JONAH VENTURES

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Report prepared for matt_bowser@fws.gov

BatchId = JVB2366

Number of samples analyzed = 79

Average number of copies detected

This table shows the average number of copies detected for each target organism in each sample. Values represent the average number of copies / 100 mL when sample volume was provided. When sample volumes are not known, the values indicate the estimated number of copies in the sample.

SampleId	NorthernPike01
0LLEEOJD	0
0QYJQ3L1	0
0SIUVSRS	0
0UBS9ZM1	0
13T3SKEF	0
19ABJ5C6	0
1EY36LLO	0
1SZVWVSK	0
226FLVTV	0
235AS487	0
2OH3VMK1	0
3H19M15S	0
54V4AOFU	0
5A052U6Y	0
5V288ELW	0
6W9CKYQT	0
815FXVD6	0
89YJPOOE	0
8TRRE13K	0
8V565CFU	0
98LVZFXT	0
9VPUSZOO	0
AJINAZI7	0
BKMFJ1R0	0
BLZXLC6R	0
BMXDL3B8	0
CQ6P1V0F	0
D139ZR9G	0
D6PALWDY	0
DJMLM8P3	0
EF1GLIFW	0
EYUBUIQ9	0
F2XMA6HZ	0
FIWZCP6B	0
FTWI52BV	0
FVBBS45O	0
HC2GSOWH	0
HELD3KCQ	0
HSMV7H5U	0
IGBKJEI4	0
IXWSCKR8	0
J4S1KOQU	0
J5N7T956	0
J5U0RGER	0
JA4R8OKF	0

K2ZCM1L8	0
KC27ELPD	0
M2G8ZTYC	0
ME6KXSVN	0
MK3L19GV	0
MQPUK2BQ	0
MTLAVHAE	0
N43FD7SE	0
N8EQ00EK	0
NLTNAHCG	0
NR5P5EEH	0
NXBNBQN8	0
OI6TF17U	0
OO9VYGZ2	0
PKF3O35B	0
Q4N0W5W8	0
QBFYWCYH	0
QJOG3B7W	0
QPLF4U8V	0
SZH121DL	0
T4D5AMC4	0
THH57Q1W	0
TZJITW4M	0
UKSL72WJ	0
UM0EWPI5	0
VCPM156P	0
VGAD04TY	0
VHSWMEBW	0
VLGN3CE7	0
XO6SQ0XK	0
XT6ZN8JO	0
XWGBDXA5	0
ZAXKLZ72	0
ZFBW5X0Z	0

Percent of replicates above detection limit

This table provides data on what percentage of the replicates that were run were above the detection limit. The detection limit is as high as the lowest positive on the calibration curve, but can be up to an order of magnitude lower. For example, a calibration curve might generate a positive at 100 copies and no positive for 10 copies, but the actual detection limit would be 11 copies. See the next section for the range of copy numbers estimated for each assay.

SampleId	NorthernPike01
0LLEEOJD	0
0QYJQ3L1	0
0SIUVSRS	0
0UBS9ZM1	0
13T3SKEF	0
19ABJ5C6	0
1EY36LLO	0
1SZVWVSK	0
226FLVTV	0
235AS487	0
2OH3VMK1	0
3H19M15S	0
54V4AOFU	0
5A052U6Y	0
5V288ELW	0
6W9CKYQT	0
815FXVD6	0
89YJPOOE	0
8TRRE13K	0
8V565CFU	0
98LVZFXT	0
9VPUSZOO	0
AJINAZI7	0
BKMFJ1R0	0
BLZXLC6R	0
BMXDL3B8	0
CQ6P1V0F	0
D139ZR9G	0
D6PALWDY	0
DJMLM8P3	0
EF1GLIFW	0
EYUBUIQ9	0
F2XMA6HZ	0
FIWZCP6B	0
FTWI52BV	0
FVBBS45O	0
HC2GSOWH	0
HELD3KCQ	0
HSMV7H5U	0
IGBKJEI4	0
IXWSCKR8	0
J4S1KOQU	0
J5N7T956	0

J5U0RGER	0
JA4R8OKF	0
K2ZCM1L8	0
KC27ELPD	0
M2G8ZTYC	0
ME6KXSVN	0
MK3L19GV	0
MQPUK2BQ	0
MTLAVHAE	0
N43FD7SE	0
N8EQ00EK	0
NLTNAHCG	0
NR5P5EEH	0
NXBNBQN8	0
OI6TF17U	0
OO9VYGZ2	0
PKF3O35B	0
Q4N0W5W8	0
QBFYWCYH	0
QJOG3B7W	0
QPLF4U8V	0
SZH121DL	0
T4D5AMC4	0
THH57Q1W	0
TZJITW4M	0
UKSL72WJ	0
UM0EWPI5	0
VCPM156P	0
VGAD04TY	0
VHSWMEBW	0
VLGN3CE7	0
XO6SQ0XK	0
XT6ZN8JO	0
XWGBDXA5	0
ZAXKLZ72	0
ZFBW5X0Z	0

Detailed results

The following table provides the estimated copy number for individual technical replicates for each qPCR assay. Missing values indicate failed reactions or outliers that were removed from the analysis.

