGGO\EGGO cogenra
7/23/2013 7:42:51 PM
no data
1 V
Gear 1\GHS-DE
Egco prox
\EGGO\EGGO cogenra
7/23/2013 7:06:56 PM
no data
1 V
Gear 1\GHS-DE
Egco prox
\EGGO\EGGO cogenra


D-DE-2-X
Back
P-P 0.08-1000.00 Hz: 13.407 mkm
P-P 0.08-115.77 Hz: 12.476 mkm
F: 115.70 Hz
Y: 0.002 mkm
mkm
P-P
2.0
1.6
1.2
0.8
0.4
0.0
Turbine, HS shaft 96 Hz
Gen, LS shaft 25 Hz
14 Hz
50 Hz
75 Hz
23.07.13 19:06:56
23.07.13 19:42:51
23.07.13 23:15:31
20
40
60
80
100
Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:15:31 PM
no data
1 V
Gear 1\GHS-DE
Egco prox
\EGGO\EGGO cogen rati
7/23/2013 7:42:51 PM
no data
1 V
Gear 1\GHS-DE
Egco prox
\EGGO\EGGO cogen rati
7/23/2013 7:06:56 PM
no data
1 V
Gear 1\GHS-DE
Egco prox
\EGGO\EGGO cogen rati


D-DE-2-Y
Back
Wave 0.00-1000.00 H
T: 3200.00-25599.61 (320
RMS: 3.344 (3.348) mk
t: 3323.438 n
Y:-2.018 mkm
mkm
10
5
0
-5
-10
3300
3400
3500
3600
3700
3800
ms
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 7:06:56 PM
no data
1 H
Gear 1\GHS-DE
Egco prox
\EGGO\EGGO cogenra
7/23/2013 7:42:51 PM
no data
1 H
Gear 1\GHS-DE
Egco prox
\EGGO\EGGO cogenra
7/23/2013 11:15:31 PM
no data
1 H
Gear 1\GHS-DE
Egco prox
\EGGO\EGGO cogenra


D-DE-2-Y
Click to see waveform
P-P 0.08-1000.00 Hz: 9.465 n
P-P 0.08-1000.00 Hz: 9.465 n
F: 426.21 Hz
Home
mkm
P-P
8
7
6
5
3
2
1
0
See detail
Typical vibration signsture
23.07.13 19:06:56
23.07.13 19:42:51
23.07.13 23:15:31
250
500
750
Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:15:31 PM
no data
1 H
Gear 1\GHS-DE
Egco prox
\EGGO\EGGO cogenra
7/23/2013 7:42:51 PM
no data
1 H
Gear 1\GHS-DE
Egco prox
\EGGO\EGGO cogenra
7/23/2013 7:06:56 PM
no data
1 H
Gear 1\GHS-DE
Egco prox
\EGGO\EGGO cogenra


D-DE-2-Y
Back
P-P 0.08-1000.00 Hz: 9.465 mkm
P-P 0.08-115.77 Hz: 7.846 mkm
F: 115.70 Hz
Y: 0.004 mkm
Turbine, HS shaft 96 Hz
Gen, LS shaft 25 Hz
14 Hz
50 Hz
1,09 Hz to 1,33 Hz
75 Hz
mkm P-P
2.0
1.6
1.2
0.8
0.4
0.0
20
40
60
80
100
Hz
23.07.13 19:06:56
23.07.13 19:42:51
23.07.13 23:15:31
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:15:31 PM
no data
1 H
Gear 1\GHS-DE
Egco prox
\EGGO\EGGO cogen rati
7/23/2013 7:42:51 PM
no data
1 H
Gear 1\GHS-DE
Egco prox
\EGGO\EGGO cogen rati
7/23/2013 7:06:56 PM
no data
1 H
Gear 1\GHS-DE
Egco prox
\EGGO\EGGO cogen rati



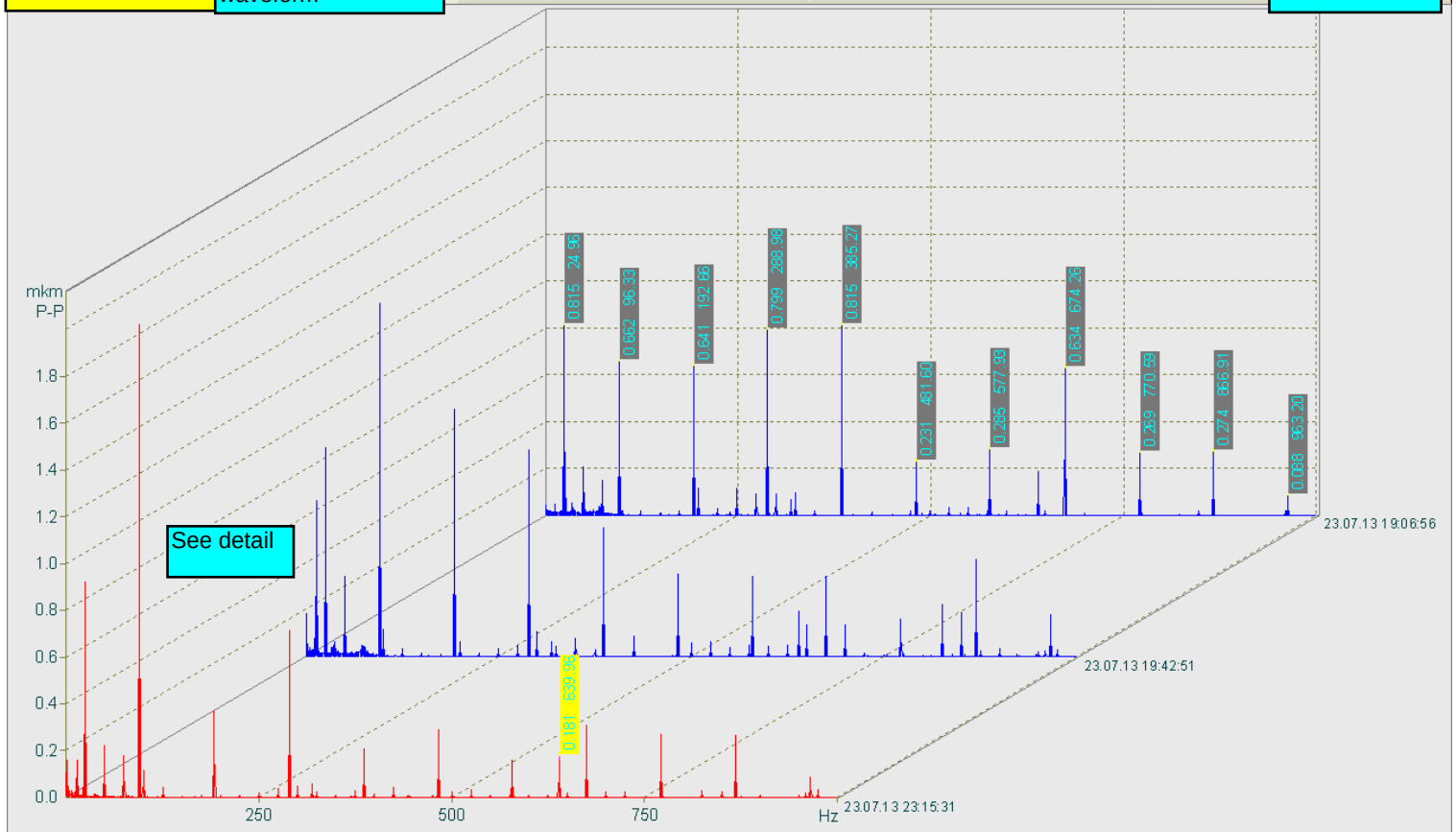
Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 7:06:56 PM	no data	2 V	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogenra
7/23/2013 7:42:51 PM	no data	2 V	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogenra
7/23/2013 11:15:31 PM	no data	2 V	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogenra

D-NDE-2-X

Click to see waveform

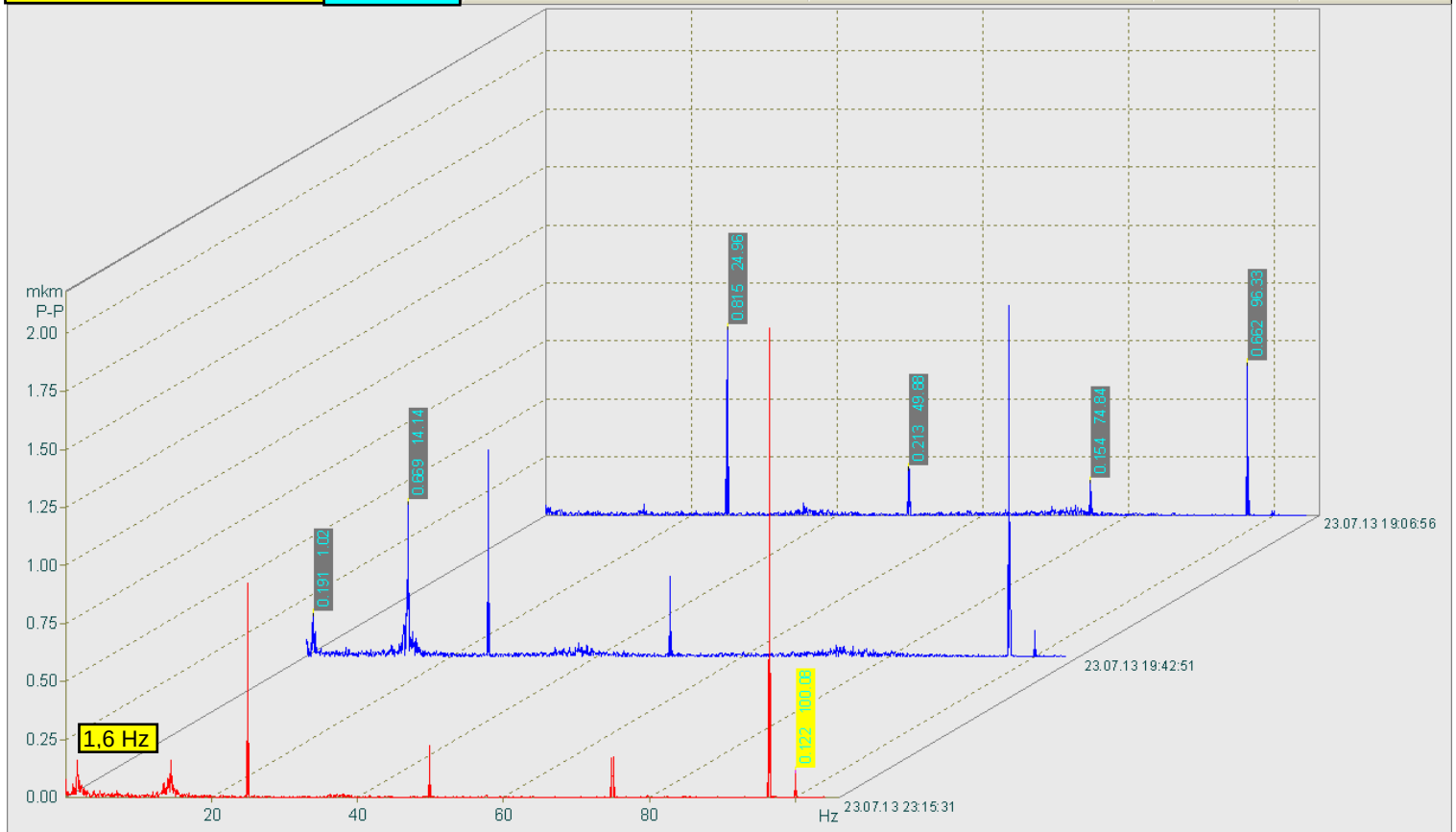
P-P 0.08-1000.00 Hz: 3.544 mkm | P-P 0.08-1000.00 Hz: 3.544 mkm | F: 16.88 Hz

Home

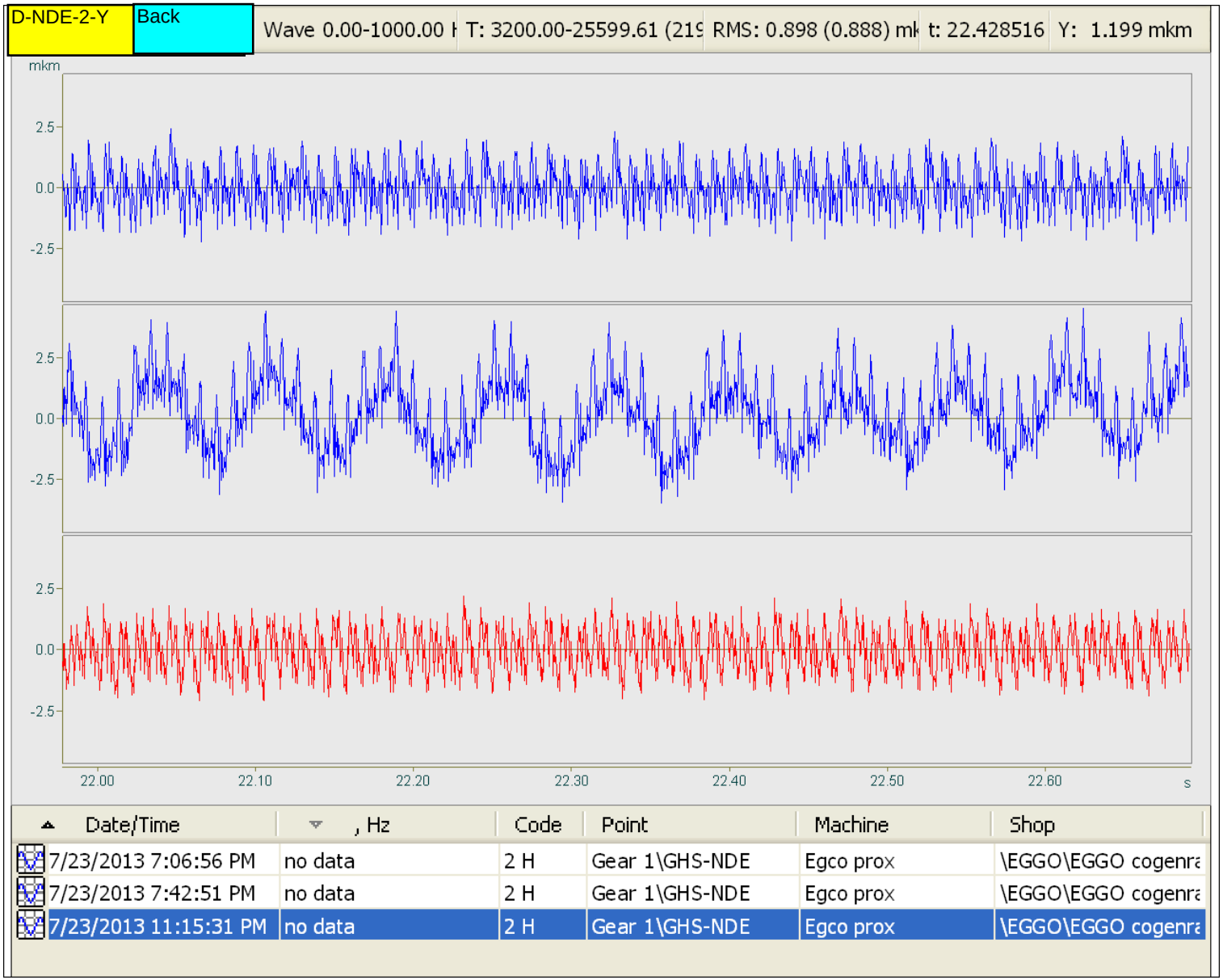


Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:15:31 PM	no data	2 V	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogen rati
7/23/2013 7:42:51 PM	no data	2 V	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogen rati
7/23/2013 7:06:56 PM	no data	2 V	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogen rati

D-NDE-2-X | Back | P-P 0.08-1000.00 Hz: 3.544 mkm | P-P 0.08-104.38 Hz: 3.114 mkm | F: 100.08 Hz | Y: 0.122 mkm

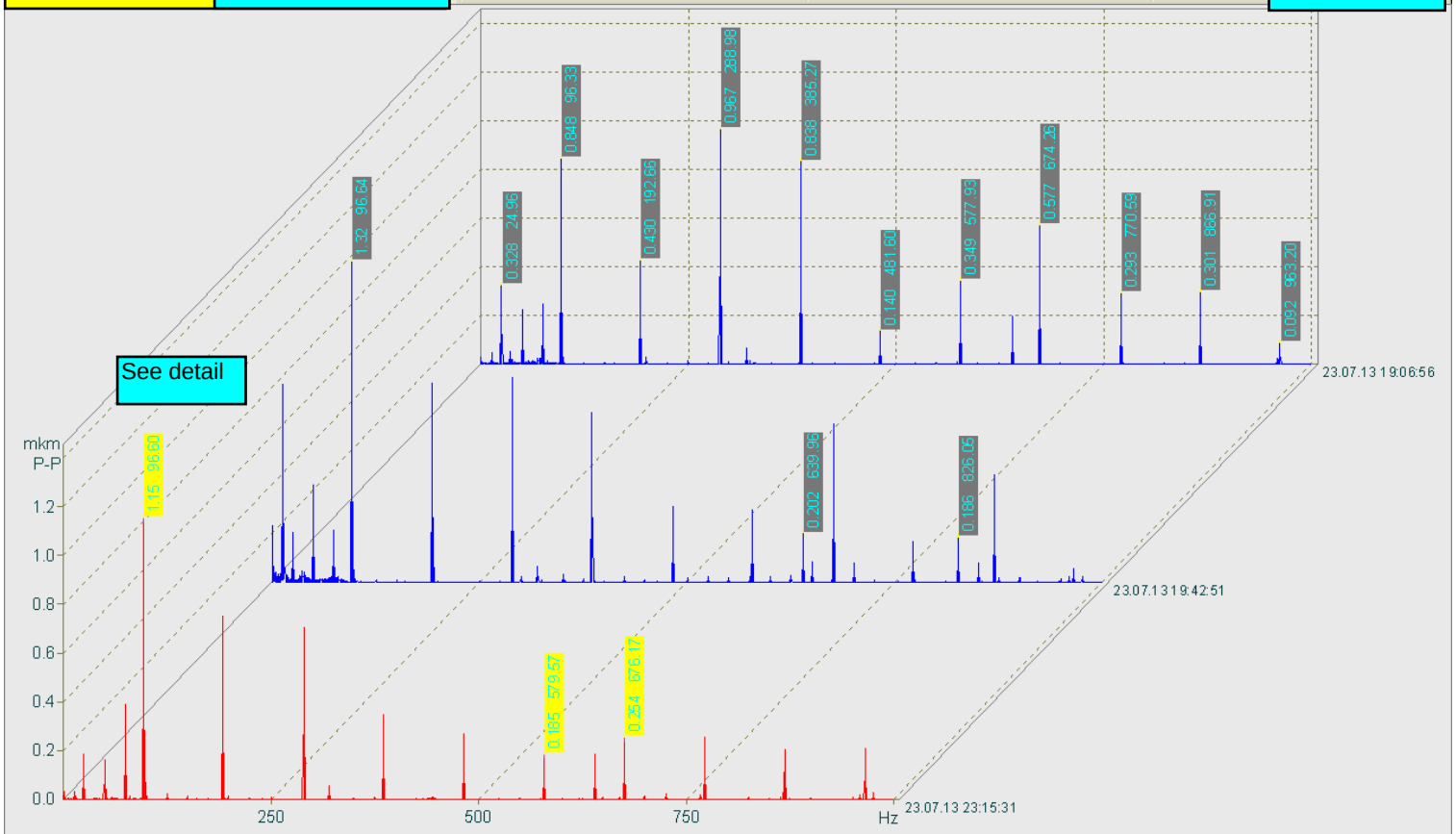


Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:15:31 PM	no data	2 V	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogen rati
7/23/2013 7:42:51 PM	no data	2 V	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogen rati
7/23/2013 7:06:56 PM	no data	2 V	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogen rati

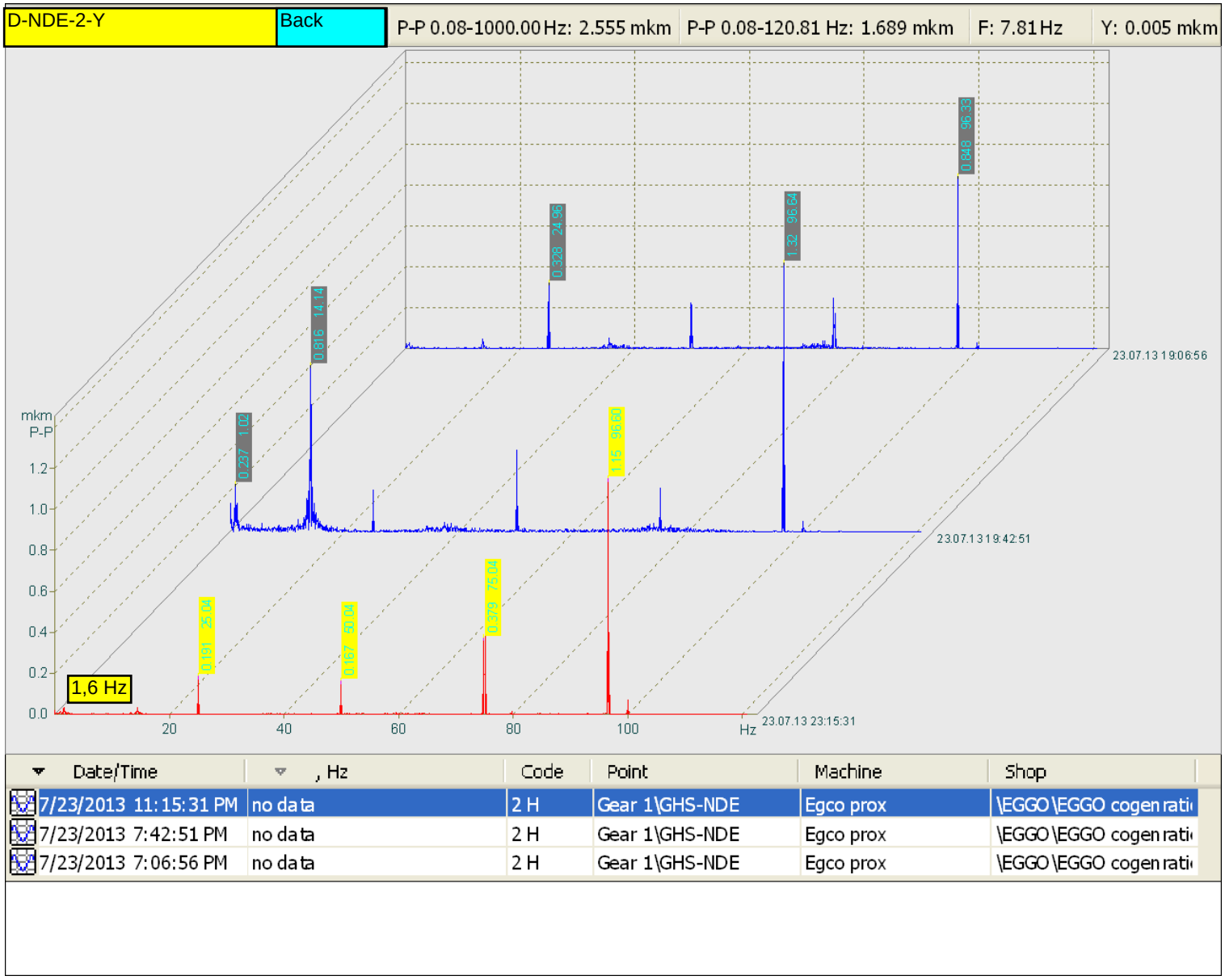


Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 7:06:56 PM	no data	2 H	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogenra
7/23/2013 7:42:51 PM	no data	2 H	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogenra
7/23/2013 11:15:31 PM	no data	2 H	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogenra

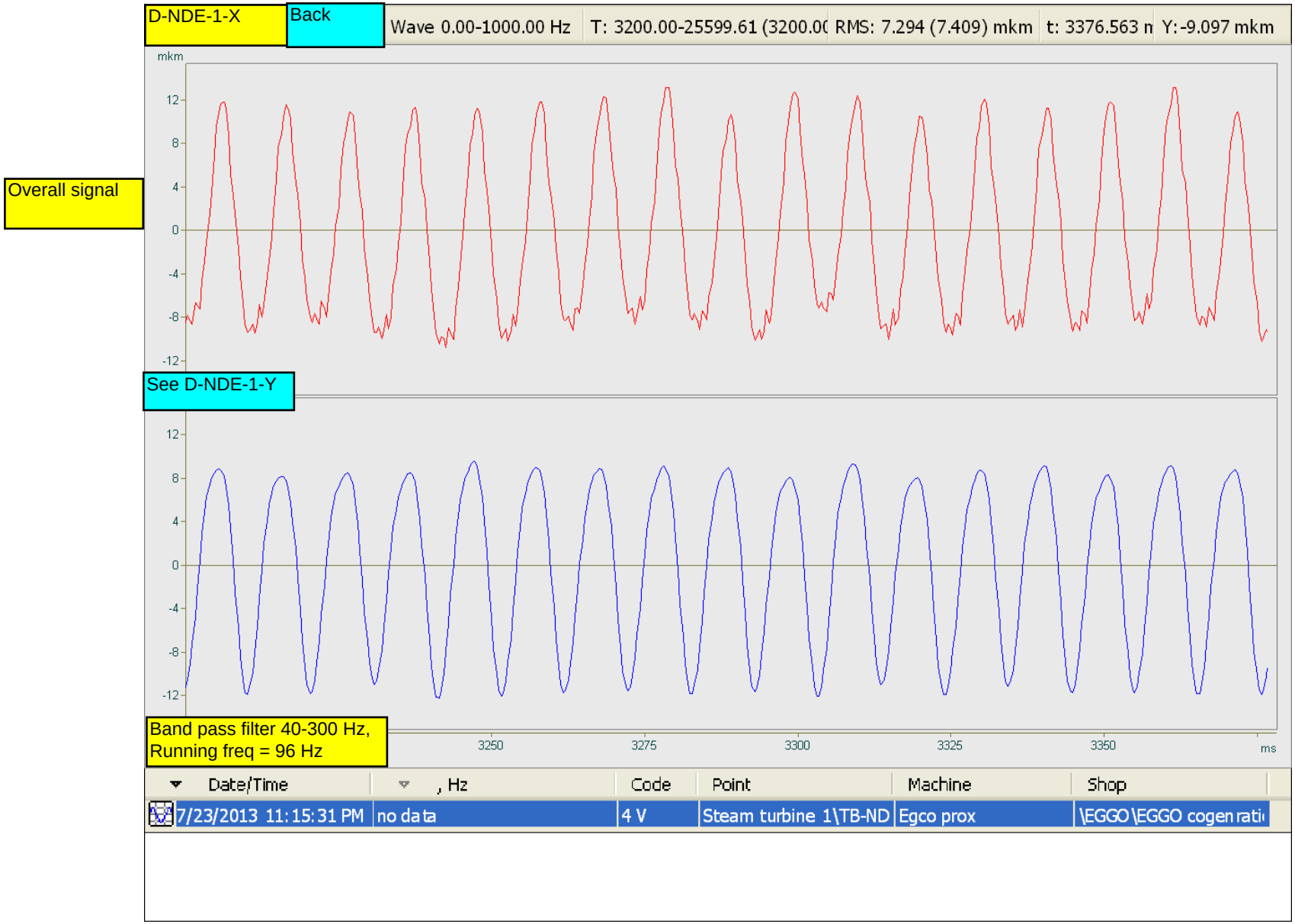
D-NDE-2-Y | Click to see waveform | P-P 0.08-1000.00 Hz: 2.555 mkm | P-P 0.08-1000.00 Hz: 2.555 mkm | F: 97.77 H | Home

