Accelerometer Calibration Certificate
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.
Calibration performed on JUN 19 2024

Serial No:	K14059	**Temperature:**	23.8 °C
Model:	PR	**Humidity:**	41%
Calibrated on:	Channel 3 on 8G 5161 LE		

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

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

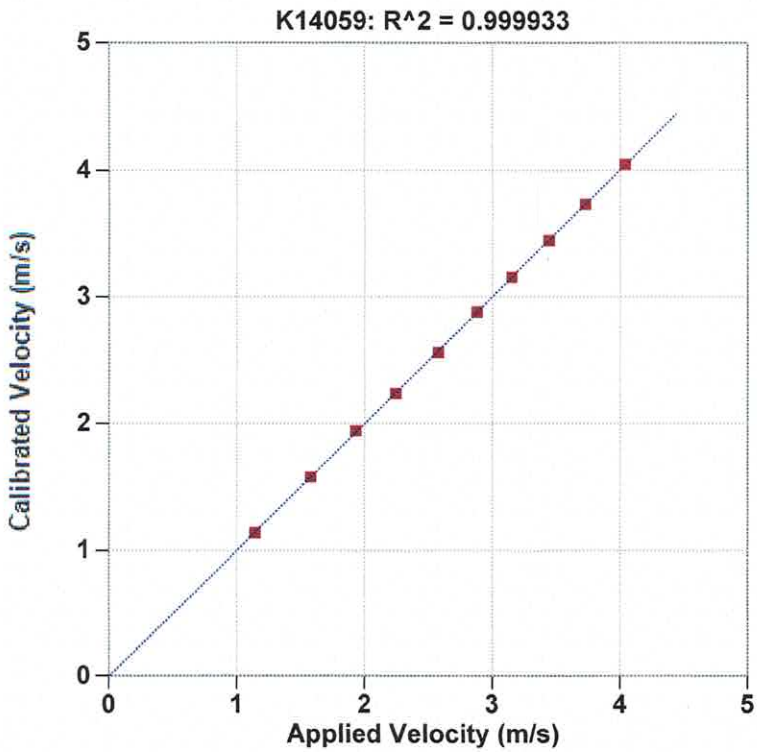
PDA CALIBRATION FACTOR

392.2 mv/5000g
(78.4 µv/g)
R^2: 0.999933 [Chip programmed]

Operator: William Johnson

Signed

PILE DYNAMICS, INC.
ORIGINAL COPY



Reference Velocity	S/N K14059 Velocity
m/s	m/s
1.142	1.136
1.575	1.577
1.927	1.943
2.244	2.236
2.574	2.563
2.877	2.881
3.151	3.152
3.444	3.441
3.728	3.727
4.037	4.043

Maximum Acceleration: 872 g's

Accelerometer Calibration Certificate
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.
Calibration performed on JUN 1 9 2024

Serial No:	K14060	**Temperature:**	24.2 °C
Model:	PR	**Humidity:**	41%
Calibrated on:	Channel 4 on 8G 5161 LE		

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

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

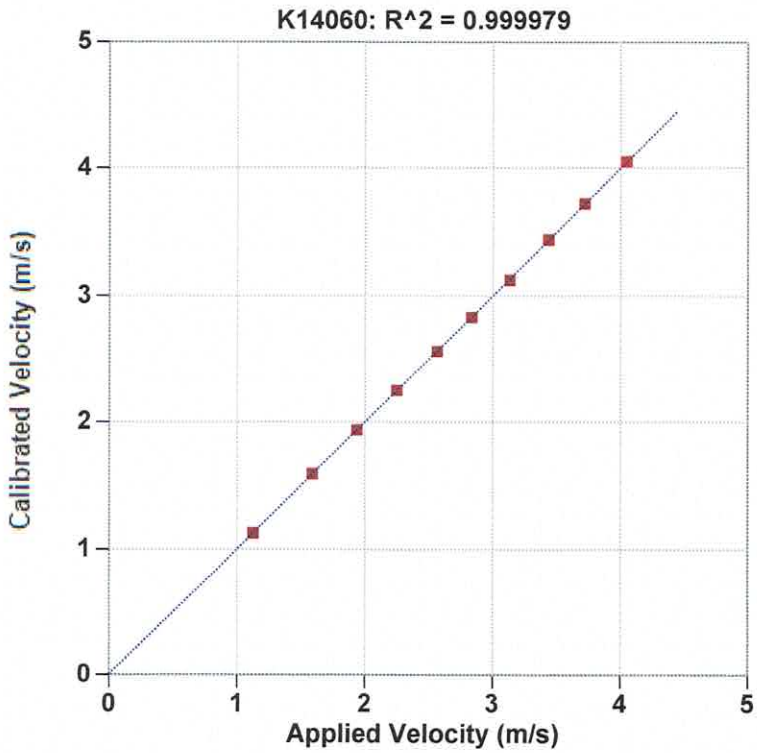
PDA CALIBRATION FACTOR

353.8 mv/5000g
(70.8 µv/g)
R^2: 0.999979 [Chip programmed]

