

Certificate of Calibration

Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: K14129 Temperature: 24.9 °C

Model: KICHER PR Humidity: 47%

Calibrated on: Channel 4 on 8G 5161 LE

PDA CALIBRATION FACTOR

346.9 mv/5000g

(69.4 μ v/g)

R²: 0.999950 [Chip programmed]

Ref Acc 1: 78270! Cal on: 11Jan2024
971 g's/volt

Ref Acc 2: 78268! Cal on: 11Jan2024
986 g's/volt

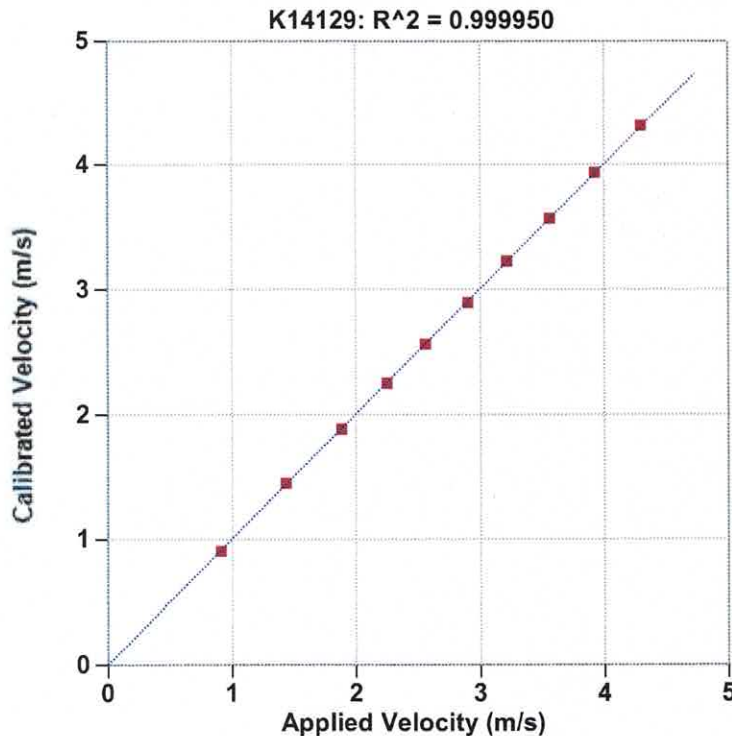
Operator: William Johnson

Signed

Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

Calibration valid 2 years

From: OCT 11 2024



Reference Velocity	S/N K14129 Velocity
m/s	m/s
0.913	0.905
1.439	1.445
1.886	1.876
2.254	2.246
2.564	2.563
2.905	2.893
3.222	3.226
3.566	3.566
3.929	3.934
4.302	4.311

Maximum Acceleration: 917 g's



Certificate of Calibration

Pile Dynamics, Inc.

Transducer Model: PDI Strain Transducer

Serial Number: Z387

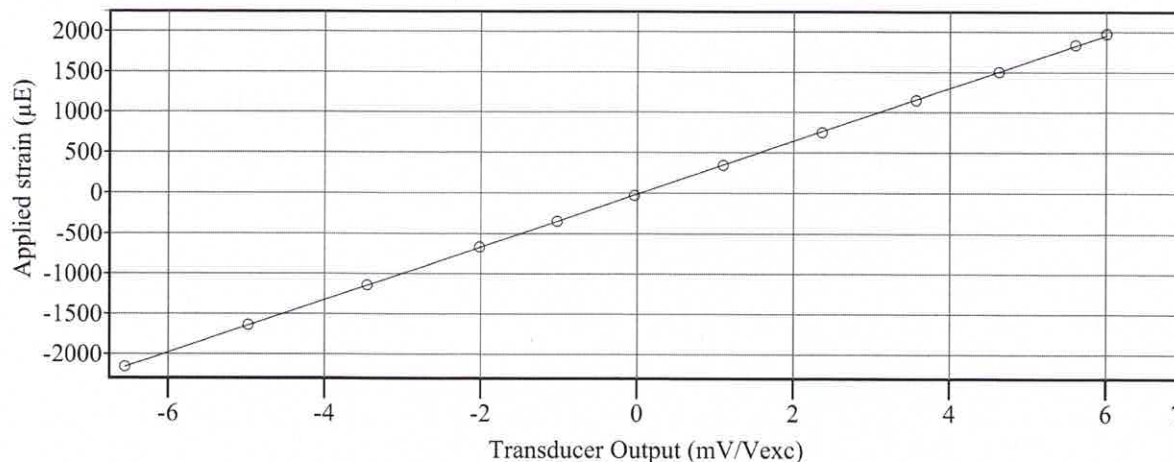
PDI Gage Factor: 94.8

Mean Linear Correlation Coefficient: 0.999959

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2158.8	-6.554	341.2	1.097
-1640.4	-4.975	750.2	2.364
-1141.7	-3.454	1148.3	3.569
-669.3	-2.016	1502.6	4.626
-347.8	-1.023	1837.3	5.606
-28.4	-0.034	1975.1	6.006

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Paul Hartman

Signature:

Paul Hartman

PDI Gage: Z387

OCT 11 2024

Calibration Date: _____





Certificate of Calibration

Pile Dynamics, Inc.

Transducer Model: PDI Strain Transducer

Serial Number: Z388

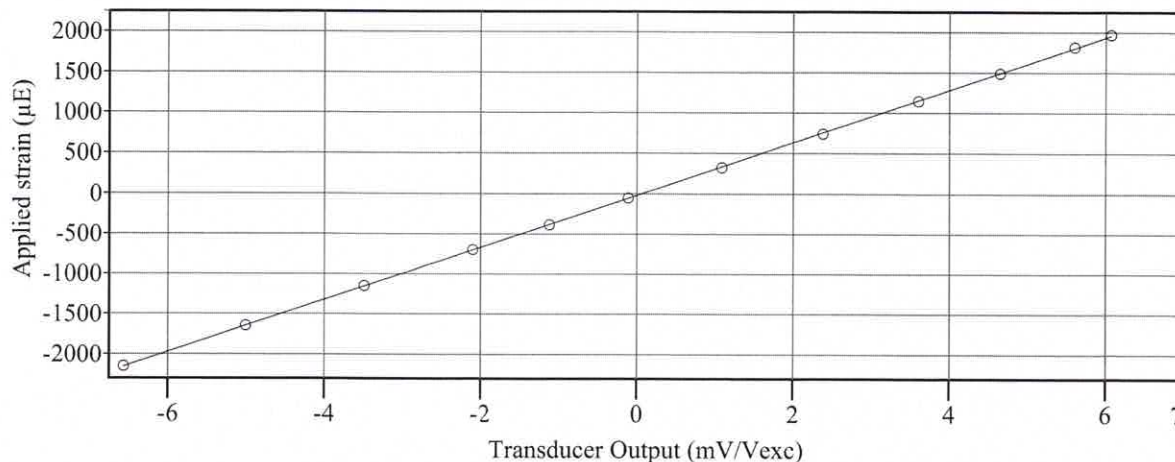
PDI Gage Factor: 94.0

Mean Linear Correlation Coefficient: 0.999958

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2152.2	-6.566	321.5	1.083
-1647.0	-5.002	741.5	2.383
-1148.3	-3.485	1148.3	3.605
-699.9	-2.102	1489.5	4.647
-387.1	-1.118	1817.6	5.603
-50.3	-0.107	1968.5	6.071

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Paul Hartman

Signature: _____

Paul Hartman

PDI Gage: Z388

Calibration Date: OCT 11 2024





Certificate of Calibration

Pile Dynamics, Inc.

Transducer Model: PDI Strain Transducer

Serial Number: Z389

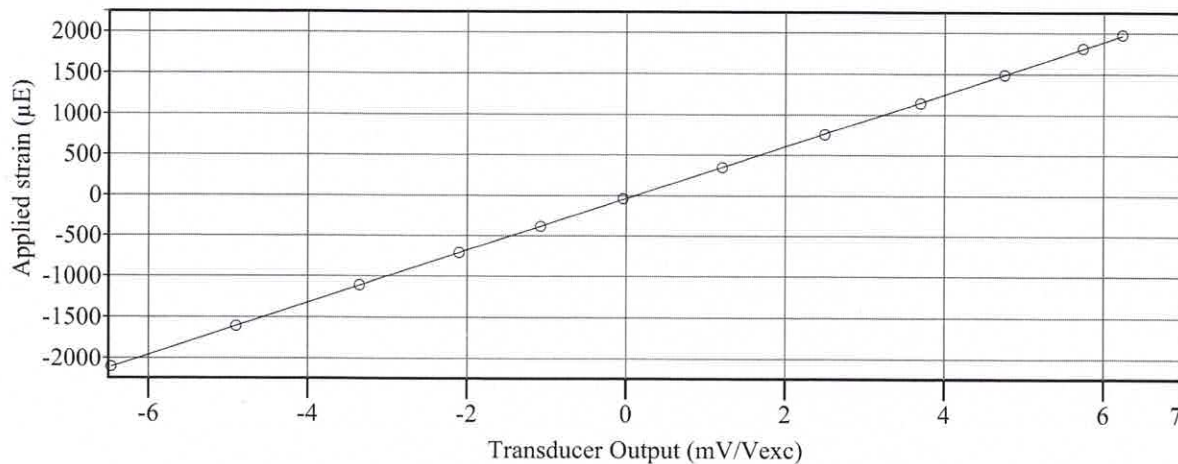
PDI Gage Factor: 92.7

Mean Linear Correlation Coefficient: 0.999979

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2106.3	-6.466	347.8	1.204
-1607.6	-4.898	754.6	2.494
-1108.9	-3.348	1143.9	3.699
-708.7	-2.099	1489.5	4.749
-380.6	-1.074	1811.0	5.739
-39.4	-0.039	1975.1	6.231

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Paul Hartman

Signature: _____

Paul Hartman

PDI Gage: Z389

Calibration Date: OCT 11 2024





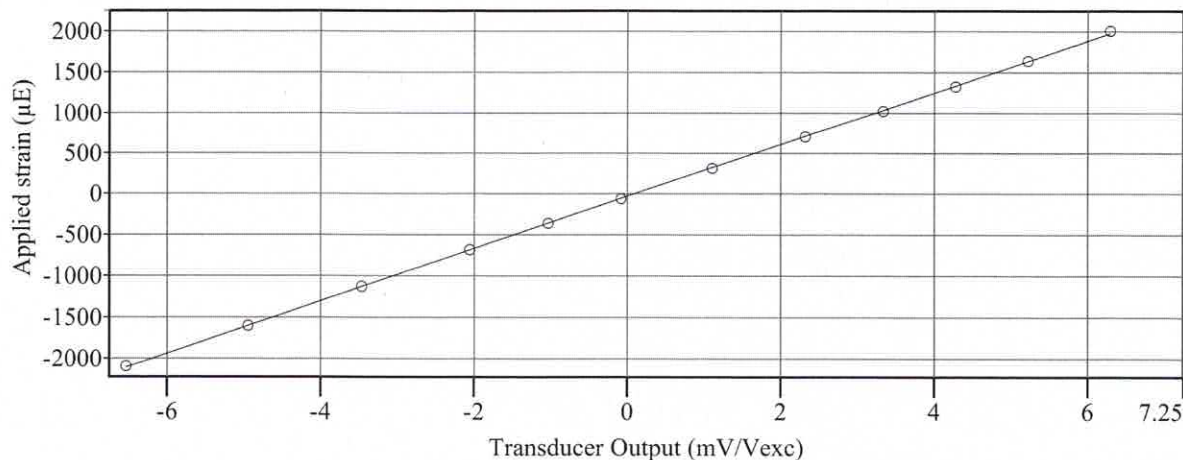
Certificate of Calibration

Pile Dynamics, Inc.
 Transducer Model: PDI Strain Transducer
 Serial Number: Y969
 PDI Gage Factor: 92.1
 Mean Linear Correlation Coefficient: 0.999914

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2095.4	-6.532	312.8	1.104
-1601.0	-4.940	702.1	2.317
-1128.6	-3.460	1023.6	3.331
-682.4	-2.055	1325.5	4.276
-358.7	-1.033	1640.4	5.216
-59.1	-0.084	2007.9	6.292

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Kay Tol

Signature: Kay Tol

PDI Gage: Y969

OCT 11 2024

Calibration Date: _____



Certificate of Calibration

Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: 80373 Temperature: 23.0 °C
Model: PE Humidity: 42%
Calibrated on: Channel 4 on 8G 5161 LE

PDA CALIBRATION FACTOR

945.1 g's/volt

R²: 0.999947 [Chip programmed]

Ref Acc 1: 78270! Cal on: 11Jan2024
971 g's/volt
Ref Acc 2: 78268! Cal on: 11Jan2024
986 g's/volt

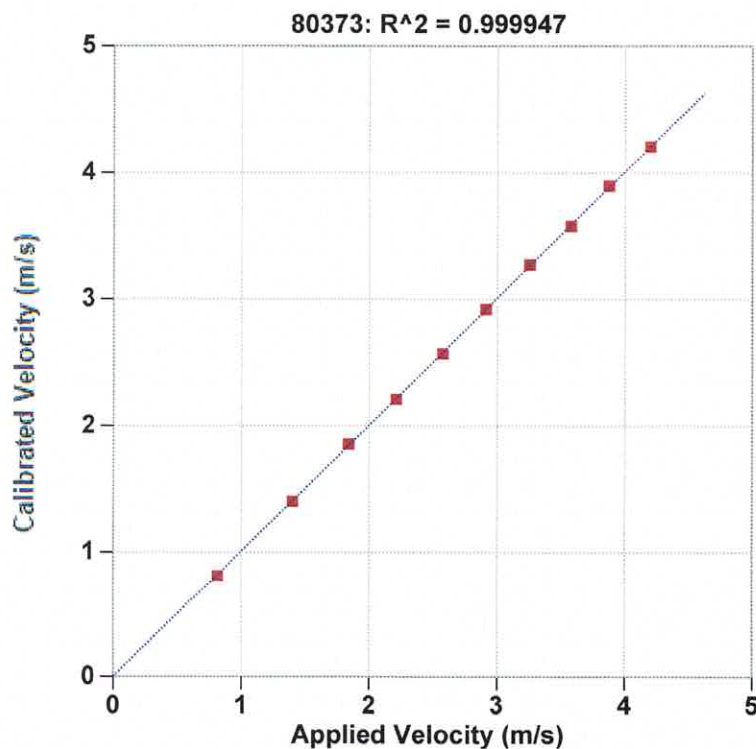
Operator: William Johnson

Signed

Calibration valid 2 years

From: **OCT 10 2024**

Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).



Reference Velocity	S/N 80373 Velocity
m/s	m/s
0.817	0.809
1.407	1.400
1.843	1.855
2.217	2.213
2.580	2.571
2.916	2.918
3.262	3.270
3.584	3.575
3.881	3.891
4.206	4.203

Maximum Acceleration: 915 g's



Certificate of Calibration

Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: 80427 Temperature: 23.0 °C

Model: PE Humidity: 42%

Calibrated on: Channel 3 on 8G 5161 LE

Ref Acc 1: 78270! Cal on: 11Jan2024
971 g's/volt

Ref Acc 2: 78268! Cal on: 11Jan2024
986 g's/volt

Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

PDA CALIBRATION FACTOR

929.6 g's/volt

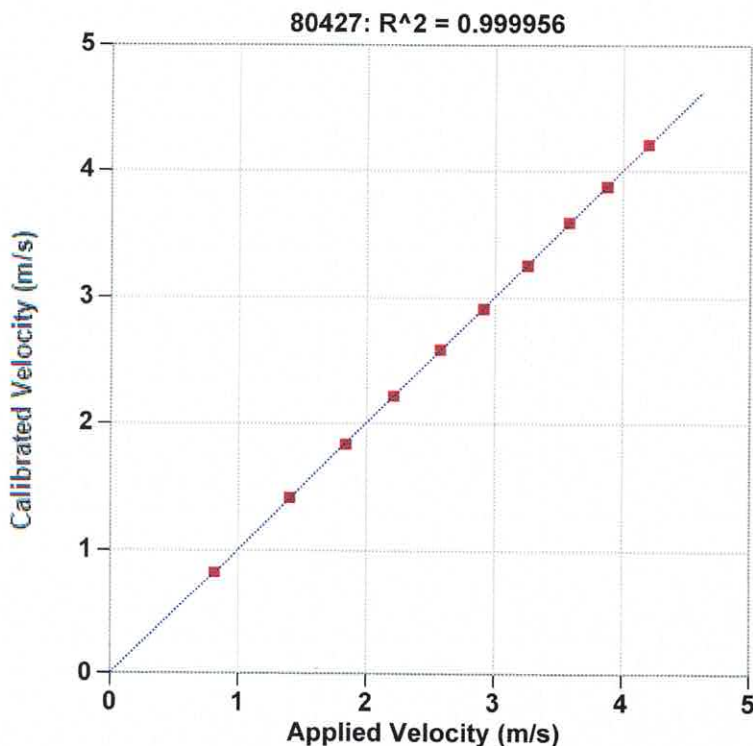
R²: 0.999956 [Chip programmed]

Operator: William Johnson


Signed

Calibration valid 2 years

From: OCT 1 0 2024



Reference Velocity	S/N 80427 Velocity
m/s	m/s
0.817	0.823
1.407	1.414
1.843	1.832
2.217	2.220
2.580	2.589
2.916	2.912
3.262	3.256
3.584	3.590
3.881	3.874
4.206	4.209

Maximum Acceleration: 915 g's



Certificate of Calibration

Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: 80372 Temperature: 23.2 °C
Model: PE Humidity: 42%
Calibrated on: Channel 4 on 8G 5161 LE

PDA CALIBRATION FACTOR

931.1 g's/volt

R²: 0.999979 [Chip programmed]

Ref Acc 1: 78270! Cal on: 11Jan2024
971 g's/volt
Ref Acc 2: 78268! Cal on: 11Jan2024
986 g's/volt

Operator: William Johnson

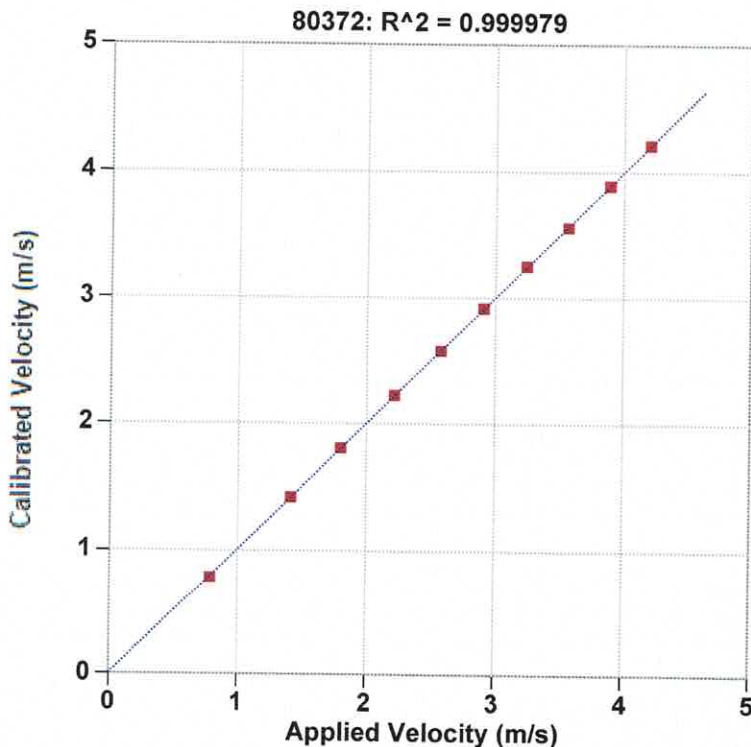
Signed

Calibration valid 2 years

OCT 10 2024

From: _____

Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).



