CAUSEWAY GEOTECH

# APPENDIX J

# SPT HAMMER ENERGY MEASUREMENT REPORT

# Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

**Dynamic Sampling Uk Ltd**
**Unit 8 Victory Park**
**Victory Road**
**Derby**
**DE24 8ZF**

| | |
|---|---|
| Hammer Ref: | D130 **(Asset No. 1411)** |
| Test Date: | 25/04/2022 |
| Report Date: | 25/04/2022 |
| File Name: | D130.spt |
| Test Operator: | B.HUNTER |

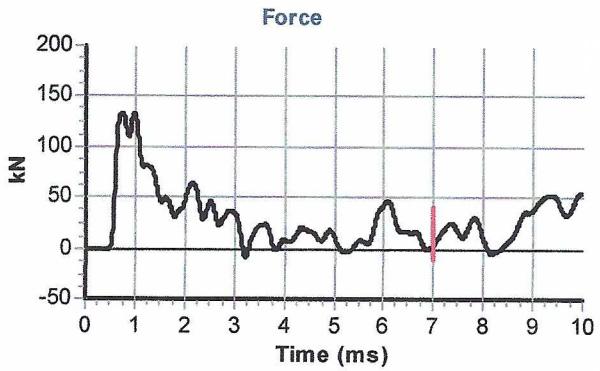
## Instrumented Rod Data

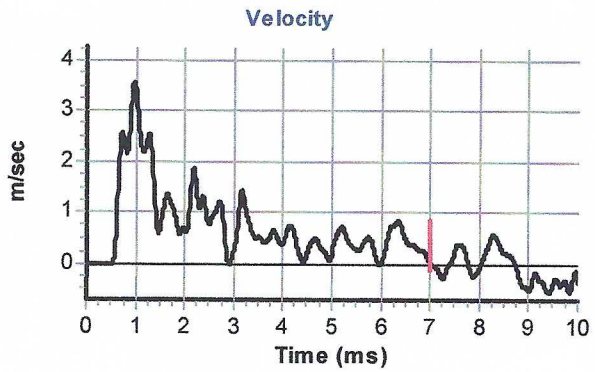
| | |
|---|---|
| Diameter $d_r$ (mm): | 54 |
| Wall Thickness $t_r$ (mm): | 6.5 |
| Assumed Modulus $E_a$ (GPa): | 208 |
| Accelerometer No.1: | 62901 |
| Accelerometer No.2: | 62902 |

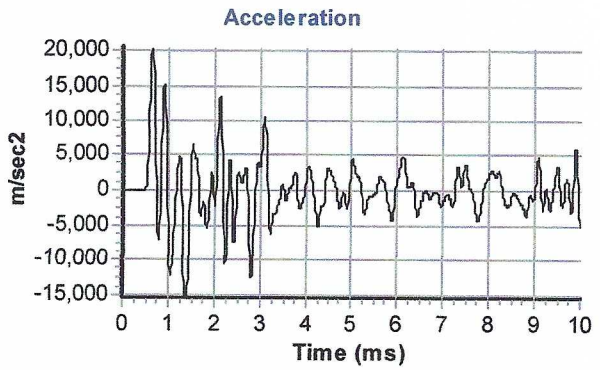
## Hammer Information

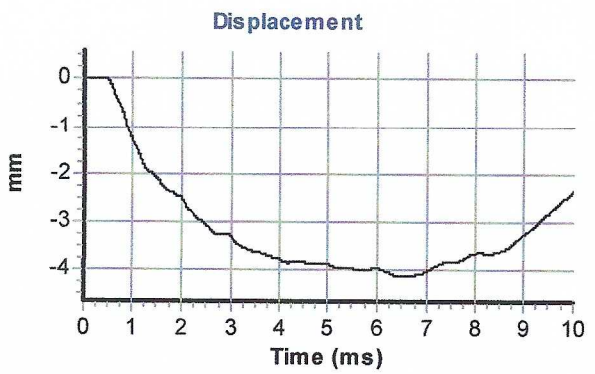
| | |
|---|---|
| Hammer Mass m (kg): | 63.5 |
| Falling Height h (mm): | 760 |
| String Length L (m): | 10.0 |

**Comments / Location**




## Calculations

| | |
|---|---|
| Area of Rod A (mm2): | 970 |
| Theoretical Energy $E_{theor}$ (J): | 473 |
| Measured Energy $E_{meas}$ (J): | 318 |