Operator: William Johnson

Signed

PILE DYNAMICS, INC.
ORIGINAL COPY



Reference Velocity	S/N K14060 Velocity
m/s	m/s
1.128	1.129
1.592	1.595
1.940	1.936
2.254	2.255
2.567	2.564
2.837	2.835
3.137	3.127
3.442	3.445
3.723	3.726
4.049	4.055

Maximum Acceleration: 873 g's

Accelerometer Calibration Certificate
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.
Calibration performed on JUN 1 9 2024

Serial No:	K14054	**Temperature:**	24.2 °C
Model:	PR	**Humidity:**	41%
Calibrated on:	Channel 3 on 8G 5161 LE		

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

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

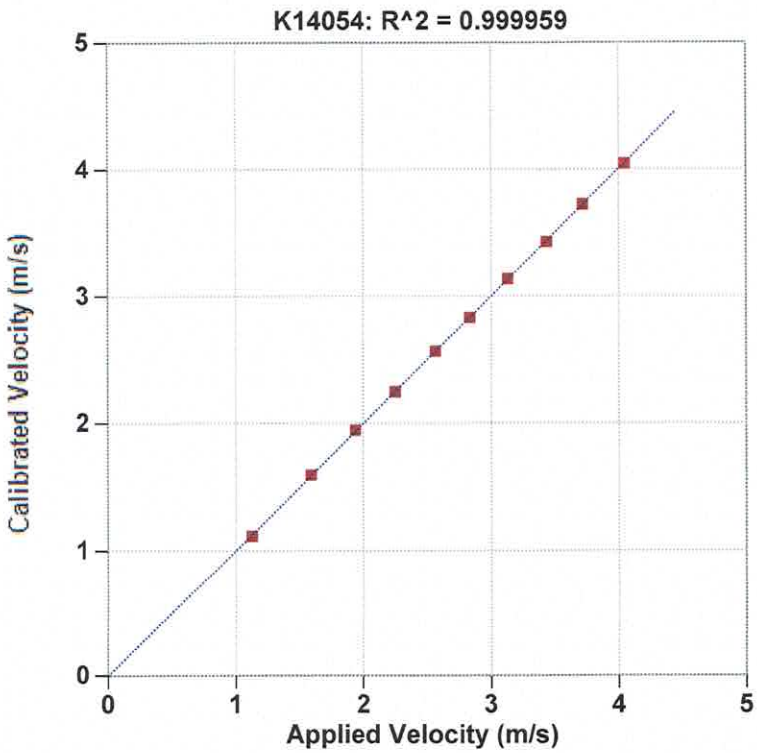
PDA CALIBRATION FACTOR

347.6 mv/5000g
(69.5 µv/g)
R^2: 0.999959 [Chip programmed]

Operator: William Johnson

Signed

PILE DYNAMICS, INC.
ORIGINAL COPY



Reference Velocity	S/N K14054 Velocity
m/s	m/s
1.128	1.121
1.592	1.599
1.940	1.948
2.254	2.251
2.567	2.569
2.837	2.835
3.137	3.143
3.442	3.432
3.723	3.726
4.049	4.048

Maximum Acceleration: 873 g's

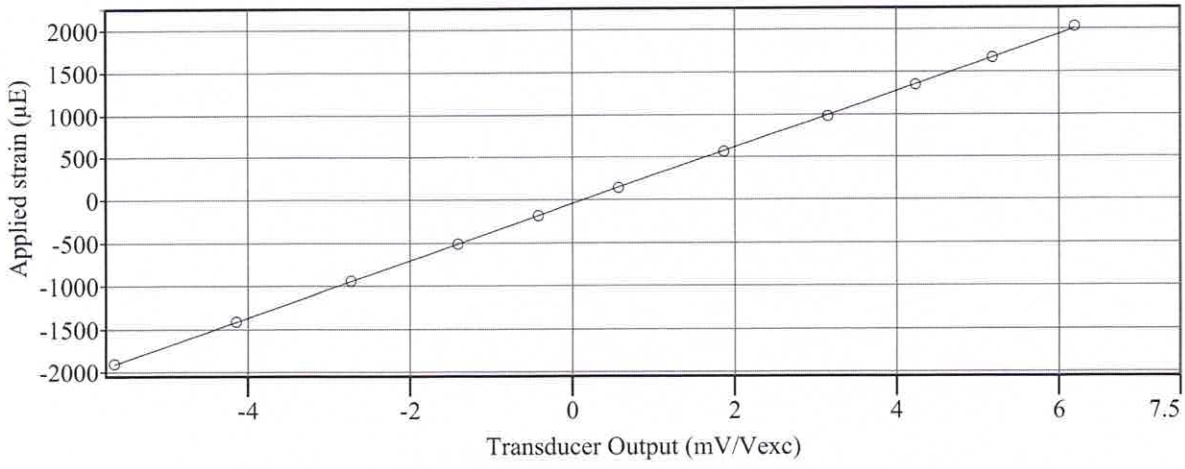
Certificate of Calibration

Pile Dynamics, Inc.
Transducer Model: PDI Strain Transducer
Serial Number: Z989
PDI Gage Factor: 95.5
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)
-1902.9	-5.646	564.3	1.869
-1410.8	-4.142	984.3	3.154
-938.3	-2.726	1351.7	4.234
-511.8	-1.410	1666.7	5.183
-183.7	-0.418	2027.6	6.197
137.8	0.573		

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: Z989
Calibration Date: JUN 19 2024

Pile Dynamics, Inc.