Reference Velocity	S/N 80372 Velocity
m/s	m/s
0.790	0.781
1.419	1.423
1.805	1.807
2.223	2.226
2.583	2.579
2.914	2.918
3.250	3.255
3.571	3.563
3.895	3.895
4.212	4.213

Maximum Acceleration: 919 g's



Certificate of Calibration

Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: 80473 Temperature: 23.0 °C

Model: PE Humidity: 42%

Calibrated on: Channel 3 on 8G 5161 LE

PDA CALIBRATION FACTOR

933.2 g's/volt

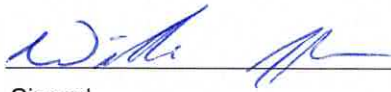
R²: 0.999967 [Chip programmed]

Ref Acc 1: 78270! Cal on: 11Jan2024
971 g's/volt

Ref Acc 2: 78268! Cal on: 11Jan2024
986 g's/volt

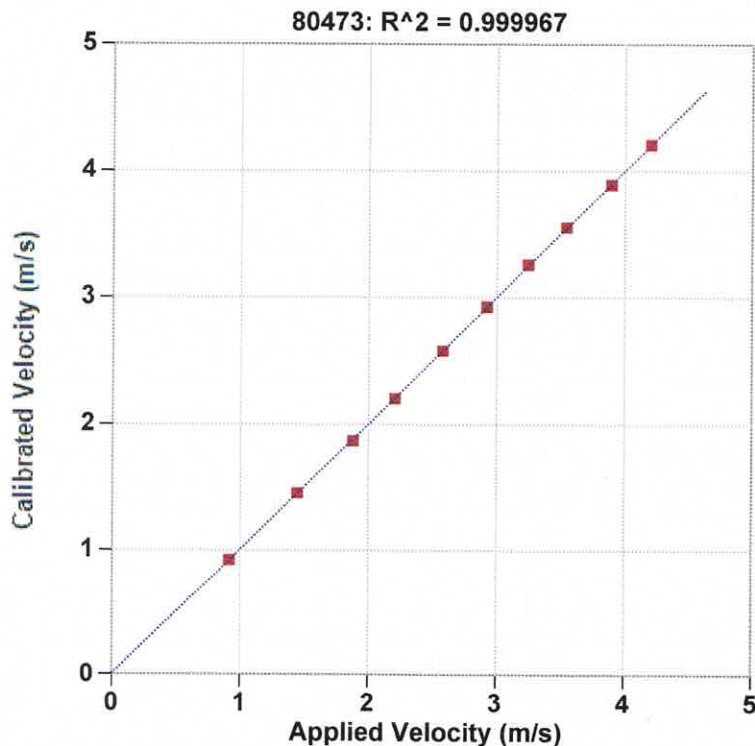
Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

Operator: William Johnson


Signed

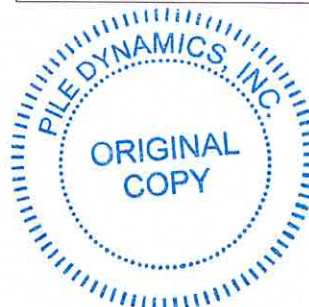
Calibration valid 2 years

From: ~~OCT 1 0 2024~~



Reference Velocity	S/N 80473 Velocity
m/s	m/s
0.920	0.922
1.450	1.453
1.883	1.869
2.212	2.207
2.582	2.582
2.926	2.929
3.254	3.260
3.549	3.556
3.899	3.895
4.211	4.210

Maximum Acceleration: 918 g's





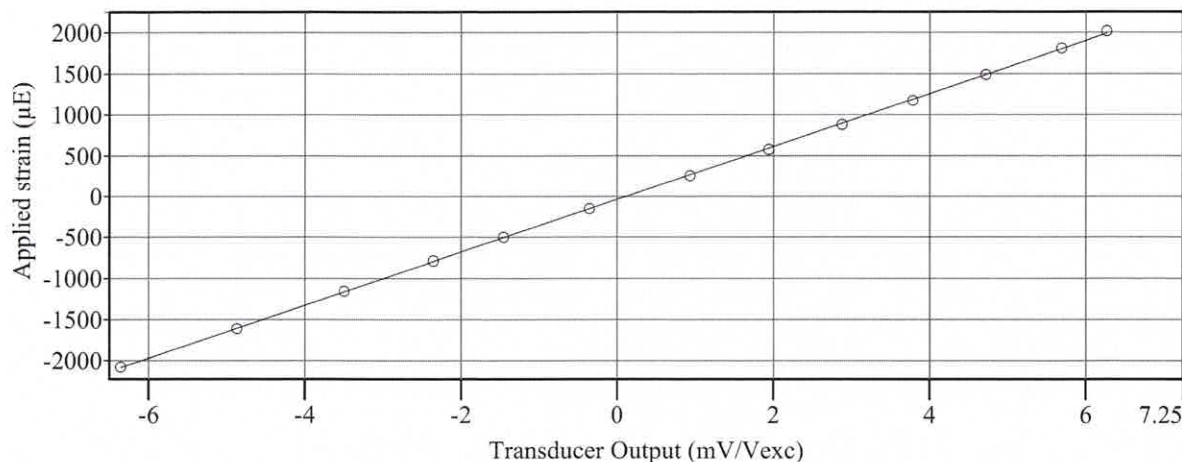
Certificate of Calibration

Pile Dynamics, Inc.
 Transducer Model: PDI Strain Transducer
 Serial Number: 230A
 PDI Gage Factor: 93.3
 Mean Linear Correlation Coefficient: 0.999922

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2080.1	-6.357	577.4	1.942
-1607.6	-4.865	879.3	2.877
-1154.9	-3.493	1174.5	3.783
-787.4	-2.352	1489.5	4.719
-498.7	-1.452	1811.0	5.688
-150.9	-0.356	2014.4	6.266
255.9	0.929		

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Kay Tol

PDI Gage: 230A

Calibration Date: _____

Signature: Kay Tol
 OCT 10 2024





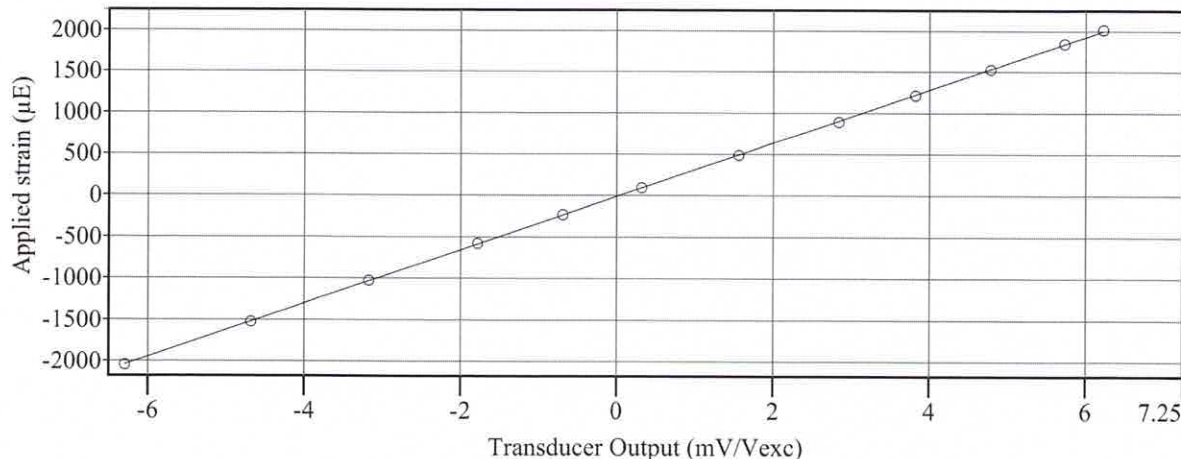
Certificate of Calibration

Pile Dynamics, Inc.
 Transducer Model: PDI Strain Transducer
 Serial Number: 227A
 PDI Gage Factor: 93.3
 Mean Linear Correlation Coefficient: 0.999965

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2047.2	-6.296	485.6	1.556
-1522.3	-4.679	892.4	2.838
-1030.2	-3.172	1213.9	3.822
-577.4	-1.780	1528.9	4.782
-229.7	-0.691	1843.8	5.732
91.9	0.317	2014.4	6.225

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Kay Tol

PDI Gage: 227A

Calibration Date: _____

OCT 10 2024 Signature: *Kay Tol*





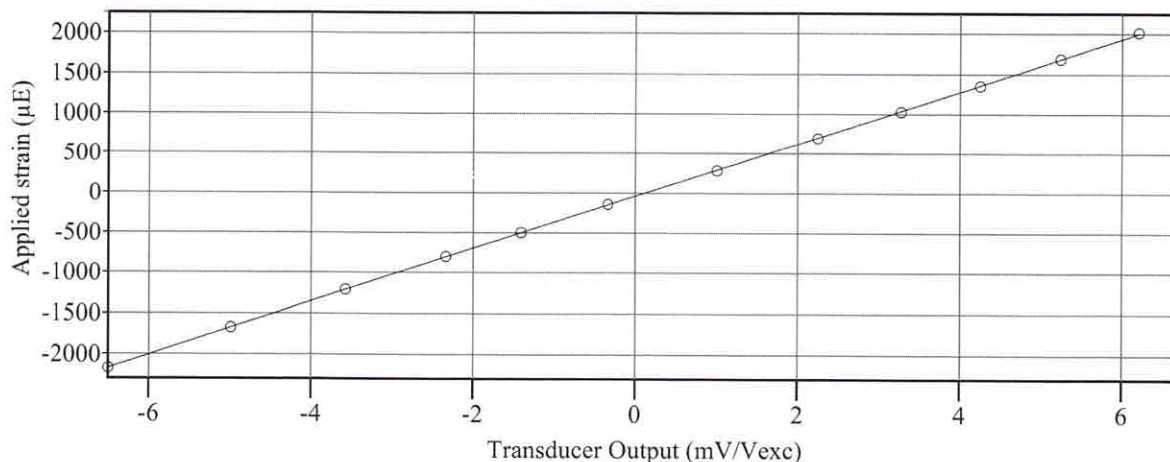
Certificate of Calibration

Pile Dynamics, Inc.
Transducer Model: PDI Strain Transducer
Serial Number: 226A
PDI Gage Factor: 94.9
Mean Linear Correlation Coefficient: 0.999975

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2171.9	-6.500	282.2	1.003
-1675.4	-4.985	695.5	2.247
-1207.3	-3.573	1030.2	3.277
-800.5	-2.337	1351.7	4.251
-498.7	-1.407	1686.4	5.244
-144.4	-0.339	2014.4	6.206

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Kay Tol

Signature: Kay Tol

PDI Gage: 226A

OCT 10 2024

Calibration Date: _____





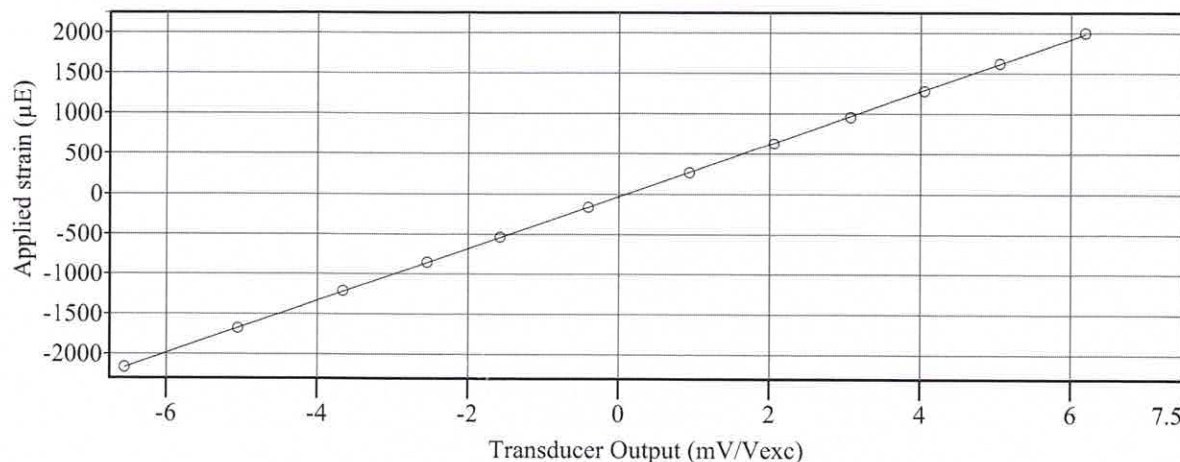
Certificate of Calibration

Pile Dynamics, Inc.
 Transducer Model: PDI Strain Transducer
 Serial Number: 225A
 PDI Gage Factor: 94.1
 Mean Linear Correlation Coefficient: 0.999960

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2165.4	-6.555	269.0	0.935
-1679.8	-5.050	629.9	2.056
-1213.9	-3.654	958.0	3.071
-853.0	-2.542	1279.5	4.051
-538.1	-1.572	1620.7	5.050
-164.0	-0.404	2001.3	6.185

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Kay Tol

Signature: Kay Tol

PDI Gage: 225A

Calibration Date: OCT 10 2024





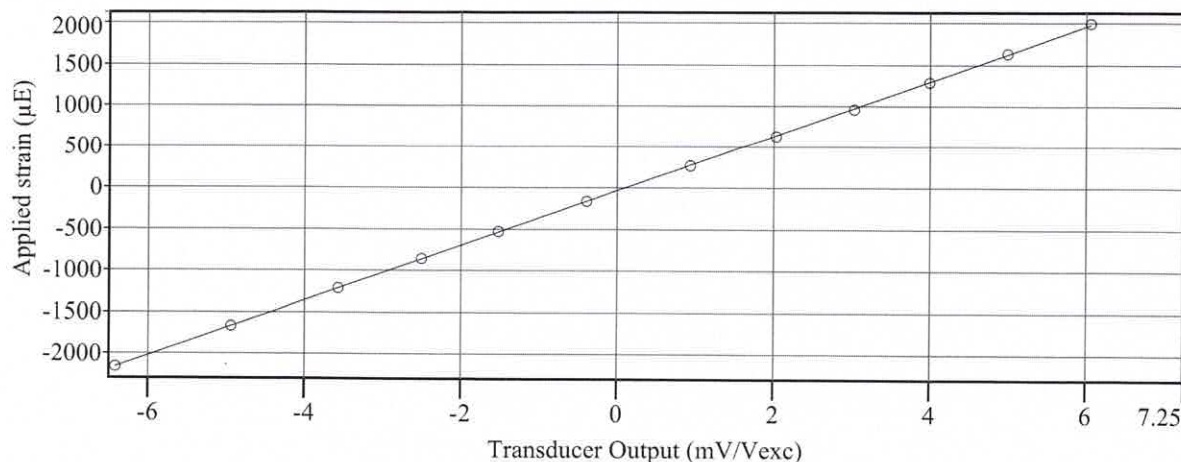
Certificate of Calibration

Pile Dynamics, Inc.
 Transducer Model: PDI Strain Transducer
 Serial Number: 229A
 PDI Gage Factor: 95.9
 Mean Linear Correlation Coefficient: 0.999952

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2158.8	-6.416	269.0	0.931
-1666.7	-4.936	629.9	2.031
-1213.9	-3.568	958.0	3.027
-859.6	-2.504	1286.1	3.993
-529.3	-1.517	1633.9	4.989
-164.0	-0.393	1994.8	6.057

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Kay Tol

Signature: Kay Tol

PDI Gage: 229A

Calibration Date: OCT 10 2024





Certificate of Calibration

Pile Dynamics, Inc.

Transducer Model: PDI Strain Transducer

Serial Number: 215A

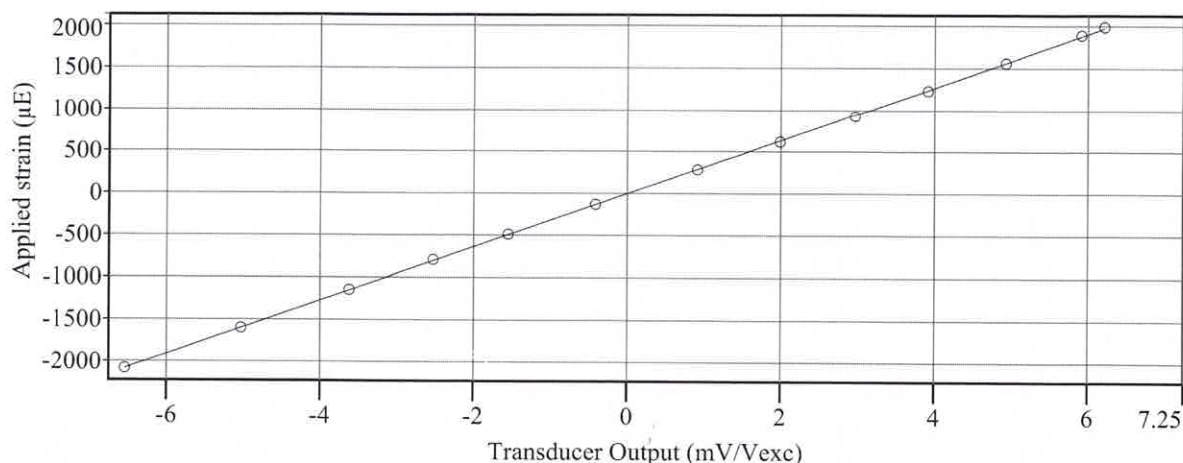
PDI Gage Factor: 91.9

Mean Linear Correlation Coefficient: 0.999944

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2082.2	-6.542	616.8	1.991
-1601.0	-5.025	925.2	2.966
-1148.3	-3.617	1233.6	3.915
-794.0	-2.526	1561.7	4.925
-489.9	-1.550	1892.0	5.913
-131.2	-0.416	1988.2	6.210
282.2	0.910		

Calibration Curve

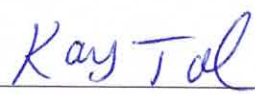


PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Kay Tol

Signature: 

PDI Gage: 215A

Calibration Date: OCT 10 2024





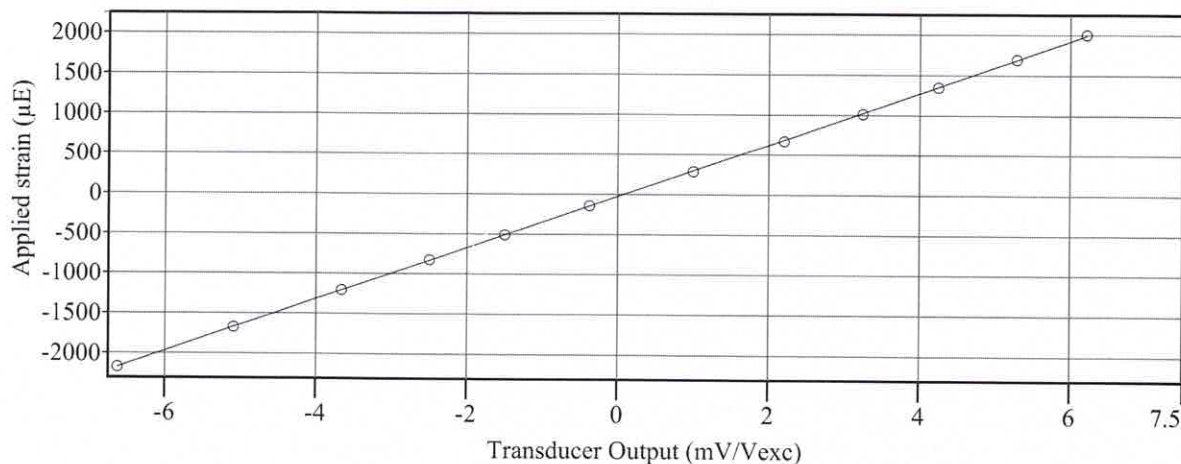
Certificate of Calibration

Pile Dynamics, Inc.
Transducer Model: PDI Strain Transducer
Serial Number: 219A
PDI Gage Factor: 93.6
Mean Linear Correlation Coefficient: 0.999966

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2171.9	-6.626	288.7	0.997
-1673.2	-5.086	675.9	2.206
-1207.3	-3.654	1014.9	3.245
-826.8	-2.492	1345.1	4.249
-509.6	-1.494	1692.9	5.284
-144.4	-0.376	2001.3	6.215

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Kay Tol

Signature: Kay Tol

PDI Gage: 219A

OCT 10 2024

Calibration Date: _____





Certificate of Calibration

Pile Dynamics, Inc.

Transducer Model: PDI Strain Transducer

Serial Number: 216A

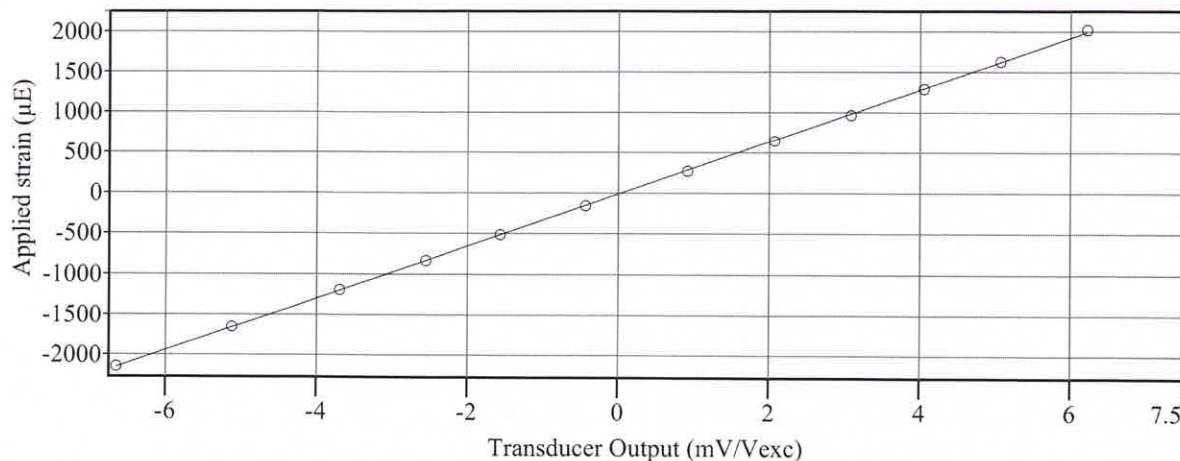
PDI Gage Factor: 93.1

Mean Linear Correlation Coefficient: 0.999909

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2145.7	-6.652	269.0	0.916
-1653.5	-5.119	643.0	2.072
-1194.2	-3.688	964.6	3.082
-833.3	-2.549	1292.7	4.054
-514.0	-1.564	1627.3	5.065
-157.5	-0.434	2021.0	6.219

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Kay Tol

Signature: Kay Tol

PDI Gage: 216A

Calibration Date: OCT 10 2024



Certificate of Calibration Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: K14222 Temperature: 23.6 °C

Model: KICHER PR Humidity: 32%

Calibrated on: Channel 4 on 8G 5161 LE

PDA CALIBRATION FACTOR

376.3 mv/5000g

(75.3 $\mu\text{v/g}$)

R²: 0.999950 [Chip programmed]

Ref Acc 1: 78268! Cal on: 11Jan2024
986 g's/volt

Ref Acc 2: 78270! Cal on: 11Jan2024
971 g's/volt

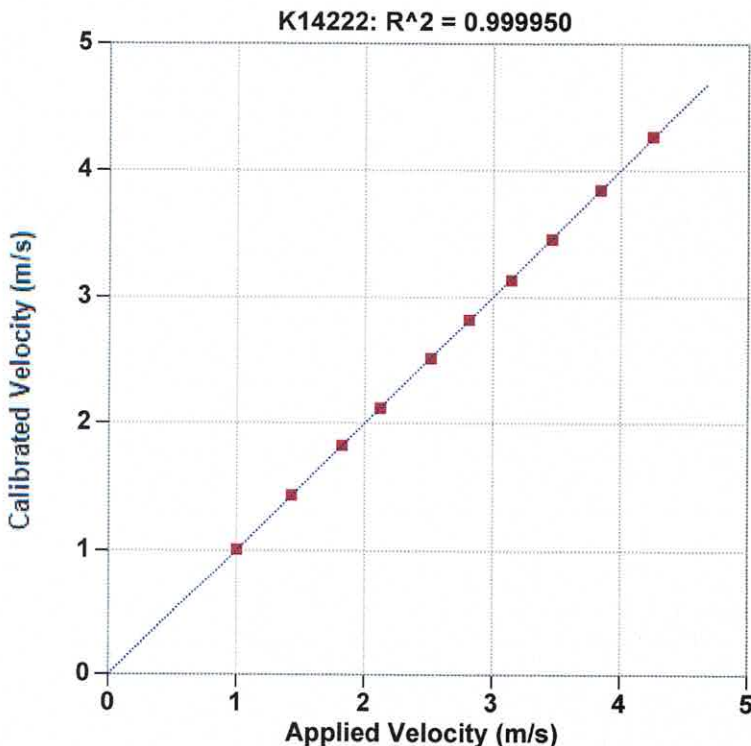
Reference accelerometer calibrations are traceable to
the United States National Institute of Standards and
Technology (NIST).