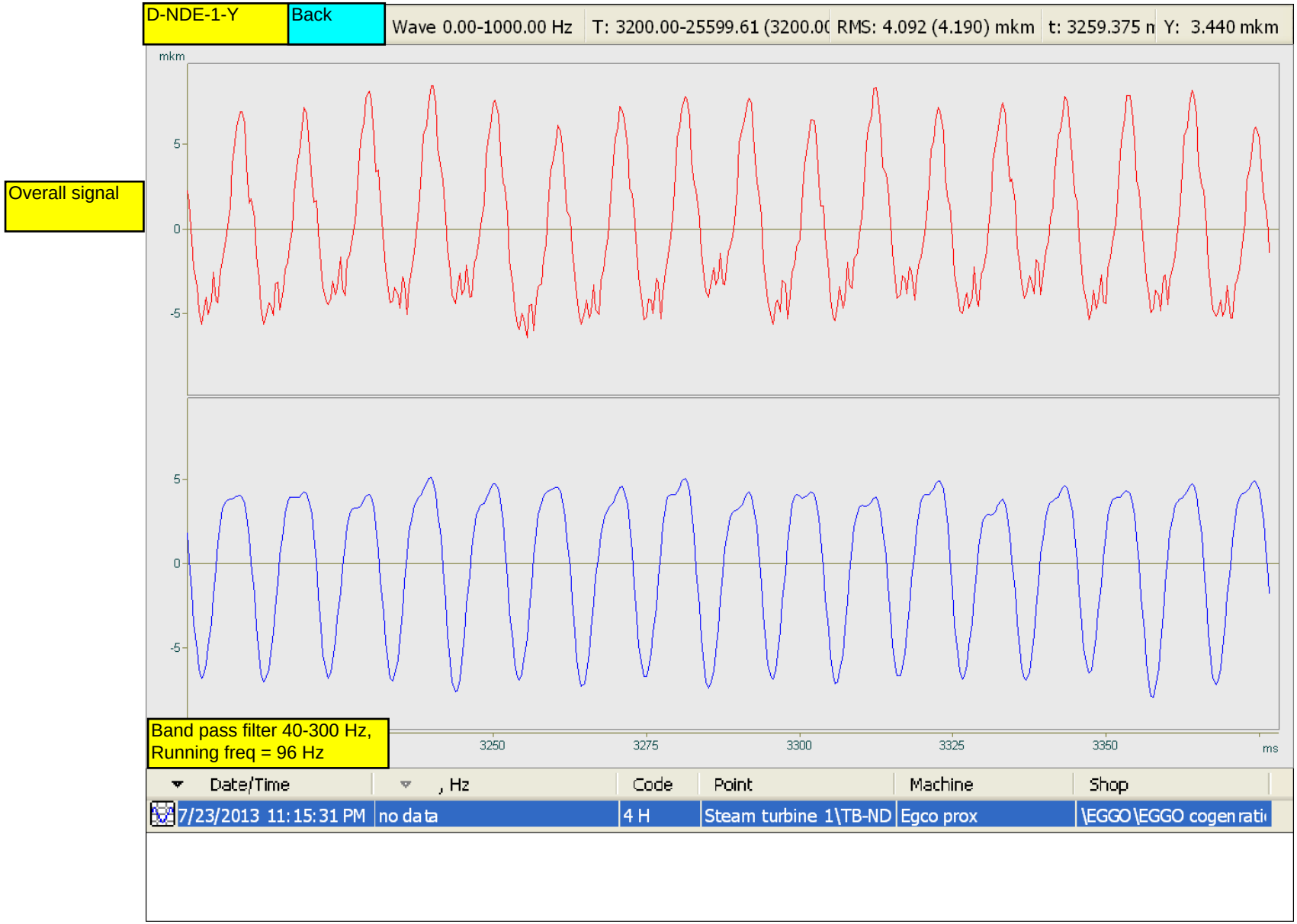


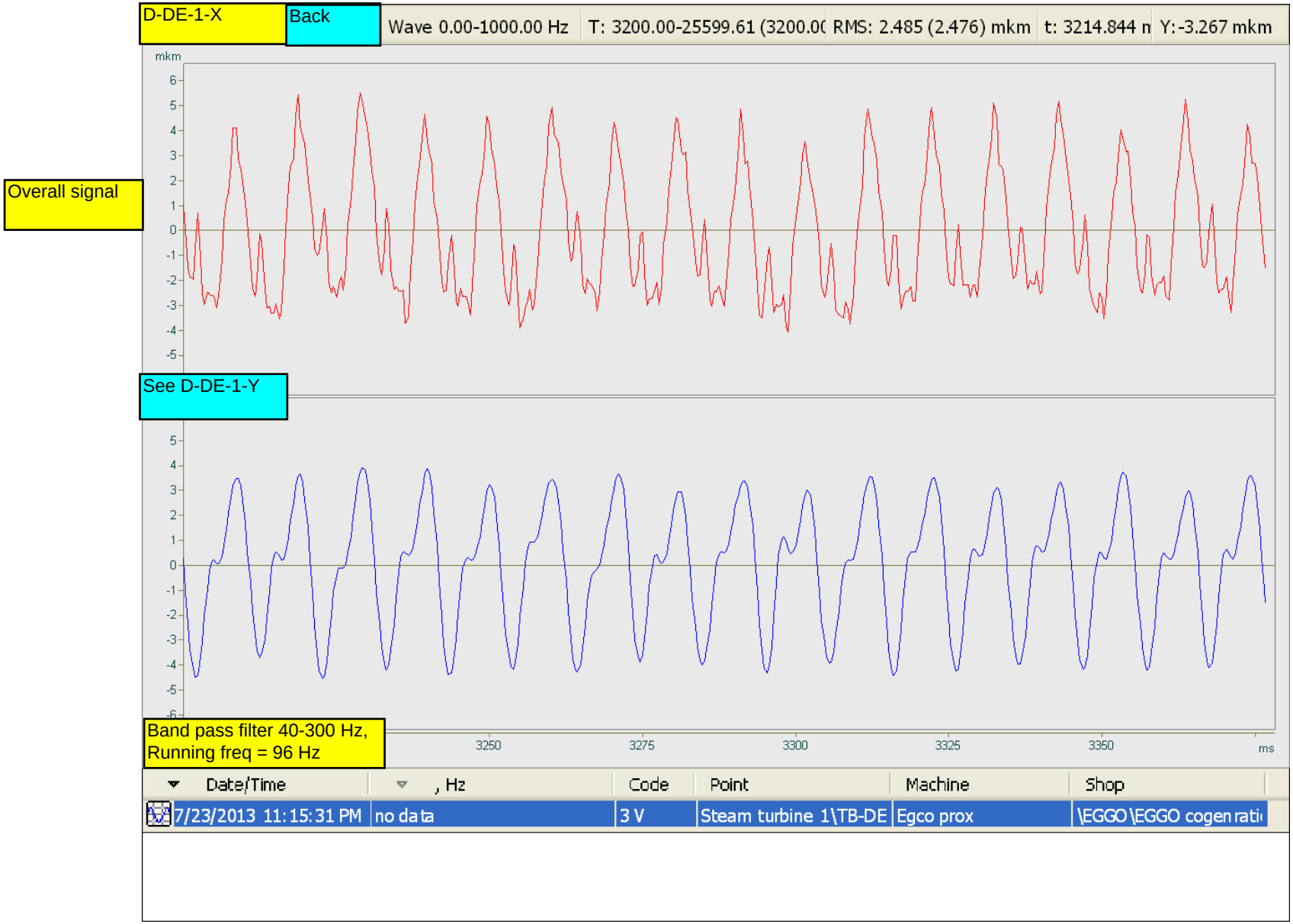
Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:15:31 PM	no data	2 H	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogen rati
7/23/2013 7:42:51 PM	no data	2 H	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogen rati
7/23/2013 7:06:56 PM	no data	2 H	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogen rati



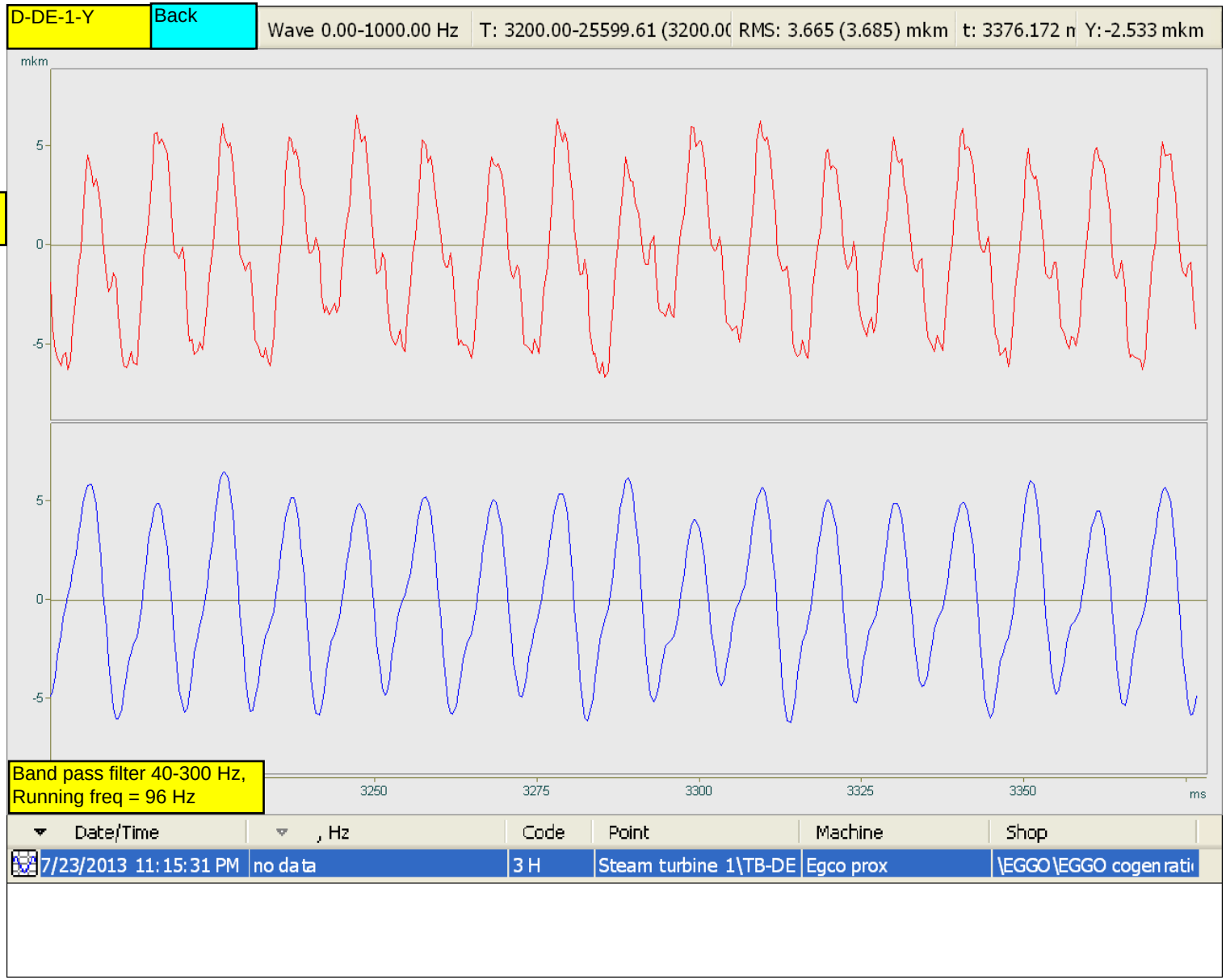
Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:15:31 PM	no data	2 H	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogen rati
7/23/2013 7:42:51 PM	no data	2 H	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogen rati
7/23/2013 7:06:56 PM	no data	2 H	Gear 1\GHS-NDE	Egco prox	\EGGO\EGGO cogen rati

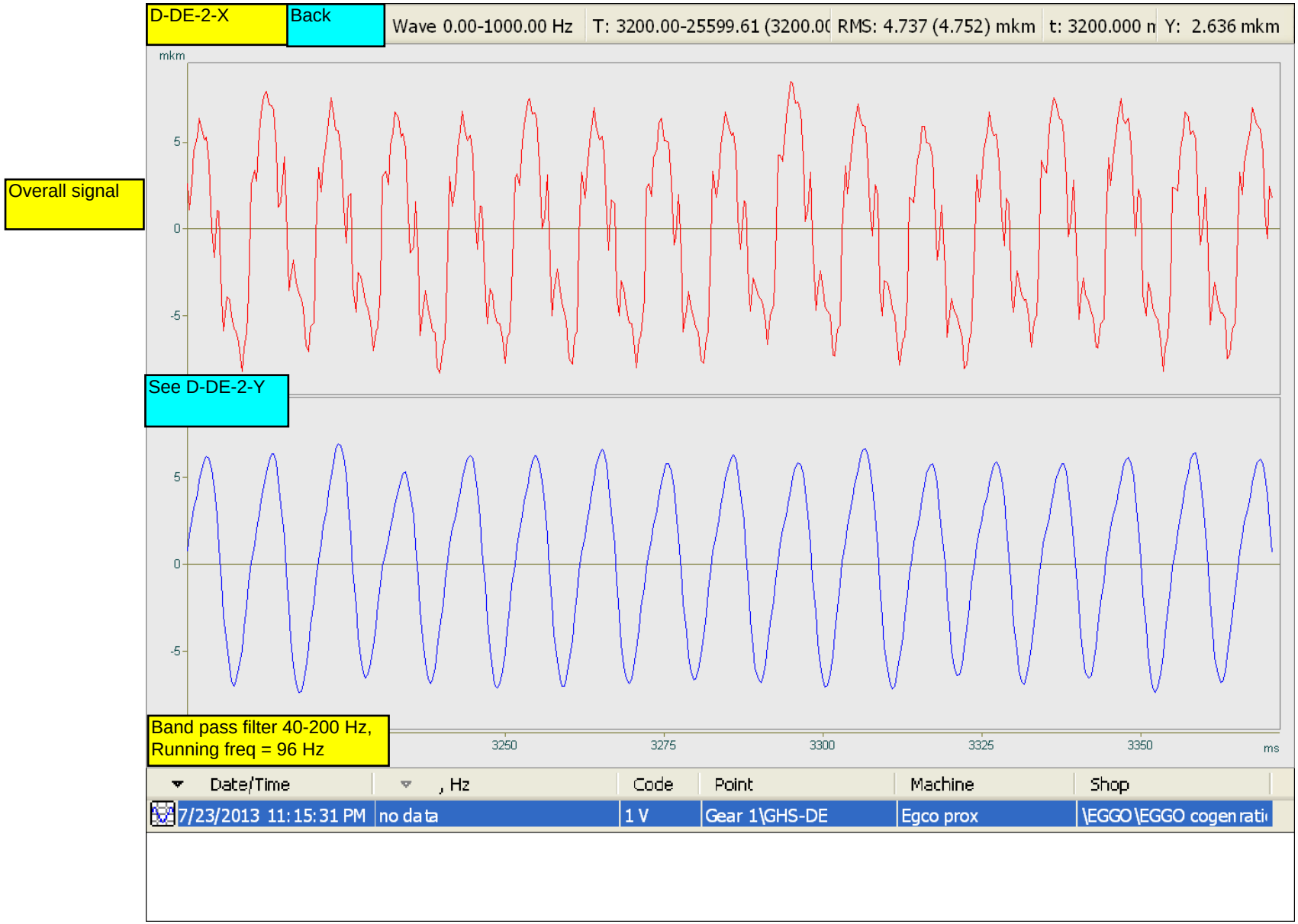

D-NDE-1-X
Back
Wave 0.00-1000.00 Hz
T: 3200.00-25599.61 (3200.0(
RMS: 7.294 (7.409) mkm
t: 3376.563 n
Y:-9.097 mkm
Overall signal
mkm
12
8
4
0
-4
-8
-12
See D-NDE-1-Y
12
8
4
0
-4
-8
-12
Band pass filter 40-300 Hz,
Running freq = 96 Hz
3250
3275
3300
3325
3350
ms
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:15:31 PM
no data
4 V
Steam turbine 1\TB-ND
Egco prox
\EGGO\EGGO cogen rati


D-NDE-1-Y
Back
Wave 0.00-1000.00 Hz
T: 3200.00-25599.61 (3200.0(
RMS: 4.092 (4.190) mkm
t: 3259.375 n
Y: 3.440 mkm
Overall signal
mkm
5
0
-5
5
0
-5
Band pass filter 40-300 Hz,
Running freq = 96 Hz
3250
3275
3300
3325
3350
ms
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:15:31 PM
no data
4 H
Steam turbine 1\TB-ND
Egco prox
\EGGO\EGGO cogen rati

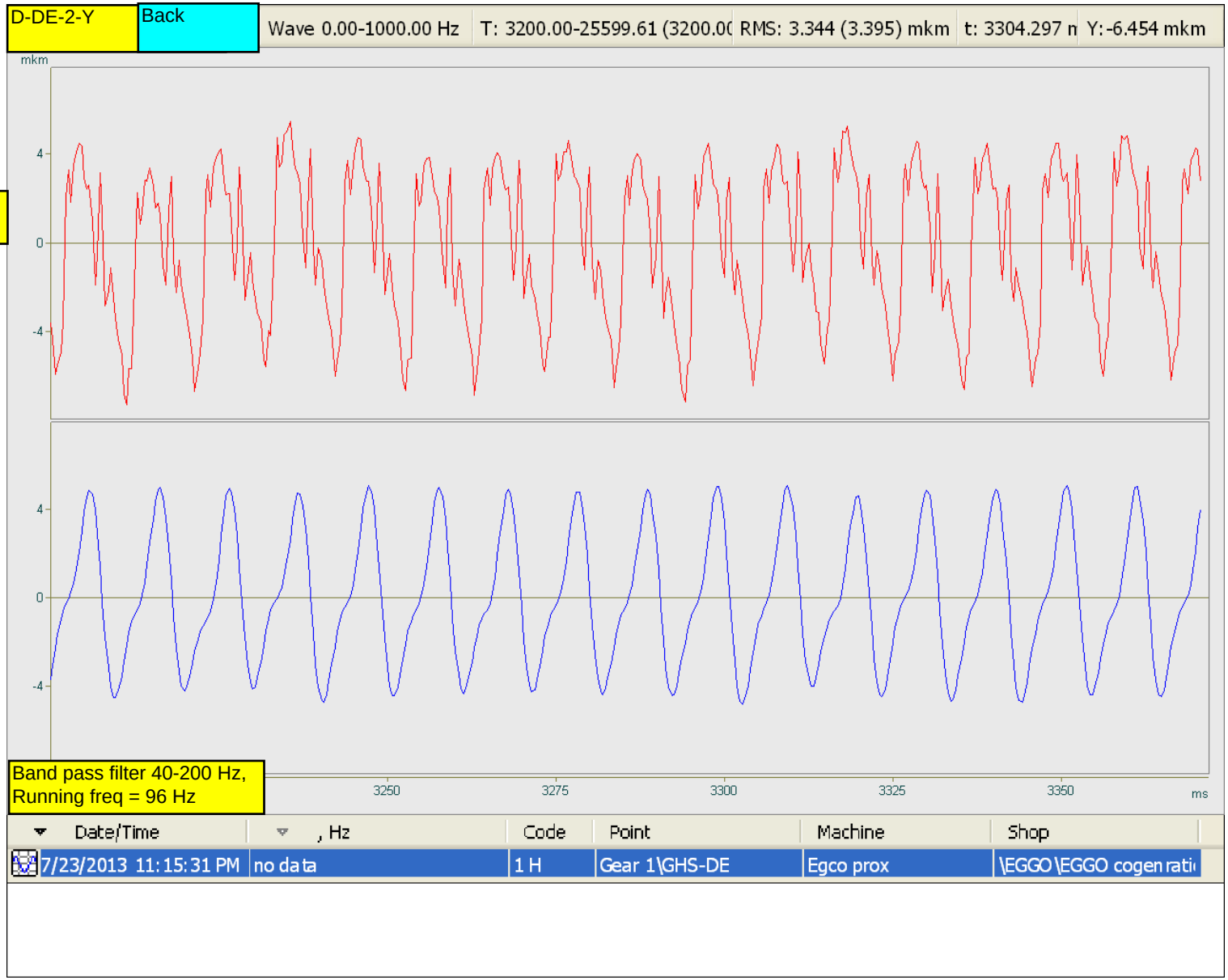

D-DE-1-X
Back
Wave 0.00-1000.00 Hz
T: 3200.00-25599.61 (3200.0(
RMS: 2.485 (2.476) mkm
t: 3214.844 n
Y:-3.267 mkm
Overall signal
mkm
See D-DE-1-Y
Band pass filter 40-300 Hz,
Running freq = 96 Hz
3250
3275
3300
3325
3350
ms
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:15:31 PM
no data
3 V
Steam turbine 1\TB-DE
Egco prox
\EGGO\EGGO cogen rati

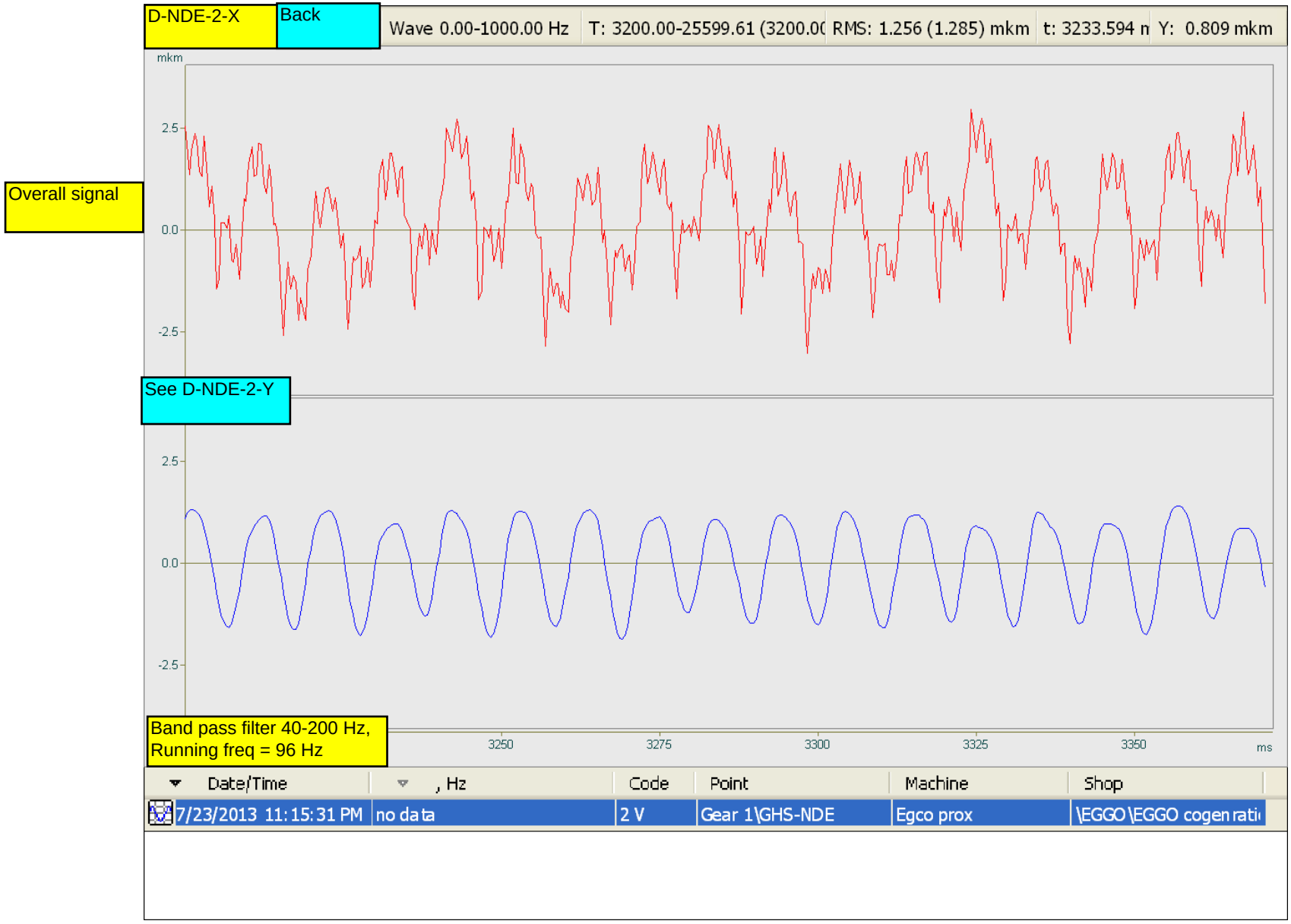
Overall signal



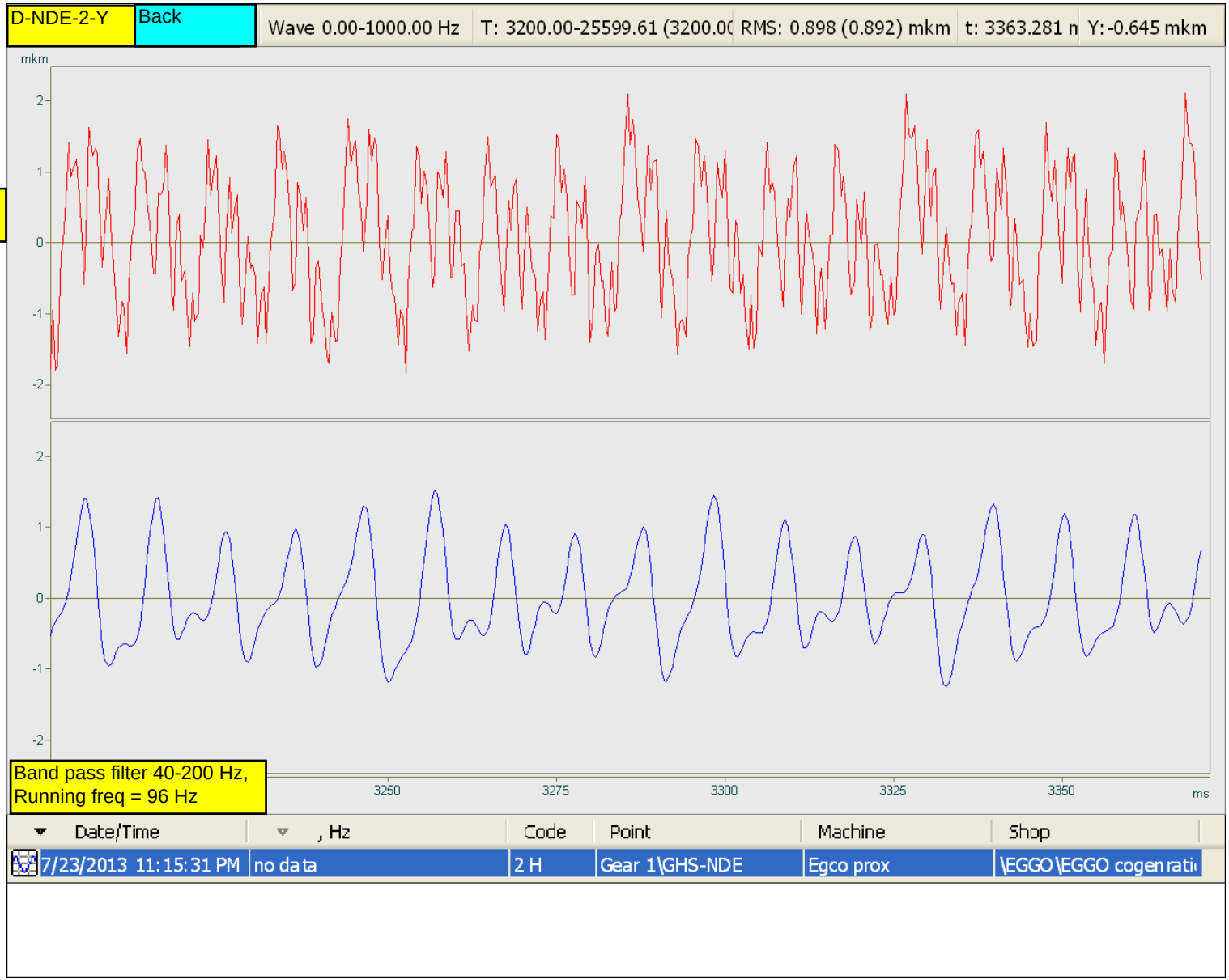

D-DE-2-X
Back
Wave 0.00-1000.00 Hz
T: 3200.00-25599.61 (3200.0(
RMS: 4.737 (4.752) mkm
t: 3200.000 n
Y: 2.636 mkm
Overall signal
mkm
5
0
-5
See D-DE-2-Y
5
0
-5
Band pass filter 40-200 Hz,
Running freq = 96 Hz
3250
3275
3300
3325
3350
ms
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:15:31 PM
no data
1 V
Gear 1\GHS-DE
Egco prox
\EGGO\EGGO cogen rati