**Energy Ratio $E_r$ (%):** **67**

Signed: B.Hunter

Title: Operations Manager

The recommended calibration interval is 12 months

Southern Testing
Environmental & Geotechnical

# SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

**Southern Testing**
**Unit 11**
**Charlwoods Road**
**East Grinstead**
**West Sussex**
**RH19 2HU**

| | |
|---|---|
| SPT Hammer Ref: | 0643 |
| Test Date: | 12/02/2022 |
| Report Date: | 14/02/2022 |
| File Name: | 0643.spt |
| Test Operator: | NPB |

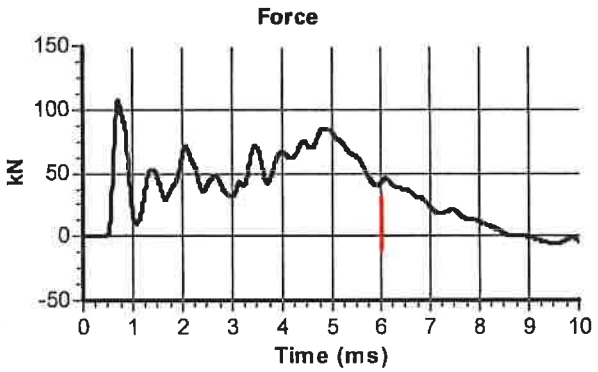
**Instrumented Rod Data**

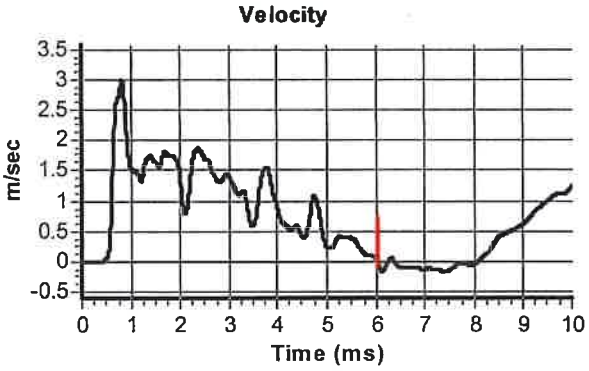
| | |
|---|---|
| Diameter $d_r$ (mm): | 54 |
| Wall Thickness $t_r$ (mm): | 6.0 |
| Assumed Modulus $E_a$ (GPa): | 200 |
| Accelerometer No.1: | 64786 |
| Accelerometer No.2: | 64789 |

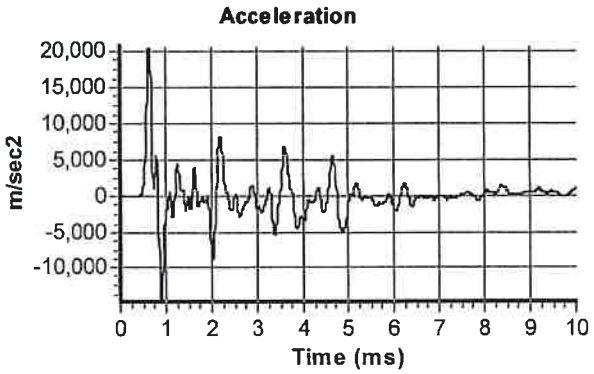
**SPT Hammer Information**

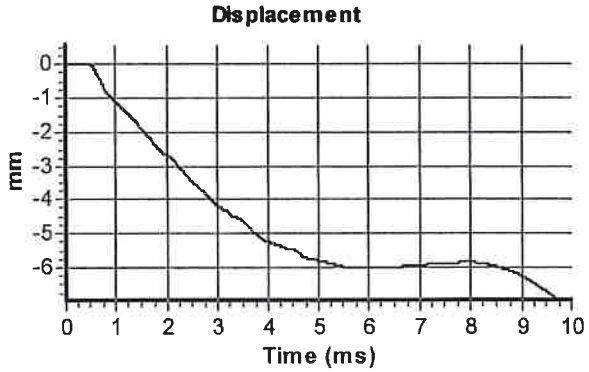
| | |
|---|---|
| Hammer Mass m (kg): | 63.0 |
| Falling Height h (mm): | 760 |
| SPT String Length L (m): | 12.0 |