SampleId	Rep 1	Rep 2	Rep 3
NorthernPike01			
0LLEEOJD	0	0	0
0QYJQ3L1	0	0	0
0SIUVSRS	0	0	0
0UBS9ZM1	0	0	0
13T3SKEF	0	0	0
19ABJ5C6	0	0	0
1EY36LLO	0	0	0
1SZVWVSK	0	0	0
226FLVTV	0	0	0
235AS487	0	0	0
2OH3VMK1	0	0	0
3H19M15S	0	0	0
54V4AOFU	0	0	0
5A052U6Y	0	0	0
5V288ELW	0	0	0
6W9CKYQT	0	0	0
815FXVD6	0	0	0
89YJPOOE	0	0	0
8TRRE13K	0	0	0
8V565CFU	0	0	0
98LVZFXT	0	0	0
9VPUSZOO	0	0	0
AJINAZI7	0	0	0
BKMFJ1R0	0	0	0
BLZXLC6R	0	0	0
BMXDL3B8	0	0	0
CQ6P1V0F	0	0	0
D139ZR9G	0	0	0
D6PALWDY	0	0	0
DJMLM8P3	0	0	0
EF1GLIFW	0	0	0
EYUBUIQ9	0	0	0
F2XMA6HZ	0	0	0
FIWZCP6B	0	0	0
FTWI52BV	0	0	0
FVBBS45O	0	0	0
HC2GSOWH	0	0	0
HELD3KCQ	0	0	0
HSMV7H5U	0	0	0
IGBKJEI4	0	0	0
IXWSCKR8	0	0	0
J4S1KOQU	0	0	0
J5N7T956	0	0	0
J5U0RGER	0	0	0
JA4R8OKF	0	0	0

K2ZCM1L8	0	0	0
KC27ELPD	0	0	0
M2G8ZTYC	0	0	0
ME6KXSVN	0	0	0
MK3L19GV	0	0	0
MQPUK2BQ	0	0	0
MTLAVHAE	0	0	0
N43FD7SE	0	0	0
N8EQ00EK	0	0	0
NLTNAHCG	0	0	0
NR5P5EEH	0	0	0
NXBNBQN8	0	0	0
OI6TF17U	0	0	0
OO9VYGZ2	0	0	0
PKF3O35B	0	0	0
Q4N0W5W8	0	0	0
QBFYWCYH	0	0	0
QJOG3B7W	0	0	0
QPLF4U8V	0	0	0
SZH121DL	0	0	0
T4D5AMC4	0	0	0
THH57Q1W	0	0	0
TZJITW4M	0	0	0
UKSL72WJ	0	0	0
UM0EWPI5	0	0	0
VCPM156P	0	0	0
VGAD04TY	0	0	0
VHSWMEBW	0	0	0
VLGN3CE7	0	0	0
XO6SQ0XK	0	0	0
XT6ZN8JO	0	0	0
XWGBDXA5	0	0	0
ZAXKLZ72	0	0	0
ZFBW5X0Z	0	0	0