Overall signal




D-NDE-2-X
Back
Wave 0.00-1000.00 Hz
T: 3200.00-25599.61 (3200.0(
RMS: 1.256 (1.285) mkm
t: 3233.594 n
Y: 0.809 mkm
Overall signal
mkm
2.5
0.0
-2.5
See D-NDE-2-Y
2.5
0.0
-2.5
Band pass filter 40-200 Hz,
Running freq = 96 Hz
3250
3275
3300
3325
3350
ms
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:15:31 PM
no data
2 V
Gear 1\GHS-NDE
Egco prox
\EGGO\EGGO cogen rati

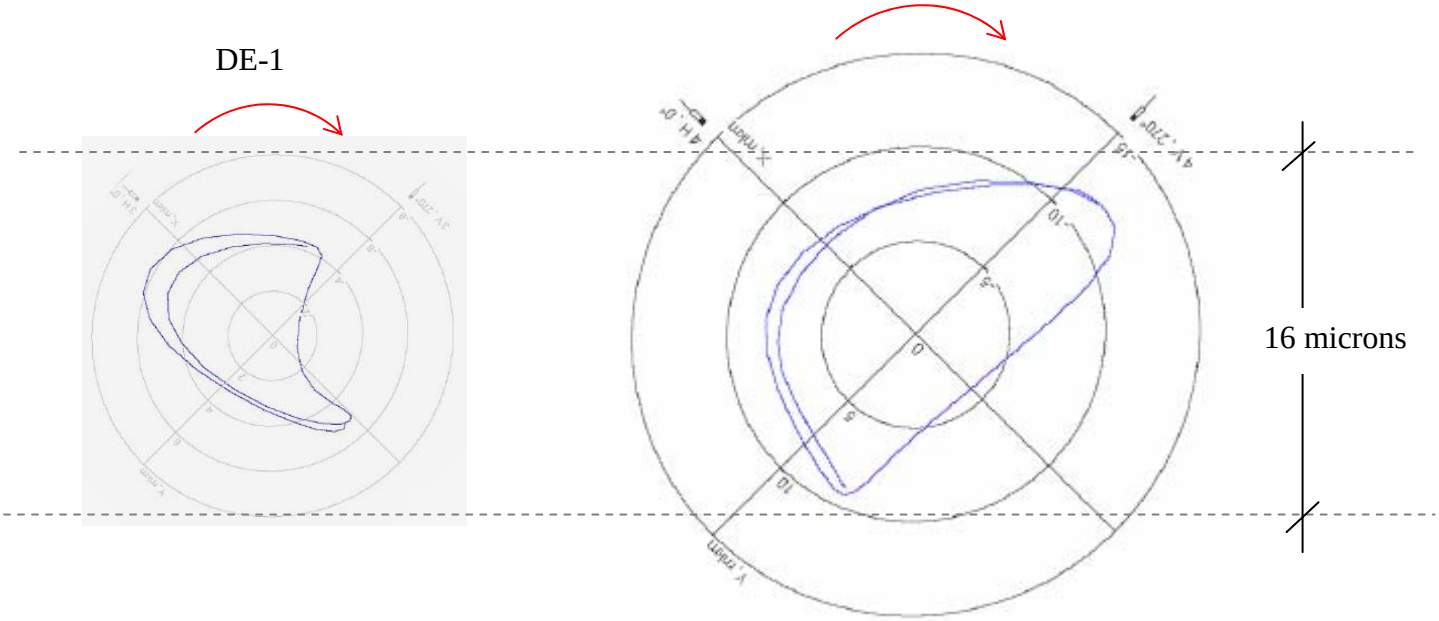
Overall signal



Move cursor above orbit plot, then click to see waveform

NDE-1

DE-1

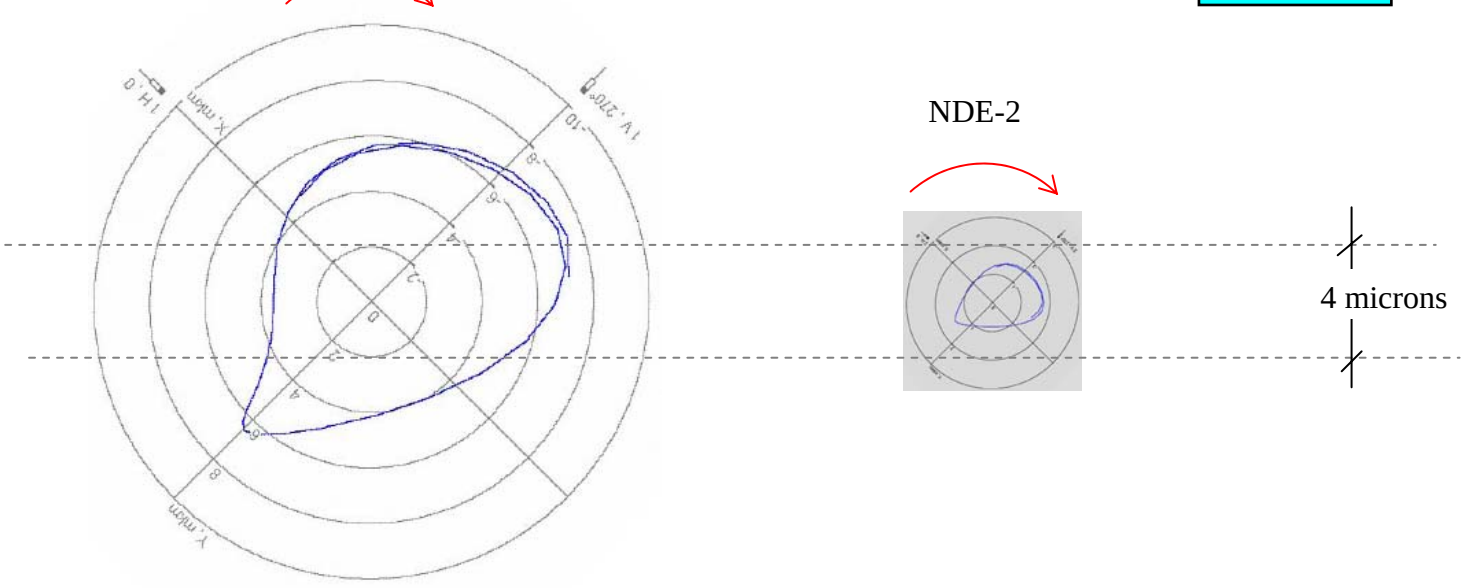


DE-1 & NDE-1 Vibration signal was band pass filtered 40-300 Hz, while 1X is 96 Hz

DE-2

Home

NDE-2



DE-2 & NDE-2 Vibration signal was band pass filtered 40-300 Hz, while 1X is 96 Hz

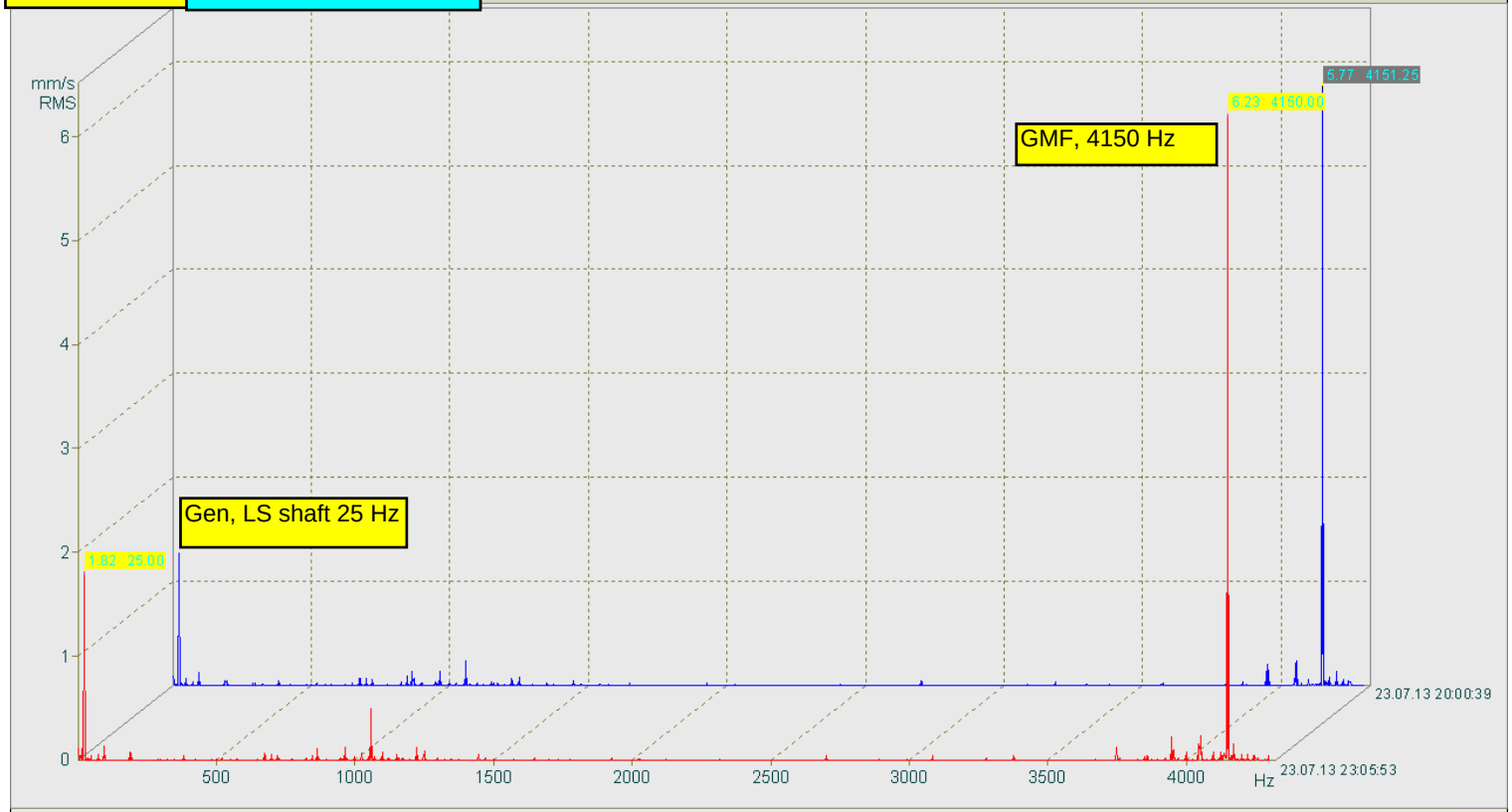
Notice.
Sensor orientation 45°set up is not available, these images are attempted to rotate 45°.
Orbit plots are not subtracted slow roll.
Only Band pass filter 40-300 Hz for DE-1 & NDE-1, and 40-200 Hz for DE-2 & NDE-2
Orbit group DE-1& NDE-1 and DE-2 & NDE-2 are not scale.

Home

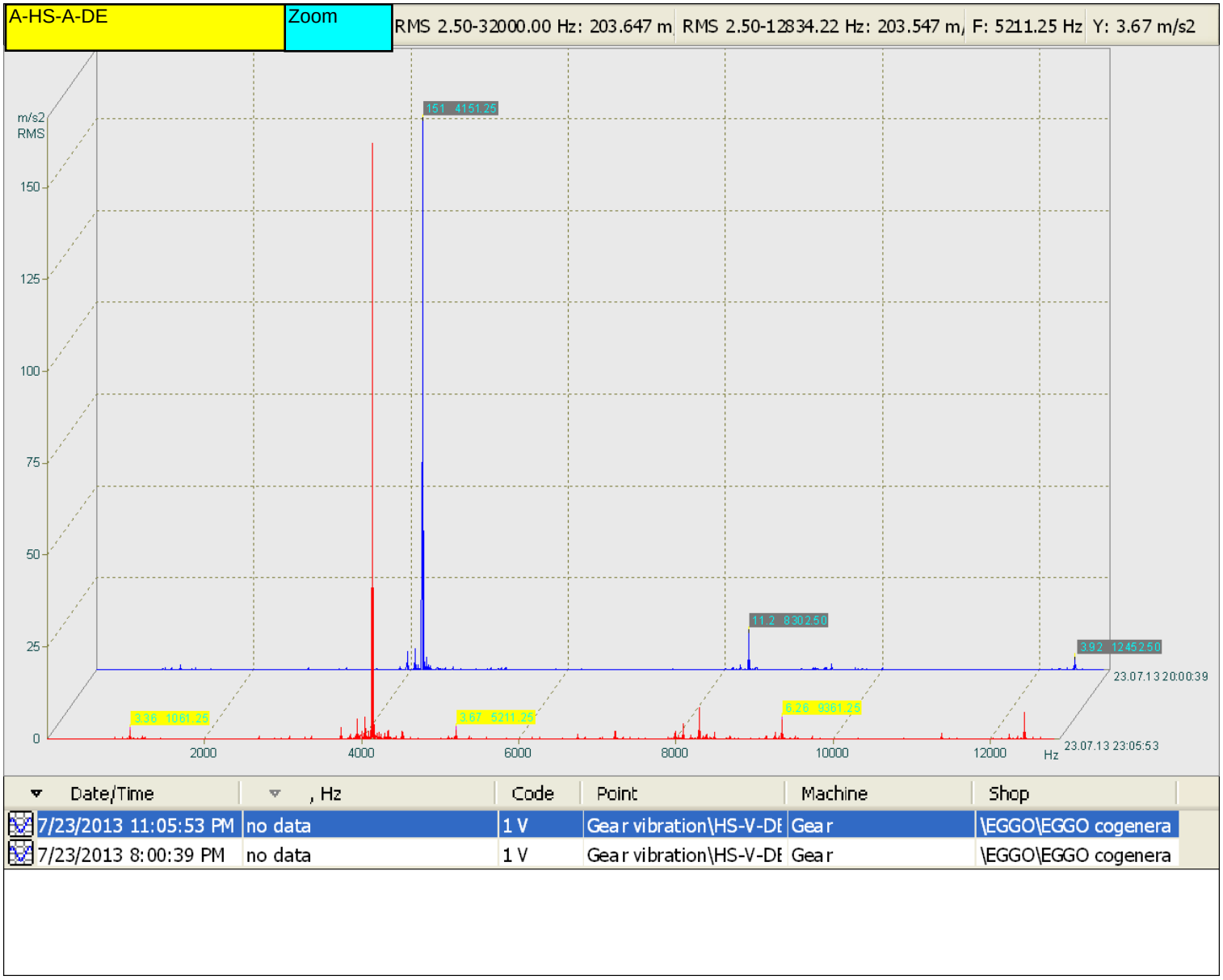
A-HS-V-DE

See Acceleration signal

RMS 2.50-32000.00 Hz: 8.127 mm/ RMS 2.50-4304.76 Hz: 8.111 mm/s F: 25.00 Hz Y: 1.82 mm/s



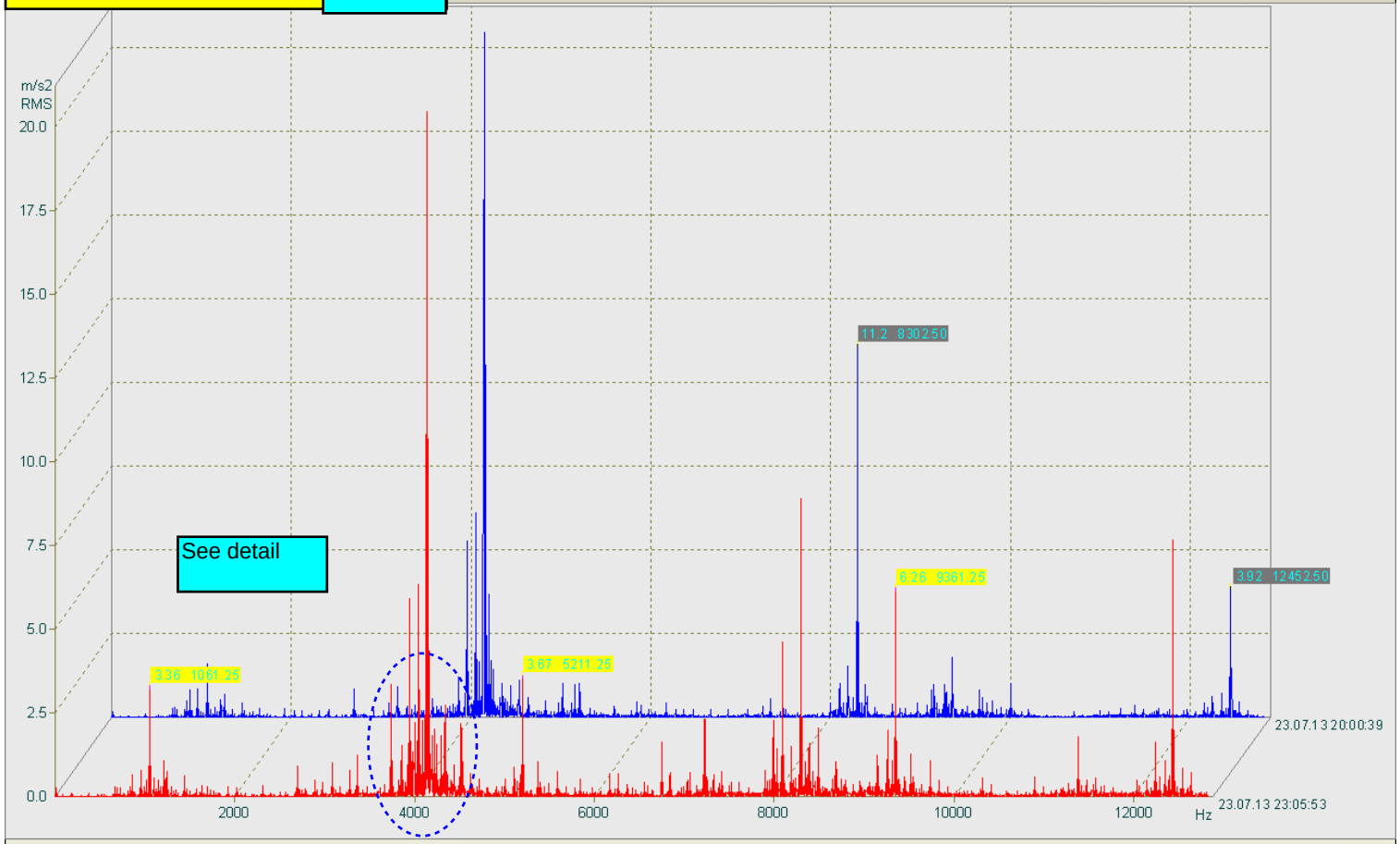
Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:05:53 PM	no data	1 V	Gear vibration\HS-V-DE	Gear	\EGGO\EGGO cogenera
7/23/2013 8:00:39 PM	no data	1 V	Gear vibration\HS-V-DE	Gear	\EGGO\EGGO cogenera



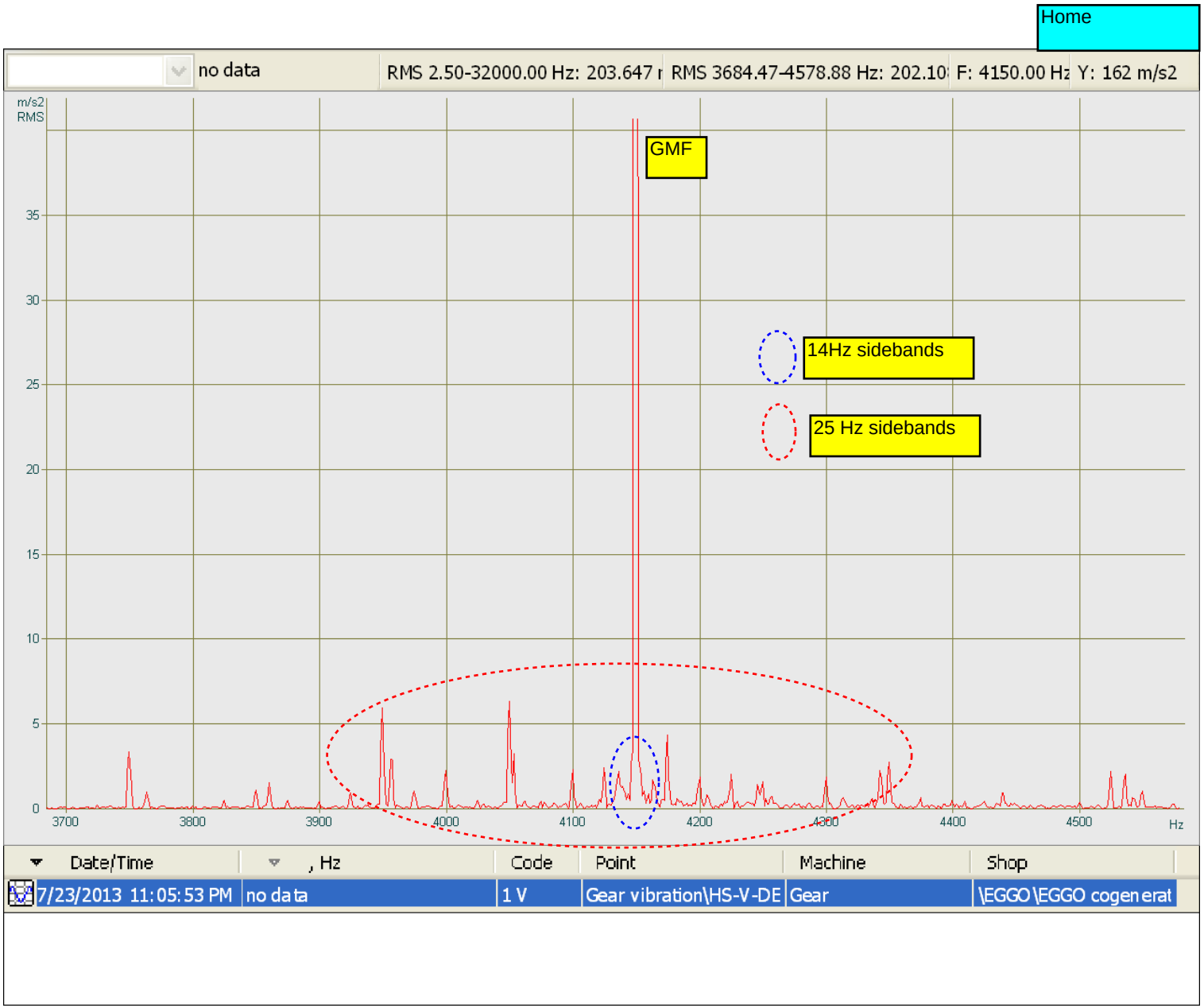
Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:05:53 PM	no data	1 V	Gear vibration\HS-V-DE	Gear	\EGGO\EGGO cogenera
7/23/2013 8:00:39 PM	no data	1 V	Gear vibration\HS-V-DE	Gear	\EGGO\EGGO cogenera

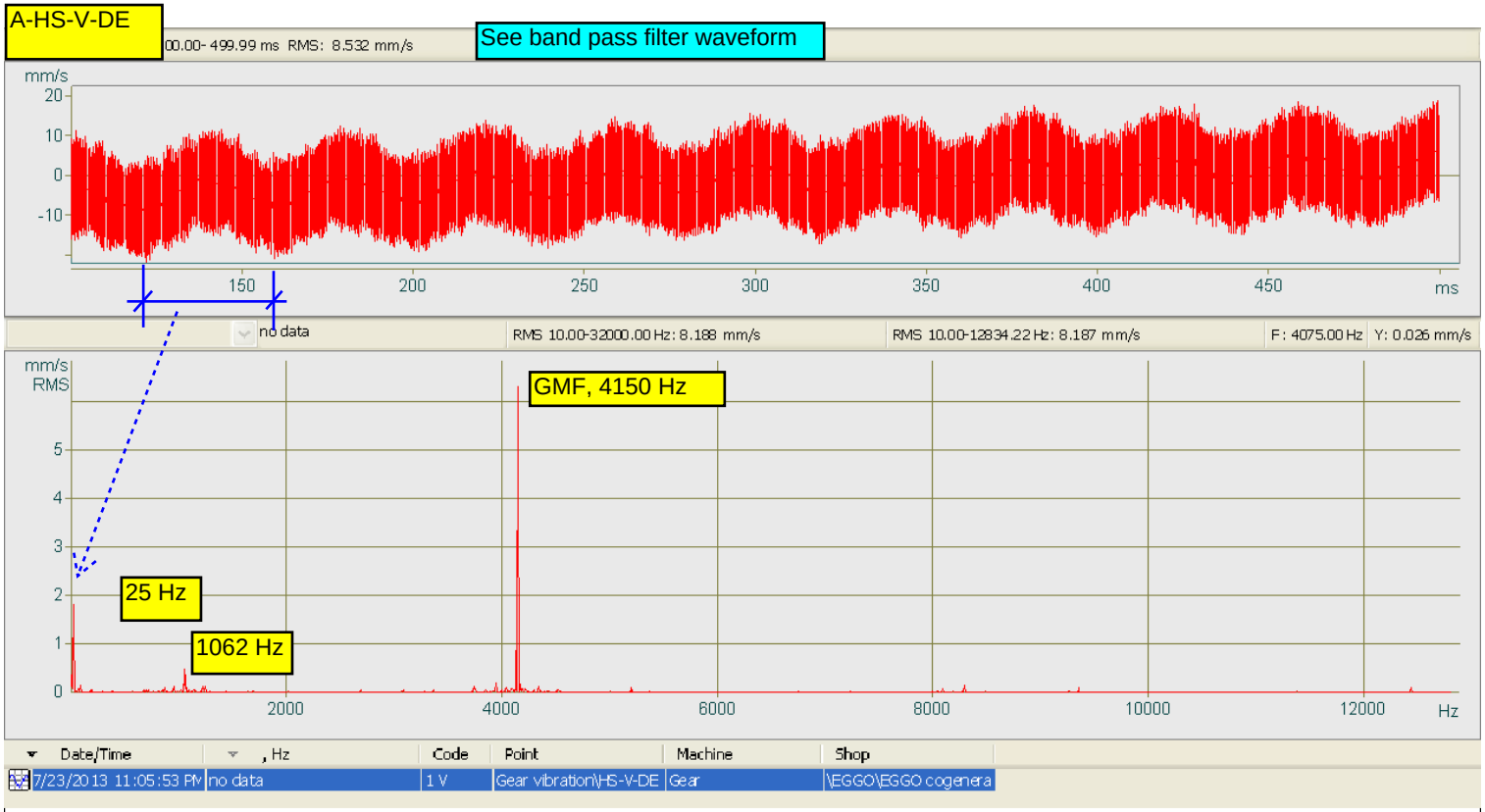
Home

A-HS-A-DE | Back | RMS 2.50-32000.00 Hz: 203.647 m | RMS 2.50-12834.22 Hz: 203.547 m, | F: 8663.75 Hz | Y: 0.205 m/s2