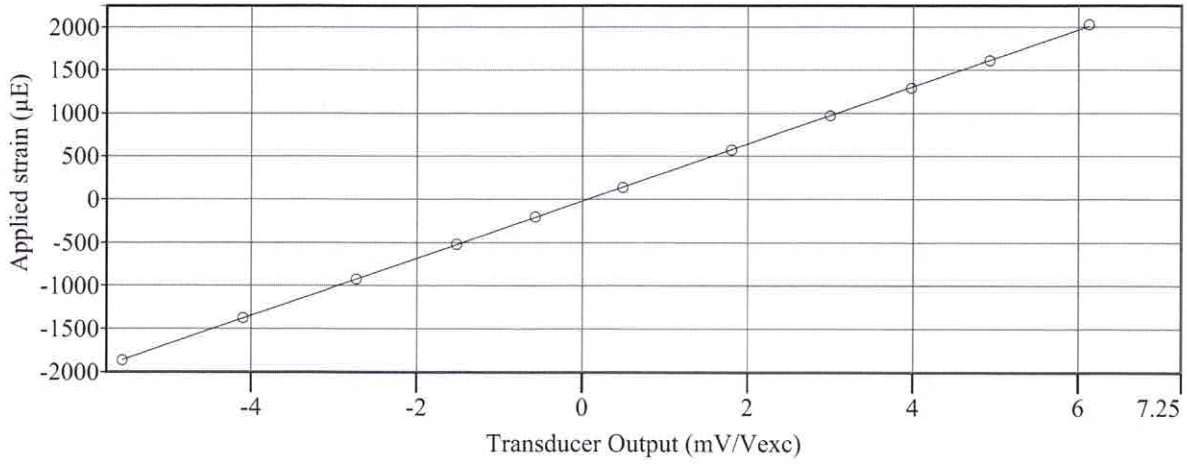
Certificate of Calibration

Pile Dynamics, Inc.
Transducer Model: PDI Strain Transducer
Serial Number: Z987
PDI Gage Factor: 95.7
Mean Linear Correlation Coefficient: 0.999962

Table 1: Representative Calibration Data

Applied strain (με)	Gage Output (mV/Vexc)	Applied strain (με)	Gage Output (mV/Vexc)
-1863.5	-5.561	570.9	1.801
-1375.8	-4.100	968.9	2.995
-925.2	-2.730	1286.1	3.978
-518.4	-1.521	1607.6	4.923
-203.4	-0.569	2027.6	6.127
137.8	0.490		

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: Z987
Calibration Date: JUN 19 2024

Pile Dynamics, Inc.

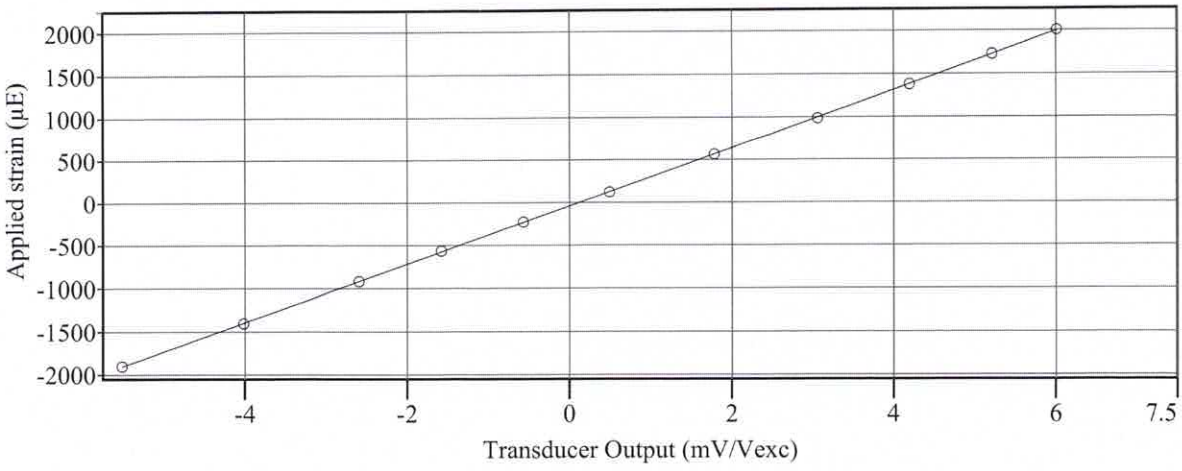
Certificate of Calibration

Pile Dynamics, Inc.
Transducer Model: PDI Strain Transducer
Serial Number: Z999
PDI Gage Factor: 97.7
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)
-1902.9	-5.516	564.3	1.783
-1404.2	-4.017	984.3	3.061
-918.6	-2.593	1378.0	4.195
-564.3	-1.579	1725.7	5.212
-227.5	-0.568	2001.3	6.011
124.7	0.496		

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: Z999
Calibration Date: JUN 19 2024

Pile Dynamics, Inc.