Operator: William Johnson

Signed

Calibration valid 2 years

From: **OCT 10 2024**



Reference Velocity	S/N K14222 Velocity
m/s	m/s
1.005	1.012
1.430	1.435
1.824	1.825
2.127	2.122
2.518	2.511
2.814	2.823
3.148	3.137
3.466	3.459
3.844	3.846
4.256	4.265

Maximum Acceleration: 927 g's

Certificate of Calibration
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: K14223 Temperature: 23.0 °C
Model: KICHER PR Humidity: 32%
Calibrated on: Channel 4 on 8G 5161 LE

PDA CALIBRATION FACTOR

396.0 mv/5000g
(79.2 μv/g)
R^2: 0.999921 [Chip programmed]

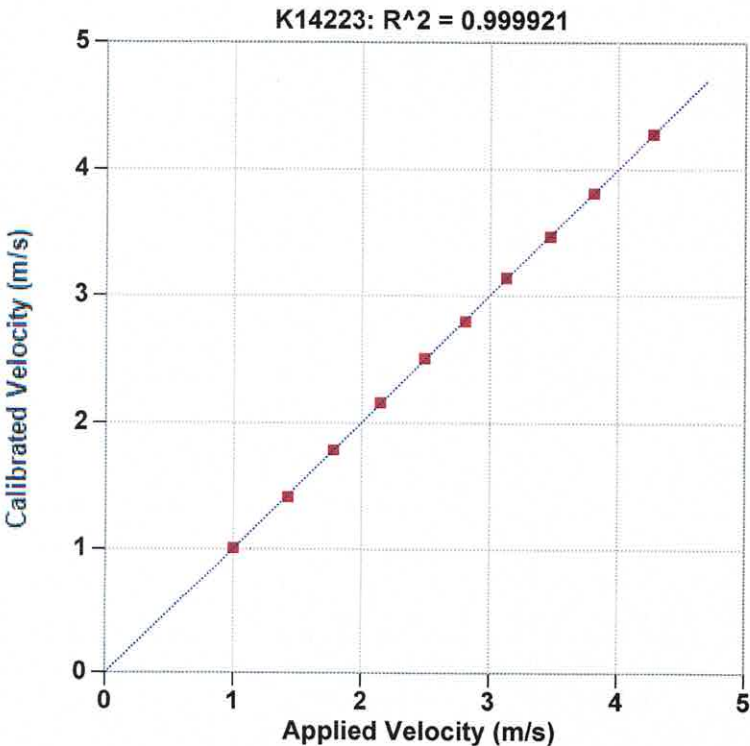
Ref Acc 1: 78268! Cal on: 11Jan2024
986 g's/volt
Ref Acc 2: 78270! Cal on: 11Jan2024
971 g's/volt

Operator: William Johnson

[Signature]
Signed

Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

Calibration valid 2 years
From: OCT 10 2024



Reference Velocity	S/N K14223 Velocity
m/s	m/s
1.002	1.009
1.427	1.414
1.781	1.786
2.151	2.161
2.494	2.507
2.810	2.799
3.133	3.140
3.476	3.466
3.814	3.812
4.280	4.280
Maximum Acceleration: 936 g's	

Certificate of Calibration
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: K14226 Temperature: 23.0 °C
Model: KICHER PR Humidity: 32%
Calibrated on: Channel 3 on 8G 5161 LE

PDA CALIBRATION FACTOR

365.6 mv/5000g
(73.1 μv/g)
R^2: 0.999971 [Chip programmed]

Ref Acc 1: 78268! Cal on: 11Jan2024
986 g's/volt
Ref Acc 2: 78270! Cal on: 11Jan2024
971 g's/volt

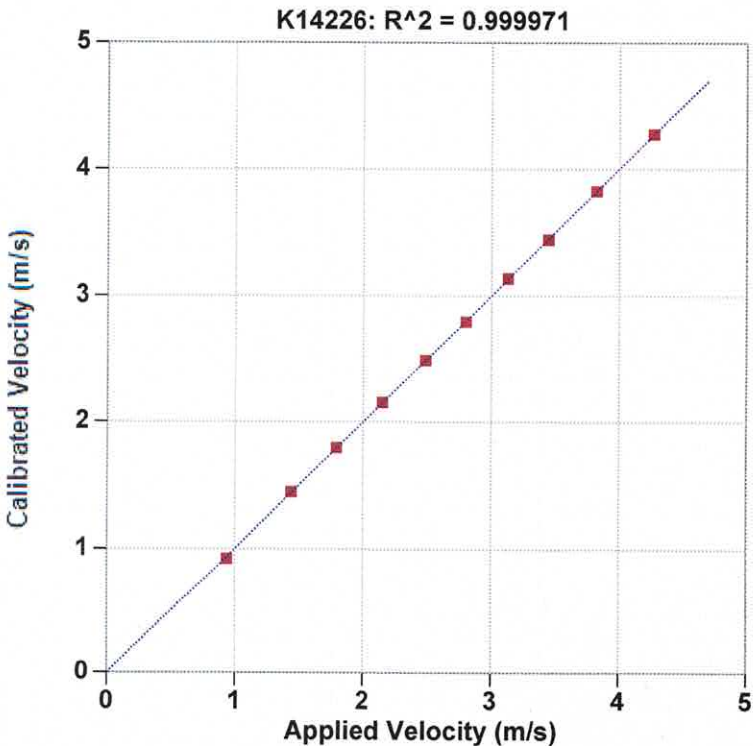
Operator: William Johnson

William Johnson
Signed

Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

Calibration valid 2 years

From: OCT 10 2024



Reference Velocity	S/N K14226 Velocity
m/s	m/s
0.937	0.925
1.443	1.448
1.795	1.797
2.156	2.158
2.492	2.493
2.807	2.799
3.135	3.140
3.450	3.445
3.826	3.828
4.275	4.278
Maximum Acceleration: 937 g's	

Certificate of Calibration Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: K14229 Temperature: 23.0 °C

Model: KICHER PR Humidity: 32%

Calibrated on: Channel 3 on 8G 5161 LE

PDA CALIBRATION FACTOR

357.0 mv/5000g

(71.4 μ v/g)

R²: 0.999959 [Chip programmed]

Ref Acc 1: 78268! Cal on: 11Jan2024
986 g's/volt

Ref Acc 2: 78270! Cal on: 11Jan2024
971 g's/volt

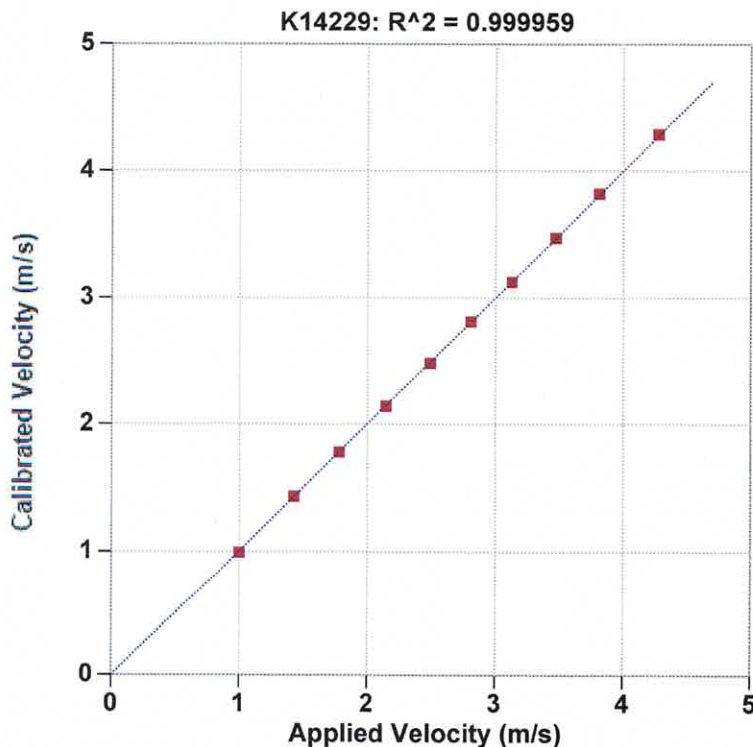
Reference accelerometer calibrations are traceable to
the United States National Institute of Standards and
Technology (NIST).

Operator: William Johnson

Signed

Calibration valid 2 years

From: OCT 1 0 2024



Reference Velocity	S/N K14229 Velocity
m/s	m/s
1.002	0.994
1.427	1.433
1.781	1.782
2.151	2.142
2.494	2.484
2.810	2.813
3.133	3.126
3.476	3.476
3.814	3.821
4.280	4.287

Maximum Acceleration: 936 g's

Certificate of Calibration Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: LW462312 Temperature: 24.0 °C

Model: PE Humidity: 32%

Calibrated on: Channel 3 on 8G 5161 LE

PDA CALIBRATION FACTOR

9.4 g's/volt

R²: 0.999919 [Chip programmed]

Ref Acc 1: LW503313! Cal on: 31Jan2024
10 g's/volt

Ref Acc 2: LW503311! Cal on: 31Jan2024
10 g's/volt

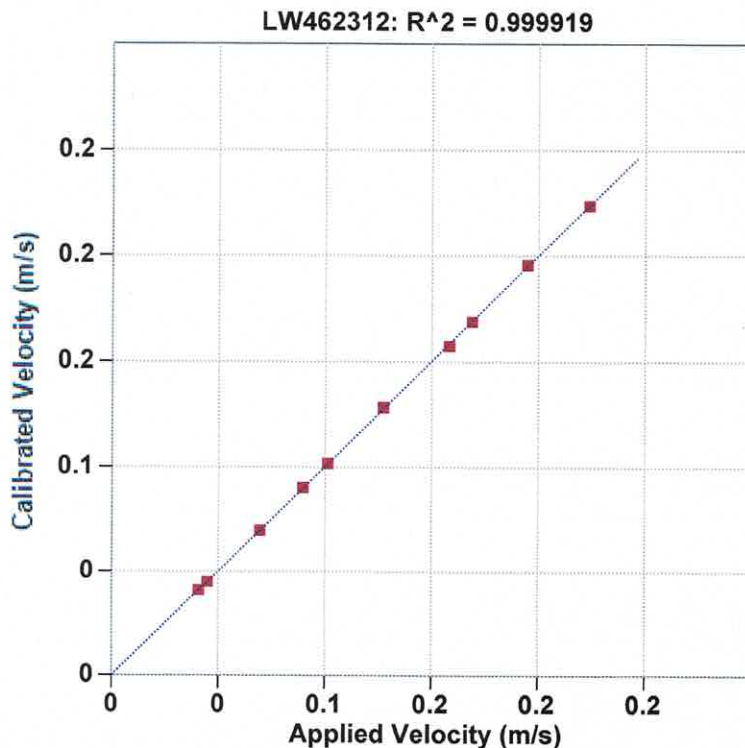
Operator: William Johnson


Signed

Reference accelerometer calibrations are traceable to
the United States National Institute of Standards and
Technology (NIST).

Calibration valid 2 years

From: OCT 10 2024



Reference Velocity	S/N LW462312 Velocity
m/s	m/s
0.041	0.041
0.045	0.045
0.070	0.070
0.090	0.090
0.101	0.102
0.127	0.128
0.158	0.157
0.169	0.169
0.195	0.196
0.224	0.224
Maximum Acceleration: 24 g's	

Certificate of Calibration
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: 78191 Temperature: 23.3 °C
Model: PE Humidity: 46%
Calibrated on: Channel 3 on 8G 5161 LE

PDA CALIBRATION FACTOR

1035.0 g's/volt

R^2: 0.999954 [Chip programmed]

Ref Acc 1: 78270! Cal on: 11Jan2024
971 g's/volt
Ref Acc 2: 78268! Cal on: 11Jan2024
986 g's/volt

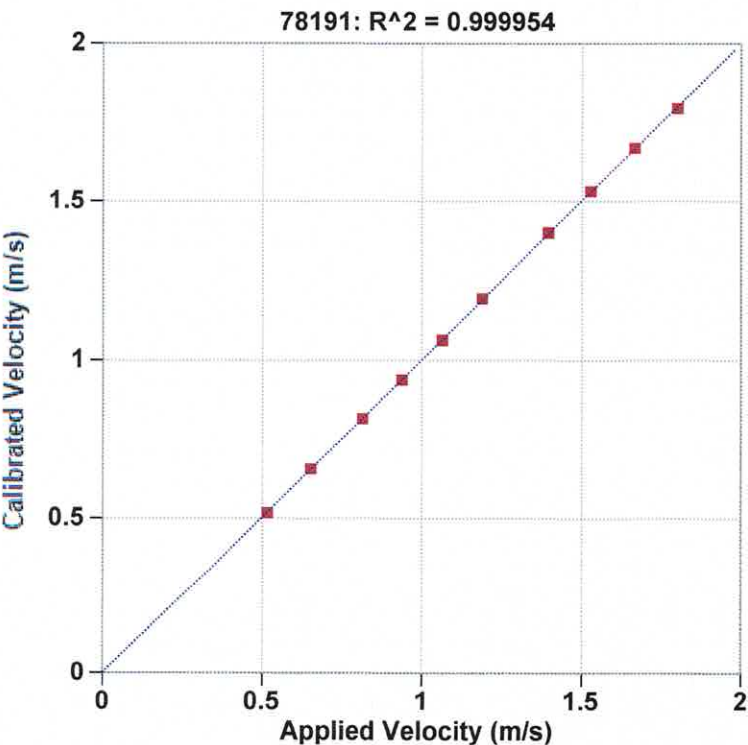
Operator: William Johnson

William Johnson
Signed

Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

Calibration valid 2 years

From: OCT 1 0 2024



Reference Velocity	S/N 78191 Velocity
m/s	m/s
0.517	0.516
0.653	0.654
0.815	0.814
0.939	0.938
1.065	1.064
1.189	1.193
1.397	1.400
1.530	1.531
1.667	1.669
1.802	1.796

Maximum Acceleration: 347 g's

Certificate of Calibration Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: LW503308 Temperature: 23.8 °C

Model: PE Humidity: 52%

Calibrated on: Channel 3 on 8G 5161 LE

PDA CALIBRATION FACTOR

10.0 g's/volt

R²: 0.999951 [Chip programmed]

Ref Acc 1: LW503311! Cal on: 31Jan2024
10 g's/volt

Ref Acc 2: LW503313! Cal on: 31Jan2024
10 g's/volt

Operator: William Johnson

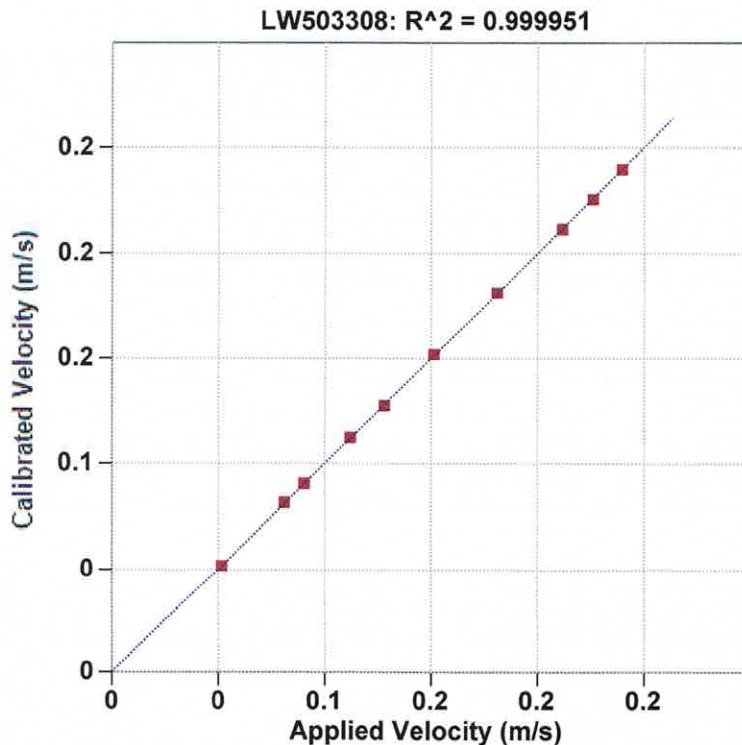
A handwritten signature in blue ink, appearing to read "W. Johnson".

Signed

Calibration valid 2 years

From: OCT 10 2024

Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).



Reference Velocity	S/N LW503308 Velocity
m/s	m/s
0.052	0.052
0.081	0.082
0.090	0.091
0.112	0.113
0.128	0.128
0.151	0.152
0.181	0.182
0.212	0.211
0.226	0.226
0.240	0.240
Maximum Acceleration: 26 g's	

QBTA: ON [ALT-F1/BB=60]

Pile Dynamics, Inc.

TG F2 DPF

File Dynamics	FS —	BN 900	PJ:	A 4	-- US
1999-03-12 01:01	10	SL 911/ 3440/ 99	PN: HOPBAR	F 2	3.3

LE 39.6 ft
AR 1.7 in2
EM 30000 Ksi
SP 0.492 K/ft3
WS 16815 ft/s
WC 17032 ft/s

JC 0.40
FM 1.00
UM 1.00

EA/C 30.3 Ks/ft
UN KIPS*0.1
FR 20000 MB 90

DL -46
UT -1 IP 0.00
PK 1 TM-PEAK

F1/2 500/ 213
F3/4 213/ 213
A1/2 999/ 999
A3/4 999/ 465

TS 12 E B PD: EMPR415 LP 0.00 ft
TB 8.0 T1 9.2 2L/C 4.7 UA 1000 UE 1024 LI 1.0

ACCEPT SQ-OFF FL-OFF PR-OFF

ACCEPT



VMX= 5.8 FMX= 92 AMX= 149
EMX= 0.5 MEX= 180 FVP= 1.00

ACCELEROMETER CALIBRATION N.I.S.T. Traceable

SERIAL NUMBER: EMPR415

CALIBRATION FACTOR: 0.093 m/s²

PAK (*5000): 465 DATE: 08-08-24

PDA OPERATOR: [Signature]

<-AT:PIEZORESISTIVE

OP: WILL [ver:5.01]

[AT:PIEZOELECTRIC->

Smart Sensor

Programmed By: WJ

CRC Value 520C



QBTA: ON [ALT-F1/BB=60]

Pile Dynamics, Inc.

TG F2 DPF

Pile Dynamics
1999-03-12 01:18FS — BN 911 PJ:
10 SL 921/ 3440/ 99 PN: HOPBARA 4 -- US
F 2 3.3LE 39.6 ft
AR 1.7 in2
EM 30000 Ksi
SP 0.492 K/ft3
WS 16815 ft/s
WC 17032 ft/sJC 0.40
FM 1.00
UM 1.00EA/C 30.3 Ks/ft
UN KIPS*0.1
FR 20000 MB 90DL -45
UT -1 IP 0.00
PK 1 TM-PEAKF1/2 500/ 213
F3/4 213/ 213
A1/2 999/ 999
A3/4 999/ 489TS 12 E B PD: EMPR416 LP 0.00 ft
TB 8.0 T1 9.2 2L/C 4.7 VA 1000 UE 1024 LI 1.0

ACCEPT SQ-OFF FL-OFF PR-OFF

ACCEPT

UMX= 5.7 FMX= 87 AMX= 159
EMX= 0.5 MEX= 170 FUP= 0.98

ACCELEROMETER CALIBRATION N.I.S.T. Traceable

SERIAL NUMBER: EMPR416

CALIBRATION FACTOR: .0978 m/s²

PAK (*5000): 489 DATE: 08-08-24

PDA OPERATOR: Will

<-AT:PIEZORESISTIVE

OP: WILL Iver:5.01

AT:PIEZOELECTRIC->

Smart Sensor

Programmed By: WJ

CRC Value 8312



QBTA: ON [ALT-F1/BB=60]

Pile Dynamics, Inc.

TG F2 DPF

Pile Dynamics 1999-03-13 00:49	FS — 10	BN 923 SL 931/ 3440/ 99	PJ: PN: HOPBAR	A 4 -- US F 2 3.3
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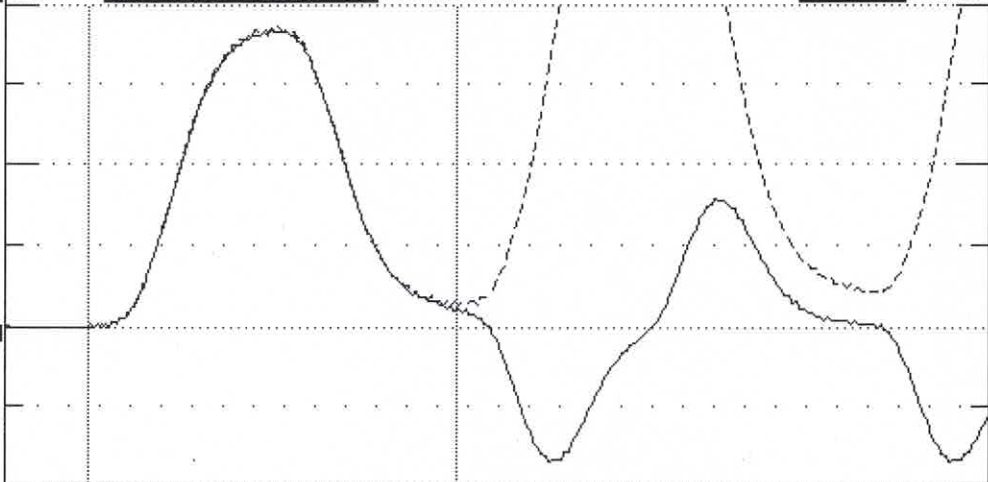
LE 39.6 ft
AR 1.7 in2
EM 30000 Ksi
SP 0.492 K/ft3
WS 16815 ft/s
WC 16500 ft/s

JC 0.40
FM 1.00
UM 1.00

EA/C 30.3 Ks/ft
UN KIPS*0.1
FR 20000 MB 90

DL -46
UT -1 IP 0.00
PK 1 TM-PEAK

F1/2 500/ 213
F3/4 213/ 213
A1/2 999/ 999
A3/4 999/ 460



TS 12 E B PD: EMPR417 LP 0.00 ft
TB 8.0 T1 9.1 2L/C 4.8 UA 1000 UE 1024 LI 1.0

ACCEPT SQ-OFF FL-OFF PR-OFF

VMX= 6.0	FMX= 92	AMX= 149
EMX= 0.5	MEX= 180	FVP= 0.98

ACCEPT	ACCELEROMETER CALIBRATION	N.I.S.T. Traceable
	SERIAL NUMBER:	Empr417
	CALIBRATION FACTOR:	0.092 m/g
	PAK (*5000):	460
PDA OPERATOR:		DATE: 08-09-24

<-AT:PIEZORESISTIVE

OP: WILL [ver:5.01]

AT:PIEZOELECTRIC->

Smart Sensor

Programmed By: WJCRC Value 5086

QBTA: ON [ALT-F1/BB=60]

Pile Dynamics, Inc.