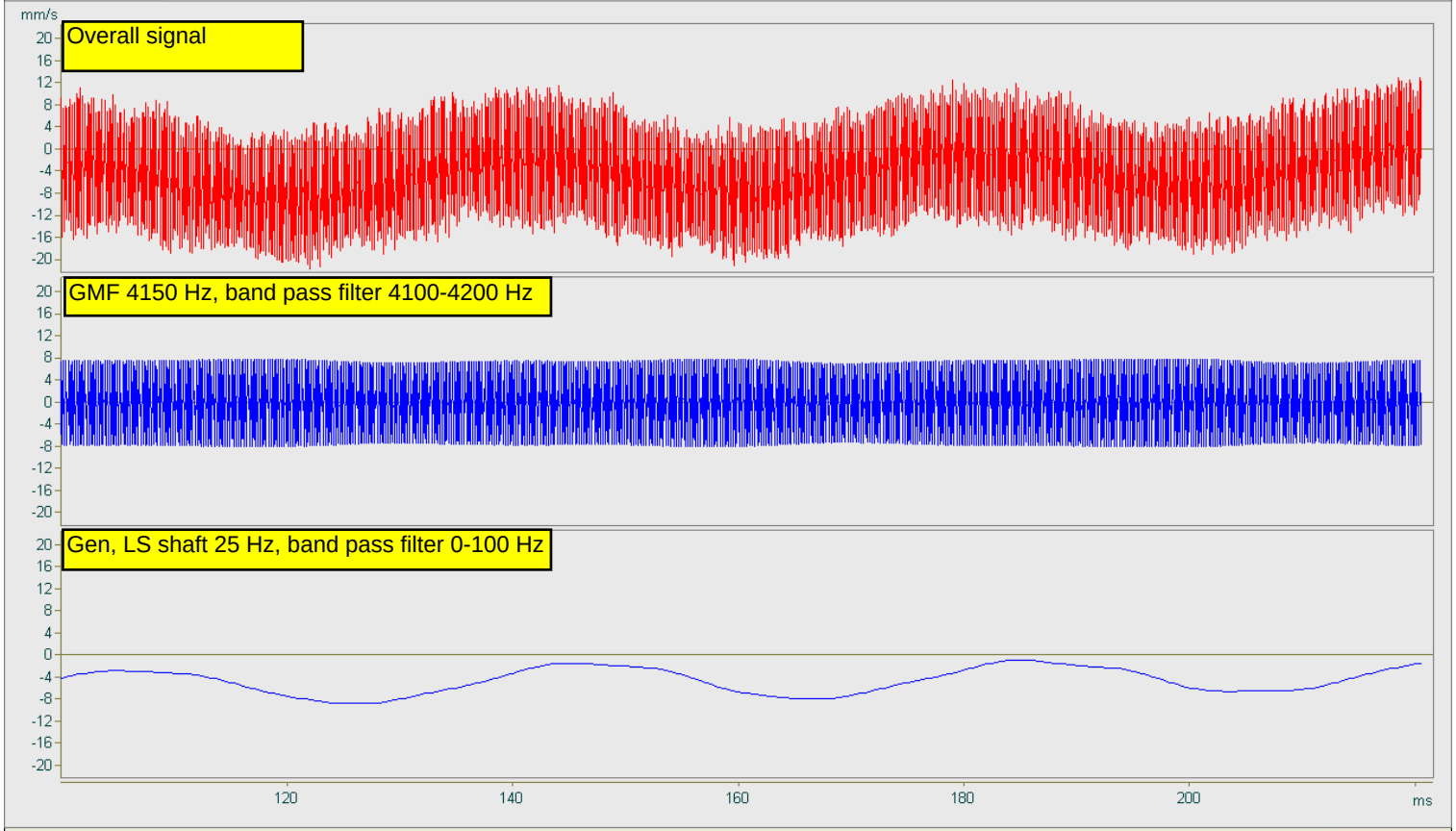
Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:05:53 PM	no data	1 V	Gear vibration\HS-V-DE	Gear	\EGGO\EGGO cogenera
7/23/2013 8:00:39 PM	no data	1 V	Gear vibration\HS-V-DE	Gear	\EGGO\EGGO cogenera


Home
no data
RMS 2.50-32000.00 Hz: 203.647 r
RMS 3684.47-4578.88 Hz: 202.10
F: 4150.00 Hz
Y: 162 m/s2
m/s2 RMS
GMF
14Hz sidebands
25 Hz sidebands
35
30
25
20
15
10
5
0
3700
3800
3900
4000
4100
4200
4300
4400
4500
Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:05:53 PM
no data
1 V
Gear vibration\HS-V-DE
Gear
\EGGO\EGGO cogenerat

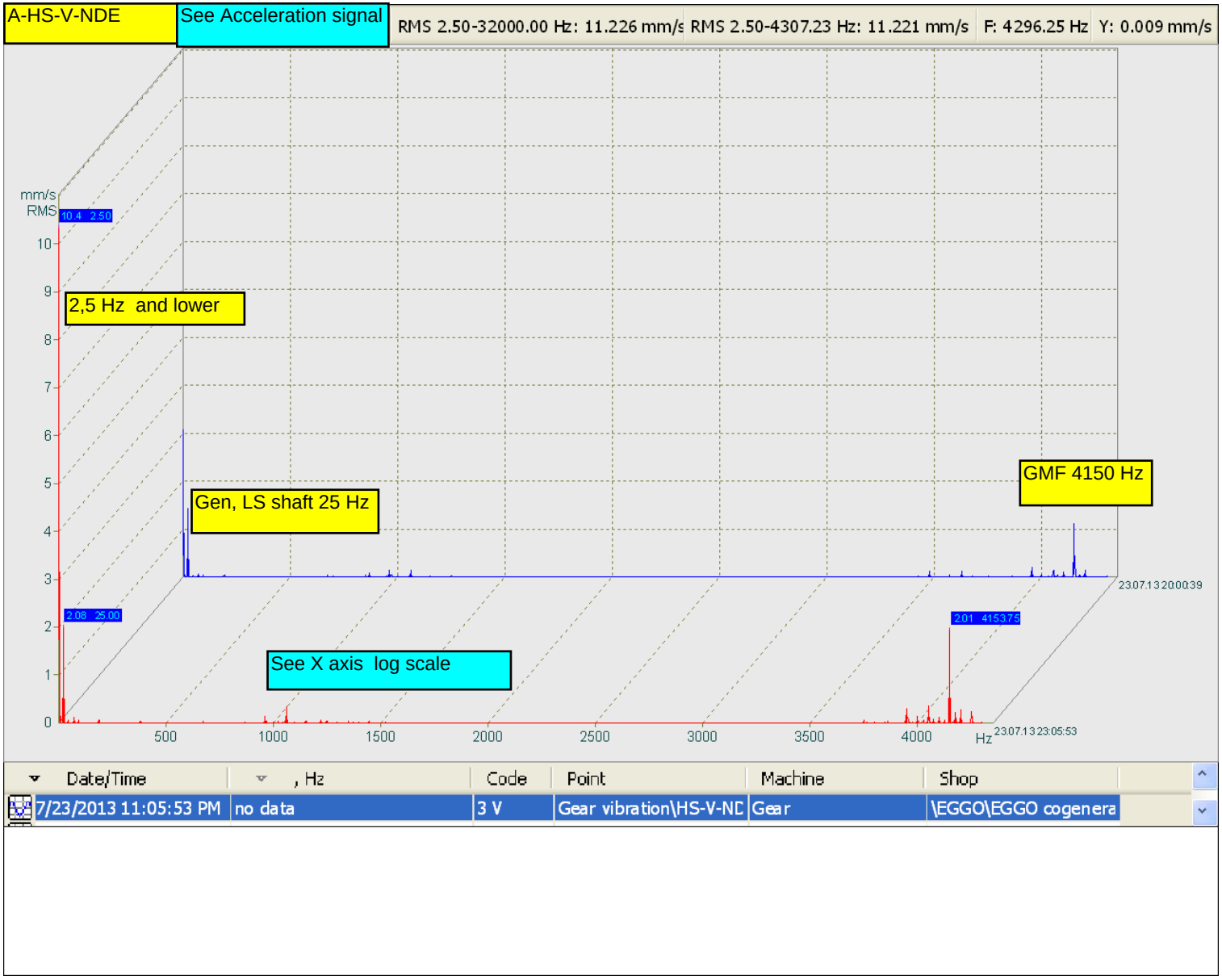

A-HS-V-DE
00.00- 499.99 ms RMS: 8.532 mm/s
See band pass filter waveform
mm/s
20
10
0
-10
150
200
250
300
350
400
450
ms
no data
RMS 10.00-32000.00 Hz: 8.188 mm/s
RMS 10.00-12834.22 Hz: 8.187 mm/s
F: 4075.00 Hz
Y: 0.026 mm/s
mm/s
RMS
GMF, 4150 Hz
25 Hz
1062 Hz
5
4
3
2
1
0
2000
4000
6000
8000
10000
12000
Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:05:53 PM
no data
1 V
Gear vibration\HS-V-DE
Gear
\EGGO\EGGO cogenera

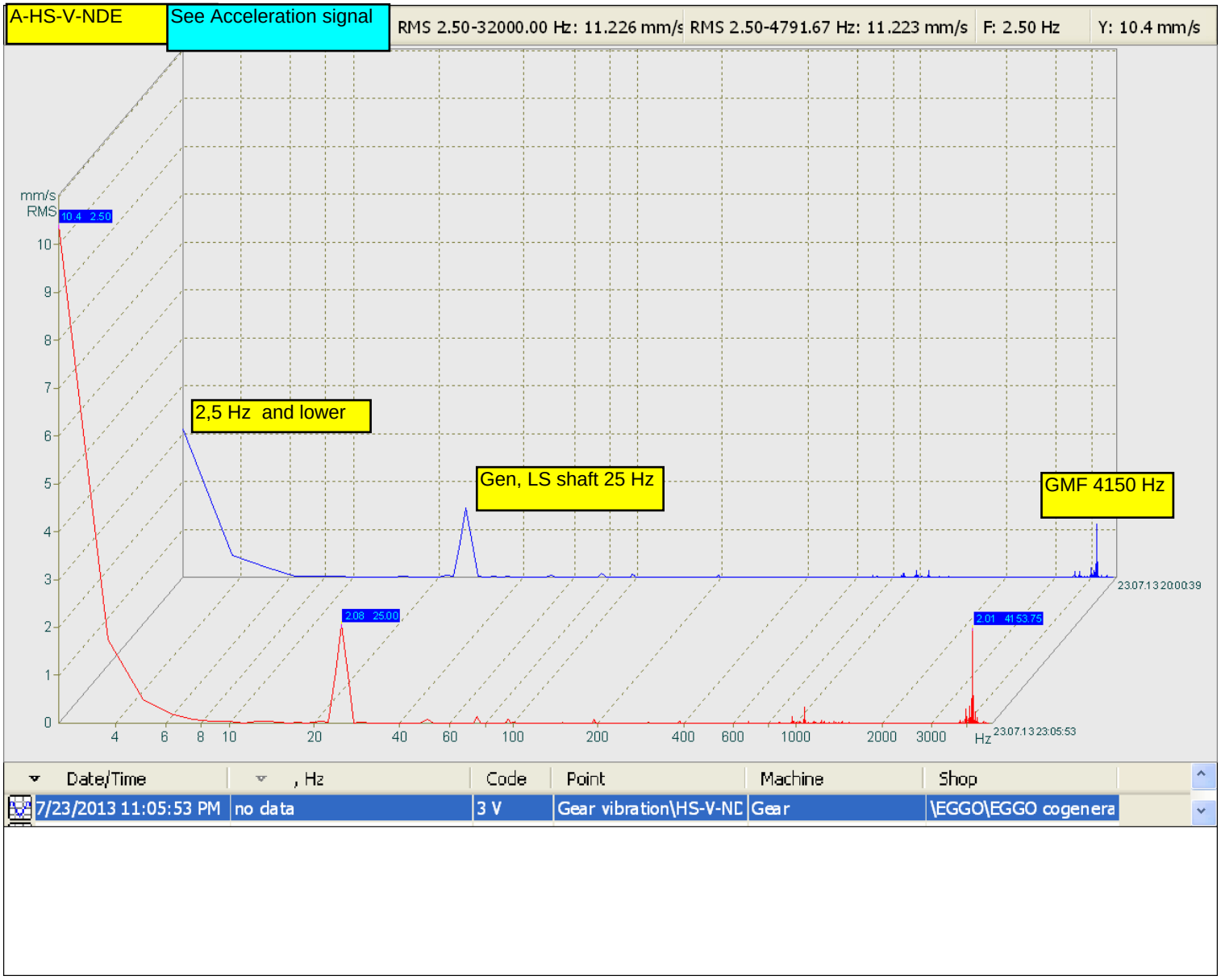
Home

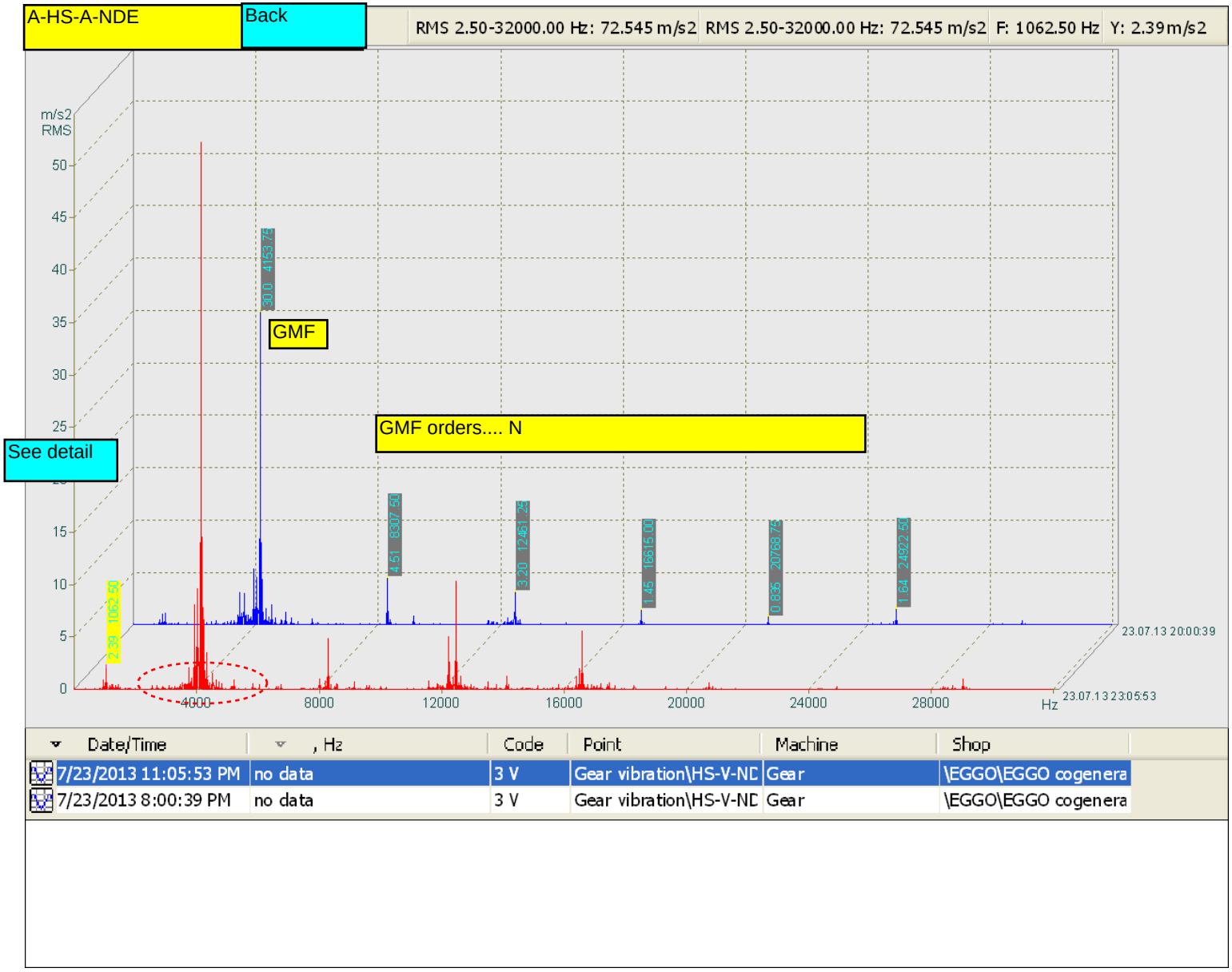
A-HS-V-DE | Wave 0.00-32000.00 Hz | T: 100.00-799.99 (100.00-220.61 | RMS: 8.730 (9.276) mm/s | t: 218.408 ms | Y: 4.879 mm/s



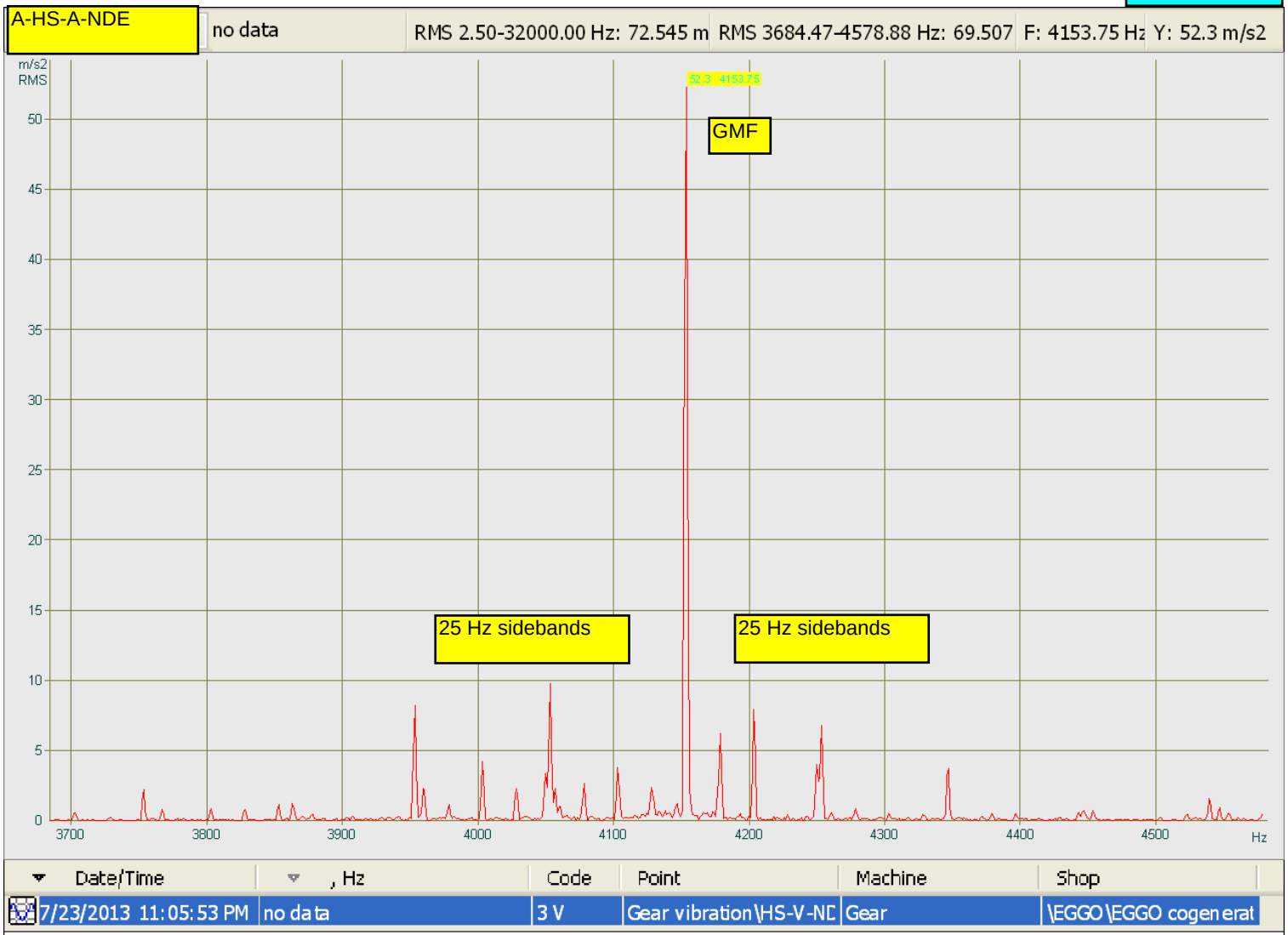
Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:05:53 PM	no data	1 V	Gear vibration\HS-V-DE	Gear	\EGGO\EGGO cogenera


A-HS-V-NDE
See Acceleration signal
RMS 2.50-32000.00 Hz: 11.226 mm/s
RMS 2.50-4307.23 Hz: 11.221 mm/s
F: 4296.25 Hz
Y: 0.009 mm/s
mm/s RMS
10.4 2.50
2,5 Hz and lower
Gen, LS shaft 25 Hz
GMF 4150 Hz
2.08 25.00
2.01 4153.75
See X axis log scale
23.07.13 20:00:39
23.07.13 23:05:53
Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:05:53 PM
no data
3 V
Gear vibration\HS-V-NDE
Gear
\EGGO\EGGO cogenera


A-HS-V-NDE
See Acceleration signal
RMS 2.50-32000.00 Hz: 11.226 mm/s
RMS 2.50-4791.67 Hz: 11.223 mm/s
F: 2.50 Hz
Y: 10.4 mm/s
mm/s RMS
10.4 2.50
2,5 Hz and lower
Gen, LS shaft 25 Hz
GMF 4150 Hz
2.08 25.00
2.01 4153.75
23.07.13 20:00:39
23.07.13 23:05:53
Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:05:53 PM
no data
3 V
Gear vibration\HS-V-NDE
Gear
\EGGO\EGGO cogenera


A-HS-A-NDE
Back
RMS 2.50-32000.00 Hz: 72.545 m/s2
RMS 2.50-32000.00 Hz: 72.545 m/s2
F: 1062.50 Hz
Y: 2.39 m/s2
m/s2
RMS
GMF
GMF orders.... N
See detail
23.07.13 20:00:39
23.07.13 23:05:53
Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:05:53 PM
no data
3 V
Gear vibration\HS-V-NDE
Gear
\EGGO\EGGO cogenera
7/23/2013 8:00:39 PM
no data
3 V
Gear vibration\HS-V-NDE
Gear
\EGGO\EGGO cogenera

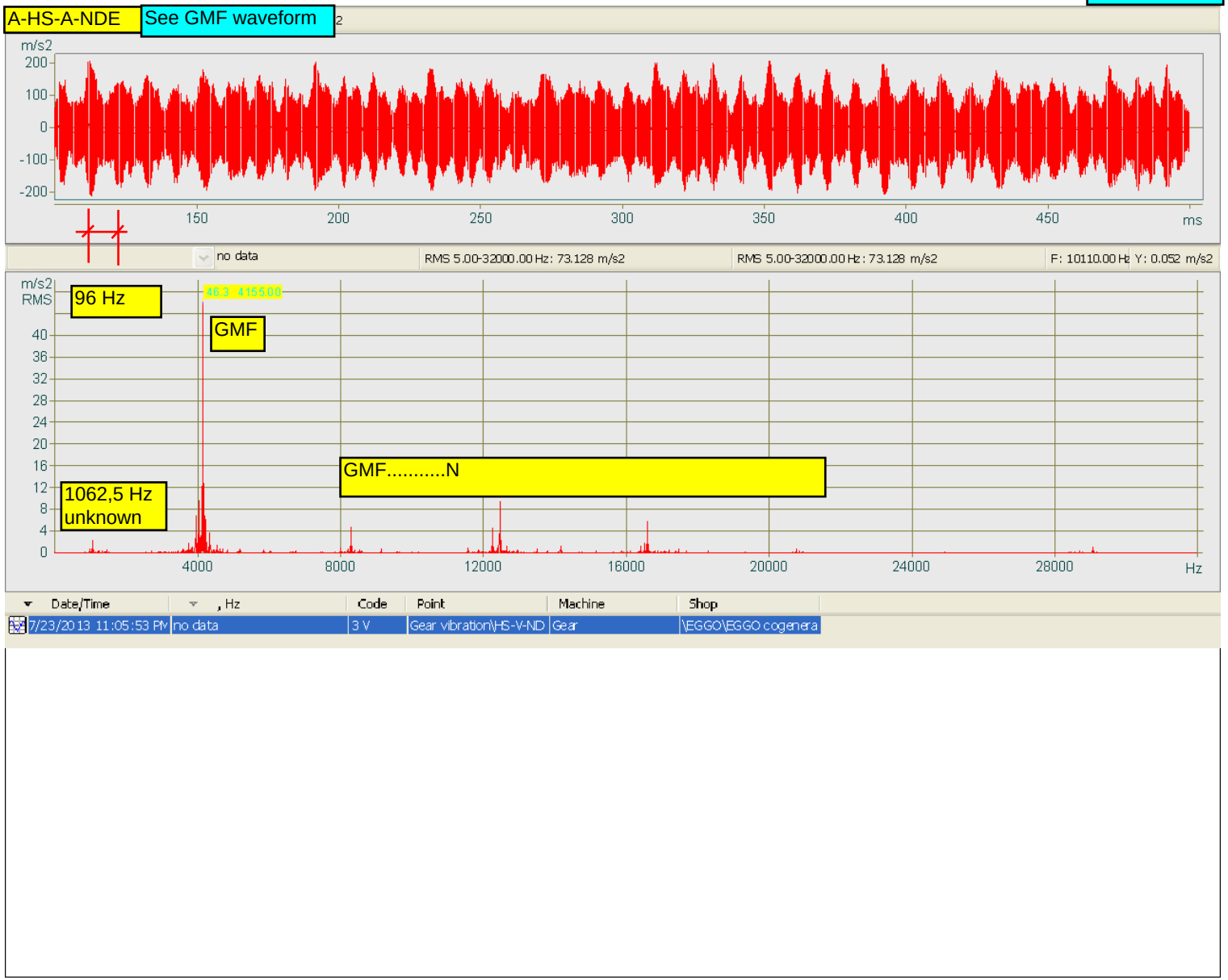
Home

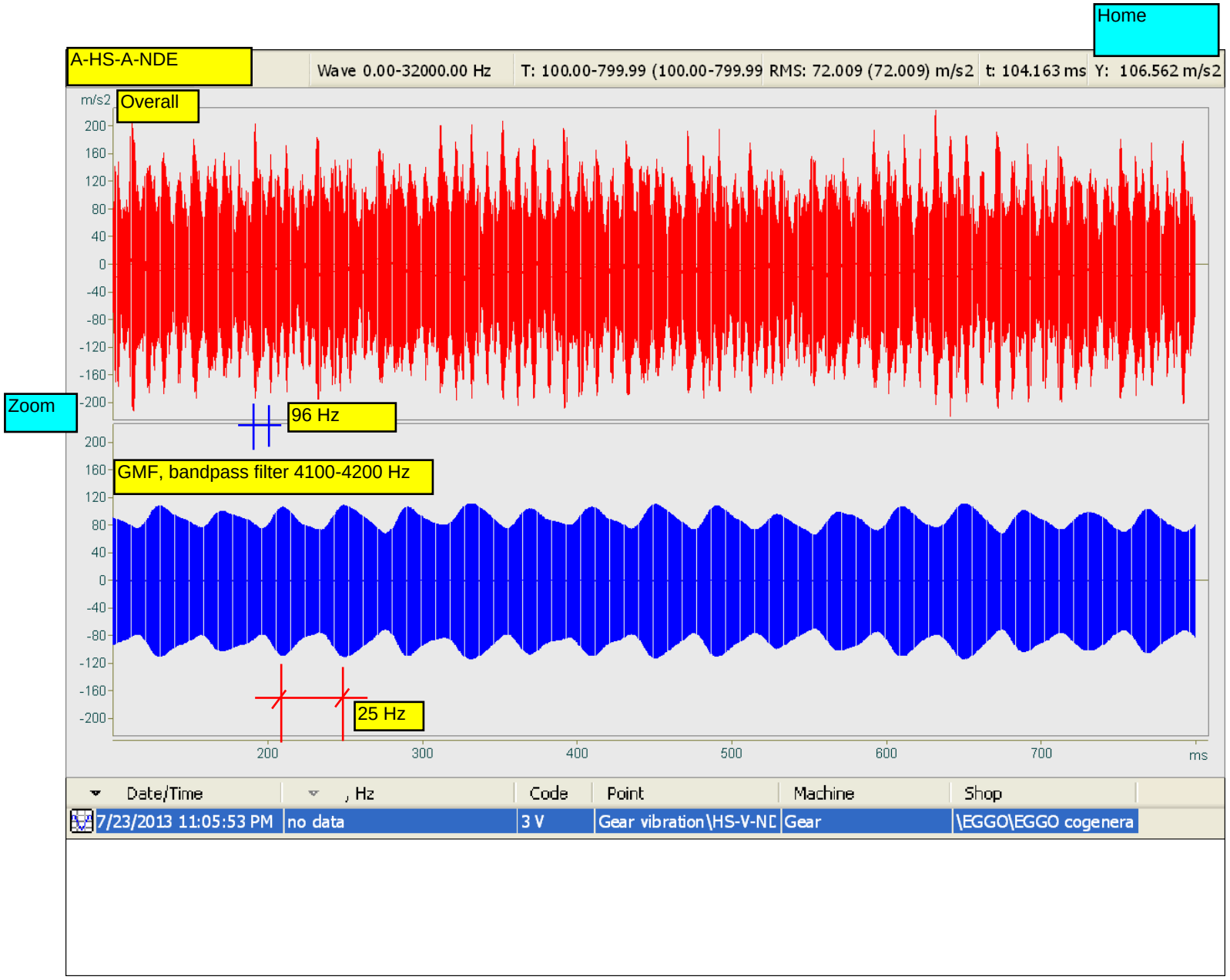

A-HS-A-NDE
no data
RMS 2.50-32000.00 Hz: 72.545 m
RMS 3684.47-4578.88 Hz: 69.507
F: 4153.75 Hz
Y: 52.3 m/s2
m/s2 RMS
GMF
25 Hz sidebands
25 Hz sidebands
Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:05:53 PM
no data
3 V
Gear vibration\HS-V-NC
Gear
\EGGO\EGGO cogenerat