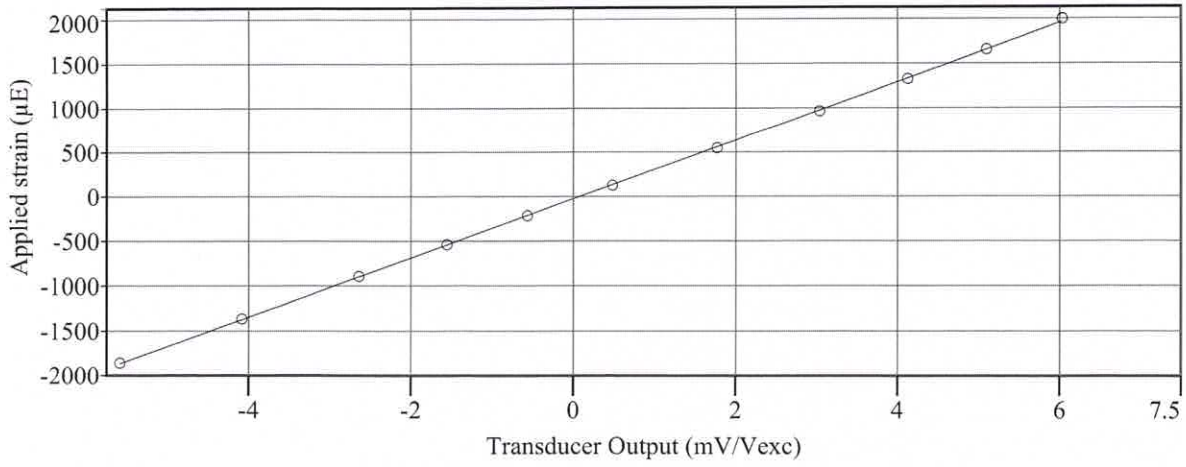
Certificate of Calibration

Pile Dynamics, Inc.
Transducer Model: PDI Strain Transducer
Serial Number: Z996
PDI Gage Factor: 95.3
Mean Linear Correlation Coefficient: 0.999903

Table 1: Representative Calibration Data

Applied strain (με)	Gage Output (mV/Vexc)	Applied strain (με)	Gage Output (mV/Vexc)
-1863.5	-5.587	544.6	1.771
-1364.8	-4.081	964.6	3.036
-892.4	-2.640	1325.5	4.126
-538.1	-1.558	1653.5	5.095
-216.5	-0.564	1994.8	6.033
124.7	0.485		

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: Z996
Calibration Date: JUN 19 2024

Pile Dynamics, Inc.

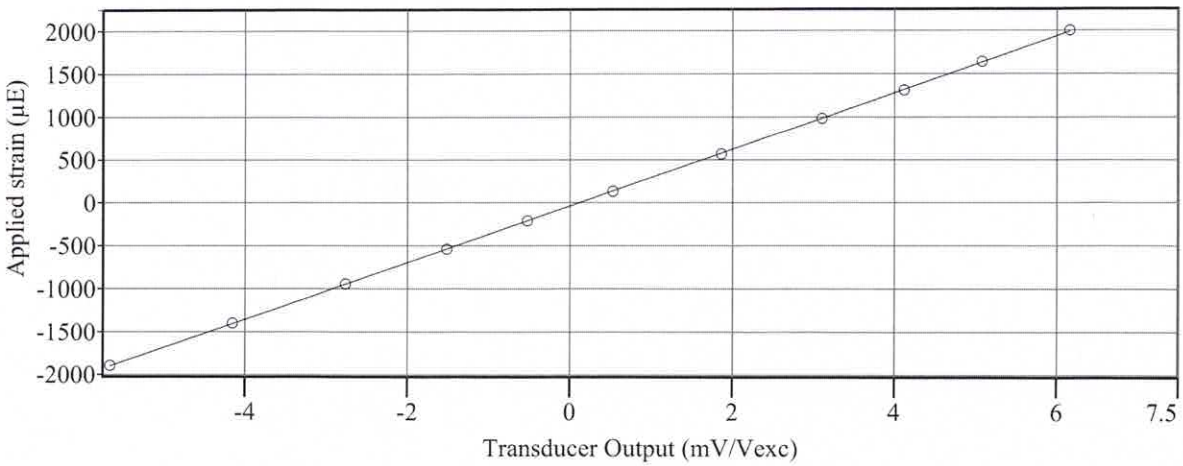
Certificate of Calibration

Pile Dynamics, Inc.
Transducer Model: PDI Strain Transducer
Serial Number: Z981
PDI Gage Factor: 95.1
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)
-1896.3	-5.661	566.5	1.862
-1397.6	-4.153	984.3	3.103
-944.9	-2.762	1312.3	4.118
-538.1	-1.516	1640.4	5.076
-210.0	-0.523	2001.3	6.158
131.2	0.532		

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: Z981
Calibration Date: JUN 19 2024

Pile Dynamics, Inc.