TG F2 DPF

File Dynamics	FS —	BN 930	PJ:	TG F2	DPF
1999-03-13 01:01	10	SL 939/ 3440/ 2	PN: HOPBAR	A 4 -- US	F 2 3.3

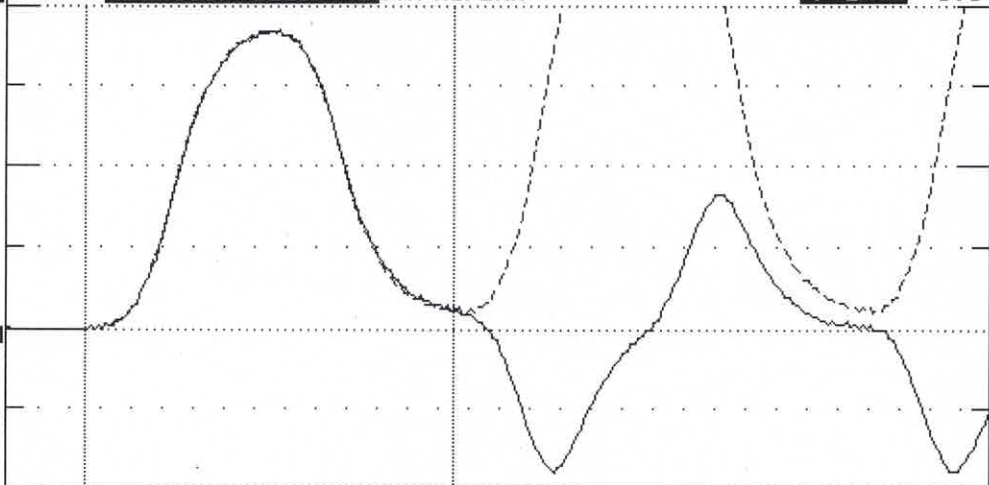
LE 39.6 ft
AR 1.7 in2
EM 30000 Ksi
SP 0.492 K/ft3
WS 16815 ft/s
WC 16500 ft/s

JC 0.40
FM 1.00
UM 1.00

EA/C 30.3 Ks/ft
UN KIPS*0.1
FR 20000 MB 90

DL -46
UT -1 IP 0.00
PK 1 TM-PEAK

F1/2 500/ 213
F3/4 213/ 213
A1/2 999/ 999
A3/4 999/ 450



TS 12 E B PD: EMPR418 LP 0.00 ft
TB 8.0 T1 9.0 2L/C 4.8 UA 1000 UE 1024 LI 1.0

ACCEPT SQ-OFF FL-OFF PR-OFF
UMX= 5.9 FMX= 92 AMX= 149
EMX= 0.5 MEX= 180 FVP= 1.00

ACCEPT	ACCELEROMETER CALIBRATION		N.I.S.T. Traceable
	SERIAL NUMBER: EMPR418		
	CALIBRATION FACTOR: 0.09 mV/g		
	PAK (*5000): 450 DATE: 08-09-24		
PDA OPERATOR: Will			

<-AT:PIEZORESISTIVE

OP: WILL [ver:5.01]

AT:PIEZOELECTRIC->

Smart Sensor

Programmed By: WJ

CRC Value DAF4



QBTA: ON [ALT-F1/BB=60]

Pile Dynamics, Inc.

TG F2 DPF

File Dynamics
1999-03-13 01:07FS — BN 937 PJ:
10 SL 941/ 3440/ 99 PN: HOPBARA 4 -- US
F 2 3.3LE 39.6 ft
AR 1.7 in2
EM 30000 Ksi
SP 0.492 K/ft3
WS 16815 ft/s
WC 16674 ft/sJC 0.40
FM 1.00
UM 1.00EA/C 30.3 Ks/ft
UN KIPS*0.1
FR 20000 MB 90DL -47
UT -1 IP 0.00
PK 1 TM-PEAKF1/2 500/ 213
F3/4 213/ 213
A1/2 999/ 999
A3/4 999/ 450TS 12 E B PD: EMPR419 LP 0.00 ft
TB 8.0 T1 8.9 2L/C 4.8 VA 1000 UE 1024 LI 1.0

ACCEPT SQ-OFF FL-OFF PR-OFF

ACCEPT

VMX= 6.0 FMX= 92 AMX= 149
EMX= 0.6 MEX= 180 FVP= 0.98

ACCELEROMETER CALIBRATION N.I.S.T. Traceable

SERIAL NUMBER: EMPR419

CALIBRATION FACTOR: 0.09 m/s²

PAK (*5000): 450 DATE: 08-09-24

PDA OPERATOR: W. J. J. J.

<-AT:PIEZORESISTIVE

OP: WILL [ver:5.01]

AT:PIEZOELECTRIC->

Smart Sensor

Programmed By: WJ

CRC Value 4FA9



QBTA: ON [ALT-F1/BB=60]

Pile Dynamics, Inc.

TG F2 DPF

Pile Dynamics 1999-03-13 01:15		FS — 10	BN 943 SL 947/ 3440/ 2	PJ: PN: HOPBAR	A 4 -- US F 2 3.3
LE 39.6 ft	AR 1.7 in2	EM 30000 Ksi	SP 0.492 K/ft3	WS 16815 ft/s	WC 16851 ft/s
JC 0.40	FM 1.00	UM 1.00			
EA/C 30.3 Ks/ft					
UN KIPS*0.1					
FR 20000 MB 90					
DL -44	UT -1	IP 0.00			
PK 1	TM-PEAK				
F1/2 500/ 213	F3/4 213/ 213	A1/2 999/ 999	A3/4 999/ 425	TS 12 TB 8.0	E B PD: EMPR420 T1 9.2 2L/C 4.7 VA 1000 UE 1024 LP 0.00 ft LI 1.0

ACCEPT SQ-OFF FL-OFF PR-OFF

VMX= 5.9 FMX= 92 AMX= 169
EMX= 0.5 MEX= 180 FVP= 1.00

ACCEPT



ACCELEROMETER CALIBRATION N.I.S.T. Traceable

SERIAL NUMBER: EMPR420

CALIBRATION FACTOR: 0.085 m/s²

PAK (*5000): 425 DATE: 08-09-24

PDA OPERATOR: Willi

<-AT:PIEZORESISTIVE

OP: WILL [ver:5.01]

AT:PIEZOELECTRIC->

Smart Sensor

Programmed By: WJ

CRC Value 32C6



QBTA: ON [ALT-F1/BB=60]

Pile Dynamics, Inc.

TG F2 DPF

File Dynamics	FS —	BN 949	PJ:	TG F2	DPF
1999-03-13 01:26	10	SL 951/ 3440/ 99	PN: HOPBAR	A 4 -- US	F 2 3.3

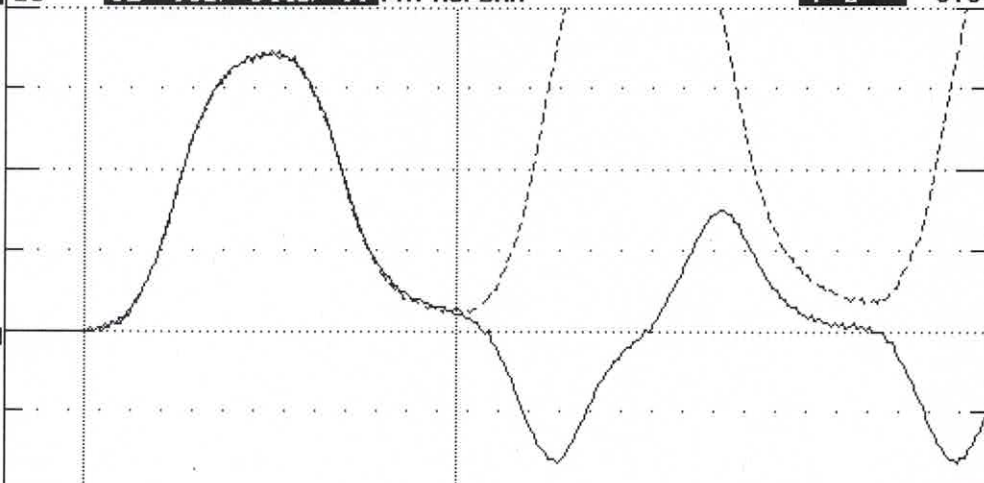
LE 39.6 ft
AR 1.7 in2
EM 30000 Ksi
SP 0.492 K/ft3
WS 16815 ft/s
WC 16330 ft/s

JC 0.40
FM 1.00
VM 1.00

EA/C 30.3 Ks/ft
UN KIPS*0.1
FR 20000 MB 90

DL -47
UT -1 IP 0.00
PK 1 TM-PEAK

F1/2 500/ 213
F3/4 213/ 213
A1/2 999/ 999
A3/4 999/ 475



TS 12 E B PD: EMP421 LP 0.00 ft
TB 8.0 T1 9.0 2L/C 4.8 VA 1000 UE 1024 LI 1.0

ACCEPT SQ-OFF FL-OFF PR-OFF

VMX= 5.5	FMX= 86	AMX= 139
EMX= 0.5	MEX= 168	FVP= 0.99

ACCEPT

ACCELEROMETER CALIBRATION N.I.S.T. Traceable

SERIAL NUMBER: EMP421

CALIBRATION FACTOR: 0.095 m/g

PAK (*5000): 475 DATE: 08-09-24

PDA OPERATOR: Will

<-AT:PIEZORESISTIVE

OP: WILL Iver: 5.011

AT:PIEZOELECTRIC->

Smart Sensor

Programmed By: WJCRC Value 8C57

QBTA: ON [ALT-F1/BB=60]

Pile Dynamics, Inc.

TG F2 DPF

Pile Dynamics 1999-03-13 01:34		FS — 10	BN 953 SL 955/ 3440/ 2	PJ: PN: HOPBAR	A 4 -- US F 2 3.3
LE 39.6 ft AR 1.7 in2 EM 30000 Ksi SP 0.492 K/ft3 WS 16815 ft/s WC 16500 ft/s					
JC 0.40 FM 1.00 UM 1.00					
EA/C 30.3 Ks/ft UN KIPS*0.1 FR 20000 MB 90					
DL -51 UT -1 IP 0.00 PK 1 TM-PEAK					
F1/2 500/ 213 F3/4 213/ 213 A1/2 999/ 999 A3/4 999/ 450	TS 12 TB 8.0	E B PD: EMPR422 T1 8.9 2L/C 4.8	VA 1000 UE 1024	LP 0.00 ft LI 1.0	

ACCEPT SQ-OFF FL-OFF PR-OFF
 VMX= 5.6 FMX= 87 AMX= 149
 EMX= 0.4 MEX= 170 FVP= 0.98

ACCEPT

 ACCELEROMETER CALIBRATION N.I.S.T. Traceable
 SERIAL NUMBER: EMPR422
 CALIBRATION FACTOR: 0.09 mV/g
 PAK (*5000): 450 DATE: 08-09-24
 PDA OPERATOR: WJK PL

<-AT:PIEZORESISTIVE

OP: WILL [ver:5.01]

[AT:PIEZOELECTRIC->

Smart Sensor

Programmed By: WJ

CRC Value 1155



QBTA: ON [ALT-F1/BB=60]

Pile Dynamics, Inc.

TG F2 DPF

File Dynamics	FS	BN 959	PJ:	A 4	-- US
1999-03-16 00:52	10	SL 961/ 3440/ 99	PN: HOPBAR	F 2	3.3

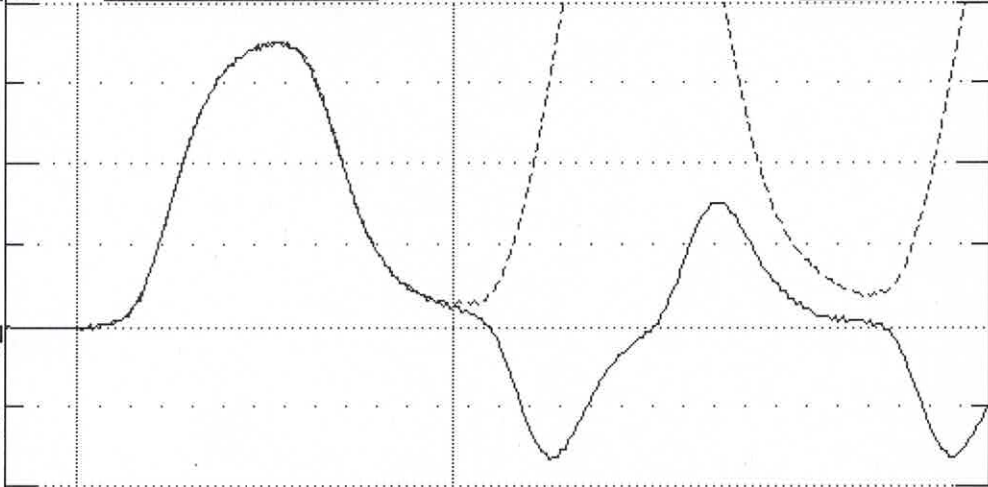
LE 39.6 ft
AR 1.7 in2
EM 30000 Ksi
SP 0.492 K/ft3
WS 16815 ft/s
WC 16163 ft/s

JC 0.40
FM 1.00
UM 1.00

EA/C 30.3 Ks/ft
UN KIPS*0.1
FR 20000 MB 90

DL -53
UT -1 IP 0.00
PK 1 TM-PEAK

F1/2 500/ 213
F3/4 213/ 213
A1/2 999/ 999
A3/4 999/ 415



TS 12 E B PD: EMPR423 LP 0.00 ft
TB 8.0 T1 8.9 2L/C 4.9 VA 1000 UE 1024 LI 1.0

ACCEPT SQ-OFF FL-OFF PR-OFF

VMX= 5.7	FMX= 88	AMX= 139
EMX= 0.5	MEX= 172	FVP= 0.99

ACCEPT

ACCELEROMETER CALIBRATION N.I.S.T. Traceable

SERIAL NUMBER: EMPR423

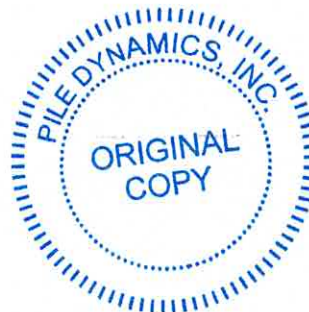
CALIBRATION FACTOR: 0.083 m/g

PAK (*5000): 415 DATE: 08-12-2024

PDA OPERATOR: Willi

<-AT:PIEZORESISTIVE OP: WILL [ver:5.01] AT:PIEZOELECTRIC->

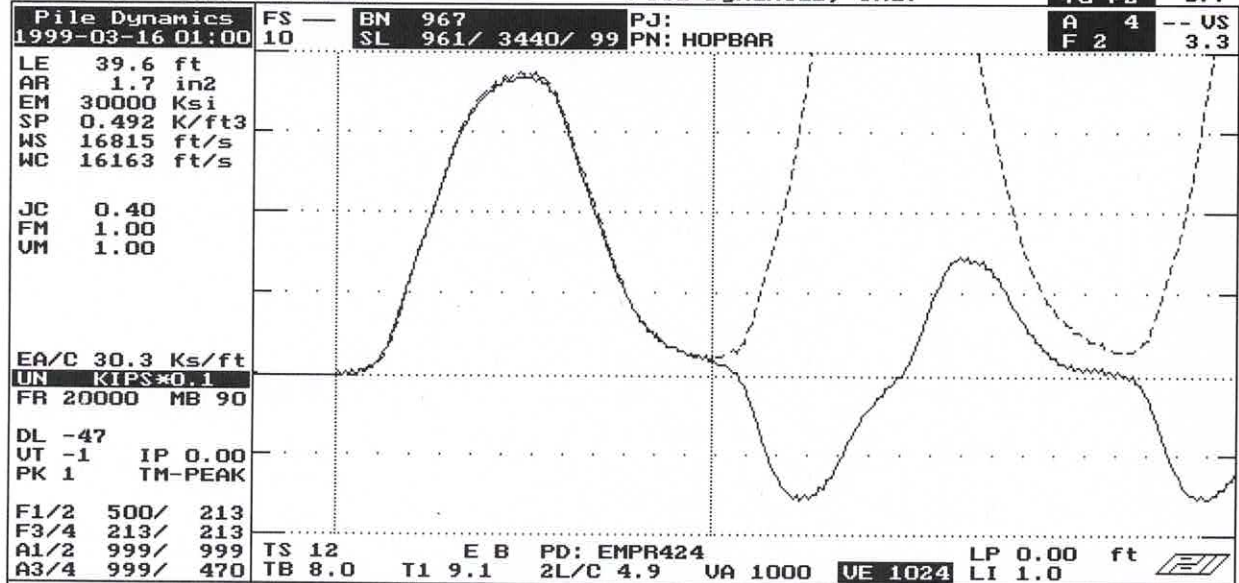
Smart Sensor

Programmed By: WJCRC Value C302

QBTA: ON [ALT-F1/BB=60]

Pile Dynamics, Inc.

TG F2 DPF



ACCEPT SQ-OFF FL-OFF PR-OFF	VMX= 6.0 FMX= 92 AMX= 159
	EMX= 0.6 MEX= 180 FVP= 0.97

ACCEPT 	ACCELEROMETER CALIBRATION	N.I.S.T. Traceable
	SERIAL NUMBER:	EMP424
	CALIBRATION FACTOR:	0.094 m/s ²
	PAK (*5000):	470
	DATE:	08-12-2024
PDA OPERATOR:		Will

<-AT:PIEZORESISTIVE

OP: WILL Iver:5.011

AT:PIEZOELECTRIC->

Smart Sensor

Programmed By: WJCRC Value 0832

QBTA: ON [ALT-F1/BB=60]

File Dynamics, Inc.

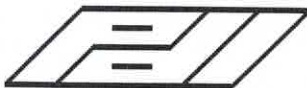
TG F2 DPF

File Dynamics 1999-03-16 01:22		FS — 10	BN 981 SL 971/ 3440/ 99	PJ: PN: HOPBAR	A 4 -- US F 2 3.3
LE 39.6 ft AR 1.7 in2 EM 30000 Ksi SP 0.492 K/ft3 WS 16815 ft/s WC 16851 ft/s					
JC 0.40 FM 1.00 UM 1.00					
EA/C 30.3 Ks/ft UN KIPS*0.1 FR 20000 MB 90					
DL -45 UT -1 IP 0.00 PK 1 TM-PEAK					
F1/2 500/ 213 F3/4 213/ 213 A1/2 999/ 999 A3/4 999/ 477	TS 12 TB 8.0	E B PD: EMP425 T1 9.1 2L/C 4.7	VA 1000	VE 1024	LP 0.00 ft LI 1.0

UMX= 5.9 FMX= 91 AMX= 159
 EMX= 0.5 MEX= 178 FVP= 0.98

ACCEPT SQ-OFF FL-OFF PR-OFF

ACCEPT



ACCELEROMETER CALIBRATION

N.I.S.T. Traceable

SERIAL NUMBER:

EMP425

CALIBRATION FACTOR:

.0954 m/s²

PAK (*5000):

477

DATE:

08-12-2024

PDA OPERATOR:

WILL

JL

<-AT:PIEZORESISTIVE

OP: WILL [ver:5.01]

[AT:PIEZOELECTRIC->

Smart Sensor

Programmed By: WJSCRC Value A759

QBTA: ON [ALT-F1/BB=60]

Pile Dynamics, Inc.