Home

A-HS-A-NDE

See GMF waveform

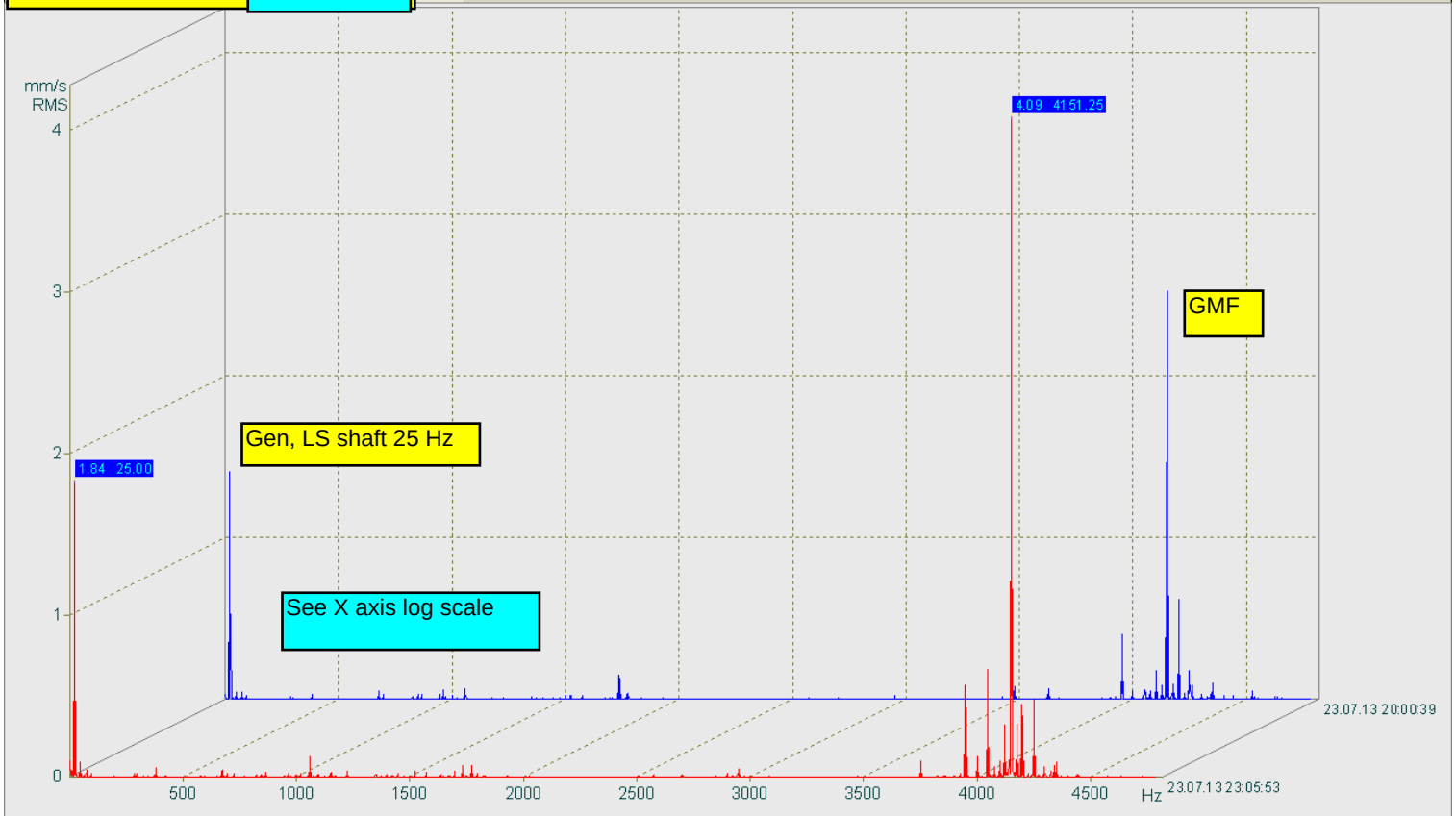



Home
A-HS-A-NDE
Wave 0.00-32000.00 Hz
T: 100.00-799.99 (100.00-799.99
RMS: 72.009 (72.009) m/s2
t: 104.163 ms
Y: 106.562 m/s2
m/s2
Overall
200
160
120
80
40
0
-40
-80
-120
-160
-200
Zoom
96 Hz
GMF, bandpass filter 4100-4200 Hz
25 Hz
200
300
400
500
600
700
ms
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:05:53 PM
no data
3 V
Gear vibration\HS-V-NE
Gear
\EGGO\EGGO cogenera

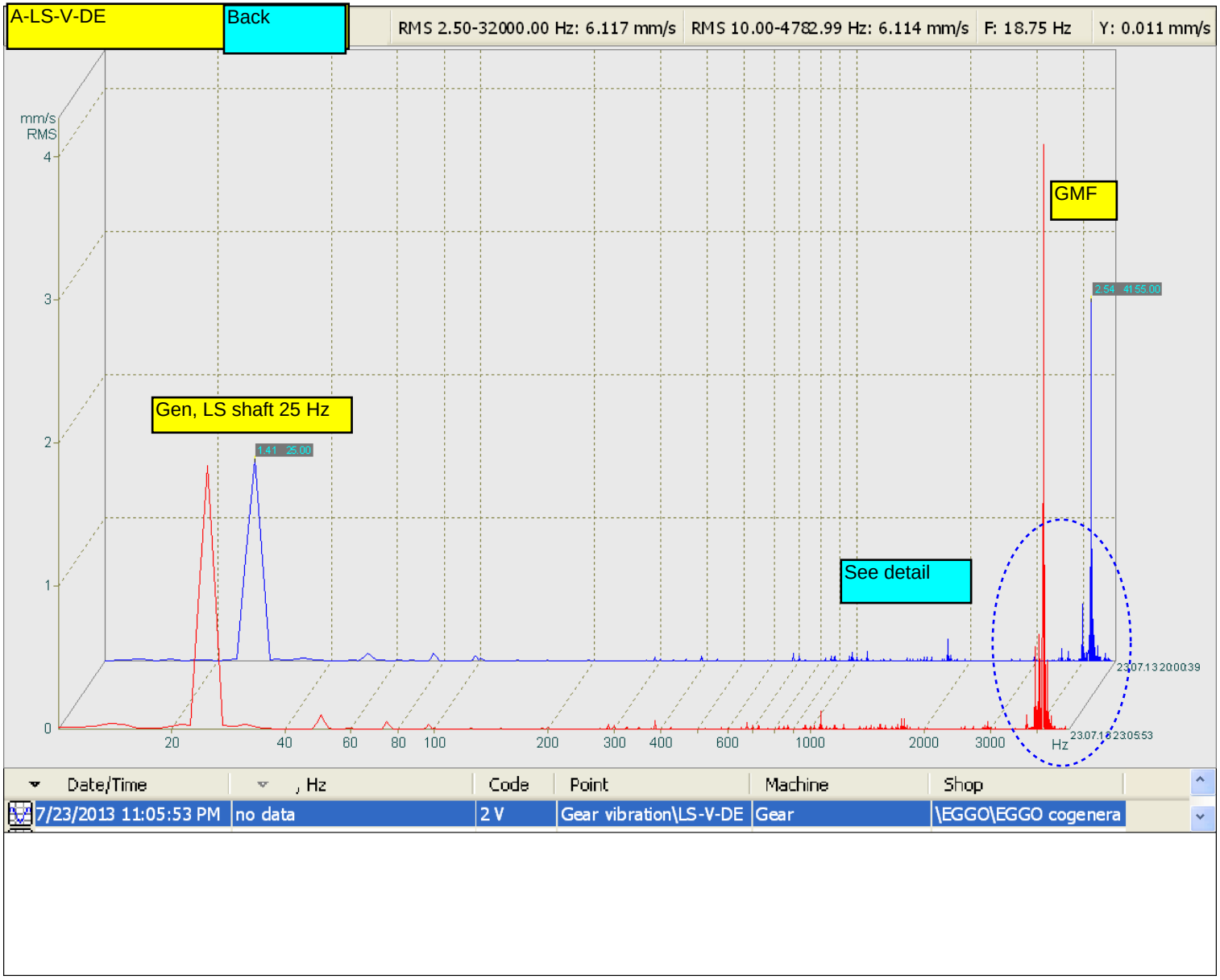
Home
A-HS-A-NDE
Wave 0.00-32000.00 Hz
T: 100.00-799.99 (100.00-108.56
RMS: 72.009 (65.802) m/s2
t: 104.260 ms
Y:-80.738 m/s2
m/s2
Overall
200
160
120
80
40
0
-40
-80
-120
-160
-200
GMF, bandpass filter 4100-4200 Hz
101
102
103
104
105
106
107
108
ms
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:05:53 PM
no data
3 V
Gear vibration\HS-V-NE
Gear
\EGGO\EGGO cogenera

Home

A-LS-V-DE | Back | RMS 2.50-32000.00 Hz: 6.117 mm/s | RMS 2.50-4789.47 Hz: 6.116 mm/s | F: 620.00 Hz | Y: 0.003 mm/s

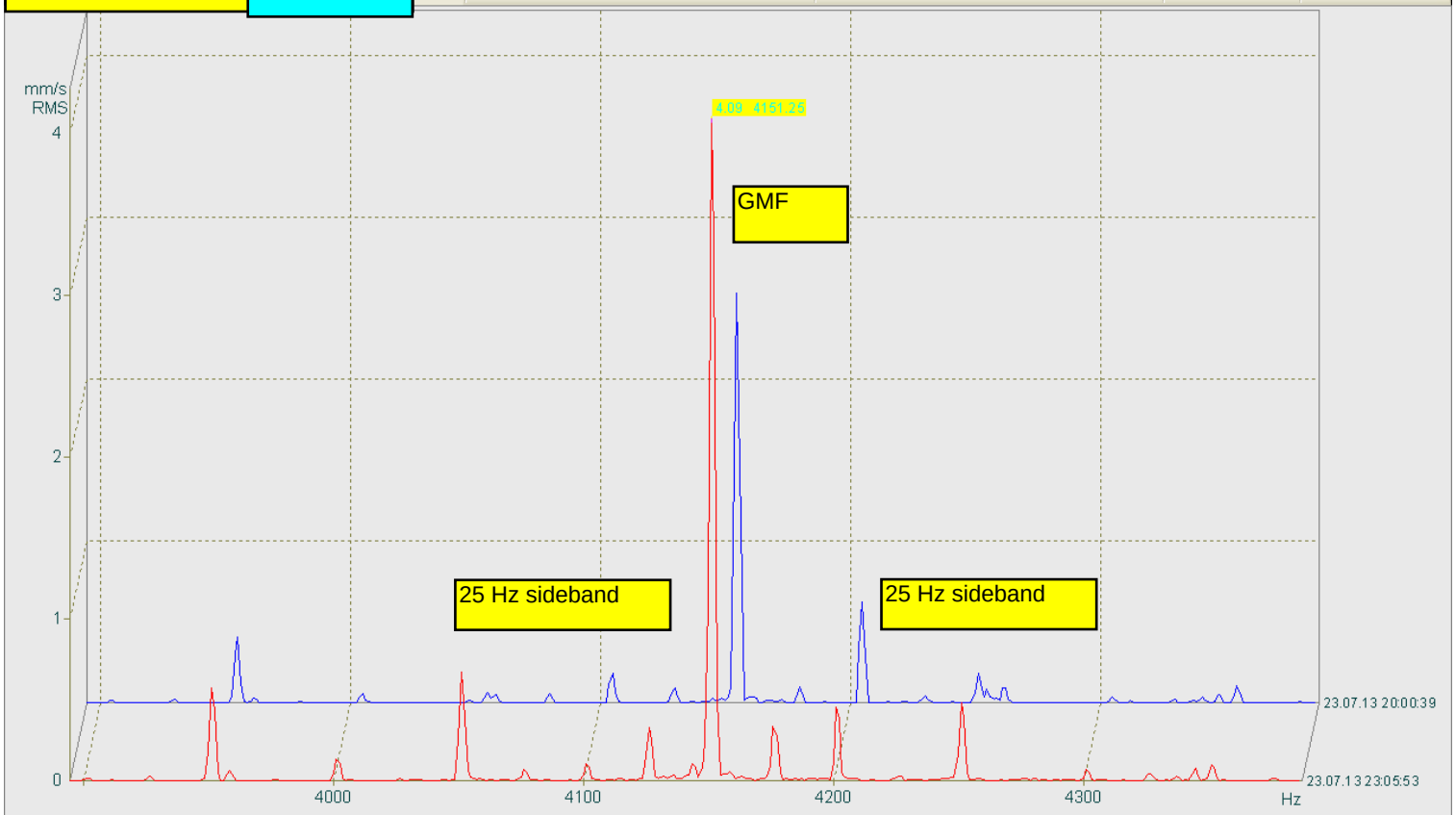


Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:05:53 PM	no data	2 V	Gear vibration\LS-V-DE	Gear	\EGGO\EGGO cogenera
7/23/2013 8:00:39 PM	no data	2 V	Gear vibration\LS-V-DE	Gear	\EGGO\EGGO cogenera


A-LS-V-DE
Back
RMS 2.50-32000.00 Hz: 6.117 mm/s
RMS 10.00-4782.99 Hz: 6.114 mm/s
F: 18.75 Hz
Y: 0.011 mm/s
mm/s RMS
GMF
Gen, LS shaft 25 Hz
See detail
Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:05:53 PM
no data
2 V
Gear vibration\LS-V-DE
Gear
\EGGO\EGGO cogenera

Home

A-LS-V-DE | Back | RMS 2.50-32000.00 Hz: 6.117 mm/s | RMS 3894.34-4384.91 Hz: 5.665 mm/ | F: 3972.50 Hz | Y: 0.002 mm/s

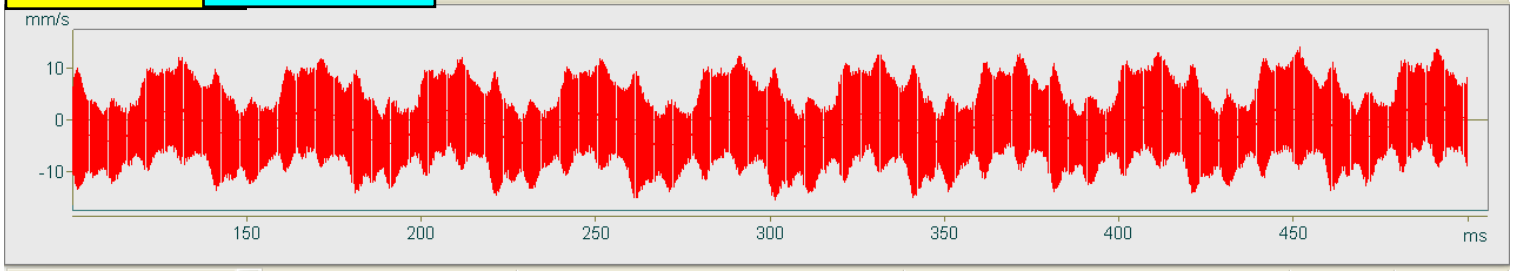


Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:05:53 PM	no data	2 V	Gear vibration\LS-V-DE	Gear	\EGGO\EGGO cogenera
7/23/2013 8:00:39 PM	no data	2 V	Gear vibration\LS-V-DE	Gear	\EGGO\EGGO cogenera

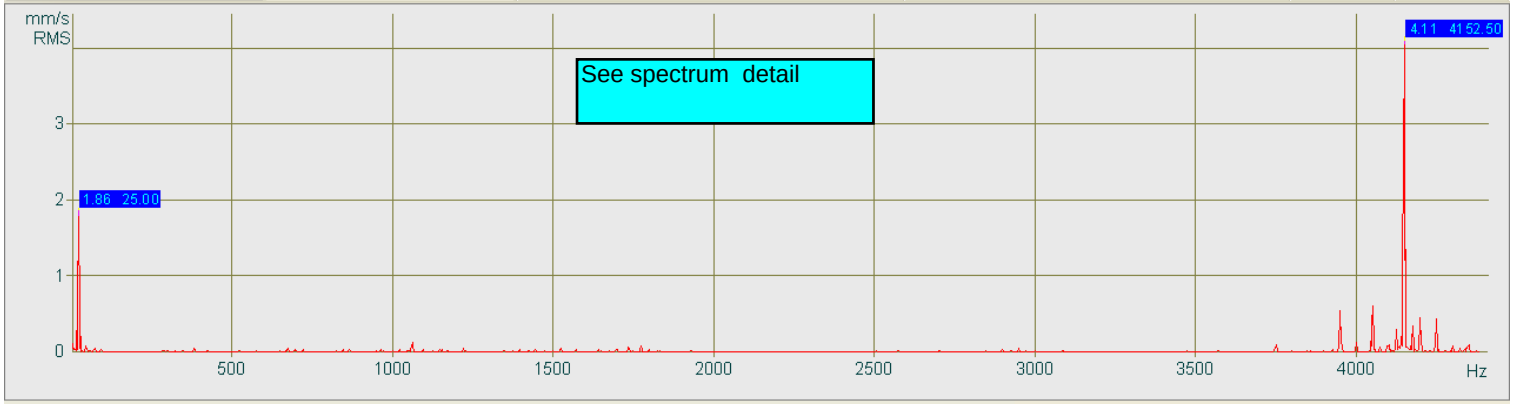
Home

A-LS-V-DE

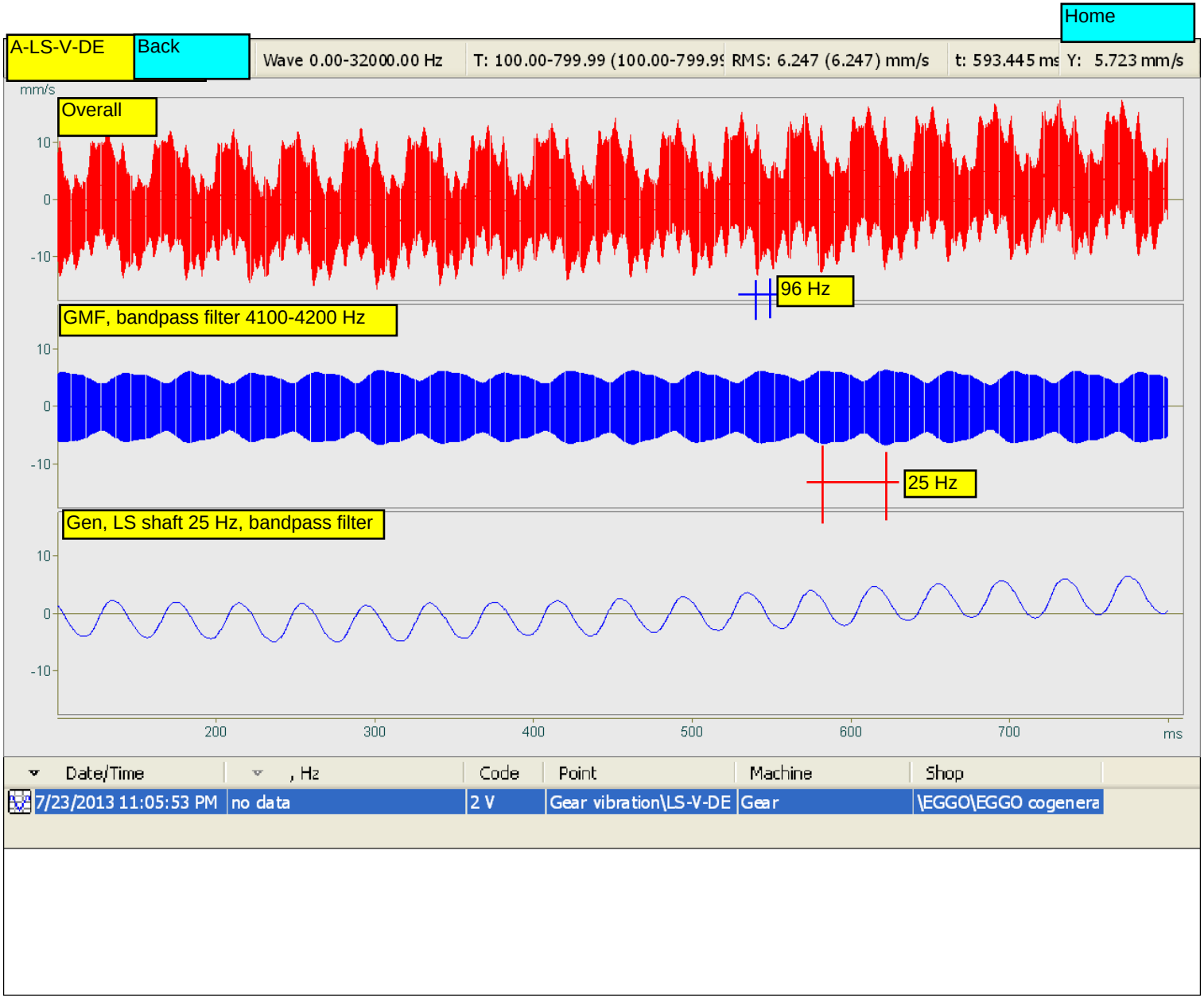
See GMF waveform

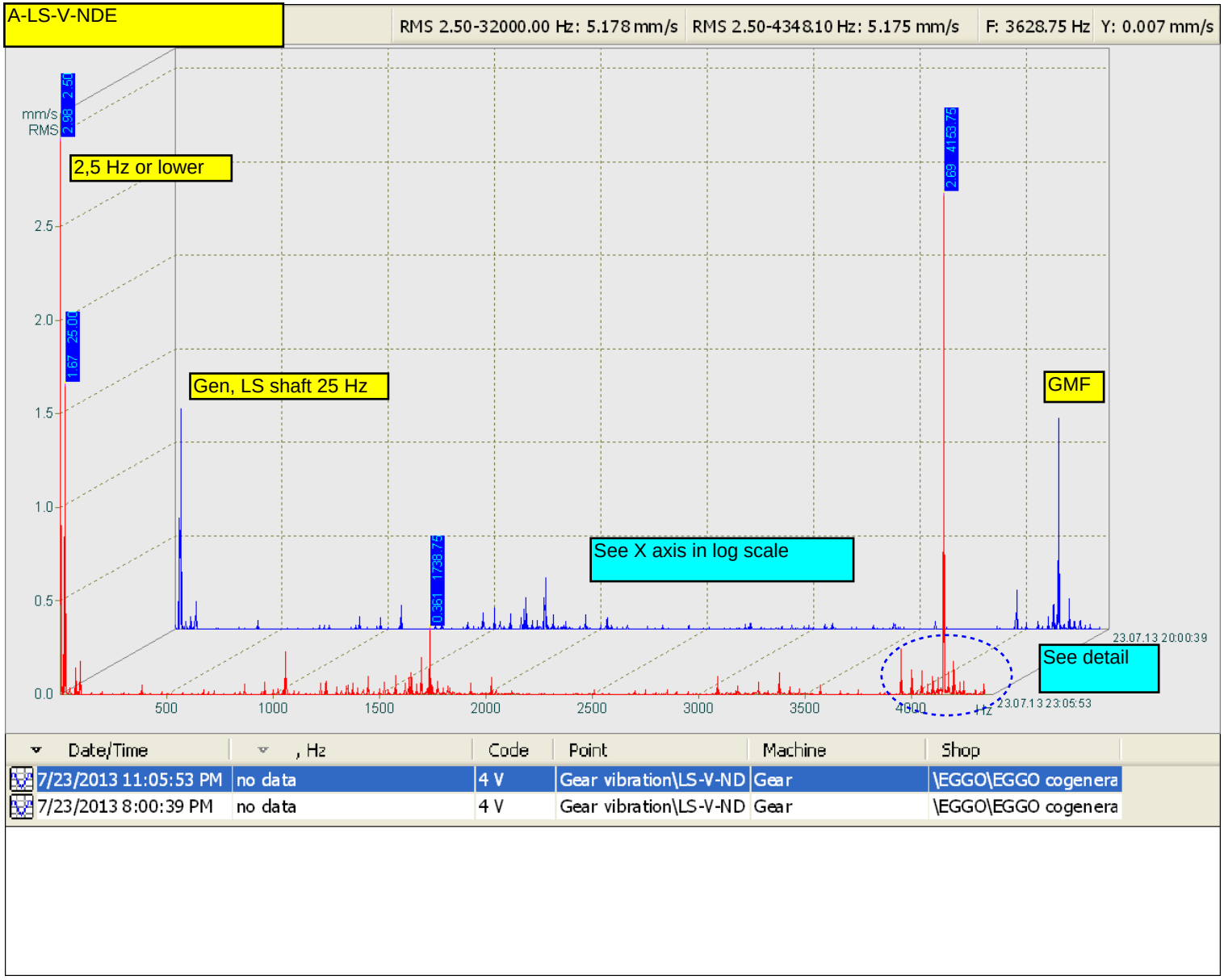


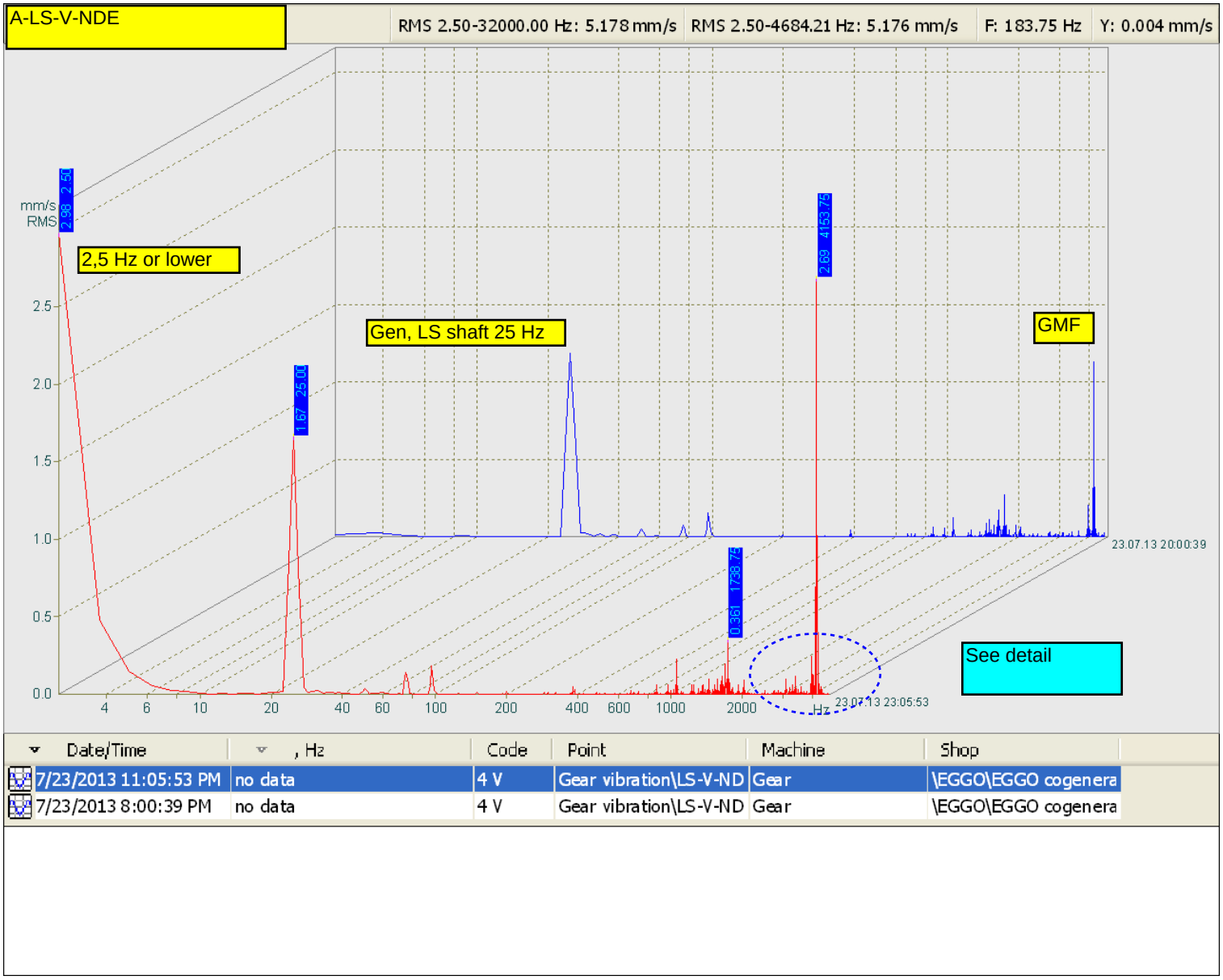
no data | RMS 5.00-32000.00 Hz: 6.137 mm/s | RMS 5.00-4388.89 Hz: 6.135 mm/s | F: 2210.00 Hz | Y: 0.001 mm/s



Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:05:53 PM	no data	2 V	Gear vibration\LS-V-DE	Gear	\EGGO\EGGO cogenera


Home
A-LS-V-DE
Back
Wave 0.00-32000.00 Hz
T: 100.00-799.99 (100.00-799.9
RMS: 6.247 (6.247) mm/s
t: 593.445 ms
Y: 5.723 mm/s
mm/s
Overall
10
0
-10
96 Hz
GMF, bandpass filter 4100-4200 Hz
10
0
-10
25 Hz
Gen, LS shaft 25 Hz, bandpass filter
10
0
-10
200
300
400
500
600
700
ms
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:05:53 PM
no data
2 V
Gear vibration\LS-V-DE
Gear
\EGGO\EGGO cogenera

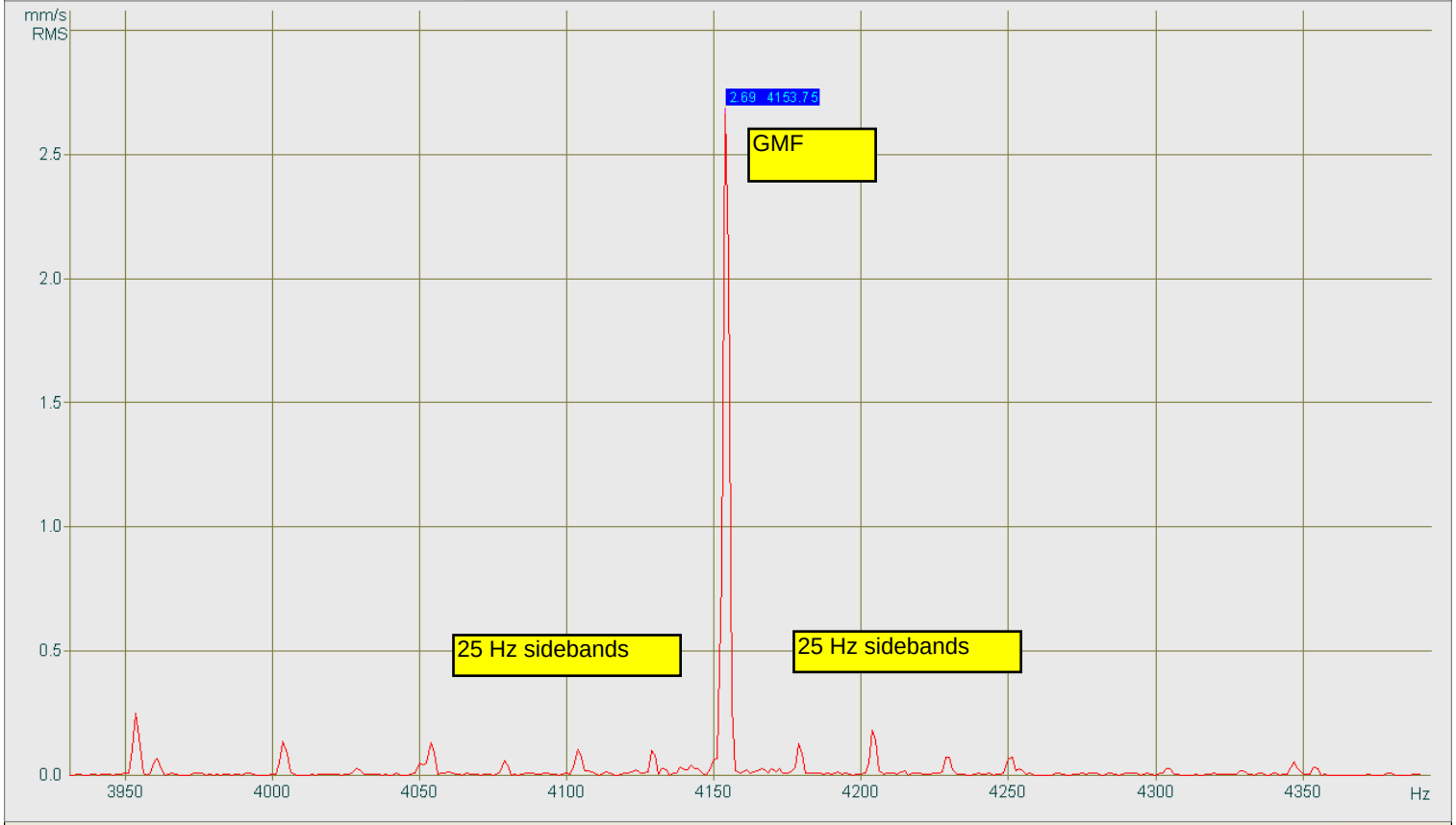

A-LS-V-NDE
RMS 2.50-32000.00 Hz: 5.178 mm/s
RMS 2.50-4348.10 Hz: 5.175 mm/s
F: 3628.75 Hz
Y: 0.007 mm/s
mm/s RMS
2,5 Hz or lower
Gen, LS shaft 25 Hz
GMF
See X axis in log scale
See detail
23.07.13 20:00:39
23.07.13 23:05:53
Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:05:53 PM
no data
4 V
Gear vibration\LS-V-ND
Gear
\EGGO\EGGO cogenera
7/23/2013 8:00:39 PM
no data
4 V
Gear vibration\LS-V-ND
Gear
\EGGO\EGGO cogenera


A-LS-V-NDE
RMS 2.50-32000.00 Hz: 5.178 mm/s
RMS 2.50-4684.21 Hz: 5.176 mm/s
F: 183.75 Hz
Y: 0.004 mm/s
mm/s RMS
2,5 Hz or lower
Gen, LS shaft 25 Hz
GMF
See detail
23.07.13 20:00:39
23.07.13 23:05:53
Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:05:53 PM
no data
4 V
Gear vibration\LS-V-ND
Gear
\EGGO\EGGO cogenera
7/23/2013 8:00:39 PM
no data
4 V
Gear vibration\LS-V-ND
Gear
\EGGO\EGGO cogenera

Home

A-LS-V-NDE

RMS 2.50-32000.00 Hz: 5.178 mm/s | RMS 3931.29-4390.35 Hz: 3.554 mm/ | F: 4153.75 Hz | Y: 2.69 mm/s

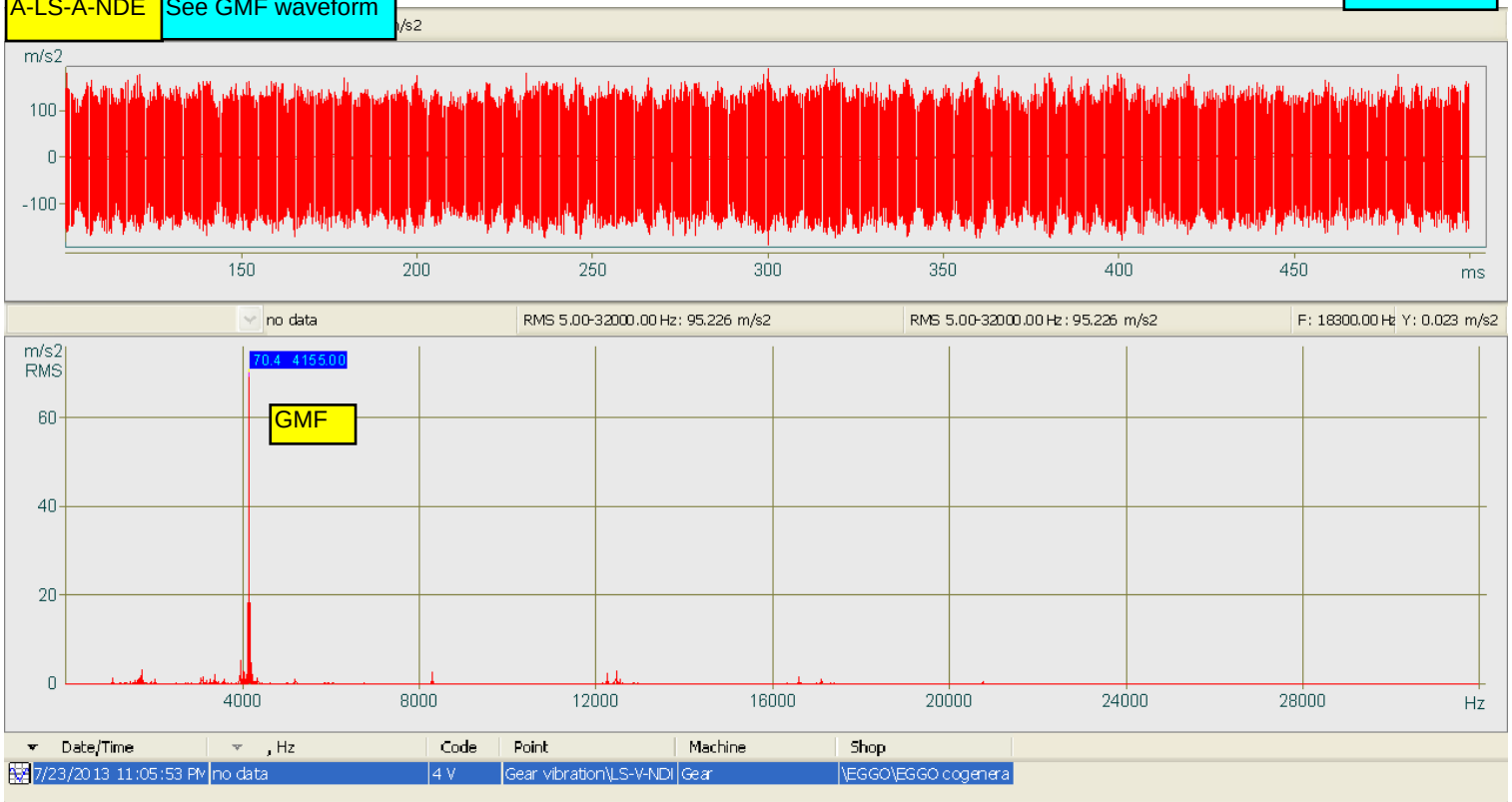


Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:05:53 PM	no data	4 V	Gear vibration\LS-V-ND	Gear	\EGGO\EGGO cogenera

A-LS-A-NDE

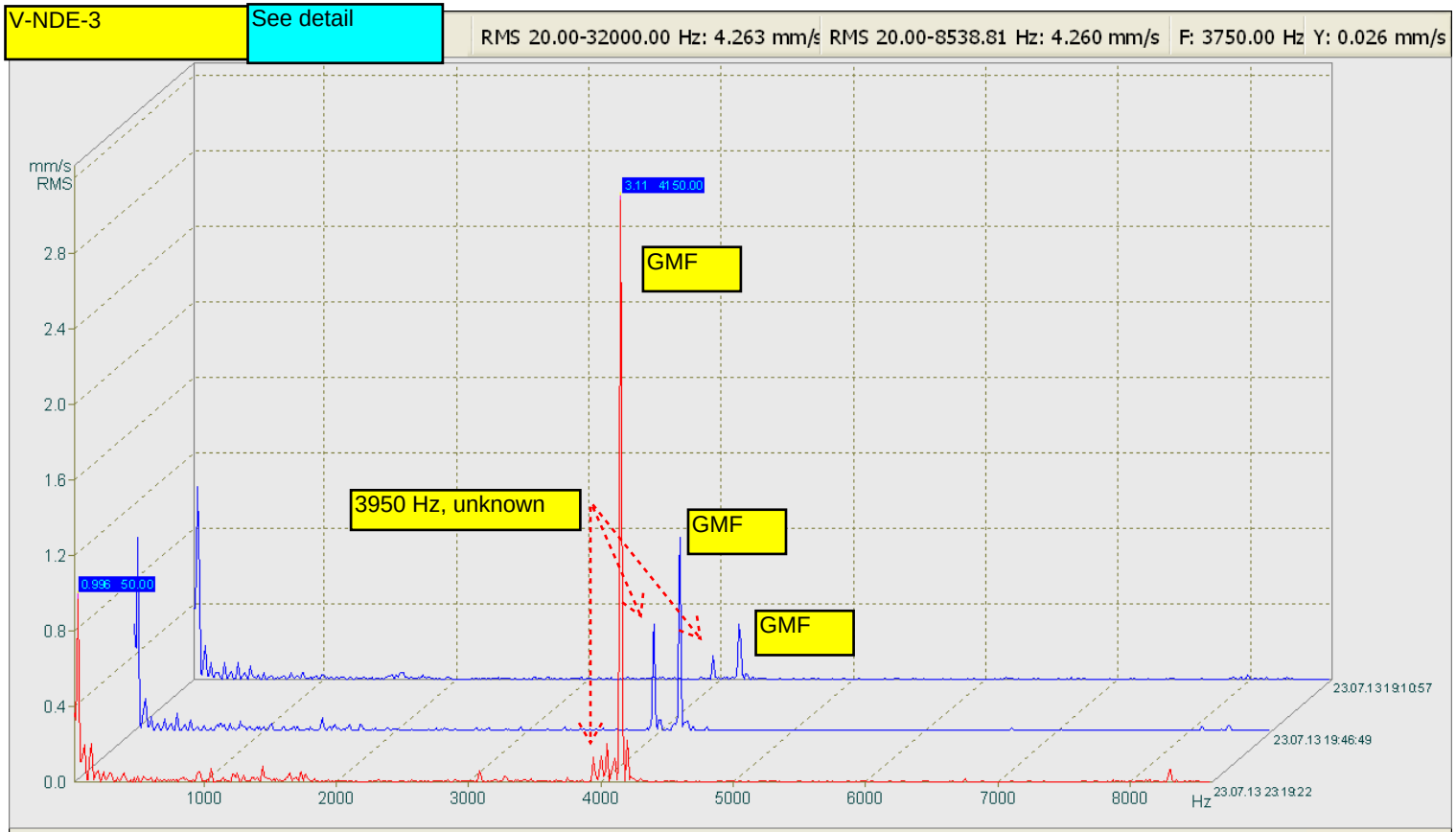
See GMF waveform

Home

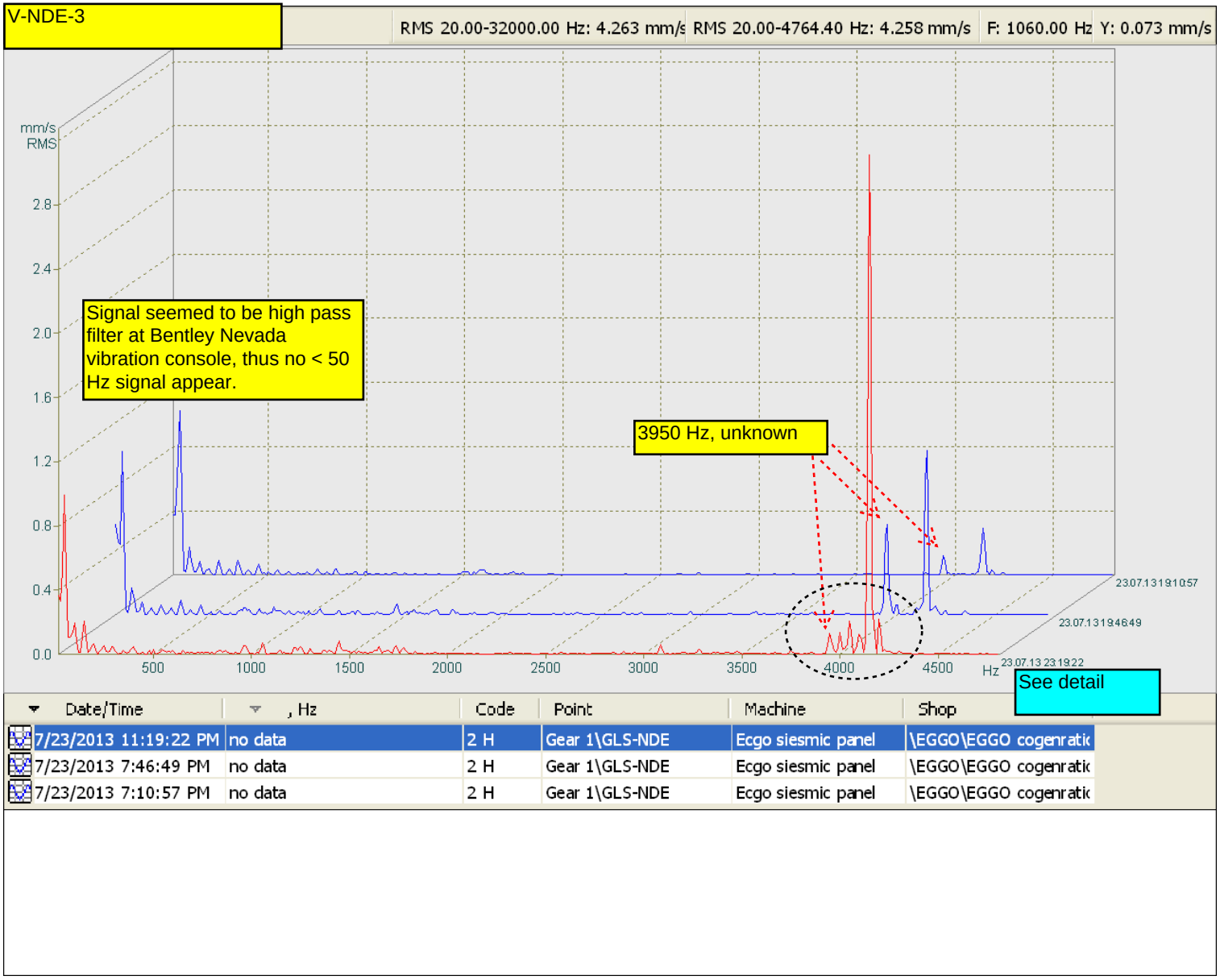


Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:05:53 PM	no data	4 V	Gear vibration\LS-V-NDI	Gear	\EGGO\EGGO cogenera

Home
A-LS-A-NDE
no data
Wave 0.00-32000.00 Hz
T: 100.00-799.99 (107.56-114.46
RMS: 94.201 (97.064) m/s2
t: 111.011 ms
Y: 155.452 m/s2
m/s2
Overall
100
0
-100
GMF, bandpass filter 4100-4200 Hz
100
0
-100
108
109
110
111
112
113
114
ms
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:05:53 PM
no data
4 V
Gear vibration\LS-V-ND
Gear
\EGGO\EGGO cogenera



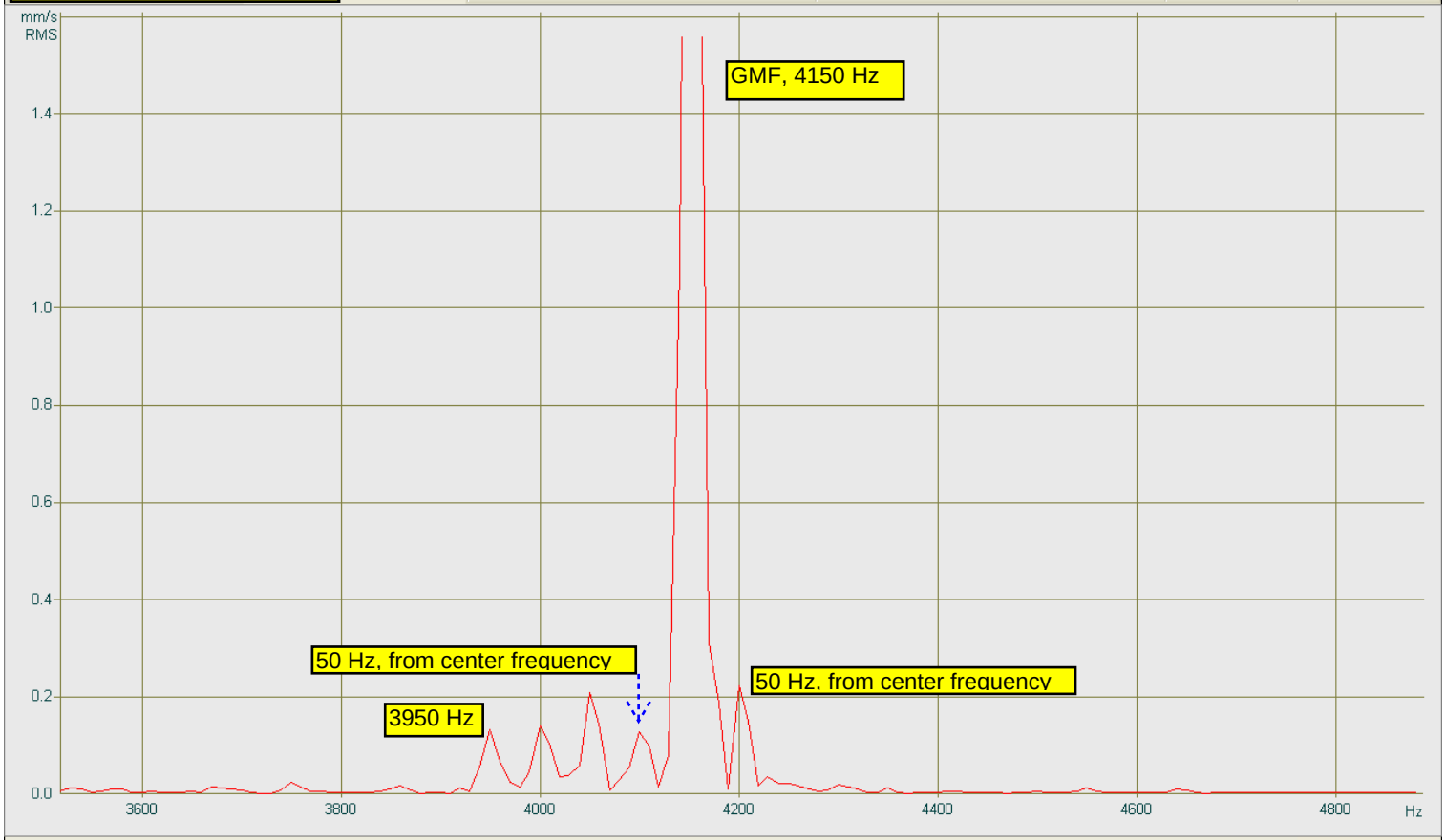
Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:19:22 PM	no data	2 H	Gear 1\GLS-NDE	Ecgo siesmic panel	\EGGO\EGGO cogenratic
7/23/2013 7:46:49 PM	no data	2 H	Gear 1\GLS-NDE	Ecgo siesmic panel	\EGGO\EGGO cogenratic
7/23/2013 7:10:57 PM	no data	2 H	Gear 1\GLS-NDE	Ecgo siesmic panel	\EGGO\EGGO cogenratic


V-NDE-3
RMS 20.00-32000.00 Hz: 4.263 mm/s
RMS 20.00-4764.40 Hz: 4.258 mm/s
F: 1060.00 Hz
Y: 0.073 mm/s
mm/s RMS
2.8
2.4
2.0
1.6
1.2
0.8
0.4
0.0
500
1000
1500
2000
2500
3000
3500
4000
4500
Hz
Signal seemed to be high pass filter at Bentley Nevada vibration console, thus no < 50 Hz signal appear.
3950 Hz, unknown
23.07.13 19:10:57
23.07.13 19:46:49
23.07.13 23:19:22
See detail
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:19:22 PM
no data
2 H
Gear 1\GLS-NDE
Ecgo siesmic panel
\EGGO\EGGO cogenratic
7/23/2013 7:46:49 PM
no data
2 H
Gear 1\GLS-NDE
Ecgo siesmic panel
\EGGO\EGGO cogenratic
7/23/2013 7:10:57 PM
no data
2 H
Gear 1\GLS-NDE
Ecgo siesmic panel
\EGGO\EGGO cogenratic