**Comments / Location**
CAUSEWAY




**Calculations**

| | |
|---|---|
| Area of Rod A (mm2): | 905 |
| Theoretical Energy $E_{theor}$ (J): | 473 |
| Measured Energy $E_{meas}$ (J): | 340 |

**Energy Ratio $E_r$ (%): 72**

The recommended calibration interval is 12 months

N Burrows

Signed: N Burrows
Title: FOC Manager

Southern Testing
Environmental & Geotechnical

# SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

**Southern Testing**
**Unit 11**
**Charlwoods Road**
**East Grinstead**
**West Sussex**
**RH19 2HU**

| | |
|---|---|
| SPT Hammer Ref: | 0208 |
| Test Date: | 12/02/2022 |
| Report Date: | 14/02/2022 |
| File Name: | 0208.spt |
| Test Operator: | NPB |

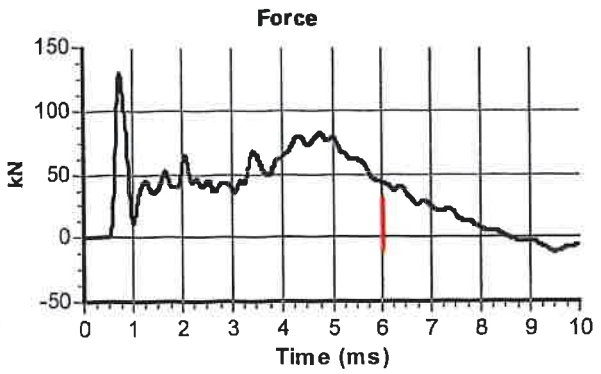
## Instrumented Rod Data

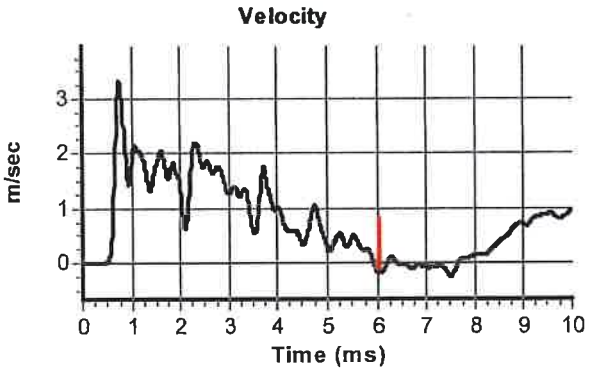
| | |
|---|---|
| Diameter $d_r$ (mm): | 54 |
| Wall Thickness $t_r$ (mm): | 6.0 |
| Assumed Modulus $E_a$ (GPa): | 200 |
| Accelerometer No.1: | 64786 |
| Accelerometer No.2: | 64789 |

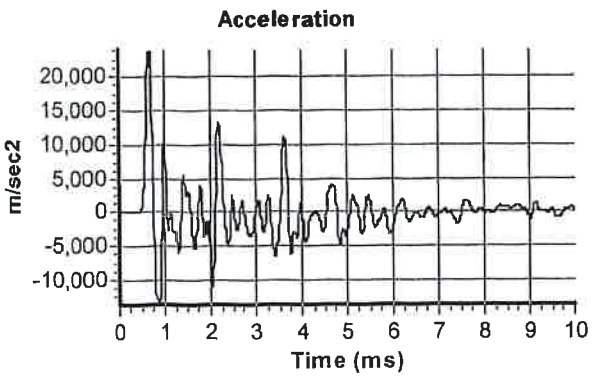
## SPT Hammer Information

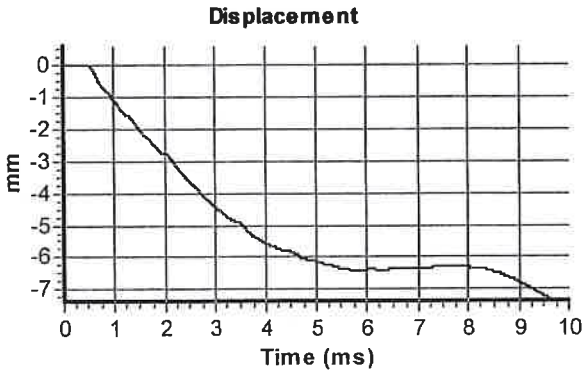
| | |
|---|---|
| Hammer Mass m (kg): | 63.0 |
| Falling Height h (mm): | 760 |
| SPT String Length L (m): | 12.0 |