TG F2 DPF

File Dynamics	FS —	BN 987	PJ:	A 4	-- US
1999-03-16 01:30	10	SL 971/ 3440/ 99	PN: HOPBAR	F 2	3.3

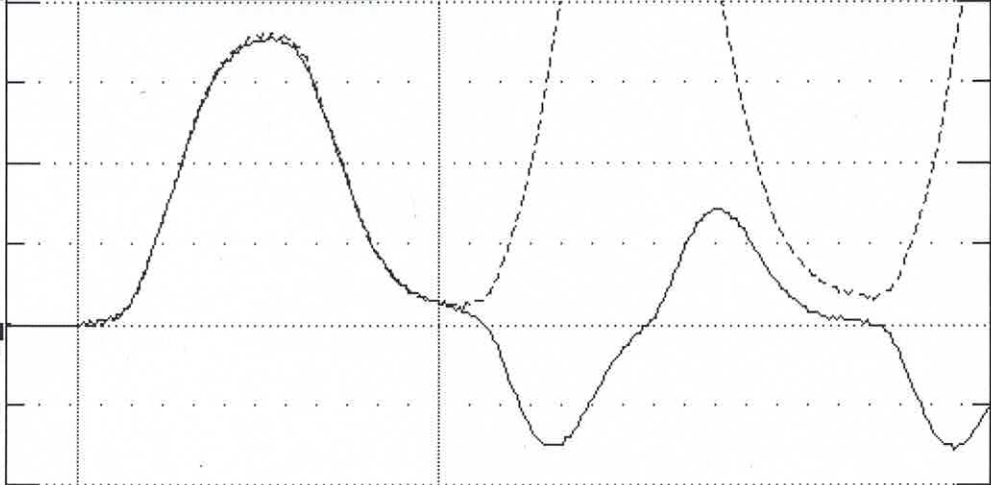
LE 39.6 ft
AR 1.7 in2
EM 30000 Ksi
SP 0.492 K/ft3
WS 16815 ft/s
WC 16851 ft/s

JC 0.40
FM 1.00
UM 1.00

EA/C 30.3 Ks/ft
UN KIPS*0.1
FR 20000 MB 90

DL -48
UT -1 IP 0.00
PK 1 TM-PEAK

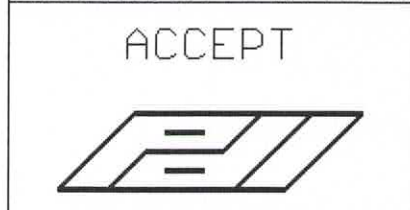
F1/2 500/ 213
F3/4 213/ 213
A1/2 999/ 999
A3/4 999/ 430



TS 12 E B PD: EMPR426 LP 0.00 ft
TB 8.0 T1 8.9 2L/C 4.7 UA 1000 UE 1024 LI 1.0

ACCEPT SQ-OFF FL-OFF PR-OFF

VMX= 5.8 FMX= 89 AMX= 149
EMX= 0.5 MEX= 174 FVP= 0.97



ACCELEROMETER CALIBRATION N.I.S.T. Traceable

SERIAL NUMBER: EMPR 426

CALIBRATION FACTOR: 0.086 m/s²/g

PAK (*5000): 430 DATE: 08-12-2024

PDA OPERATOR: Will

<-AT:PIEZORESISTIVE

OP: WILL [ver:5.01]

[AT:PIEZOELECTRIC->

Smart Sensor

Programmed By: WJS

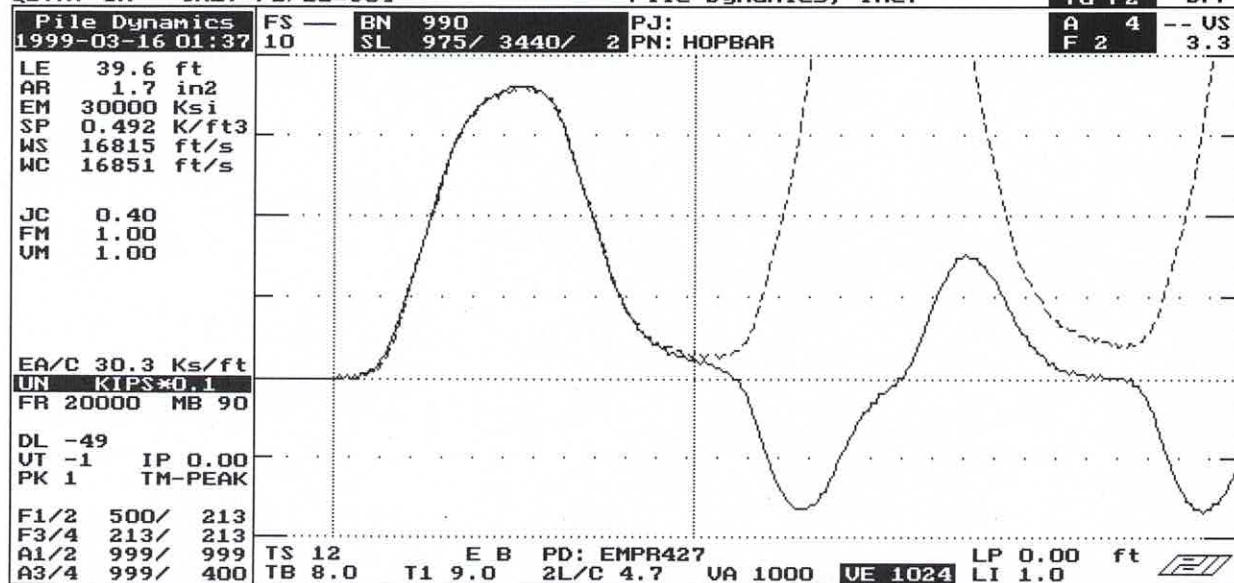
CRC Value 7887



QBTA: ON [ALT-F1/BB=60]

Pile Dynamics, Inc.

TG F2 DPF



ACCEPT SQ-OFF FL-OFF PR-OFF

VMX= 5.8 FMX= 90 AMX= 169
EMX= 0.5 MEX= 176 FVP= 0.98

ACCEPT



ACCELEROMETER CALIBRATION N.I.S.T. Traceable

SERIAL NUMBER: EMP427

CALIBRATION FACTOR: 0.08 m/s²

PAK (*5000): 400 DATE: 08-12-2024

PDA OPERATOR: Willi

<-AT:PIEZORESISTIVE

OP: WILL Iver:5.011

AT:PIEZOELECTRIC->

Smart Sensor

Programmed By: WJ

CRC Value C8BE



QBTA: ON [ALT-F1/BB=60]

Pile Dynamics, Inc.

TG F2 DPF

Pile Dynamics
1999-03-16 01:59FS —
10BN 1022
SL 981/ 3440/ 99PJ:
PN: HOPBARA 4 -- US
F 2 3.3LE 39.6 ft
AR 1.7 in2
EM 30000 Ksi
SP 0.492 K/ft3
WS 16815 ft/s
WC 16330 ft/sJC 0.40
FM 1.00
UM 1.00EA/C 30.3 Ks/ft
UN KIPS*0.1
FR 20000 MB 90DL -46
UT -1 IP 0.00
PK 1 TM-PEAKF1/2 500/ 213
F3/4 213/ 213
A1/2 999/ 999
A3/4 999/ 490TS 12
TB 8.0E B PD: EMPR428
T1 9.1 2L/C 4.8VA 1000 VE 1024 LP 0.00 ft
LI 1.0VMX= 6.0 FMX= 95 AMX= 189
EMX= 0.5 MEX= 186 FUP= 0.99

ACCEPT SQ-OFF FL-OFF PR-OFF

ACCEPT



ACCELEROMETER CALIBRATION

N.I.S.T. Traceable

SERIAL NUMBER:

EMPR 428

CALIBRATION FACTOR:

0.098 m/s

PAK (*5000):

490

DATE: 08-12-2024

PDA OPERATOR:

Willi

<-AT:PIEZORESISTIVE

OP: WILL [ver:5.01]

AT:PIEZOELECTRIC->

Smart Sensor

Programmed By: WJCRC Value B100



Certificate of Calibration

Pile Dynamics, Inc.

Transducer Model: PDI Strain Transducer

Serial Number: Z719

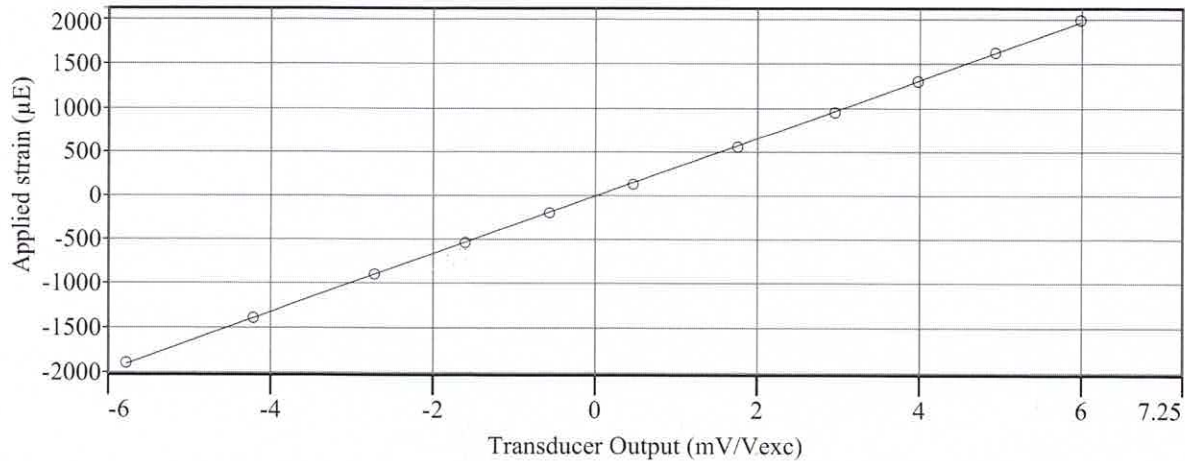
PDI Gage Factor: 95.3

Mean Linear Correlation Coefficient: 0.999894

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-1896.3	-5.783	557.7	1.752
-1391.1	-4.214	958.0	2.953
-899.0	-2.719	1305.8	3.978
-538.1	-1.604	1627.3	4.931
-196.9	-0.565	1994.8	5.984
131.2	0.467		

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Paul Hartman

Signature:

Paul Hartman

PDI Gage: Z719

AUG 14 2024

Calibration Date: _____





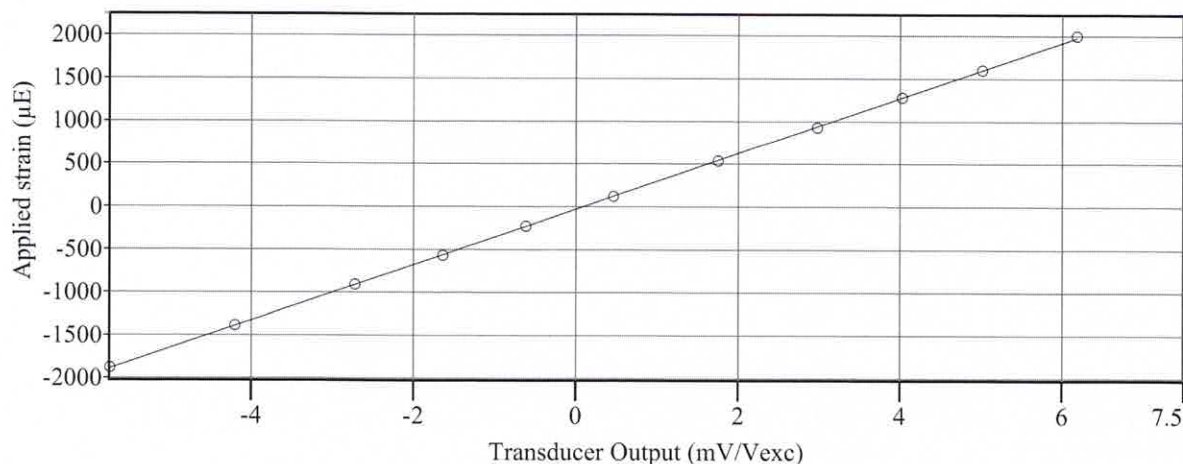
Certificate of Calibration

Pile Dynamics, Inc.
Transducer Model: PDI Strain Transducer
Serial Number: Z720
PDI Gage Factor: 93.7
Mean Linear Correlation Coefficient: 0.999935

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-1876.6	-5.740	531.5	1.753
-1384.5	-4.199	927.4	2.978
-905.5	-2.719	1279.5	4.027
-564.3	-1.639	1601.0	5.013
-223.1	-0.613	2001.3	6.181
120.3	0.466		

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Paul Hartman

Signature:

Paul Hartman

PDI Gage: Z720

AUG 14 2024

Calibration Date: _____





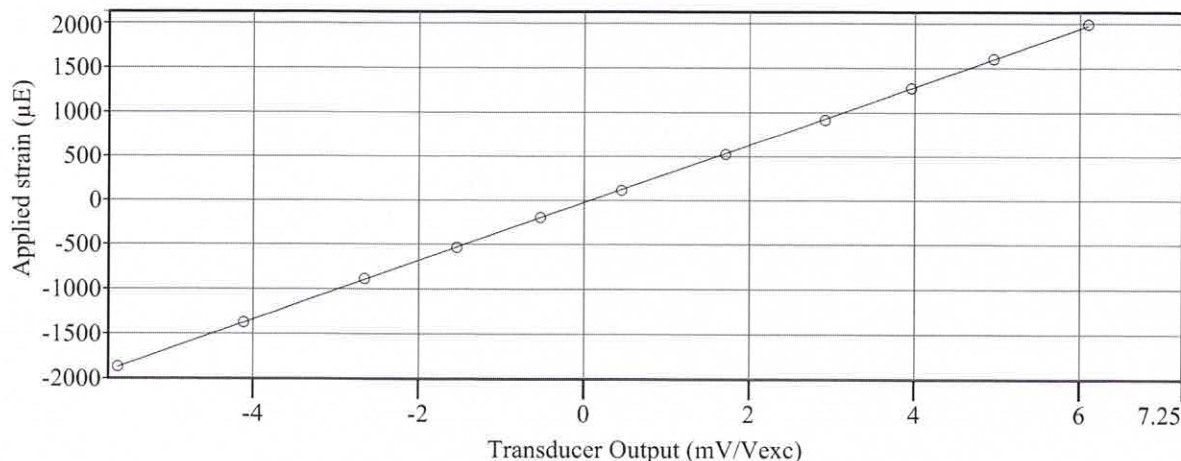
Certificate of Calibration

Pile Dynamics, Inc.
Transducer Model: PDI Strain Transducer
Serial Number: Z721
PDI Gage Factor: 94.7
Mean Linear Correlation Coefficient: 0.999952

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-1870.1	-5.638	524.9	1.710
-1371.4	-4.114	918.6	2.915
-885.8	-2.654	1273.0	3.958
-533.7	-1.539	1601.0	4.952
-196.9	-0.528	1988.2	6.098
111.5	0.454		

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Paul Hartman

PDI Gage: Z721

Calibration Date: _____

Signature: _____

Paul Hartman

AUG 14 2024





Certificate of Calibration

Pile Dynamics, Inc.

Transducer Model: PDI Strain Transducer

Serial Number: Z722

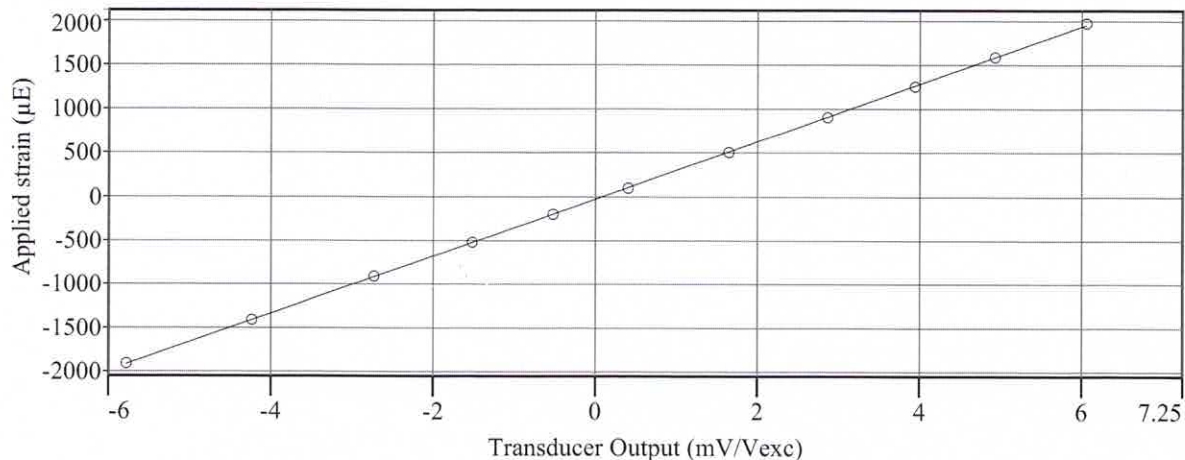
PDI Gage Factor: 94.5

Mean Linear Correlation Coefficient: 0.999952

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-1909.4	-5.783	505.2	1.641
-1410.8	-4.232	905.5	2.864
-912.1	-2.727	1253.3	3.944
-518.4	-1.519	1587.9	4.926
-196.9	-0.521	1975.1	6.057
98.4	0.405		

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Paul Hartman

Signature:

Paul Hartman

PDI Gage: Z722

AUG 14 2024

Calibration Date: _____



Accelerometer Calibration Certificate

Pile Dynamics, Inc.



Calibrated by Pile Dynamics, Inc.
Calibration performed on

AUG 14 2024

Serial No: K14081 Temperature: 25.1 °C

Model: PR Humidity: 54%

Calibrated on: Channel 3 on 8G 5161 LE

PDA CALIBRATION FACTOR

387.4 mv/5000g

(77.5 μ v/g)

R²: 0.999958 [Chip programmed]

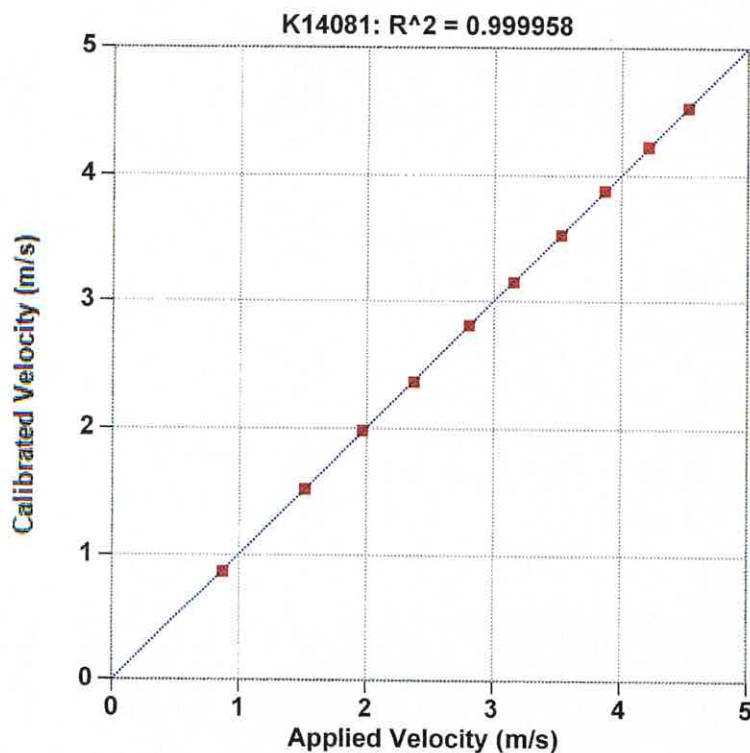
Operator: William Johnson

Signed

Ref Acc 1: 78270! Cal on: 11Jan2024
971 g's/volt

Ref Acc 2: 78268! Cal on: 11Jan2024
986 g's/volt

Reference accelerometer calibrations are traceable to
the United States National Institute of Standards and
Technology (NIST).



Reference Velocity	S/N K14081 Velocity
m/s	m/s
0.877	0.871
1.514	1.520
1.972	1.984
2.374	2.365
2.811	2.810
3.159	3.154
3.532	3.526
3.873	3.880
4.217	4.226
4.535	4.528
Maximum Acceleration: 977 g's	

Accelerometer Calibration Certificate

Pile Dynamics, Inc.



Calibrated by Pile Dynamics, Inc.
Calibration performed on

AUG 14 2024

Serial No: K14082 Temperature: 24.9 °C

Model: PR Humidity: 55%

Calibrated on: Channel 4 on 8G 5161 LE

PDA CALIBRATION FACTOR

354.6 mv/5000g

(70.9 μ v/g)

R²: 0.999919 [Chip programmed]

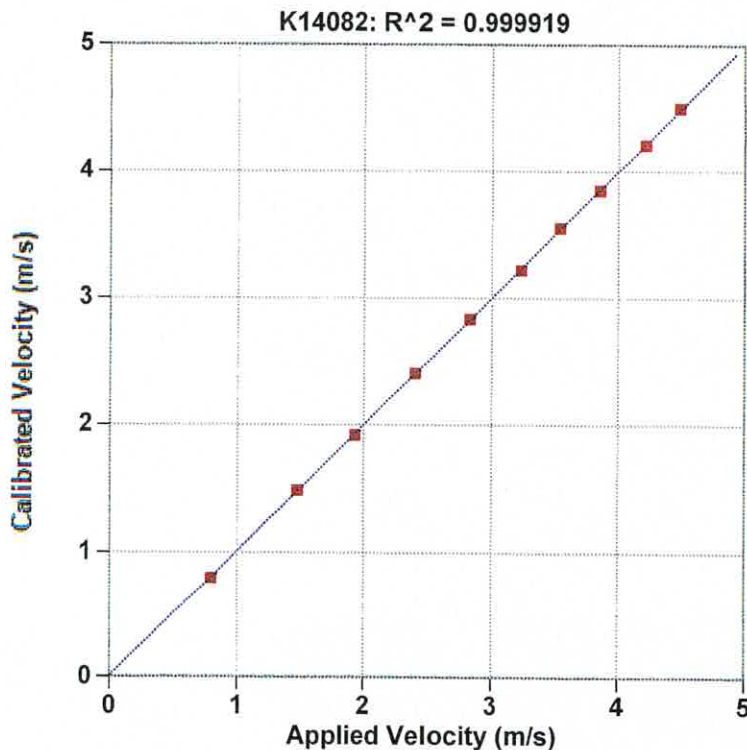
Operator: William Johnson

Ref Acc 1: 78270! Cal on: 11Jan2024
971 g's/volt

Ref Acc 2: 78268! Cal on: 11Jan2024
986 g's/volt

Reference accelerometer calibrations are traceable to
the United States National Institute of Standards and
Technology (NIST).

Signed



Reference Velocity	S/N K14082 Velocity
m/s	m/s
0.800	0.797
1.476	1.484
1.931	1.919
2.409	2.409
2.832	2.838
3.239	3.220
3.545	3.555
3.860	3.851
4.218	4.213
4.487	4.504

Maximum Acceleration: 975 g's

Accelerometer Calibration Certificate

Pile Dynamics, Inc.



Calibrated by Pile Dynamics, Inc.

Calibration performed on

AUG 14 2024

Serial No: K14049 Temperature: 23.8 °C

Model: PR Humidity: 32%

Calibrated on: Channel 4 on 8G 5161 LE

PDA CALIBRATION FACTOR

345.7 mv/5000g

(69.1 $\mu\text{v/g}$)

R²: 0.999969 [Chip programmed]

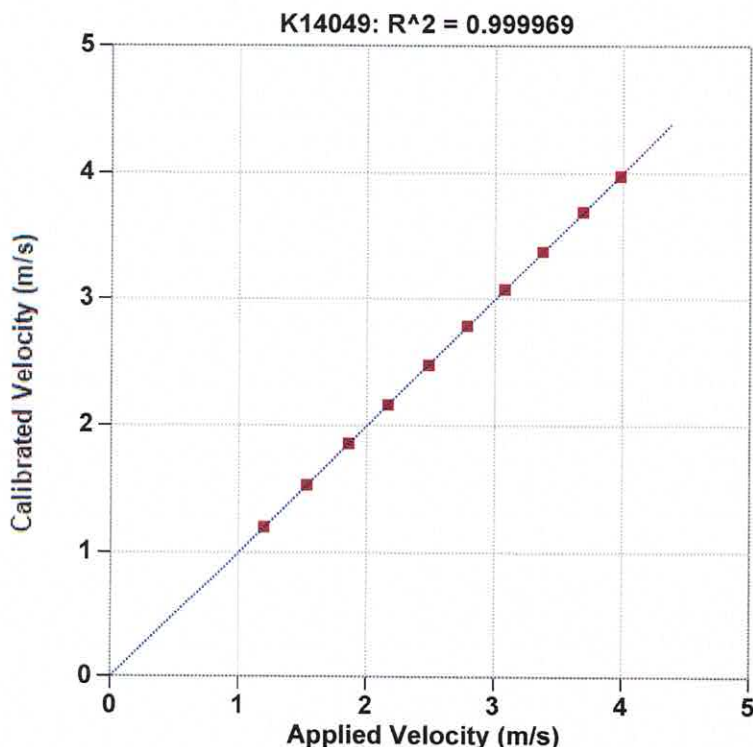
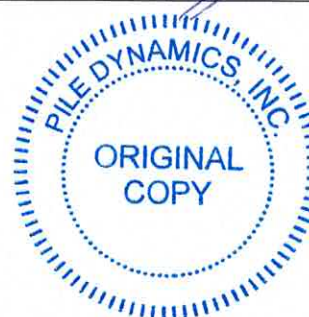
Operator: William Johnson

Ref Acc 1: 78270! Cal on: 11Jan2024
971 g's/volt

Ref Acc 2: 78268! Cal on: 11Jan2024
986 g's/volt

Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

Signed



Reference Velocity	S/N K14049 Velocity
m/s	m/s
1.199	1.200
1.531	1.529
1.860	1.857
2.168	2.164
2.485	2.476
2.783	2.790
3.076	3.077
3.375	3.380
3.689	3.694
3.980	3.975

Maximum Acceleration: 862 g's

Accelerometer Calibration Certificate

Pile Dynamics, Inc.