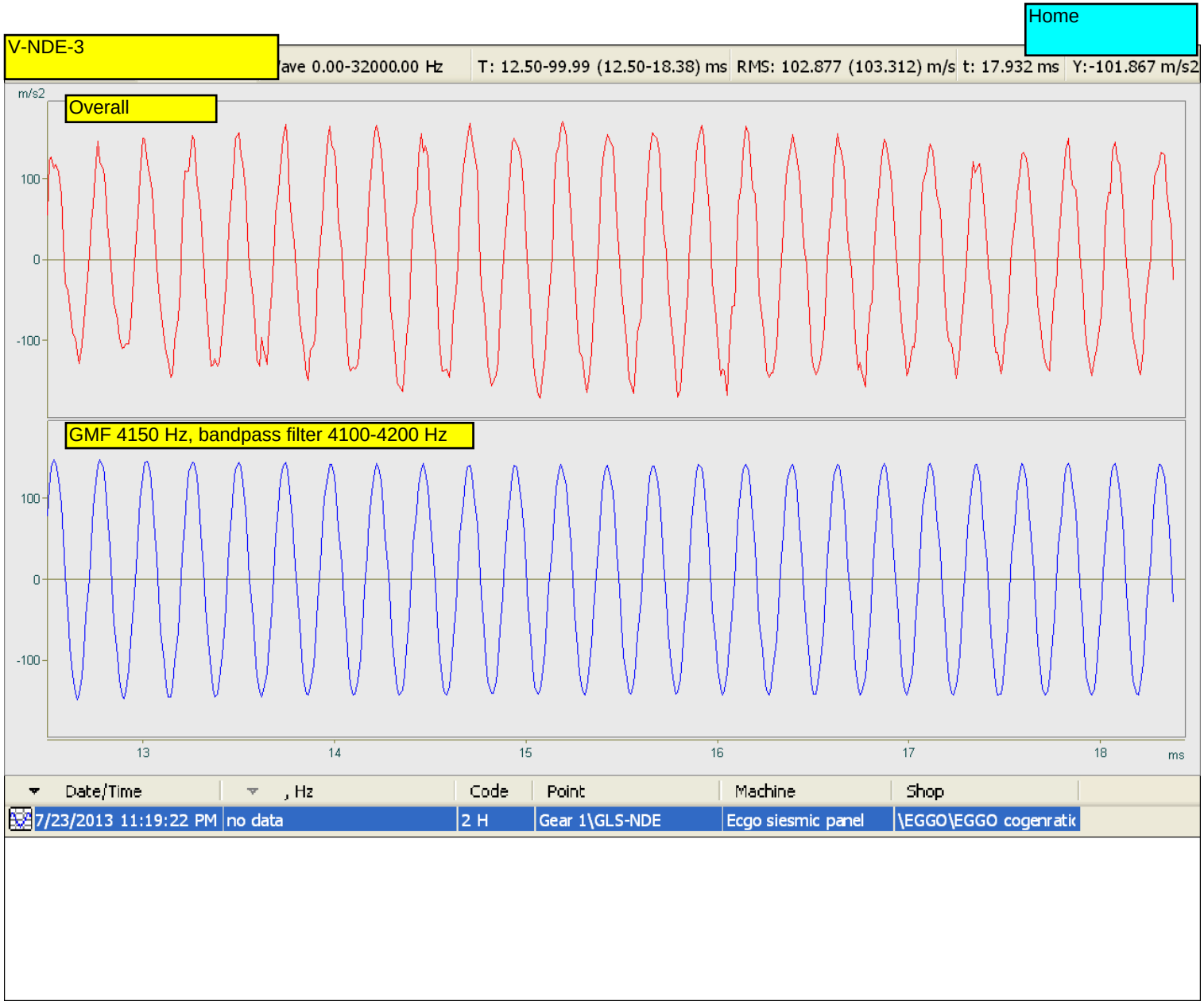
Home

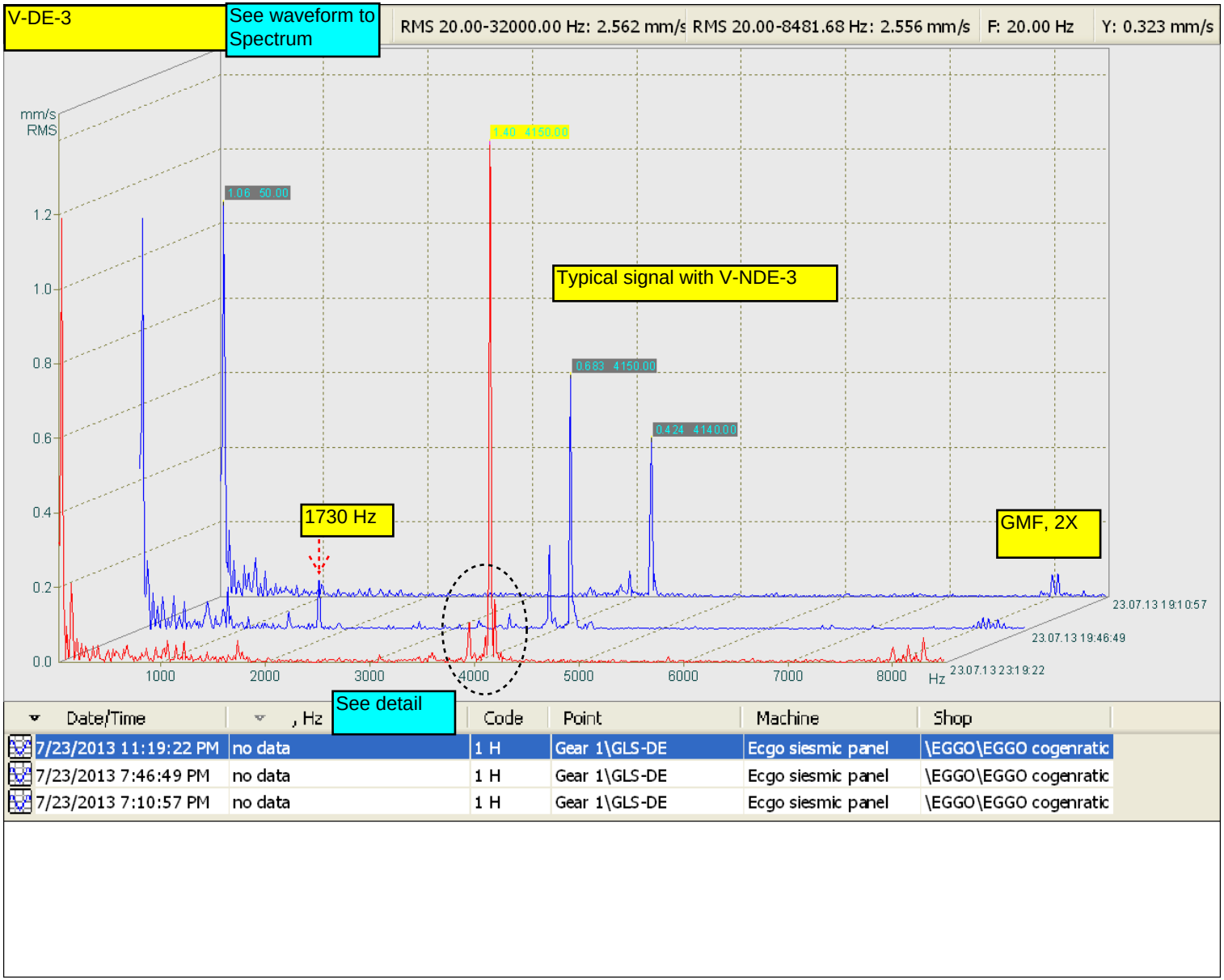
V-NDE-3

RMS 20.00-32000.00 Hz: 4.263 mm/s | RMS 3518.41-4881.37 Hz: 4.007 mm/ | F: 4150.00 Hz | Y: 3.11 mm/s



Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:19:22 PM	no data	2 H	Gear 1\GLS-NDE	Ecgo siesmic panel	\EGGO\EGGO cogenratic

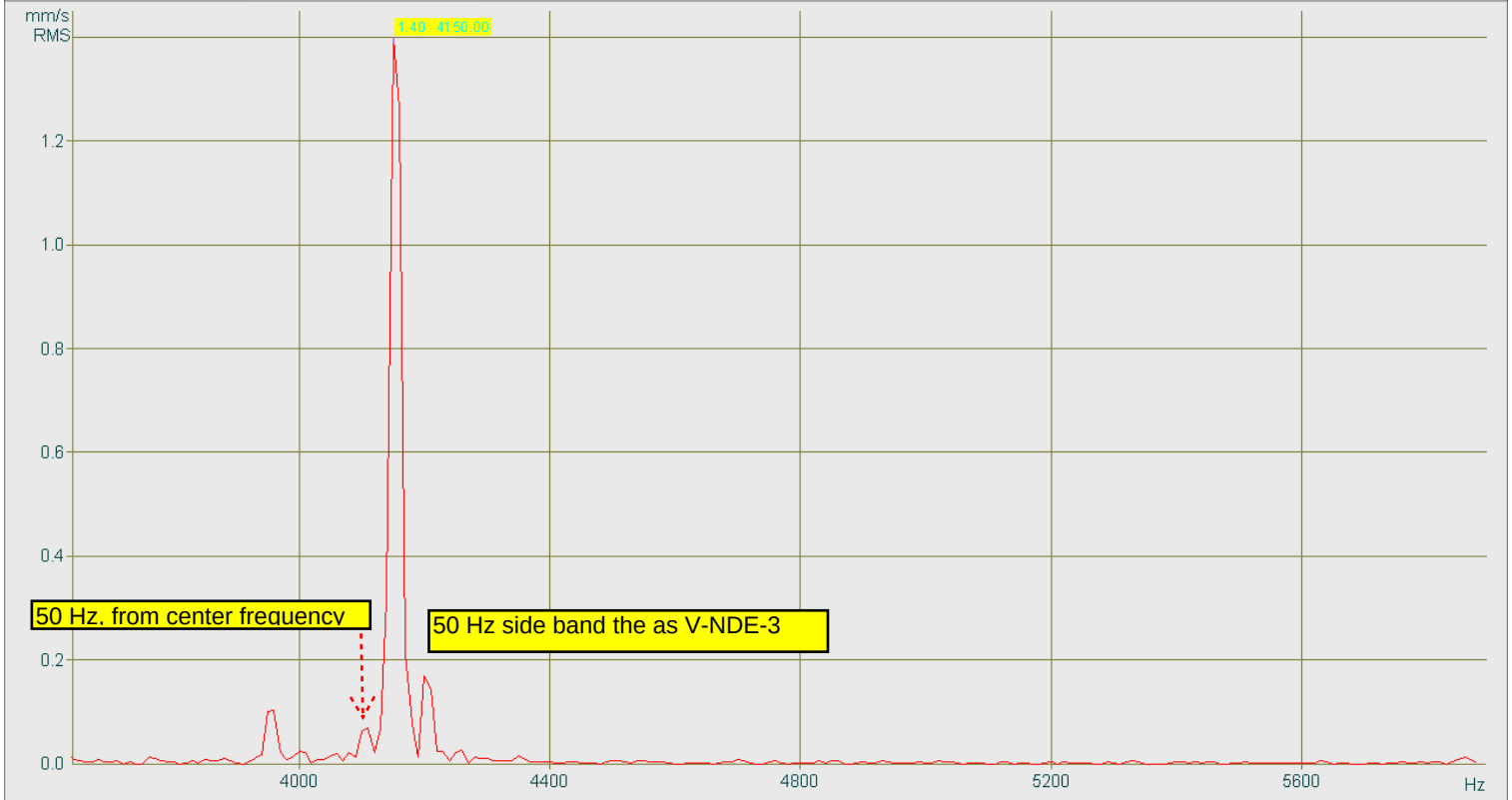

Home
V-NDE-3
ave 0.00-32000.00 Hz
T: 12.50-99.99 (12.50-18.38) ms
RMS: 102.877 (103.312) m/s
t: 17.932 ms
Y:-101.867 m/s2
m/s2
Overall
100
0
-100
GMF 4150 Hz, bandpass filter 4100-4200 Hz
100
0
-100
13
14
15
16
17
18
ms
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:19:22 PM
no data
2 H
Gear 1\GLS-NDE
Ecgo siesmic panel
\EGGO\EGGO cogenratic


V-DE-3
See waveform to Spectrum
RMS 20.00-32000.00 Hz: 2.562 mm/s
RMS 20.00-8481.68 Hz: 2.556 mm/s
F: 20.00 Hz
Y: 0.323 mm/s
mm/s RMS
1.40 4150.00
1.06 50.00
0.683 4150.00
0.424 4140.00
Typical signal with V-NDE-3
1730 Hz
GMF, 2X
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1000
2000
3000
4000
5000
6000
7000
8000
Hz
23.07.13 19:10:57
23.07.13 19:46:49
23.07.13 23:19:22
See detail
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:19:22 PM
no data
1 H
Gear 1\GLS-DE
Ecgo siesmic panel
\EGGO\EGGO cogenratic
7/23/2013 7:46:49 PM
no data
1 H
Gear 1\GLS-DE
Ecgo siesmic panel
\EGGO\EGGO cogenratic
7/23/2013 7:10:57 PM
no data
1 H
Gear 1\GLS-DE
Ecgo siesmic panel
\EGGO\EGGO cogenratic

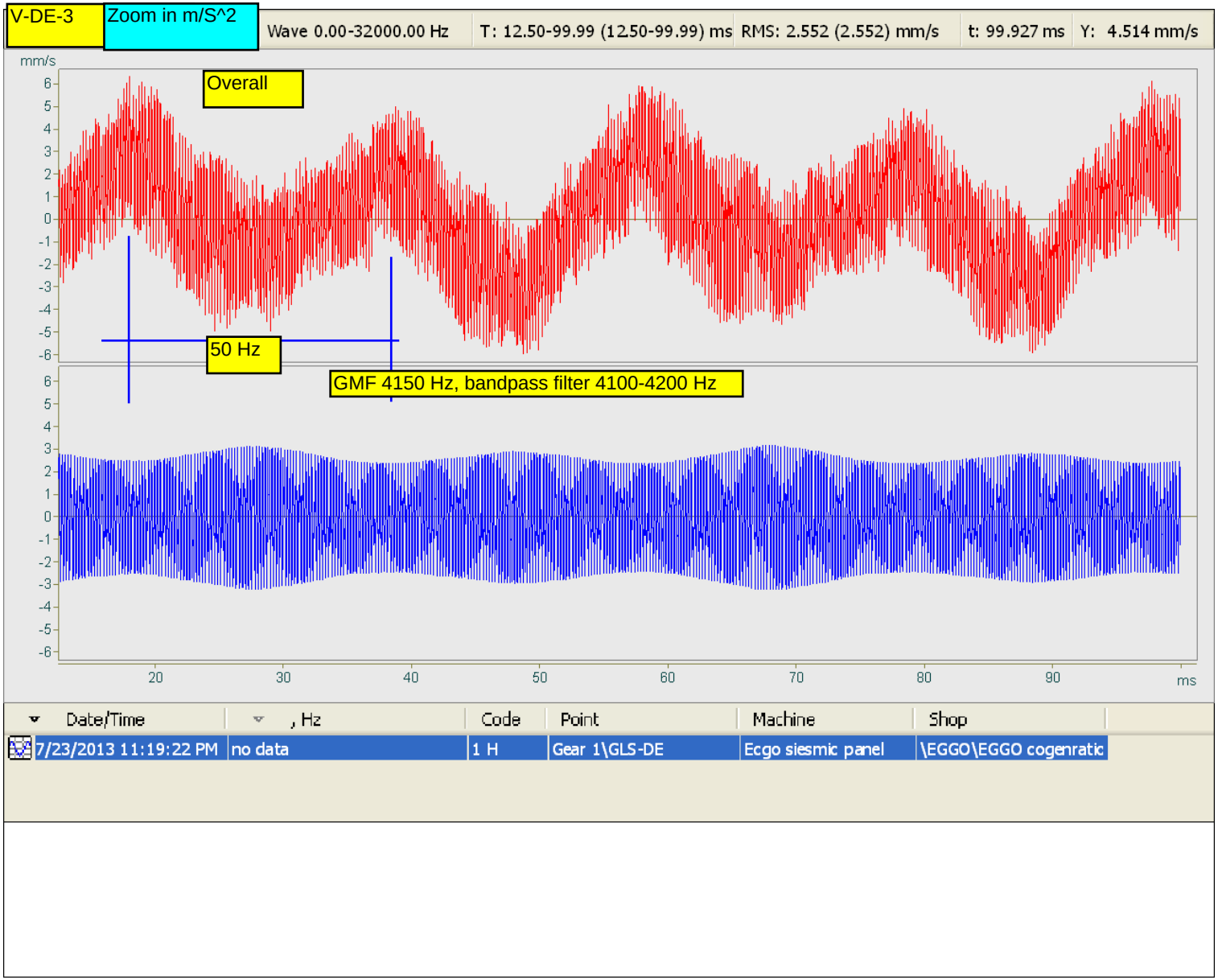
Home

V-DE-3

RMS 20.00-32000.00 Hz: 2.562 mm/s | RMS 3637.97-5881.87 Hz: 1.949 mm/ | F: 4150.00 Hz | Y: 1.40 mm/s



Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:19:22 PM	no data	1 H	Gear 1\GLS-DE	Ecgo siesmic panel	\EGGO\EGGO cogenratic

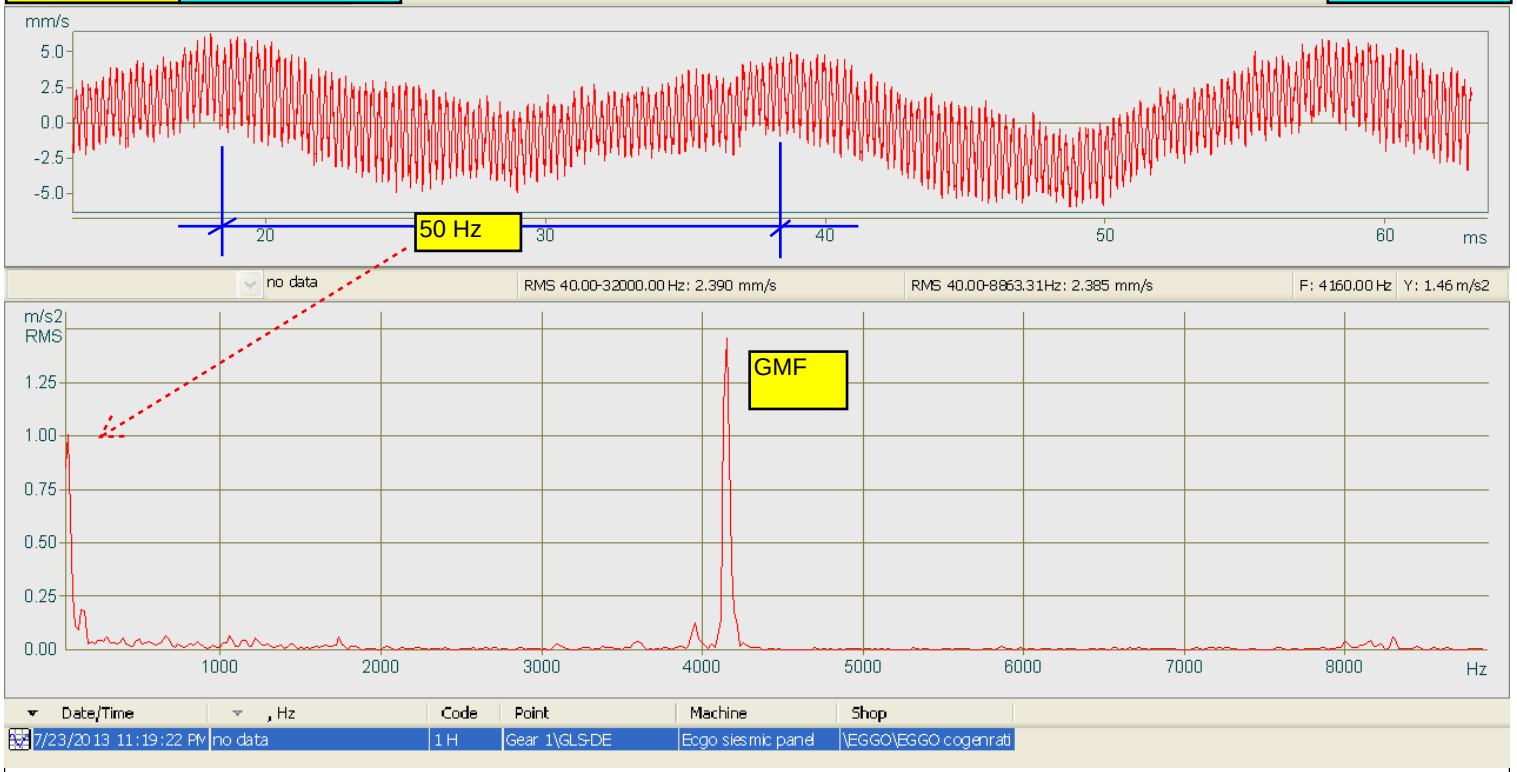

V-DE-3
Zoom in m/S^2
Wave 0.00-32000.00 Hz
T: 12.50-99.99 (12.50-99.99) ms
RMS: 2.552 (2.552) mm/s
t: 99.927 ms
Y: 4.514 mm/s
mm/s
Overall
50 Hz
GMF 4150 Hz, bandpass filter 4100-4200 Hz
ms
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:19:22 PM
no data
1 H
Gear 1\GLS-DE
Ecgo siesmic panel
\EGGO\EGGO cogenratic

V-DE-3
See waveform to spectrum
Wave 0.00-32000.00 Hz
T: 12.50-99.99 (12.64-16.94) ms
RMS: 51.619 (46.178) m/s2
t: 12.646 ms
Y:-25.957 m/s2
m/s2
Overall
100
75
50
25
0
-25
-50
-75
-100
GMF 4150 Hz, bandpass filter 4100-4200 Hz
13.0
13.5
14.0
14.5
15.0
15.5
16.0
16.5
ms
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:19:22 PM
no data
1 H
Gear 1\GLS-DE
Ecgo siesmic panel
\EGGO\EGGO cogenratic