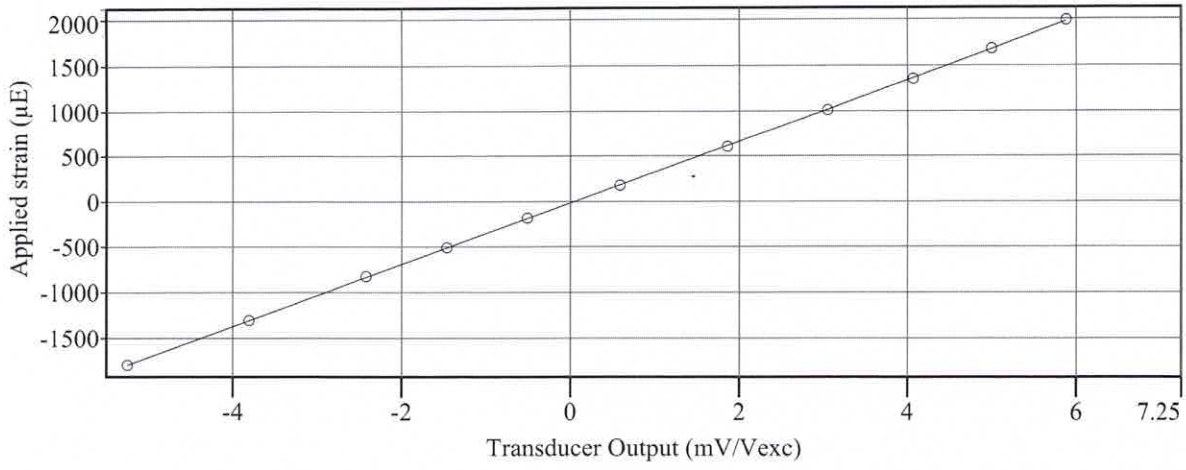
Certificate of Calibration

Pile Dynamics, Inc.
Transducer Model: PDI Strain Transducer
Serial Number: Z992
PDI Gage Factor: 97.8
Mean Linear Correlation Coefficient: 0.999962

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-1797.9	-5.251	603.7	1.860
-1303.6	-3.806	1010.5	3.053
-826.8	-2.420	1351.7	4.068
-511.8	-1.465	1679.8	4.995
-183.7	-0.508	1988.2	5.882
177.2	0.590		

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: Z992

Calibration Date: JUN 19 2024

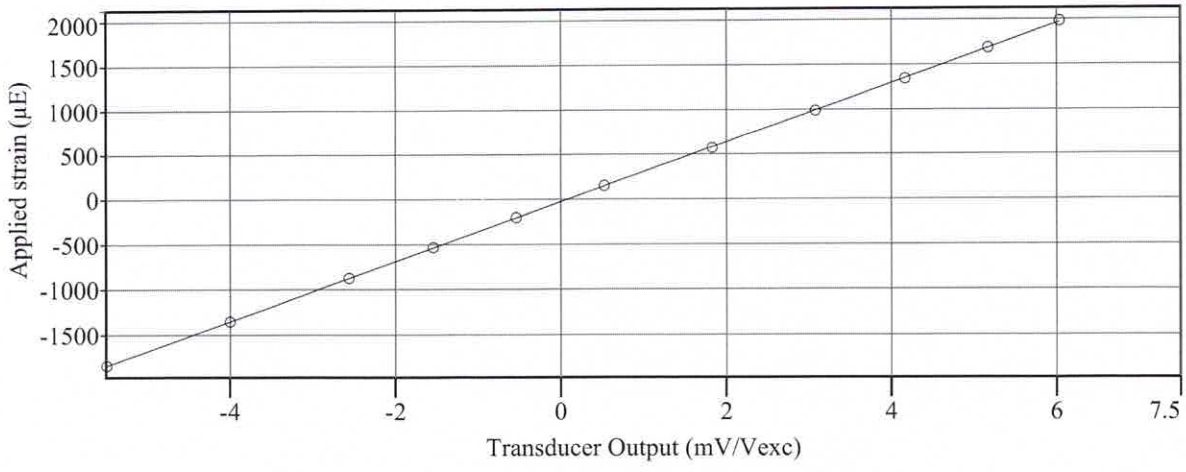
Certificate of Calibration

Pile Dynamics, Inc.
Transducer Model: PDI Strain Transducer
Serial Number: Z993
PDI Gage Factor: 95.6
Mean Linear Correlation Coefficient: 0.999981

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-1843.8	-5.490	570.9	1.829
-1351.7	-4.001	990.8	3.081
-872.7	-2.561	1345.1	4.167
-531.5	-1.544	1686.4	5.167
-203.4	-0.540	1981.6	6.035
150.9	0.526		

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: Z993
Calibration Date: JUN 19 2024