Calibrated by Pile Dynamics, Inc.
Calibration performed on

AUG 14 2024

Serial No: K14050 Temperature: 23.8 °C

Model: PR Humidity: 32%

Calibrated on: Channel 4 on 8G 5161 LE

PDA CALIBRATION FACTOR

335.0 mv/5000g

(67.0 μ v/g)

R²: 0.999936 [Chip programmed]

Operator: William Johnson

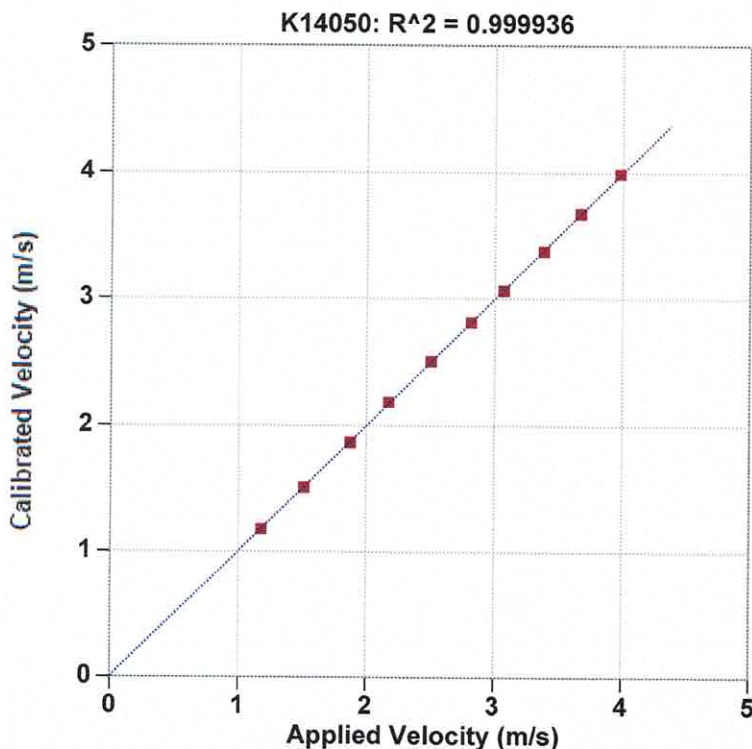
Ref Acc 1: 78270! Cal on: 11Jan2024
971 g's/volt

Ref Acc 2: 78268! Cal on: 11Jan2024
986 g's/volt

Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

William Johnson

Signed



Reference Velocity	S/N K14050 Velocity
m/s	m/s
1.182	1.174
1.512	1.508
1.872	1.866
2.175	2.188
2.504	2.507
2.816	2.815
3.070	3.065
3.384	3.375
3.671	3.672
3.977	3.987

Maximum Acceleration: 861 g's



Certificate of Calibration

Pile Dynamics, Inc.

Transducer Model: PDI Strain Transducer

Serial Number: 112A

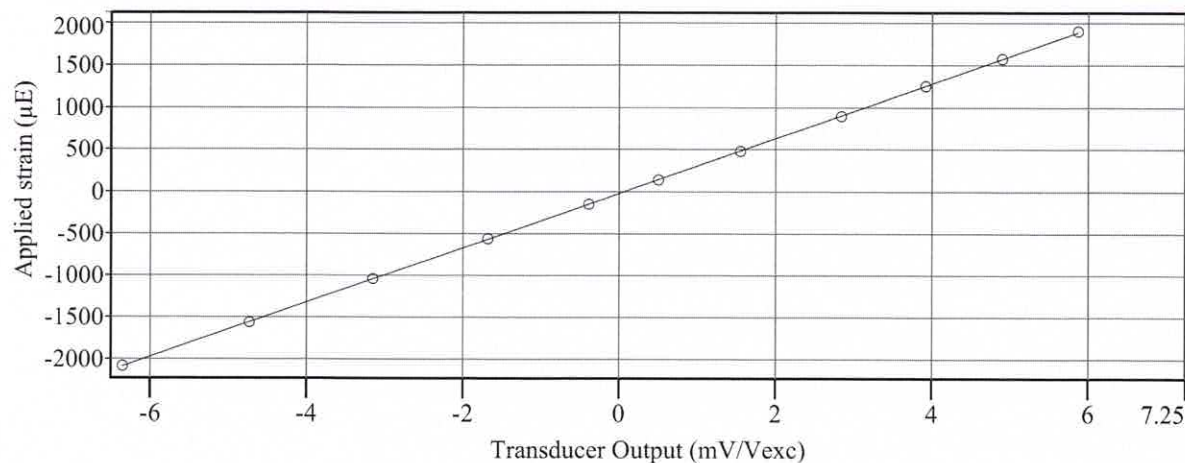
PDI Gage Factor: 94.0

Mean Linear Correlation Coefficient: 0.999977

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2082.2	-6.351	479.0	1.549
-1561.7	-4.729	899.0	2.841
-1043.3	-3.148	1253.3	3.921
-557.7	-1.679	1574.8	4.899
-146.5	-0.390	1902.9	5.868
137.8	0.501		

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Paul Hartman

PDI Gage: 112A

Calibration Date: _____

Signature:

AUG 28 2024

Paul Hartman





Certificate of Calibration

Pile Dynamics, Inc.

Transducer Model: PDI Strain Transducer

Serial Number: 113A

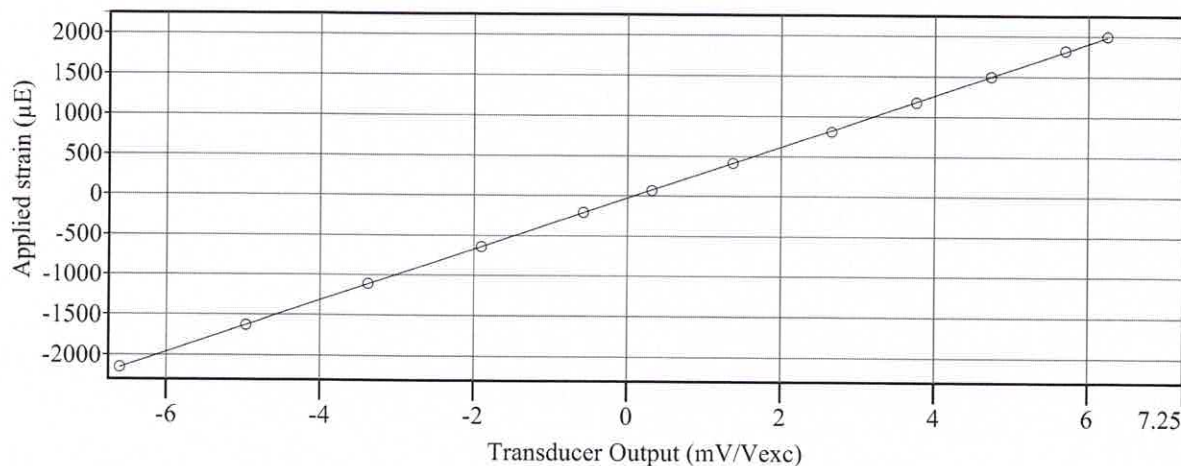
PDI Gage Factor: 93.1

Mean Linear Correlation Coefficient: 0.999971

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2152.2	-6.603	413.4	1.368
-1627.3	-4.957	813.6	2.654
-1108.9	-3.371	1174.5	3.758
-638.7	-1.900	1496.1	4.731
-210.0	-0.574	1817.6	5.699
65.6	0.316	1994.8	6.247

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Paul Hartman

PDI Gage: 113A

Calibration Date: _____

Signature:

AUG 28 2024

Paul Hartman





Certificate of Calibration

Pile Dynamics, Inc.

Transducer Model: PDI Strain Transducer

Serial Number: 114A

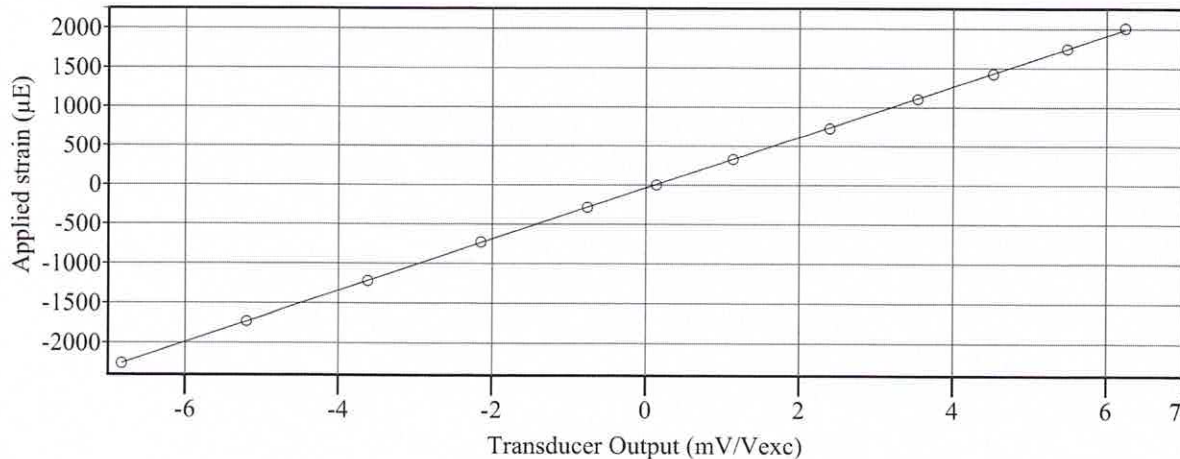
PDI Gage Factor: 93.9

Mean Linear Correlation Coefficient: 0.999967

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2257.2	-6.825	328.1	1.130
-1725.7	-5.196	728.3	2.395
-1213.9	-3.618	1102.4	3.540
-728.3	-2.145	1423.9	4.521
-288.7	-0.763	1745.4	5.485
0.0	0.136	2007.9	6.240

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Paul Hartman

PDI Gage: 114A

Calibration Date: _____

Signature: _____

Paul Hartman

AUG 28 2024



Certificate of Calibration

Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: K14137 Temperature: 24.9 °C

Model: KICHER PR Humidity: 48%

Calibrated on: Channel 4 on 8G 5161 LE

PDA CALIBRATION FACTOR

348.4 mv/5000g

(69.7 μ v/g)

R²: 0.999937 [Chip programmed]

Operator: William Johnson

Signed

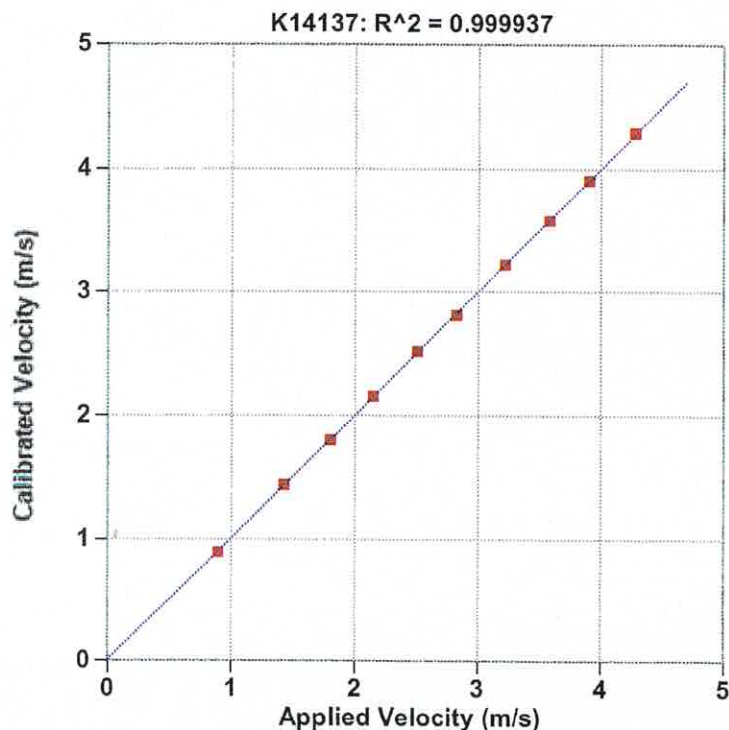
Calibration valid 2 years

From: **SEP 05 2024**

Ref Acc 1: 78270! Cal on: 11Jan2024
971 g's/volt

Ref Acc 2: 78268! Cal on: 11Jan2024
986 g's/volt

Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).



Reference Velocity	S/N K14137 Velocity
m/s	m/s
0.897	0.891
1.431	1.437
1.805	1.804
2.151	2.155
2.509	2.517
2.831	2.812
3.223	3.220
3.586	3.581
3.905	3.905
4.278	4.289

Maximum Acceleration: 920 g's



Certificate of Calibration
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: K14138 Temperature: 25.1 °C
Model: KICHER PR Humidity: 45%
Calibrated on: Channel 4 on 8G 5161 LE

PDA CALIBRATION FACTOR

345.2 mv/5000g
(69.0 µv/g)
R^2: 0.999908 [Chip programmed]

Ref Acc 1: 78270! Cal on: 11Jan2024
971 g's/volt
Ref Acc 2: 78268! Cal on: 11Jan2024
986 g's/volt

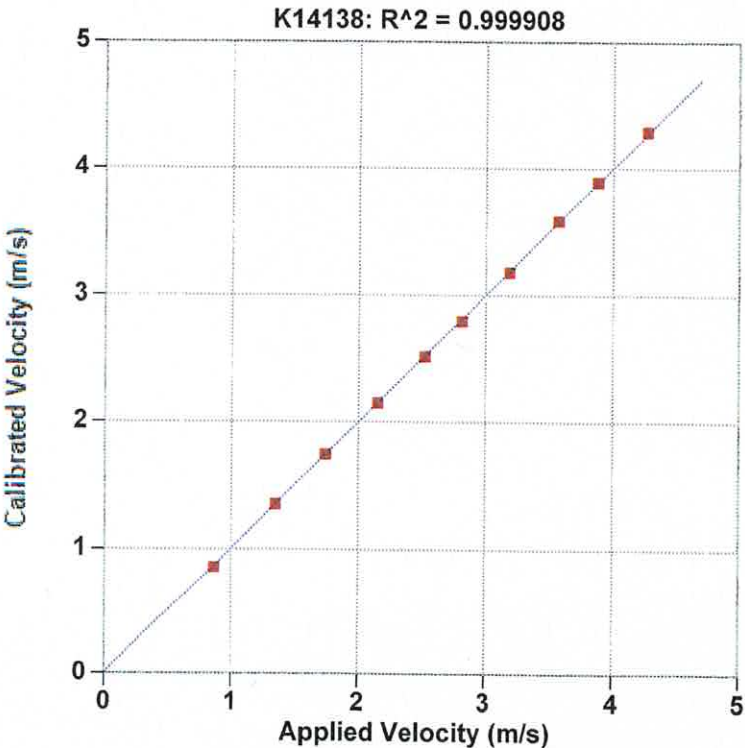
Operator: William Johnson


Signed

Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

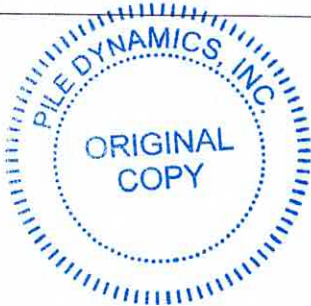
Calibration valid 2 years

From: SEP 05 2024



Reference Velocity	S/N K14138 Velocity
m/s	m/s
0.865	0.854
1.355	1.350
1.739	1.742
2.156	2.151
2.528	2.517
2.814	2.797
3.190	3.183
3.580	3.585
3.883	3.890
4.273	4.292

Maximum Acceleration: 916 g's



Certificate of Calibration

Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: K14139 Temperature: 24.9 °C
Model: KICHER PR Humidity: 49%
Calibrated on: Channel 4 on 8G 5161 LE

PDA CALIBRATION FACTOR

343.7 mv/5000g
(68.7 μ v/g)
 R^2 : 0.999955 [Chip programmed]

Ref Acc 1: 78270! Cal on: 11Jan2024
971 g's/volt
Ref Acc 2: 78268! Cal on: 11Jan2024
986 g's/volt

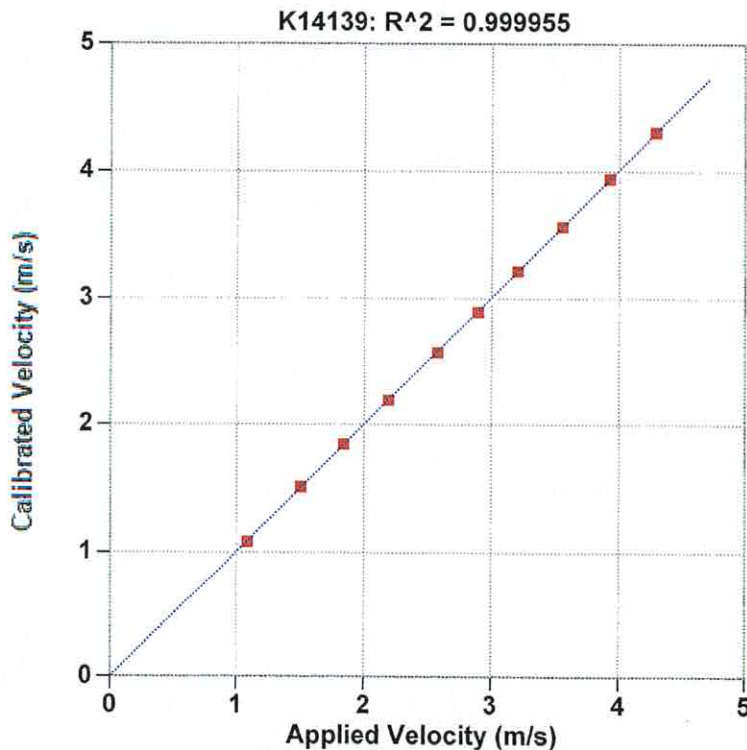
Operator: William Johnson


Signed

Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

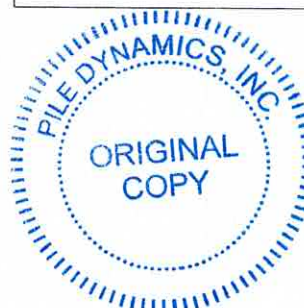
Calibration valid 2 years

From: SEP 05 2024



Reference Velocity	S/N K14139 Velocity
m/s	m/s
1.087	1.082
1.500	1.508
1.837	1.843
2.198	2.191
2.581	2.568
2.897	2.890
3.210	3.216
3.561	3.563
3.932	3.938
4.295	4.297

Maximum Acceleration: 923 g's



Certificate of Calibration Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: K14169 Temperature: 23.6 °C

Model: KICHER PR Humidity: 52%

Calibrated on: Channel 4 on 8G 5161 LE

PDA CALIBRATION FACTOR

387.3 mv/5000g

(77.5 μ v/g)

R^2: 0.999887 [Chip programmed]

Operator: William Johnson

Signed

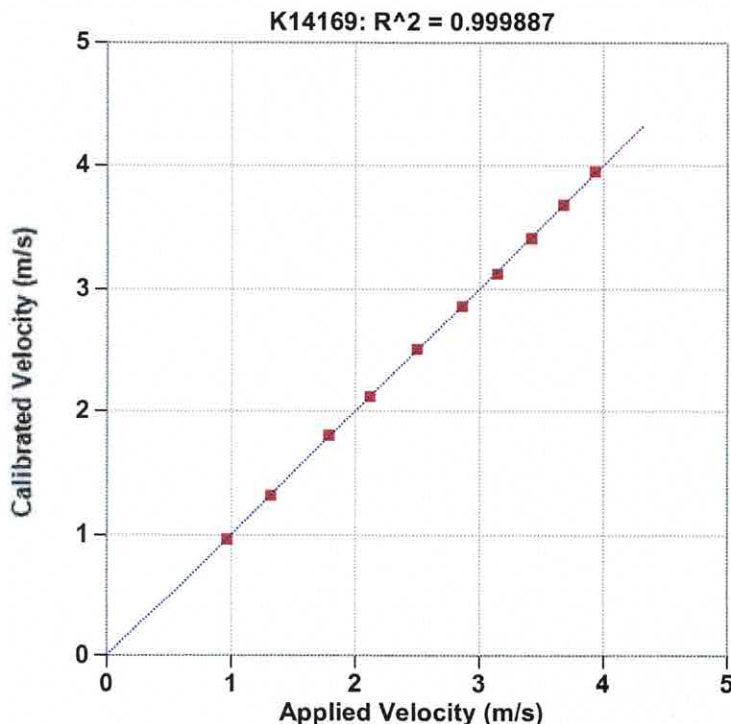
Calibration valid 2 years

From: **SEP 06 2024**

Ref Acc 1: 78268! Cal on: 11Jan2024
986 g's/volt

Ref Acc 2: 78270! Cal on: 11Jan2024
971 g's/volt

Reference accelerometer calibrations are traceable to
the United States National Institute of Standards and
Technology (NIST).