Sample metadata

SampleId	ClientSampleId	Volume Water (ml)
0LLEEOJD	NPPHA05	120
0QYJQ3L1	NPBIL04	180
0SIUVSRS	NPBER07	230
0UBS9ZM1	NPPHA08	170
13T3SKEF	NPGUL03	130
19ABJ5C6	NPCOA02	170
1EY36LLO	NPKRA05	180
1SZVWVSK	NPNEC05	160
226FLVTV	NPGOO04	140
235AS487	NPNEC02	180
2OH3VMK1	NPQUI08	180
3H19M15S	NPGOO01	160
54V4AOFU	NPDUN06	73
5A052U6Y	NPAFO09	180
5V288ELW	NPPHA14	180
6W9CKYQT	NPAFO02	180
815FXVD6	NPPHA11	180
89YJPOOE	NPGAL02	180
8TRRE13K	NPBIL01	180
8V565CFU	NPPHA13	180
98LVZFXT	NPCOA06	180
9VPUSZOO	NPBER01	240
AJINAZI7	NPQUI06	180
BKMFJ1R0	NPQUI02	180
BLZXLC6R	NPBED03	180
BMXDL3B8	NPPHA01	120
CQ6P1V0F	NPLIL05	120
D139ZR9G	NPBER05	210
D6PALWDY	NPGUL01	100
DJMLM8P3	NPBED06	180
EF1GLIFW	NPPHA07	120
EYUBUIQ9	NPAFO06	180
F2XMA6HZ	NPGAL04	180
FIWZCP6B	NPGUL07	115
FTWI52BV	NPGUL06	115
FVBBS45O	NPQUI11	180
HC2GSOWH	NPCOA09	120
HELD3KCQ	NPLIL01	180
HSMV7H5U	NPBAY06	120
IGBKJEI4	NPQUI03	180
IXWSCKR8	NPKRA02	180
J4S1KOQU	NPPHA04	120
J5N7T956	NPBED02	180
J5U0RGER	NPQUI09	180
JA4R8OKF	NPNEC08	180
K2ZCM1L8	NPBER04	205
KC27ELPD	NPGAL05	180
M2G8ZTYC	NPBAY02	180
ME6KXSVN	NPKRA03	180
MK3L19GV	NPLIL04	120

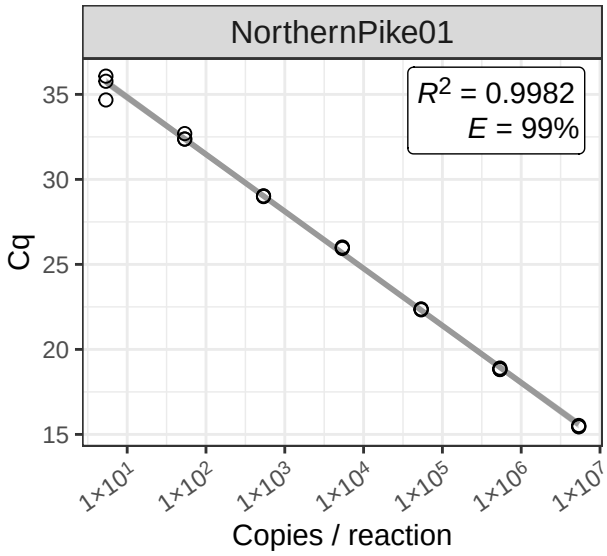
MQPUK2BQ	NPQUI05	180
MTLAVHAE	NPDUN02	65
N43FD7SE	NPBIL03	180
N8EQ00EK	NPDUN03	72
NLTNAHCG	NPBAY03	180
NR5P5EEH	NPBED05	180
NXBNBQN8	NPGAL01	180
OI6TF17U	NPCOA03	180
OO9VYGZ2	NPCOA05	180
PKF3O35B	NPNEC04	180
Q4N0W5W8	NPGOO03	130
QBFYWCYH	NPAFO08	120
QJOG3B7W	NPPHA10	180
QPLF4U8V	NPNEC01	160
SZH121DL	NPBER02	205
T4D5AMC4	NPBAY05	150
THH57Q1W	NPDUN05	70
TZJITW4M	NPLIL02	120
UKSL72WJ	NPBIL07	180
UM0EWPI5	NPAFO05	180
VCPM156P	NPNEC07	180
VGAD04TY	NPKRA06	180
VHSWMEBW	NPGUL04	120
VLGN3CE7	NPCOA08	180
XO6SQ0XK	NPGAL07	180
XT6ZN8JO	NPAFO03	180
XWGBDXA5	NPBIL06	180
ZAXKLZ72	NPPHA02	120
ZFBW5X0Z	NPGOO06	150

Methods and calibration curves

The following pages provide details of the methods used for each qPCR assay and the associated standard curves. Each assay in each run is associated with a calibration curve based typically on a series of 7, 10-fold dilutions of a standard with a known concentration. The calibration curves show the relationship between the $\log_{10}$-transformed standard concentration and the number of PCR cycles at which the detection threshold was reached (Cq). A linear regression is applied to this relationship and the r2 intercept and slope extracted for further analyses.

- RunId = An internal identifier for the standard curve(s) used to calculate copy numbers in the submitted samples. Assays that share a RunId are multiplexed (i.e., multiple targets amplified in a single reaction).
- R^2 = The coefficient of determination, or goodness of fit for the linear relationship (should be > 0.98).
- (E) = The reaction efficiency, or how close to a doubling of product was achieved with each PCR cycle. For a 10-fold dilution, 100% efficiency is for ~3.3 cycles per 10-fold dilution. A range of values is acceptable here, but we try to keep efficiency between 85% - 110%.

RunID: JVQ0379



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