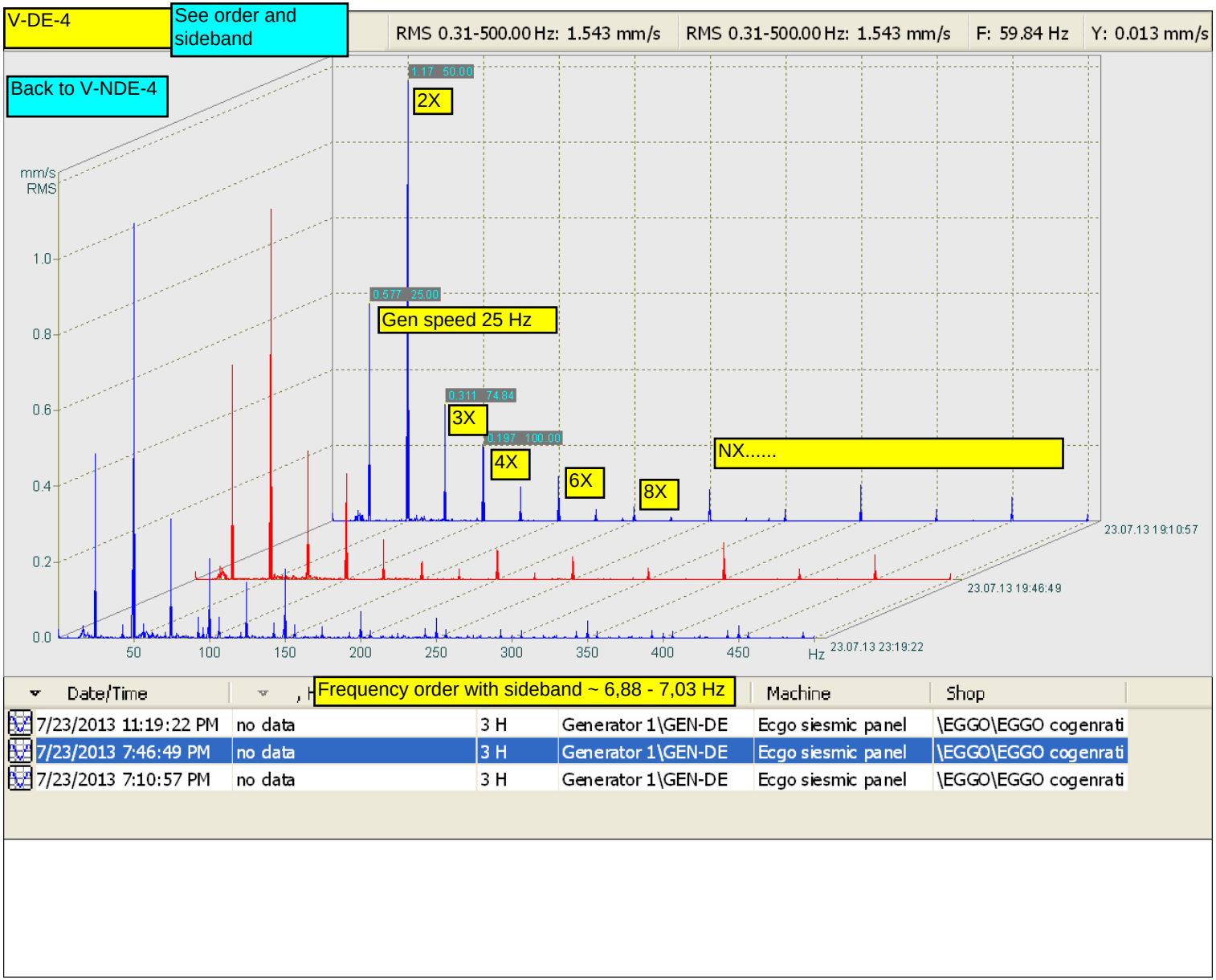
V-DE-3

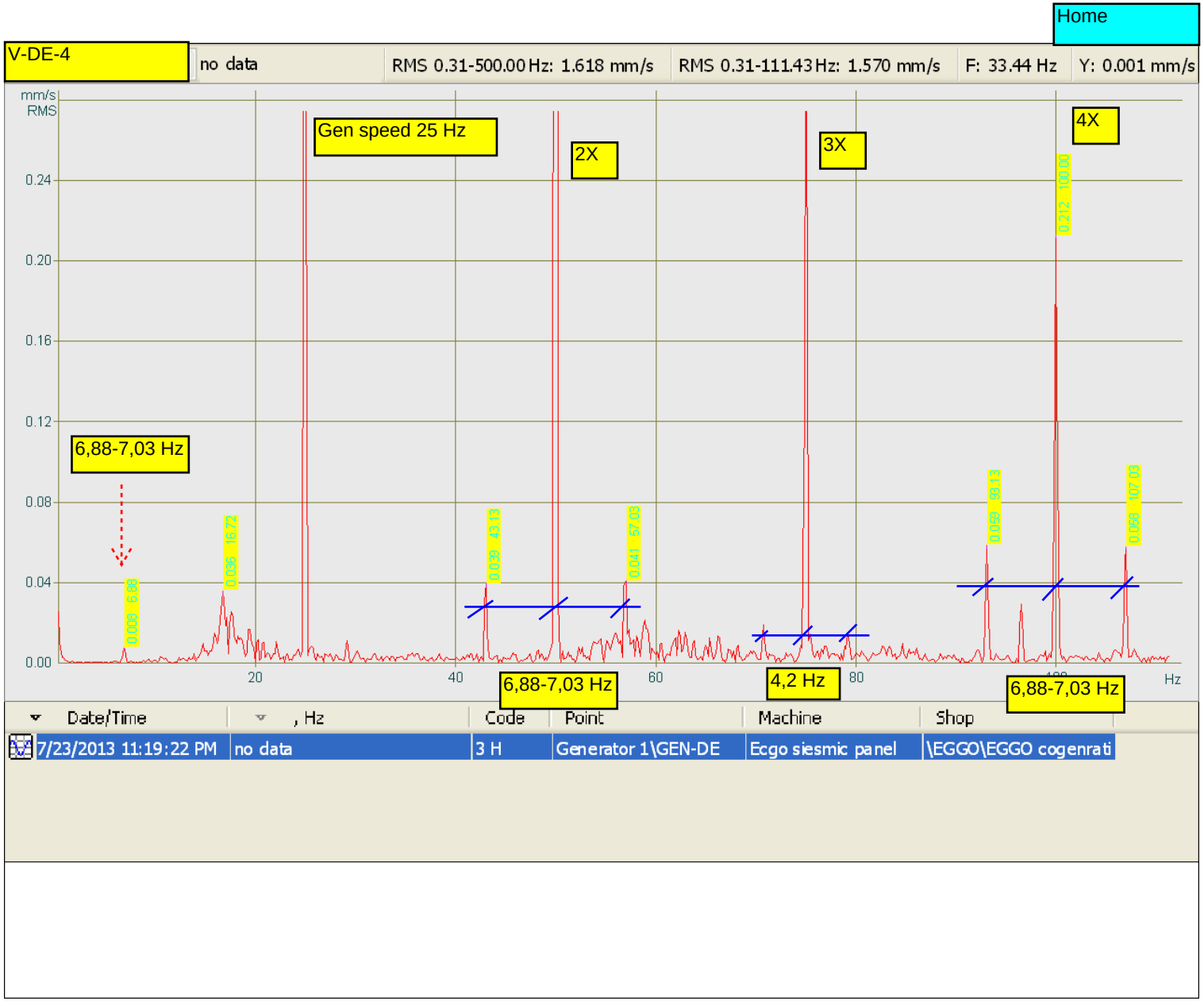
Back to spectrum

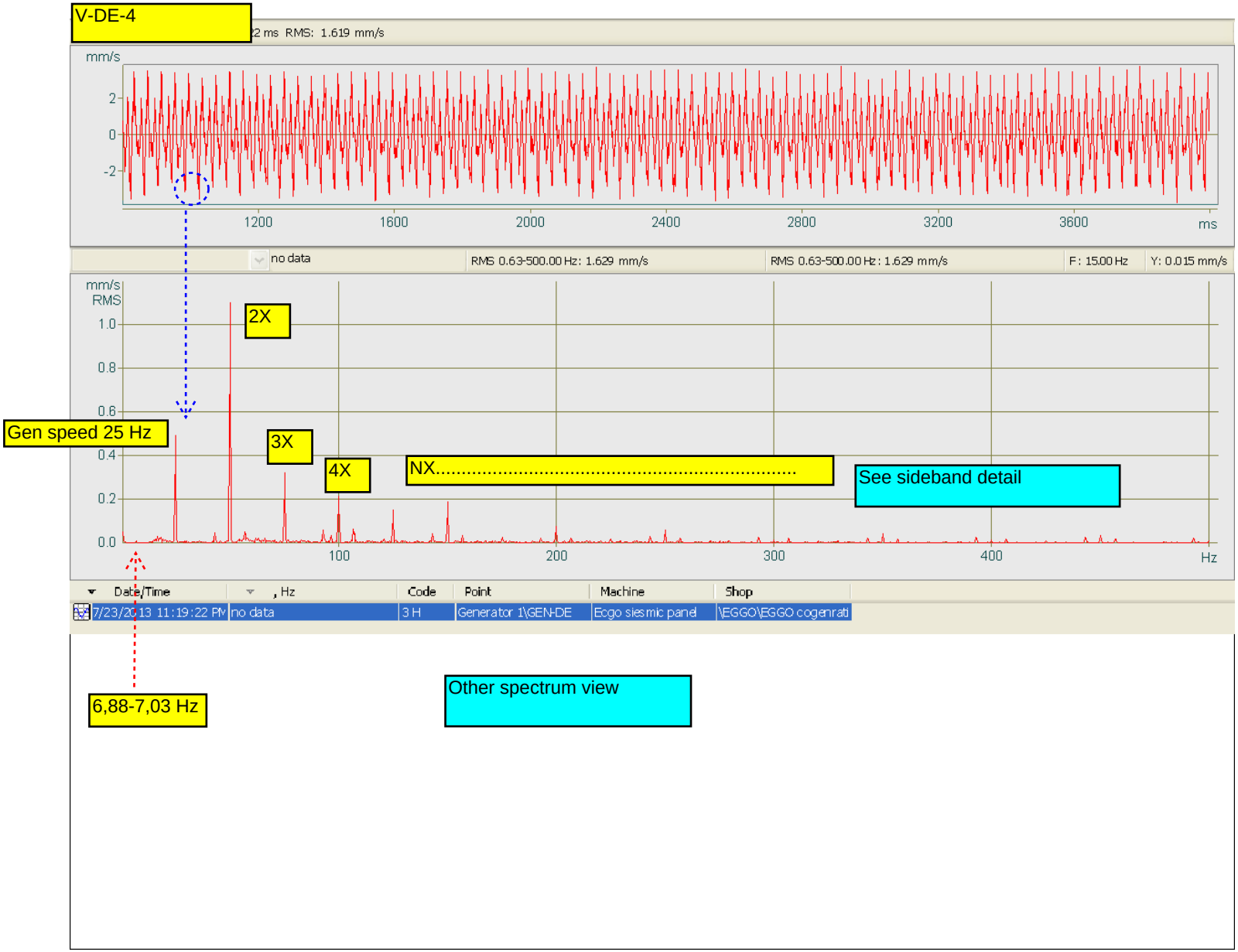
Home

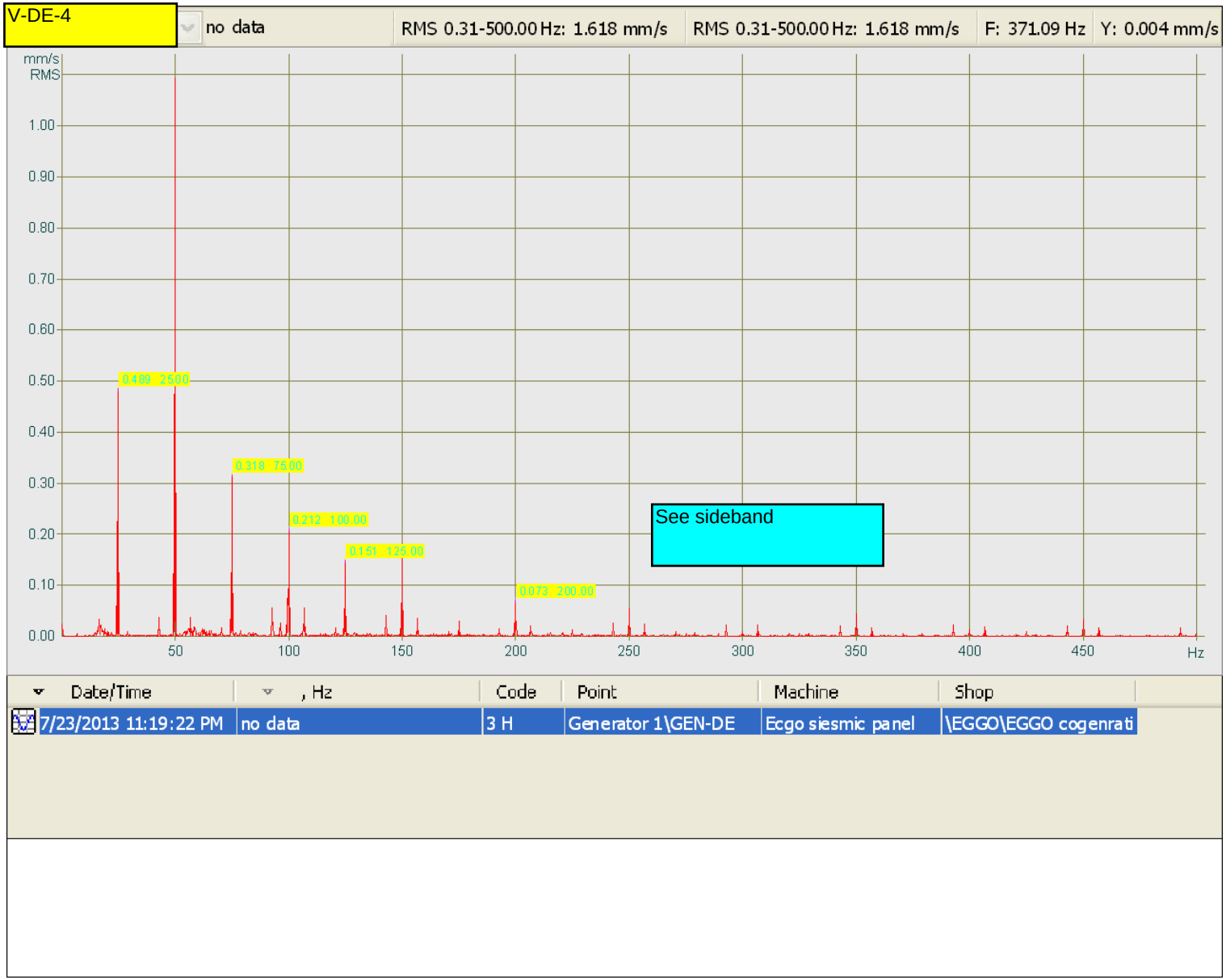


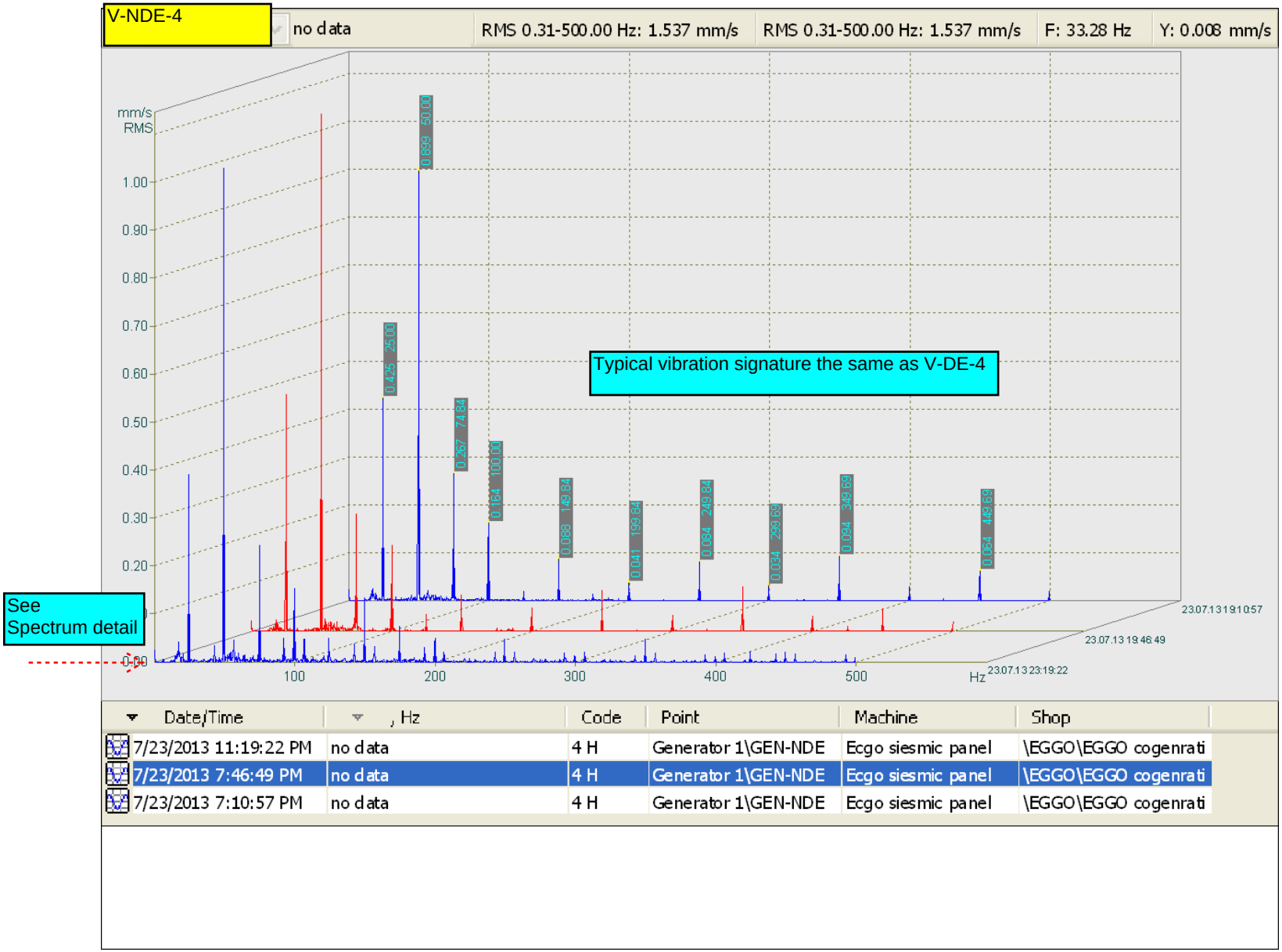
Date/Time	, Hz	Code	Point	Machine	Shop
7/23/2013 11:19:22 PM	no data	1 H	Gear 1\GLS-DE	Ecgo siesmic panel	\EGGO\EGGO cogenrati

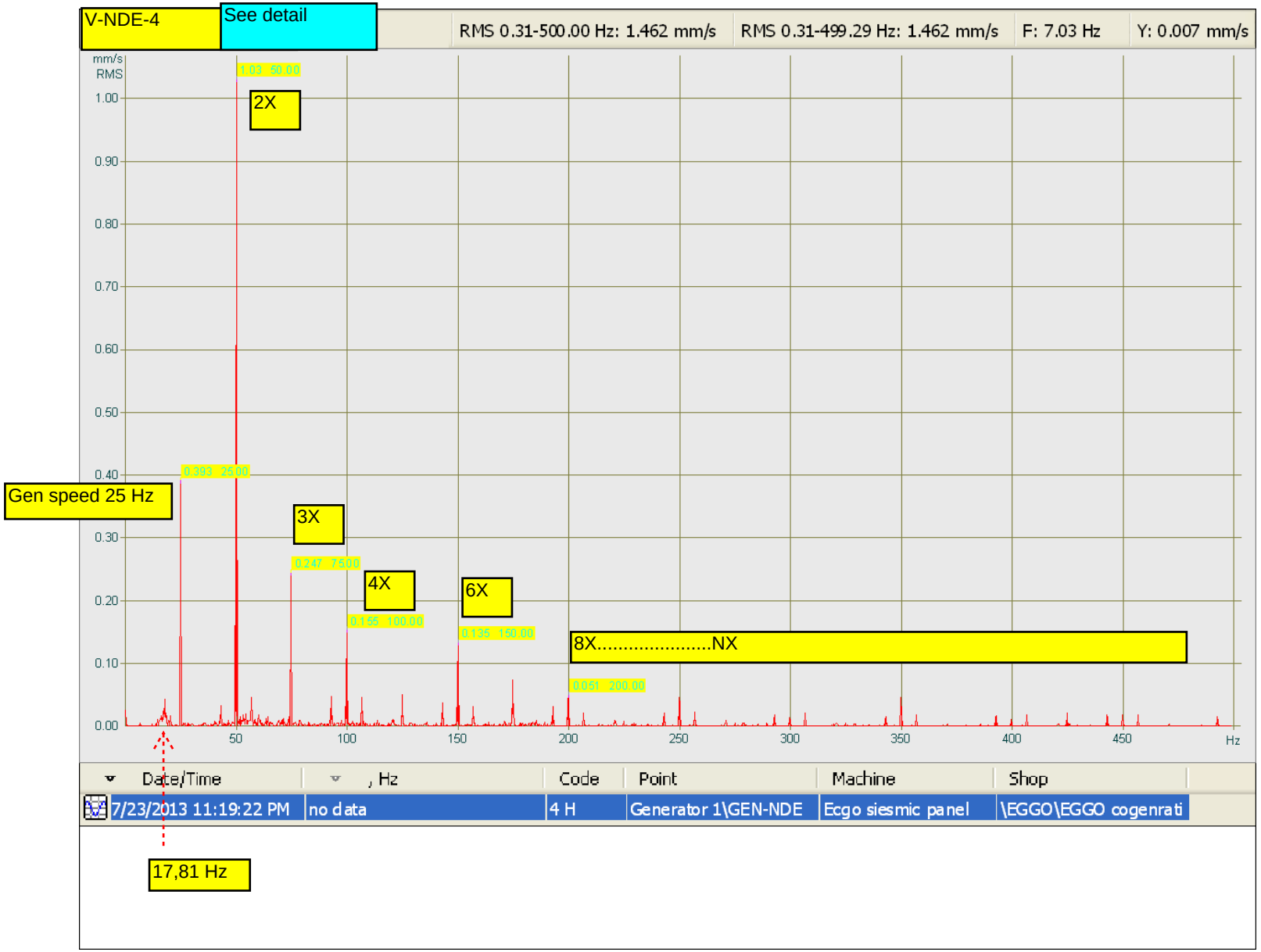

V-DE-4
See order and sideband
RMS 0.31-500.00 Hz: 1.543 mm/s
RMS 0.31-500.00 Hz: 1.543 mm/s
F: 59.84 Hz
Y: 0.013 mm/s
Back to V-NDE-4
2X
Gen speed 25 Hz
3X
4X
6X
8X
NX.....
mm/s RMS
1.0
0.8
0.6
0.4
0.2
0.0
50
100
150
200
250
300
350
400
450
Hz
23.07.13 19:10:57
23.07.13 19:46:49
23.07.13 23:19:22
Frequency order with sideband ~ 6,88 - 7,03 Hz
Date/Time
Machine
Shop
7/23/2013 11:19:22 PM
no data
3 H
Generator 1\GEN-DE
Ecgo siesmic panel
\EGGO\EGGO cogenrati
7/23/2013 7:46:49 PM
no data
3 H
Generator 1\GEN-DE
Ecgo siesmic panel
\EGGO\EGGO cogenrati
7/23/2013 7:10:57 PM
no data
3 H
Generator 1\GEN-DE
Ecgo siesmic panel
\EGGO\EGGO cogenrati

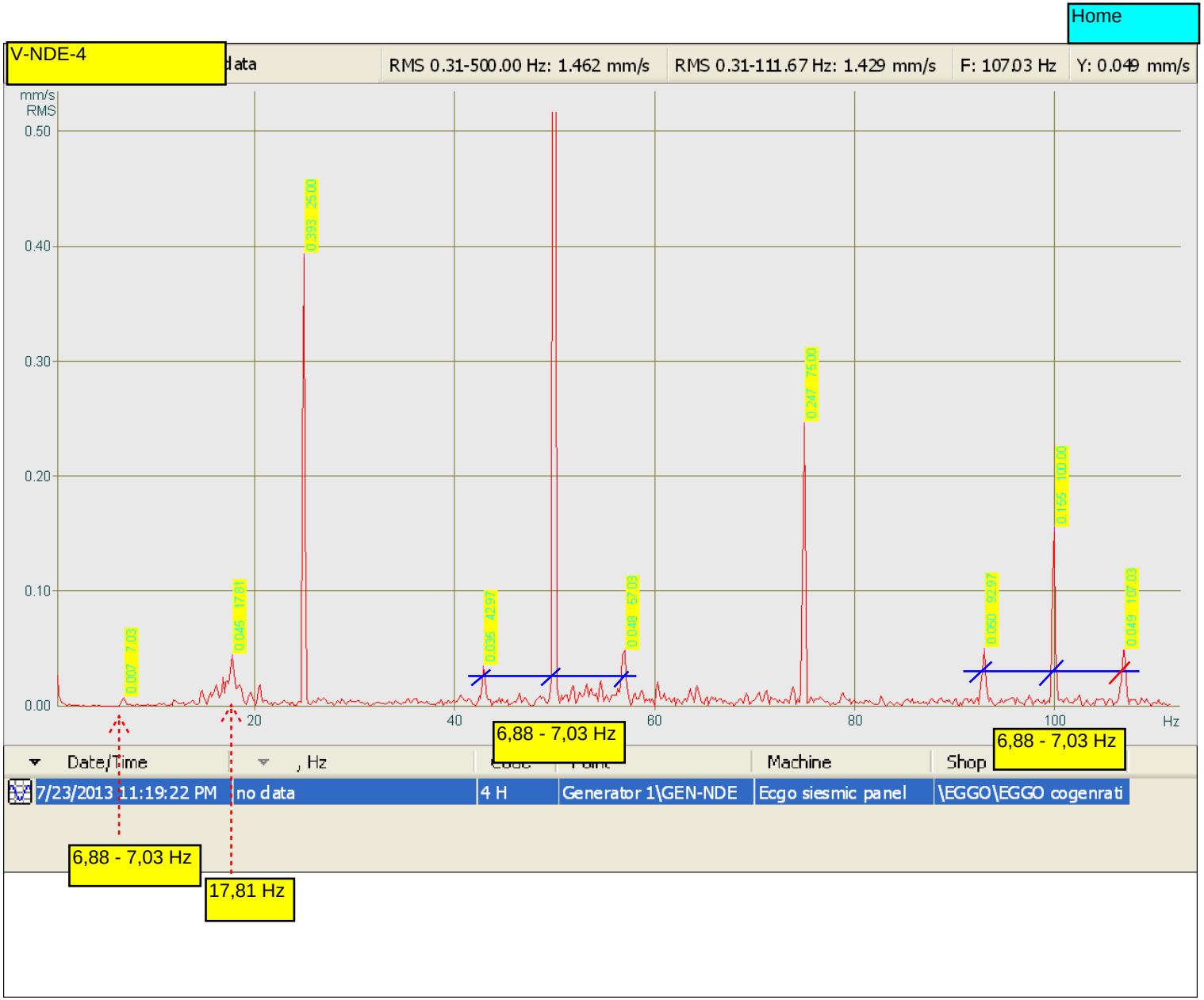

Home
V-DE-4
no data
RMS 0.31-500.00 Hz: 1.618 mm/s
RMS 0.31-111.43 Hz: 1.570 mm/s
F: 33.44 Hz
Y: 0.001 mm/s
mm/s RMS
0.24
0.20
0.16
0.12
0.08
0.04
0.00
20
40
60
80
Hz
Gen speed 25 Hz
2X
3X
4X
6,88-7,03 Hz
6,88-7,03 Hz
4,2 Hz
6,88-7,03 Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:19:22 PM
no data
3 H
Generator 1\GEN-DE
Ecgo siesmic panel
\EGGO\EGGO cogenrati


V-DE-4
2 ms RMS: 1.619 mm/s
mm/s
2
0
-2
1200
1600
2000
2400
2800
3200
3600
ms
no data
RMS 0.63-500.00 Hz: 1.629 mm/s
RMS 0.63-500.00 Hz: 1.629 mm/s
F: 15.00 Hz
Y: 0.015 mm/s
mm/s
RMS
1.0
0.8
0.6
0.4
0.2
0.0
2X
3X
4X
NX.....
See sideband detail
100
200
300
400
Hz
Gen speed 25 Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:19:22 PM
no data
3 H
Generator 1\GEN-DE
Ecgo siesmic panel
\EGGO\EGGO cogenrati
6,88-7,03 Hz
Other spectrum view

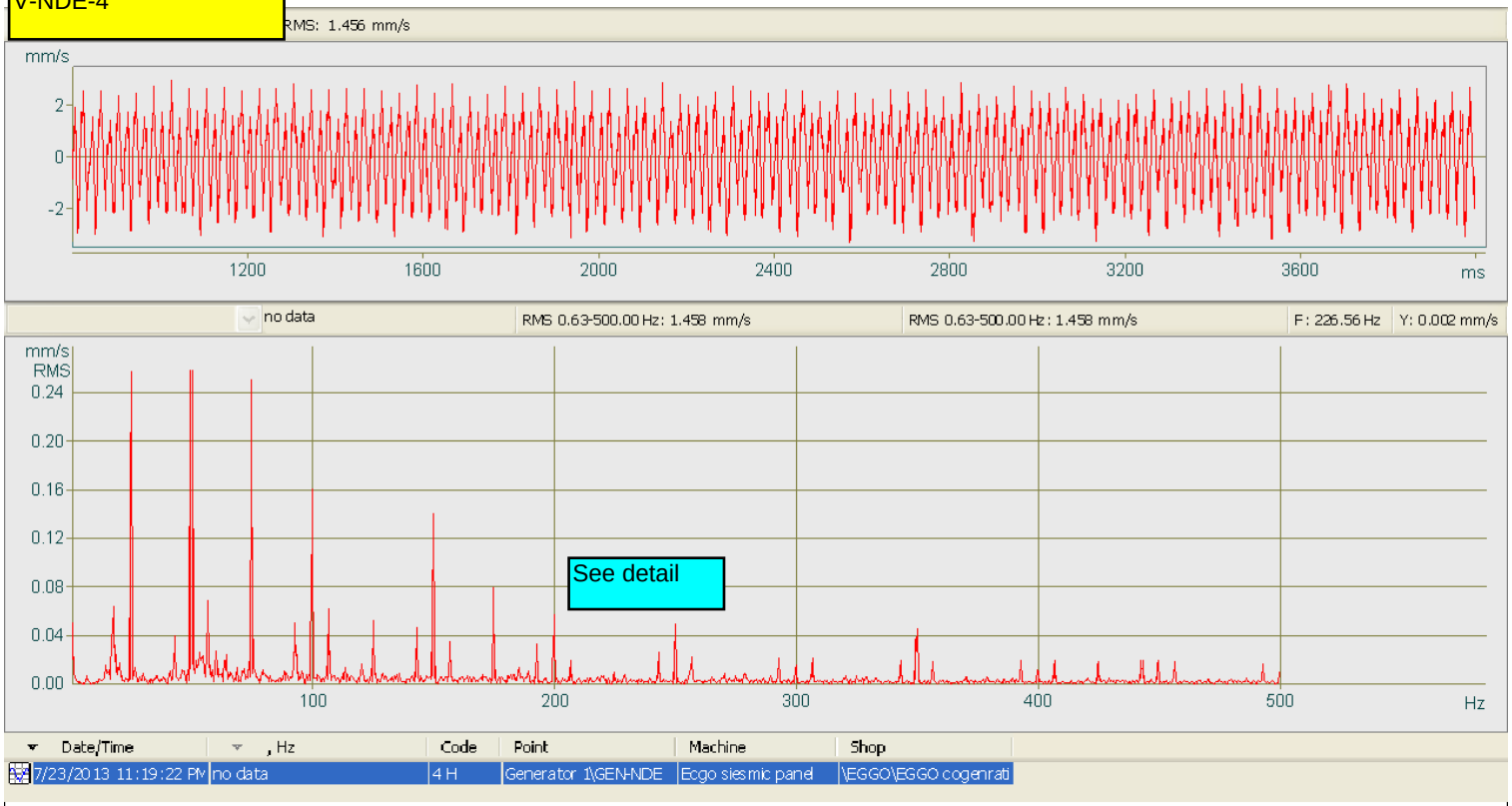

V-DE-4
no data
RMS 0.31-500.00 Hz: 1.618 mm/s
RMS 0.31-500.00 Hz: 1.618 mm/s
F: 371.09 Hz
Y: 0.004 mm/s
mm/s RMS
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0.489 25.00
0.318 75.00
0.212 100.00
0.151 125.00
0.073 200.00
See sideband
50
100
150
200
250
300
350
400
450
Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:19:22 PM
no data
3 H
Generator 1\GEN-DE
Ecgo siesmic panel
\EGGO\EGGO cogenrati


V-NDE-4
no data
RMS 0.31-500.00 Hz: 1.537 mm/s
RMS 0.31-500.00 Hz: 1.537 mm/s
F: 33.28 Hz
Y: 0.008 mm/s
mm/s RMS
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.00
100
200
300
400
500
Hz
23.07.13 19:10:57
23.07.13 19:46:49
23.07.13 23:19:22
Typical vibration signature the same as V-DE-4
See Spectrum detail
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:19:22 PM
no data
4 H
Generator 1\GEN-NDE
Ecgo siesmic panel
\EGGO\EGGO cogenrati
7/23/2013 7:46:49 PM
no data
4 H
Generator 1\GEN-NDE
Ecgo siesmic panel
\EGGO\EGGO cogenrati
7/23/2013 7:10:57 PM
no data
4 H
Generator 1\GEN-NDE
Ecgo siesmic panel
\EGGO\EGGO cogenrati


V-NDE-4
See detail
RMS 0.31-500.00 Hz: 1.462 mm/s
RMS 0.31-499.29 Hz: 1.462 mm/s
F: 7.03 Hz
Y: 0.007 mm/s
mm/s RMS
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
1.03 50.00
2X
0.393 25.00
Gen speed 25 Hz
3X
0.247 75.00
4X
0.155 100.00
6X
0.125 150.00
8X.....NX
0.051 200.00
50
100
150
200
250
300
350
400
450
Hz
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:19:22 PM
no data
4 H
Generator 1\GEN-NDE
Ecgo siesmic panel
\EGGO\EGGO cogenrati
17,81 Hz


Home
V-NDE-4
data
RMS 0.31-500.00 Hz: 1.462 mm/s
RMS 0.31-111.67 Hz: 1.429 mm/s
F: 107.03 Hz
Y: 0.049 mm/s
mm/s RMS
0.50
0.40
0.30
0.20
0.10
0.00
20
40
60
80
100
Hz
0.007 7.03
0.045 17.81
0.393 25.00
0.045 42.97
0.048 57.03
0.247 75.00
0.165 100.00
0.050 92.97
0.049 107.03
6,88 - 7,03 Hz
6,88 - 7,03 Hz
Date/Time
, Hz
Machine
Shop
7/23/2013 11:19:22 PM
no data
4 H
Generator 1\GEN-NDE
Ecgo siesmic panel
\EGGO\EGGO cogenrati
6,88 - 7,03 Hz
17,81 Hz

V-NDE-4


RMS: 1.456 mm/s
mm/s
2
0
-2
1200
1600
2000
2400
2800
3200
3600
ms
no data
RMS 0.63-500.00 Hz: 1.458 mm/s
RMS 0.63-500.00 Hz: 1.458 mm/s
F: 226.56 Hz
Y: 0.002 mm/s
mm/s
RMS
0.24
0.20
0.16
0.12
0.08
0.04
0.00
100
200
300
400
500
Hz
See detail
Date/Time
, Hz
Code
Point
Machine
Shop
7/23/2013 11:19:22 PM
no data
4 H
Generator 1\GEN-NDE
Ecgo siesmic panel
\EGGO\EGGO cogenrati

Next

Bentley Nevada vibration console

Next

Retrieve vibration data from Bentley Nevada buffered output, using Technekon STD-3300 portable data collector

Vibration data was parallel retrieving with Technekon STD-3300 and ADRE DAIU-208.