**Comments / Location**
CAUSEWAY




## Calculations

| | |
|---|---|
| Area of Rod A (mm2): | 905 |
| Theoretical Energy $E_{theor}$ (J): | 473 |
| Measured Energy $E_{meas}$ (J): | 357 |

**Energy Ratio $E_r$ (%):** **76**

N Burrows

Signed: N Burrows
Title: FOC Manager

The recommended calibration interval is 12 months

# Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

| | |
|---|---|
| Hammer Ref: | D124 |
| Test Date: | 20/10/2021 |
| Report Date: | |
| File Name: | D124.spt |
| Test Operator: | B HUNTER |

**Instrumented Rod Data**

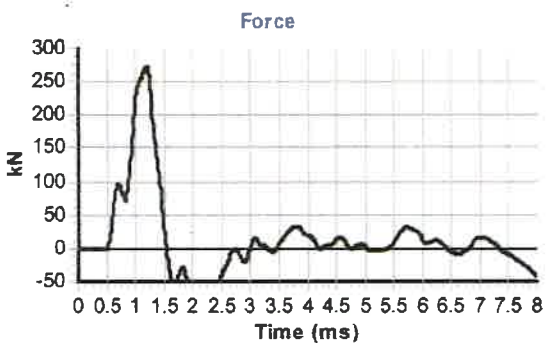
| | |
|---|---|
| Diameter $d_r$ (mm): | 54 |
| Wall Thickness $t_r$ (mm): | 6.0 |
| Assumed Modulus $E_a$ (GPa): | 208 |
| Accelerometer No.1: | 62901 |
| Accelerometer No.2: | 62902 |

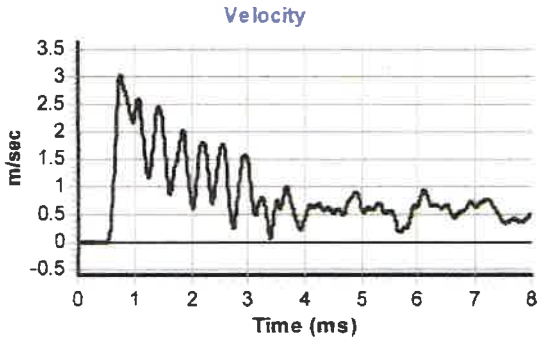
**Hammer Information**

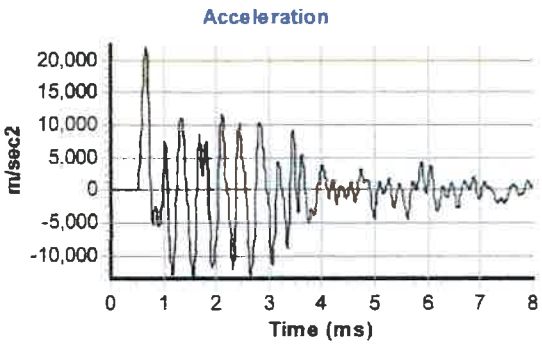
| | |
|---|---|
| Hammer Mass m (kg): | 63.5 |
| Falling Height h (mm): | 760 |
| String Length L (m): | 10.0 |

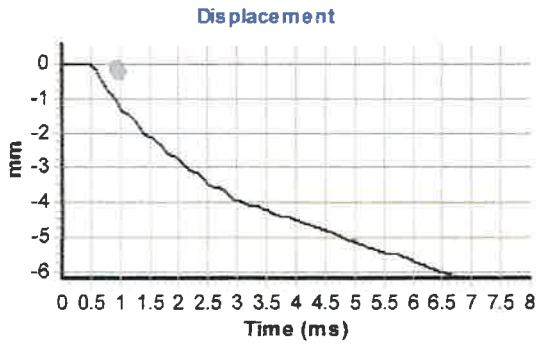
**Comments / Location**

Asset 1384.
1386.




**Calculations**

| | |
|---|---|
| Area of Rod A (mm2): | 905 |
| Theoretical Energy $E_{theor}$ (J): | 473 |
| Measured Energy $E_{meas}$ (J): | 260 |

**Energy Ratio $E_r$ (%):** **55**

Signed:

Title: Operations Manager

The recommended calibration interval is 12 months