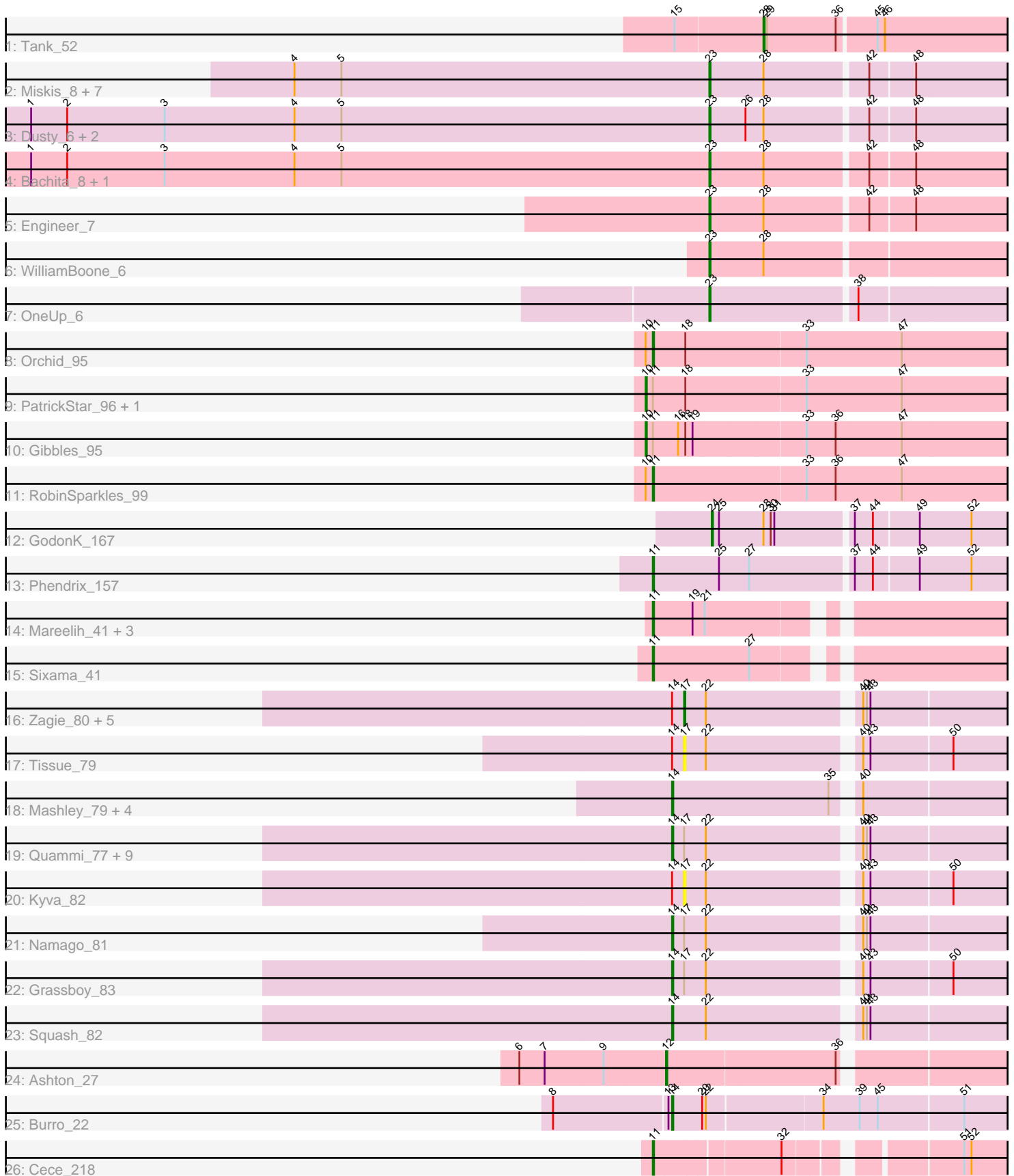


Pham 163632



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

## Pham 163632 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163632 has 58 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Tank\_52
- Track 2 : Miskis\_8, Cucurbita\_7, ClubL\_7, Toniann\_7, Smoothie\_7, Lozinak\_7, Aphelion\_7, Norvs\_7
- Track 3 : Dusty\_6, Culver\_6, Abscondus\_6
- Track 4 : Bachita\_8, PhinkBoden\_8
- Track 5 : Engineer\_7
- Track 6 : WilliamBoone\_6
- Track 7 : OneUp\_6
- Track 8 : Orchid\_95
- Track 9 : PatrickStar\_96, Kampe\_96
- Track 10 : Gibbles\_95
- Track 11 : RobinSparkles\_99
- Track 12 : GodonK\_167
- Track 13 : Phendrix\_157
- Track 14 : Mareelih\_41, Boopy\_43, Forza\_42, BlueNGold\_41
- Track 15 : Sixama\_41
- Track 16 : Zagie\_80, DonaldDuck\_80, Rudy\_76, BabyDotz\_77, Wayne3\_80, Sillytadpoles\_81
- Track 17 : Tissue\_79
- Track 18 : Mashley\_79, Hyperion\_77, Gazebo\_79, Blab\_75, AluminumJesus\_75
- Track 19 : Quammi\_77, Viceroy\_77, Jehoshaphat\_80, Lonelysoil\_76, Llemily\_80, StrawberryJamm\_84, Casend\_79, Teehee\_79, Phabia\_78, Wheelie\_78
- Track 20 : Kyva\_82
- Track 21 : Namago\_81
- Track 22 : Grassboy\_83
- Track 23 : Squash\_82
- Track 24 : Ashton\_27
- Track 25 : Burro\_22
- Track 26 : Cece\_218