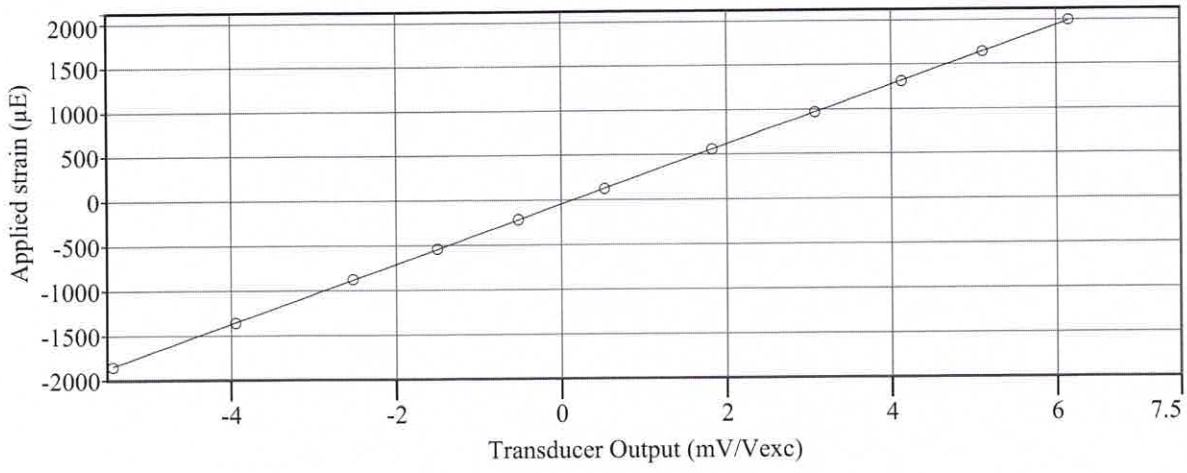
Certificate of Calibration

Pile Dynamics, Inc.
Transducer Model: PDI Strain Transducer
Serial Number: Z994
PDI Gage Factor: 95.6
Mean Linear Correlation Coefficient: 0.999983

Table 1: Representative Calibration Data

Applied strain (με)	Gage Output (mV/Vexc)	Applied strain (με)	Gage Output (mV/Vexc)
-1850.4	-5.433	557.7	1.825
-1356.1	-3.945	971.1	3.076
-872.7	-2.522	1312.3	4.126
-538.1	-1.501	1640.4	5.107
-216.5	-0.519	1994.8	6.148
124.7	0.525		

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: Z994
Calibration Date: JUN 19 2024

Pile Dynamics, Inc.

Accelerometer Calibration Certificate
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.
Calibration performed on JUN 1 9 2024

Serial No:	80000	**Temperature:**	24.6 °C
Model:	PE	**Humidity:**	52%
Calibrated on:	Channel 3 on 8G 5161 LE		

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

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

PDA CALIBRATION FACTOR

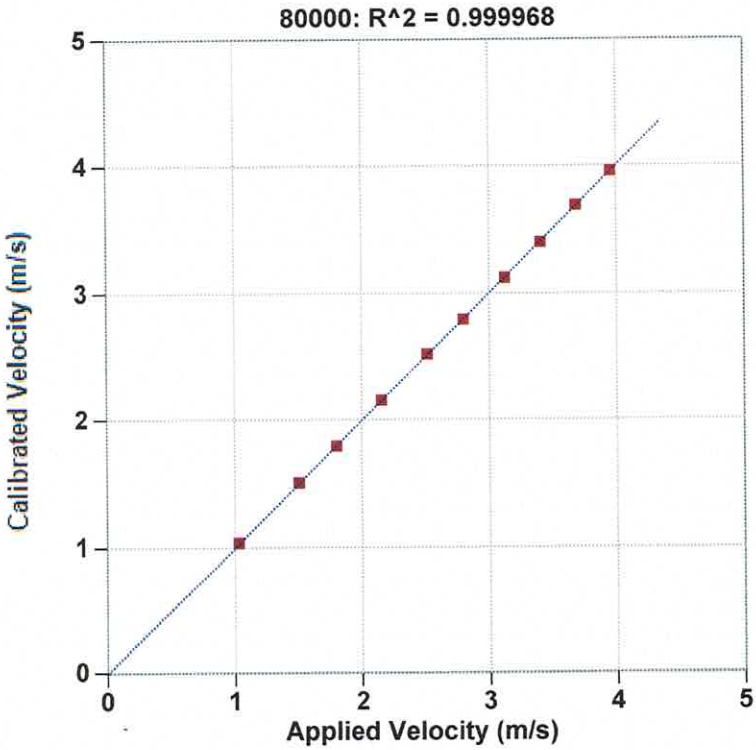
937.7 g's/volt

R^2: 0.999968 [Chip programmed]

Operator: William Johnson

Signed

PILE DYNAMICS, INC.
ORIGINAL COPY



Reference Velocity	S/N 80000 Velocity
m/s	m/s
1.030	1.038
1.505	1.509
1.800	1.795
2.155	2.157
2.513	2.521
2.799	2.794
3.127	3.122
3.405	3.401
3.684	3.689
3.956	3.955

Maximum Acceleration: 845 g's

Accelerometer Calibration Certificate
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.
Calibration performed on JUN 1 9 2024

Serial No:	79626	**Temperature:**	24.6 °C
Model:	PE	**Humidity:**	53%
Calibrated on:	Channel 4 on 8G 5161 LE		