Reference Velocity	S/N K14169 Velocity
m/s	m/s
0.971	0.970
1.323	1.319
1.792	1.805
2.124	2.122
2.502	2.510
2.865	2.861
3.146	3.128
3.423	3.412
3.680	3.683
3.935	3.952

Maximum Acceleration: 848 g's

Certificate of Calibration

Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: K14170 Temperature: 23.6 °C

Model: KICHER PR Humidity: 52%

Calibrated on: Channel 3 on 8G 5161 LE

PDA CALIBRATION FACTOR

370.6 mv/5000g

(74.1 μ v/g)

R²: 0.999972 [Chip programmed]

Ref Acc 1: 78268! Cal on: 11Jan2024
986 g's/volt

Ref Acc 2: 78270! Cal on: 11Jan2024
971 g's/volt

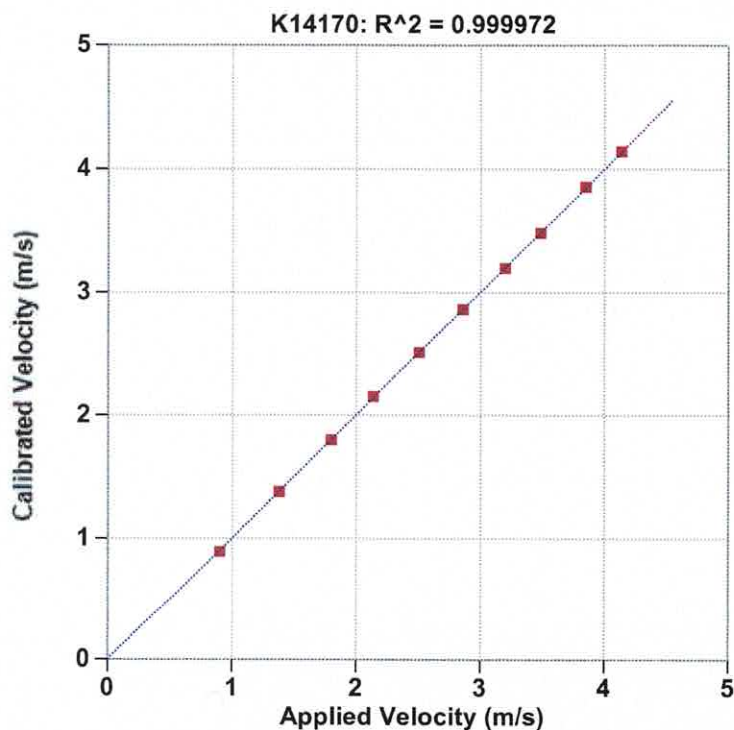
Operator: William Johnson


Signed

Reference accelerometer calibrations are traceable to
the United States National Institute of Standards and
Technology (NIST).

Calibration valid 2 years

From: **SEP 06 2024**

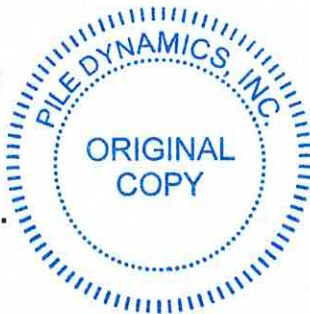


Reference Velocity	S/N K14170 Velocity
m/s	m/s
0.903	0.895
1.383	1.380
1.803	1.800
2.142	2.149
2.512	2.510
2.862	2.862
3.203	3.196
3.491	3.485
3.851	3.859
4.137	4.142

Maximum Acceleration: 899 g's

Certificate of Calibration
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: K14168 Temperature: 23.8 °C
Model: KICHER PR Humidity: 52%
Calibrated on: Channel 3 on 8G 5161 LE

PDA CALIBRATION FACTOR

389.8 mv/5000g
(78.0 μ v/g)
R²: 0.999973 [Chip programmed]

Ref Acc 1: 78268! Cal on: 11Jan2024
986 g's/volt
Ref Acc 2: 78270! Cal on: 11Jan2024
971 g's/volt

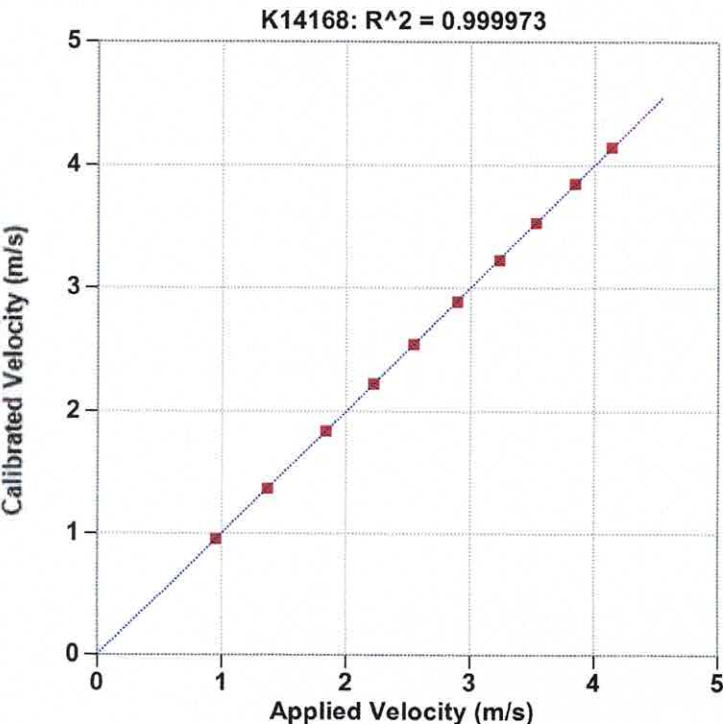
Operator: William Johnson


Signed

Reference accelerometer calibrations are traceable to
the United States National Institute of Standards and
Technology (NIST).

Calibration valid 2 years

From: **SEP 06 2024**



Reference Velocity	S/N K14168 Velocity
m/s	m/s
0.958	0.956
1.374	1.370
1.841	1.845
2.227	2.228
2.548	2.549
2.899	2.893
3.237	3.225
3.532	3.535
3.846	3.851
4.141	4.145

Maximum Acceleration: 900 g's



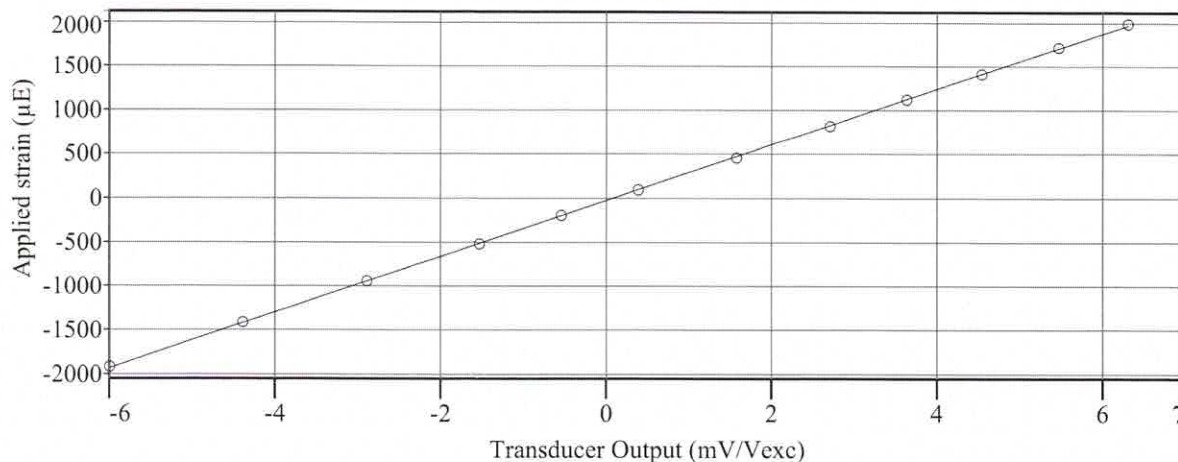
Certificate of Calibration

Pile Dynamics, Inc.
 Transducer Model: PDI Strain Transducer
 Serial Number: Y644
 PDI Gage Factor: 91.7
 Mean Linear Correlation Coefficient: 0.999920

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-1916.0	-5.996	452.8	1.576
-1415.1	-4.386	820.2	2.707
-944.9	-2.887	1122.0	3.635
-518.4	-1.526	1410.8	4.540
-196.9	-0.539	1719.2	5.470
91.9	0.392	1994.8	6.308

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Kay Tol

PDI Gage: Y644

Calibration Date: _____

Signature: Kay Tol
 SEP 05 2024





Certificate of Calibration

Pile Dynamics, Inc.

Transducer Model: PDI Strain Transducer

Serial Number: Y628

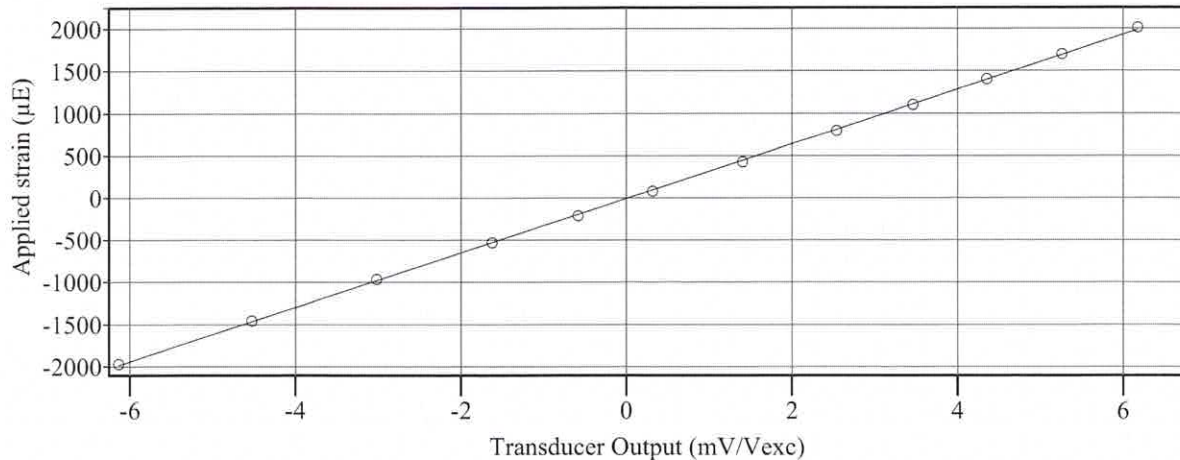
PDI Gage Factor: 93.1

Mean Linear Correlation Coefficient: 0.999853

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-1968.5	-6.134	426.5	1.403
-1456.7	-4.526	796.2	2.537
-964.6	-3.016	1102.4	3.464
-531.5	-1.620	1402.0	4.353
-210.0	-0.584	1699.5	5.265
78.7	0.317	2012.2	6.176

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Kay Tol

PDI Gage: Y628

Calibration Date: _____

Signature: 
SEP 05 2024



Certificate of Calibration
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: K14134 Temperature: 24.9 °C
Model: KICHER PR Humidity: 48%
Calibrated on: Channel 4 on 8G 5161 LE

PDA CALIBRATION FACTOR

345.6 mv/5000g
(69.1 µv/g)
R^2: 0.999934 [Chip programmed]

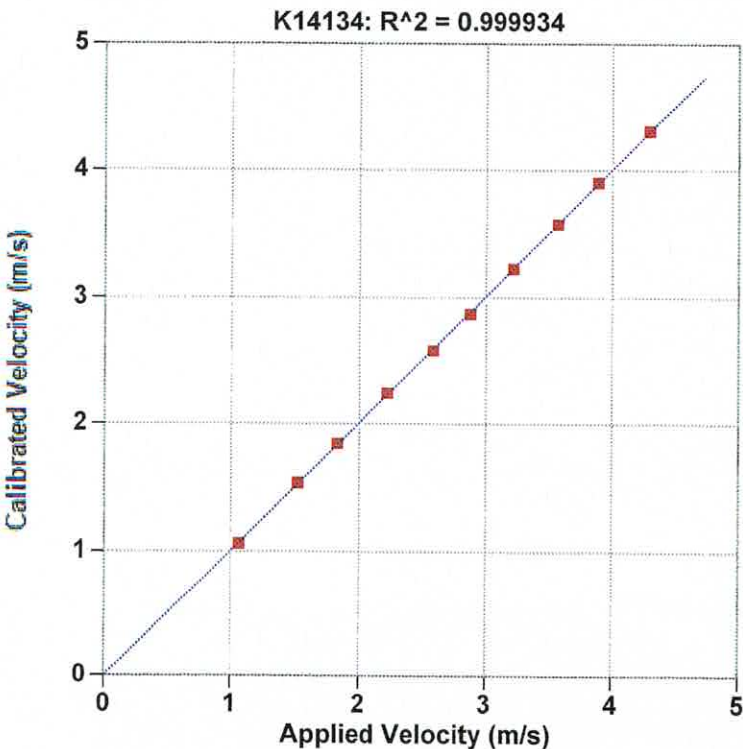
Ref Acc 1: 78270! Cal on: 11Jan2024
971 g's/volt
Ref Acc 2: 78268! Cal on: 11Jan2024
986 g's/volt

Operator: William Johnson


Signed

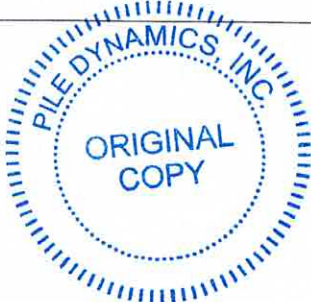
Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

Calibration valid 2 years
From: SEP 05 2024



Reference Velocity	S/N K14134 Velocity
m/s	m/s
1.067	1.063
1.523	1.531
1.830	1.839
2.230	2.241
2.591	2.578
2.880	2.868
3.227	3.223
3.575	3.570
3.895	3.901
4.300	4.305

Maximum Acceleration: 925 g's



Certificate of Calibration
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.



Serial No: K14136 Temperature: 25.1 °C
Model: KICHER PR Humidity: 45%
Calibrated on: Channel 3 on 8G 5161 LE

PDA CALIBRATION FACTOR

375.3 mv/5000g
(75.1 μv/g)
R^2: 0.999949 [Chip programmed]

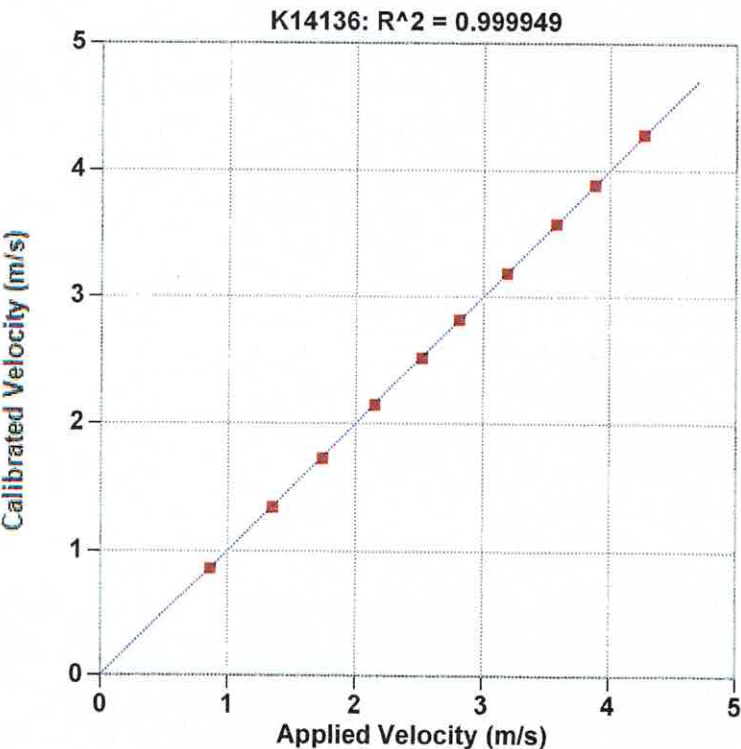
Ref Acc 1: 78270! Cal on: 11Jan2024
971 g's/volt
Ref Acc 2: 78268! Cal on: 11Jan2024
986 g's/volt

Operator: William Johnson


Signed

Reference accelerometer calibrations are traceable to the United States National Institute of Standards and Technology (NIST).

Calibration valid 2 years
SEP 05 2024
From: _____



Reference Velocity	S/N K14136 Velocity
m/s	m/s
0.865	0.861
1.355	1.346
1.739	1.726
2.156	2.147
2.528	2.518
2.814	2.822
3.190	3.190
3.580	3.583
3.883	3.888
4.273	4.281

Maximum Acceleration: 916 g's





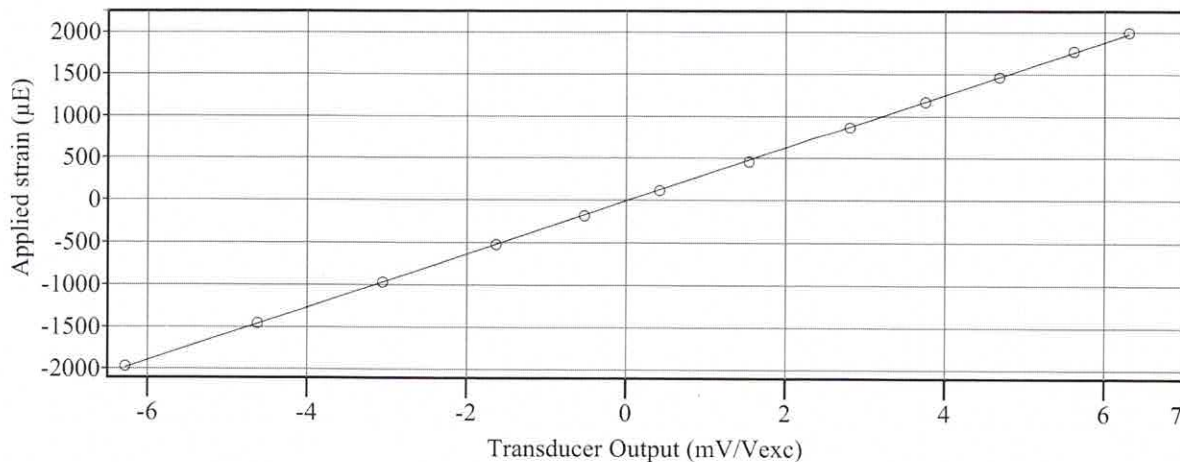
Certificate of Calibration

Pile Dynamics, Inc.
Transducer Model: PDI Strain Transducer
Serial Number: Y646
PDI Gage Factor: 91.0
Mean Linear Correlation Coefficient: 0.999911

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-1970.7	-6.280	452.8	1.539
-1456.7	-4.619	866.1	2.803
-968.9	-3.052	1168.0	3.749
-524.9	-1.628	1463.3	4.676
-183.7	-0.527	1771.7	5.614
111.5	0.416	1994.8	6.304

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Kay Tol

PDI Gage: Y646

Calibration Date: _____

Signature: _____

Kay Tol

SEP 05 2024





Certificate of Calibration

Pile Dynamics, Inc.

Transducer Model: PDI Strain Transducer

Serial Number: Z385

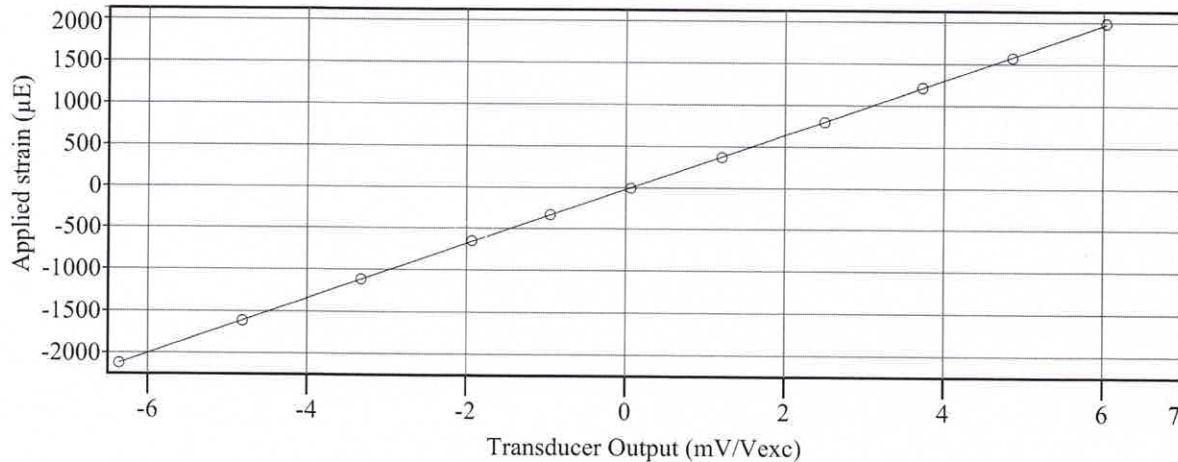
PDI Gage Factor: 95.4

Mean Linear Correlation Coefficient: 0.999978

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2121.6	-6.358	371.8	1.205
-1614.2	-4.809	800.5	2.499
-1115.5	-3.321	1213.9	3.725
-649.6	-1.929	1574.8	4.855
-330.3	-0.948	1981.6	6.036
-6.6	0.063		

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Paul Hartman

Signature:

Paul Hartman

PDI Gage: Z385

Calibration Date: SEP 03 2024





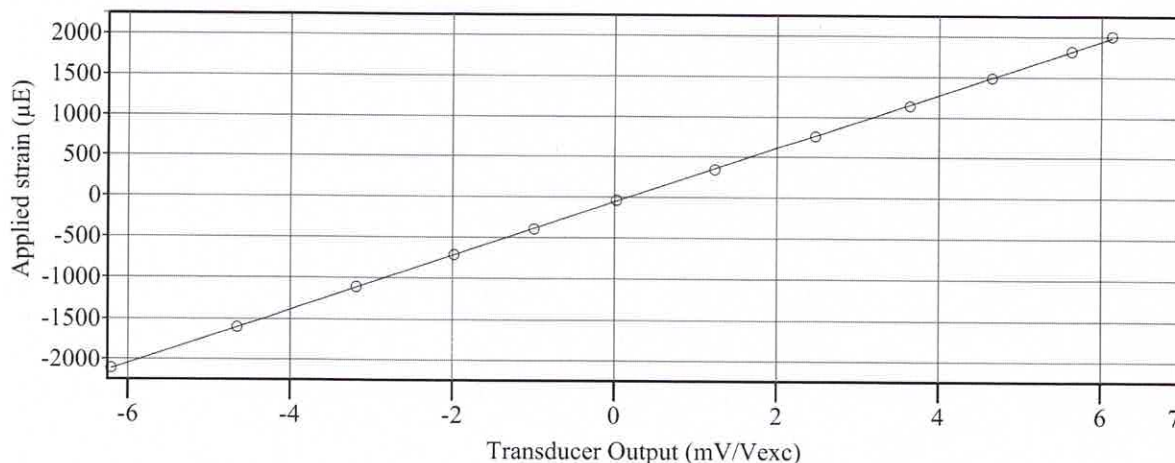
Certificate of Calibration

Pile Dynamics, Inc.
 Transducer Model: PDI Strain Transducer
 Serial Number: Z384
 PDI Gage Factor: 96.0
 Mean Linear Correlation Coefficient: 0.999955