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

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

PDA CALIBRATION FACTOR

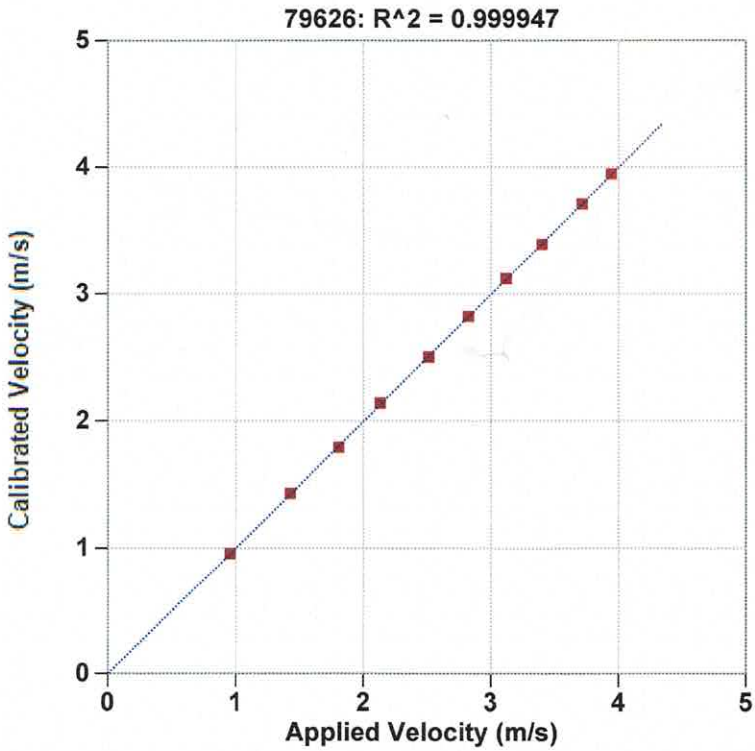
948.0 g's/volt

R^2: 0.999947 [Chip programmed]

Operator: William Johnson

Signed

PILE DYNAMICS, INC.
ORIGINAL COPY



Reference Velocity	S/N 79626 Velocity
m/s	m/s
0.955	0.957
1.428	1.434
1.806	1.792
2.134	2.142
2.514	2.505
2.826	2.826
3.116	3.124
3.401	3.396
3.714	3.712
3.943	3.949

Maximum Acceleration: 843 g's

Accelerometer Calibration Certificate
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.
Calibration performed on JUN 1 9 2024

Serial No:	K14055	**Temperature:**	24.2 °C
Model:	PR	**Humidity:**	41%
Calibrated on:	Channel 4 on 8G 5161 LE		

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

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

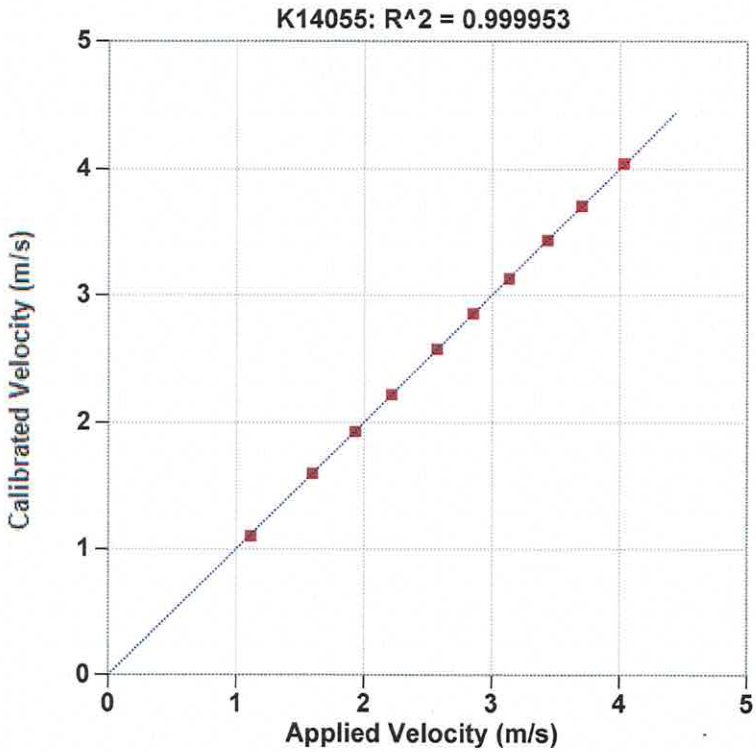
PDA CALIBRATION FACTOR

333.2 mv/5000g
(66.6 µv/g)
R^2: 0.999953 [Chip programmed]

Operator: William Johnson

Signed

PILE DYNAMICS, INC.
ORIGINAL COPY



Reference Velocity	S/N K14055 Velocity
m/s	m/s
1.118	1.105
1.598	1.599
1.932	1.929
2.220	2.222
2.573	2.578
2.855	2.858
3.139	3.133
3.442	3.434
3.706	3.707
4.036	4.044

Maximum Acceleration: 870 g's

Accelerometer Calibration Certificate
Pile Dynamics, Inc.

Calibrated by Pile Dynamics, Inc.
Calibration performed on JUN 19 2024

Serial No:	78384	**Temperature:**	24.6 °C
Model:	PE	**Humidity:**	42%
Calibrated on:	Channel 3 on 8G 5161 LE		

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

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

PDA CALIBRATION FACTOR

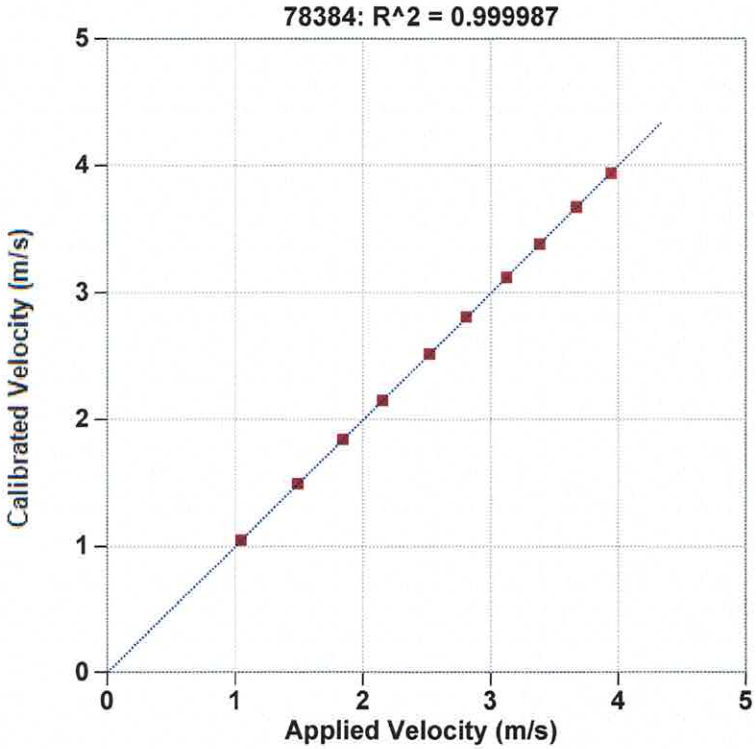
979.3 g's/volt

R^2: 0.999987 [No chip]

Operator: William Johnson

Signed

PILE DYNAMICS, INC.
ORIGINAL COPY



Reference Velocity	S/N 78384 Velocity
m/s	m/s
1.048	1.051
1.490	1.493
1.844	1.843
2.156	2.153
2.522	2.522
2.809	2.816
3.125	3.123
3.384	3.382
3.670	3.673
3.942	3.938

Maximum Acceleration: 845 g's

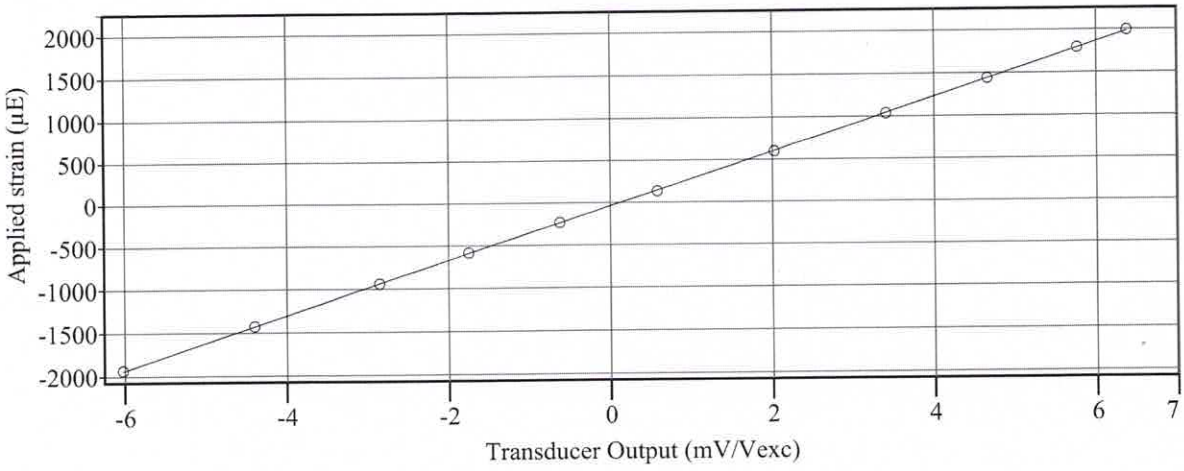
Certificate of Calibration

Pile Dynamics, Inc.
Transducer Model: PDI Strain Transducer
Serial Number: X061
PDI Gage Factor: 91.4
Mean Linear Correlation Coefficient: 0.999973

Table 1: Representative Calibration Data

Applied strain (μE)	Gage Output (mV/Vexc)	Applied strain (μE)	Gage Output (mV/Vexc)
-1935.7	-6.025	597.1	2.027
-1423.9	-4.396	1036.7	3.410
-938.3	-2.853	1439.2	4.658
-584.0	-1.750	1791.3	5.768
-229.7	-0.624	1994.8	6.379
137.8	0.581		

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: X061

Calibration Date: JUN 19 2024

Pile Dynamics, Inc.