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2112.9	-6.207	341.2	1.235
-1601.0	-4.652	761.2	2.475
-1108.9	-3.182	1141.7	3.639
-715.2	-1.980	1489.5	4.651
-393.7	-0.992	1817.6	5.635
-39.4	0.023	2001.3	6.133

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Paul Hartman

Signature: Paul Hartman

PDI Gage: Z384

Calibration Date: SEP 03 2024





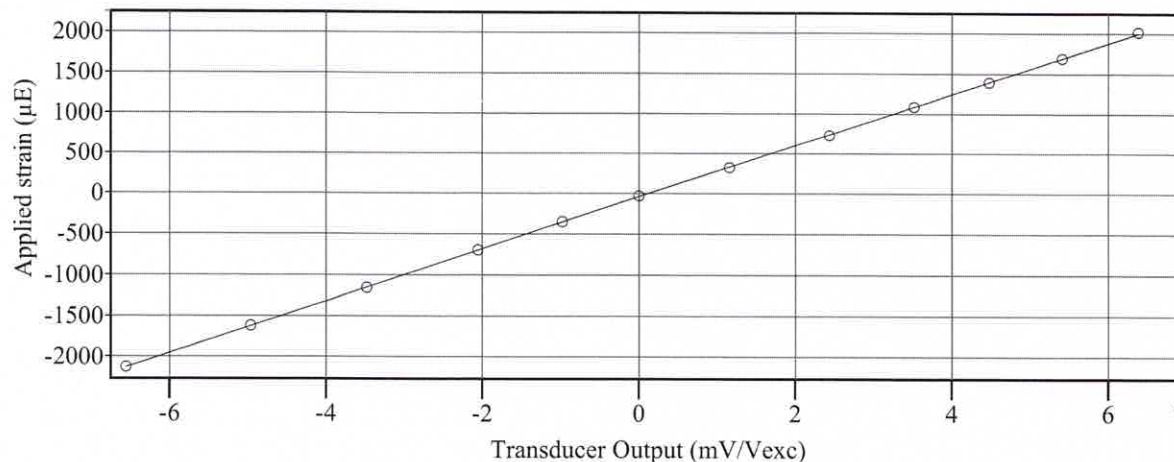
Certificate of Calibration

Pile Dynamics, Inc.
Transducer Model: PDI Strain Transducer
Serial Number: Y999
PDI Gage Factor: 92.4
Mean Linear Correlation Coefficient: 0.999963

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2130.4	-6.557	321.5	1.155
-1620.7	-4.960	728.3	2.435
-1152.7	-3.478	1087.1	3.520
-695.5	-2.058	1391.1	4.476
-350.0	-0.979	1692.9	5.411
-32.8	0.003	2021.0	6.380

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Kay Tol

PDI Gage: Y999

Calibration Date: _____

Signature: _____

Kay Tol

SEP 05 2024





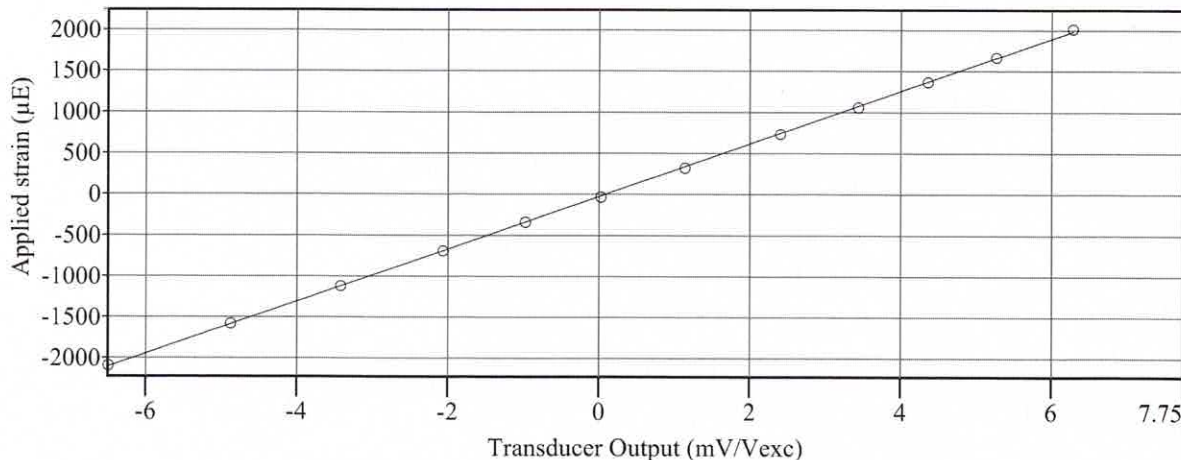
Certificate of Calibration

Pile Dynamics, Inc.
 Transducer Model: PDI Strain Transducer
 Serial Number: Y998
 PDI Gage Factor: 92.5
 Mean Linear Correlation Coefficient: 0.999888

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2093.2	-6.493	321.5	1.140
-1581.4	-4.872	732.7	2.407
-1122.0	-3.413	1056.4	3.437
-689.0	-2.064	1364.8	4.363
-341.2	-0.971	1666.7	5.265
-32.8	0.028	2014.4	6.281

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Kay Tol

Signature: Kay Tol

PDI Gage: Y998

SEP 05 2024

Calibration Date: _____





Certificate of Calibration

Pile Dynamics, Inc.

Transducer Model: PDI Strain Transducer

Serial Number: Y966

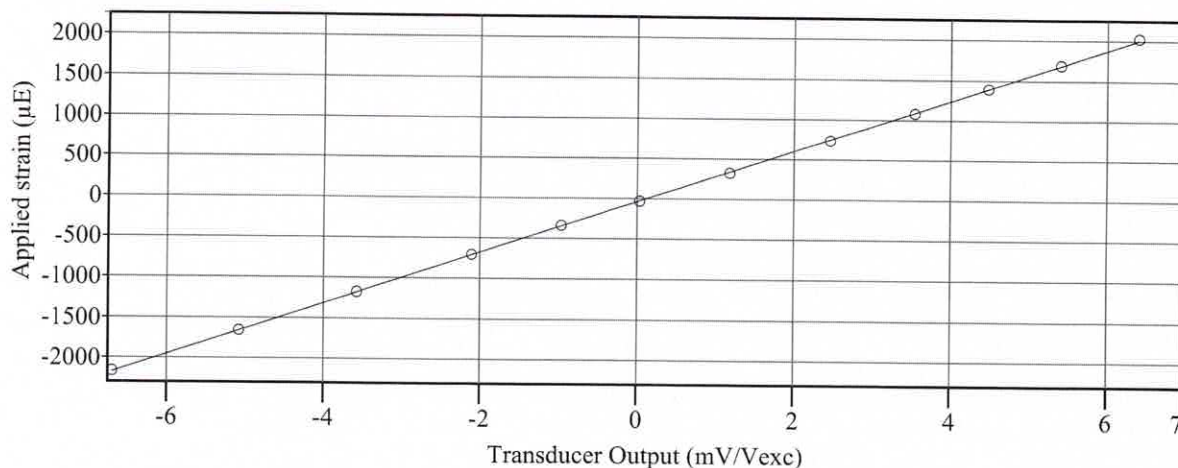
PDI Gage Factor: 92.2

Mean Linear Correlation Coefficient: 0.999938

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2165.4	-6.695	321.5	1.178
-1653.5	-5.075	734.9	2.463
-1174.5	-3.571	1082.7	3.541
-708.7	-2.108	1391.1	4.481
-341.2	-0.965	1692.9	5.407
-32.8	0.034	2027.6	6.402

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Kay Tol

PDI Gage: Y966

Calibration Date: _____

Signature: _____

SEP 05 2024

Kay Tol





Certificate of Calibration

Pile Dynamics, Inc.

Transducer Model: PDI Strain Transducer

Serial Number: Y949

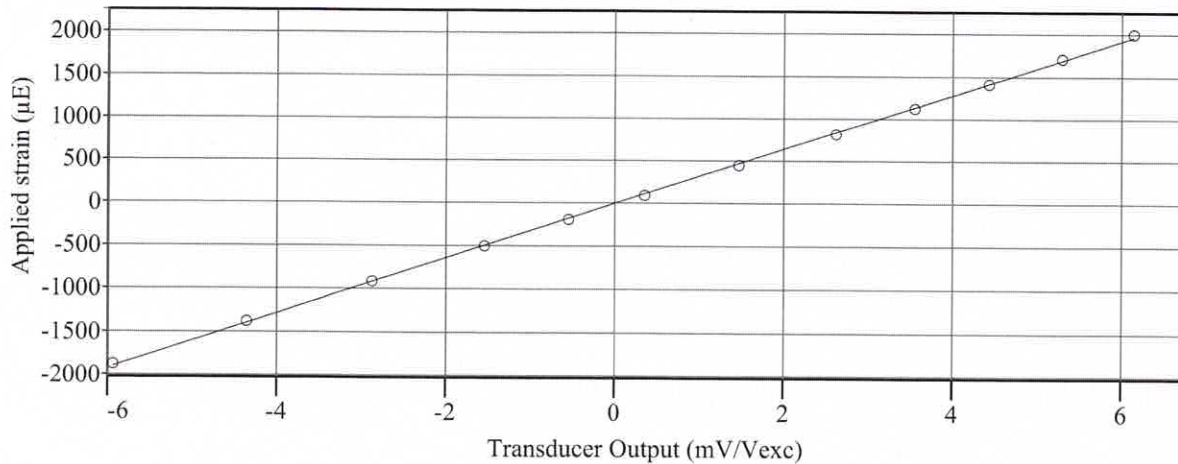
PDI Gage Factor: 92.4

Mean Linear Correlation Coefficient: 0.999734

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-1876.6	-5.939	446.2	1.466
-1378.0	-4.355	813.6	2.619
-918.6	-2.869	1122.0	3.551
-500.9	-1.540	1410.8	4.429
-190.3	-0.547	1712.6	5.298
91.9	0.354	2001.3	6.141

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: VANNA OUK

PDI Gage: Y949

Calibration Date: _____

Signature: _____

SEP 05 2024





Certificate of Calibration

Pile Dynamics, Inc.

Transducer Model: PDI Strain Transducer

Serial Number: Y947

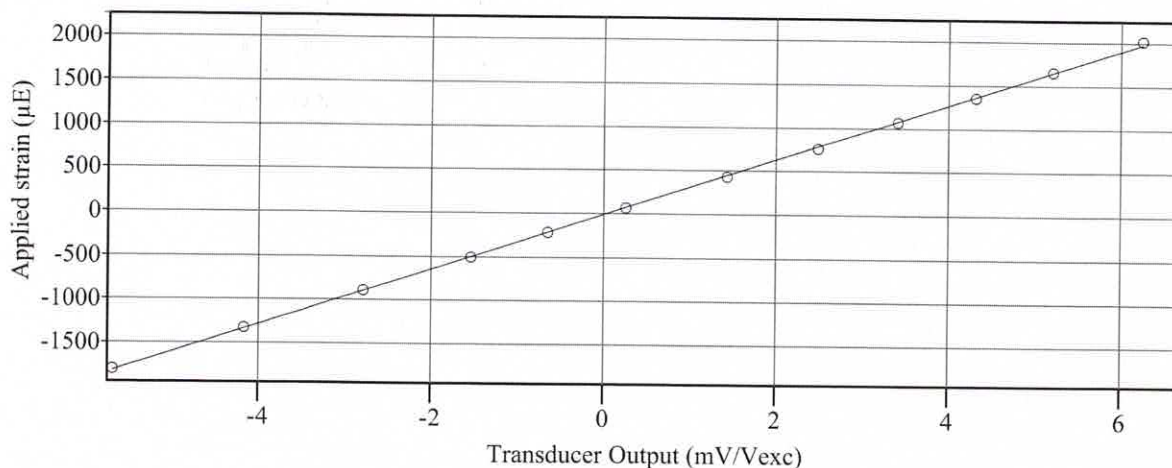
PDI Gage Factor: 91.9

Mean Linear Correlation Coefficient: 0.999799

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-1804.5	-5.689	426.5	1.431
-1325.5	-4.165	756.8	2.487
-892.4	-2.782	1069.6	3.416
-505.2	-1.536	1353.9	4.318
-216.5	-0.644	1653.5	5.212
65.6	0.262	2018.8	6.250

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: VANNA OUK

PDI Gage: Y947

Calibration Date: _____

Signature: _____

SEP 05 2024





Certificate of Calibration

Pile Dynamics, Inc.

Transducer Model: PDI Strain Transducer

Serial Number: Y945

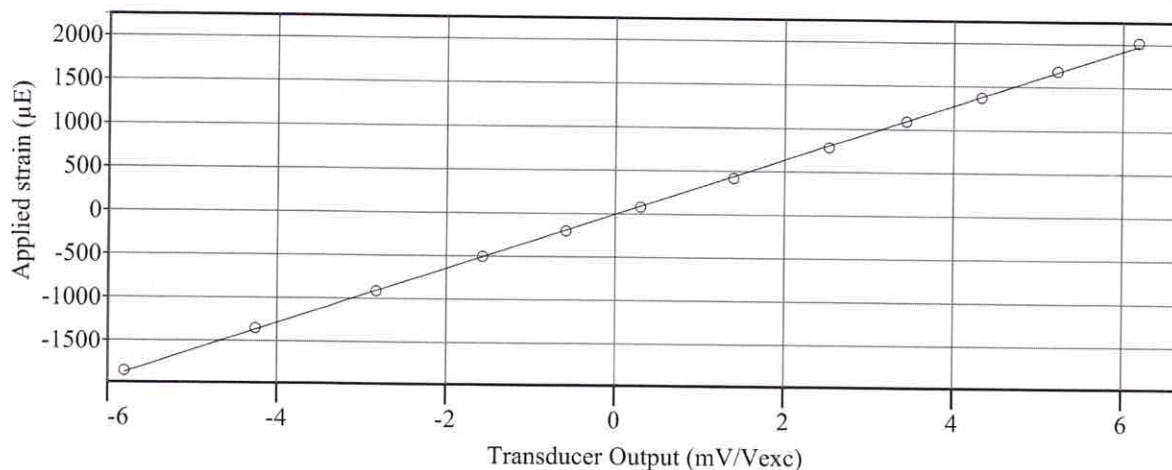
PDI Gage Factor: 92.4

Mean Linear Correlation Coefficient: 0.999771

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-1843.8	-5.807	419.9	1.395
-1349.5	-4.254	780.8	2.526
-912.1	-2.827	1089.2	3.444
-503.1	-1.566	1371.4	4.328
-203.4	-0.583	1679.8	5.230
78.7	0.298	2014.4	6.186

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: VANNA OUK

Signature: _____

PDI Gage: Y945

SEP 05 2024

Calibration Date: _____





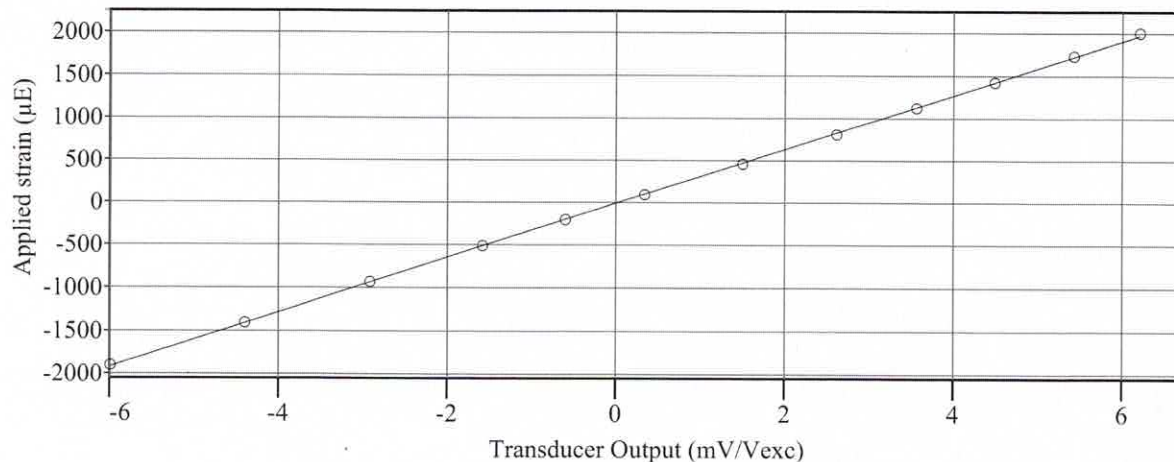
Certificate of Calibration

Pile Dynamics, Inc.
 Transducer Model: PDI Strain Transducer
 Serial Number: Y915
 PDI Gage Factor: 92.1
 Mean Linear Correlation Coefficient: 0.999889

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-1902.9	-5.991	459.3	1.500
-1404.2	-4.395	807.1	2.616
-931.8	-2.911	1122.0	3.563
-511.8	-1.580	1423.9	4.488
-203.4	-0.599	1732.3	5.430
91.9	0.341	2003.5	6.211

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Kay Tol

Signature: _____

Kay Tol

PDI Gage: Y915

SEP 05 2024

Calibration Date: _____





Certificate of Calibration

Pile Dynamics, Inc.

Transducer Model: PDI Strain Transducer

Serial Number: 167A

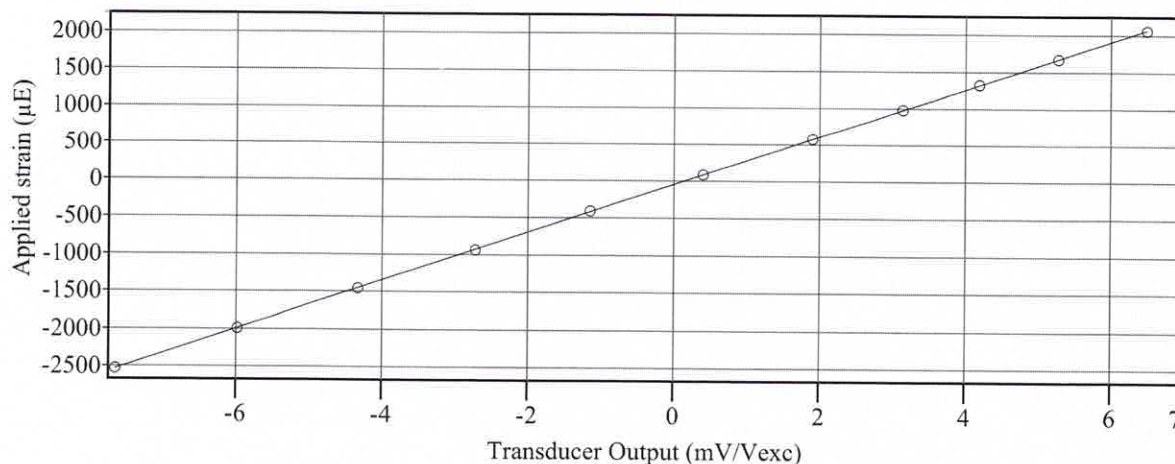
PDI Gage Factor: 94.1

Mean Linear Correlation Coefficient: 0.999984

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-2532.8	-7.657	577.4	1.907
-1994.8	-5.979	984.3	3.145
-1458.9	-4.329	1325.5	4.192
-938.3	-2.718	1673.2	5.279
-406.8	-1.146	2060.4	6.491
85.3	0.400		

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Paul Hartman

Signature: _____

Paul Hartman

PDI Gage: 167A

Calibration Date: _____

SEP 13 2024





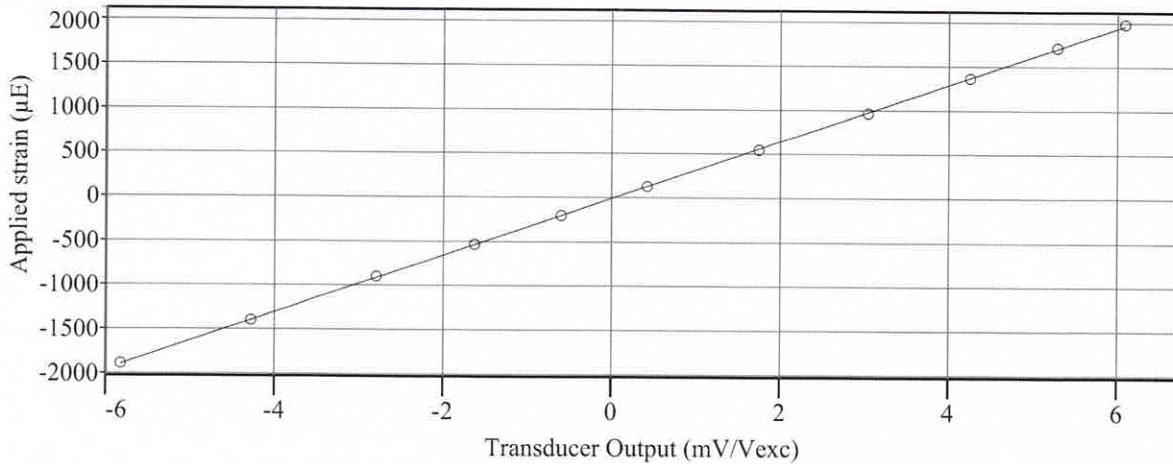
Certificate of Calibration

Pile Dynamics, Inc.
 Transducer Model: PDI Strain Transducer
 Serial Number: 125A
 PDI Gage Factor: 93.6
 Mean Linear Correlation Coefficient: 0.999930

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-1889.8	-5.826	544.6	1.747
-1395.5	-4.279	964.6	3.041
-899.0	-2.790	1364.8	4.253
-531.5	-1.622	1712.6	5.289
-203.4	-0.600	1988.2	6.091
124.7	0.422		

Calibration Curve



PDI Strain Transducer Calibration System (PDI STCS)

PDI STCS Serial Number:	1000HA
Firmware version number:	0.9.0.0
Transducer Gage Length:	3 inches (76.2mm)
Excitation Voltage for Calibration:	5.0 VDC

PDI certifies the above STCS instrument meets or exceeds published specifications and has been verified using standards and instruments whose accuracies are traceable to the National Institute of Standards and Technology (NIST), an accepted value of a natural physical constant or a ratio calibration technique.

Calibrated By: Paul Hartman

Signature: _____

Paul Hartman

PDI Gage: 125A

Calibration Date: _____

SEP 13 2024