### ***Summary of Final Annotations (See graph section above for start numbers):***

The start number called the most often in the published annotations is 14, it was called in 18 of the 50 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AluminumJesus\_75, Blab\_75, Burro\_22, Casend\_79, Gazebo\_79, Grassboy\_83, Hyperion\_77, Jehoshaphat\_80, Llemily\_80, Lonelysoil\_76, Mashley\_79, Namago\_81, Phabia\_78, Quammi\_77, Squash\_82, StrawberryJamm\_84, Teehee\_79, Viceroy\_77, Wheelie\_78,

Genes that have the "Most Annotated" start but do not call it:

- BabyDotz\_77, DonaldDuck\_80, Kyva\_82, Rudy\_76, Sillytadpoles\_81, Tissue\_79, Wayne3\_80, Zagie\_80,

Genes that do not have the "Most Annotated" start:

- Abscondus\_6, Aphelion\_7, Ashton\_27, Bachita\_8, BlueNGold\_41, Boopy\_43, Cece\_218, ClubL\_7, Cucurbita\_7, Culver\_6, Dusty\_6, Engineer\_7, Forza\_42, Gibbles\_95, GodonK\_167, Kampe\_96, Lozinak\_7, Mareelih\_41, Miskis\_8, Norvs\_7, OneUp\_6, Orchid\_95, PatrickStar\_96, Phendrix\_157, PhinkBoden\_8, RobinSparkles\_99, Sixama\_41, Smoothie\_7, Tank\_52, Toniann\_7, WilliamBoone\_6,

### Summary by start number:

Start 10:

- Found in 5 of 58 ( 8.6% ) of genes in pham
- Manual Annotations of this start: 3 of 50
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Gibbles\_95 (CX), Kampe\_96 (CX), PatrickStar\_96 (CX),

Start 11:

- Found in 12 of 58 ( 20.7% ) of genes in pham
- Manual Annotations of this start: 9 of 50
- Called 75.0% of time when present
- Phage (with cluster) where this start called: BlueNGold\_41 (DS), Boopy\_43 (DS), Cece\_218 (GD3), Forza\_42 (DS), Mareelih\_41 (DS), Orchid\_95 (CX), Phendrix\_157 (DK), RobinSparkles\_99 (CX), Sixama\_41 (DS),

Start 12:

- Found in 1 of 58 ( 1.7% ) of genes in pham
- Manual Annotations of this start: 1 of 50
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ashton\_27 (EK2),

Start 14:

- Found in 27 of 58 ( 46.6% ) of genes in pham
- Manual Annotations of this start: 18 of 50
- Called 70.4% of time when present
- Phage (with cluster) where this start called: AluminumJesus\_75 (EG), Blab\_75 (EG), Burro\_22 (EM1), Casend\_79 (EG), Gazebo\_79 (EG), Grassboy\_83 (EG), Hyperion\_77 (EG), Jehoshaphat\_80 (EG), Llemily\_80 (EG), Lonelysoil\_76 (EG), Mashley\_79 (EG), Namago\_81 (EG), Phabia\_78 (EG), Quammi\_77 (EG), Squash\_82 (EG), StrawberryJamm\_84 (EG), Teehee\_79 (EG), Viceroy\_77 (EG), Wheelie\_78 (EG),

Start 17:

- Found in 20 of 58 ( 34.5% ) of genes in pham
- Manual Annotations of this start: 4 of 50
- Called 40.0% of time when present
- Phage (with cluster) where this start called: BabyDotz\_77 (EG), DonaldDuck\_80 (EG), Kyva\_82 (EG), Rudy\_76 (EG), Sillytadpoles\_81 (EG), Tissue\_79 (EG), Wayne3\_80 (EG), Zagie\_80 (EG),

#### Start 23:

- Found in 16 of 58 ( 27.6% ) of genes in pham
- Manual Annotations of this start: 13 of 50
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abscondus\_6 (CQ), Aphelion\_7 (CQ1), Bachita\_8 (CQ1), ClubL\_7 (CQ1), Cucurbita\_7 (CQ1), Culver\_6 (CQ1), Dusty\_6 (CQ), Engineer\_7 (CQ1), Lozinak\_7 (CQ1), Miskis\_8 (CQ), Norvs\_7 (CQ), OneUp\_6 (CQ2), PhinkBoden\_8 (CQ1), Smoothie\_7 (CQ1), Toniann\_7 (CQ1), WilliamBoone\_6 (CQ1),

#### Start 24:

- Found in 1 of 58 ( 1.7% ) of genes in pham
- Manual Annotations of this start: 1 of 50
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GodonK\_167 (DK),

#### Start 28:

- Found in 17 of 58 ( 29.3% ) of genes in pham
- Manual Annotations of this start: 1 of 50
- Called 5.9% of time when present
- Phage (with cluster) where this start called: Tank\_52 (AP1),

### **Summary by clusters:**

There are 11 clusters represented in this pham: GD3, CQ1, EG, AP1, EK2, CX, EM1, CQ2, CQ, DS, DK,

#### Info for manual annotations of cluster AP1:

- Start number 28 was manually annotated 1 time for cluster AP1.

#### Info for manual annotations of cluster CQ:

- Start number 23 was manually annotated 1 time for cluster CQ.

#### Info for manual annotations of cluster CQ1:

- Start number 23 was manually annotated 11 times for cluster CQ1.

#### Info for manual annotations of cluster CQ2:

- Start number 23 was manually annotated 1 time for cluster CQ2.

#### Info for manual annotations of cluster CX:

- Start number 10 was manually annotated 3 times for cluster CX.
- Start number 11 was manually annotated 2 times for cluster CX.

#### Info for manual annotations of cluster DK:

- Start number 11 was manually annotated 1 time for cluster DK.
- Start number 24 was manually annotated 1 time for cluster DK.

Info for manual annotations of cluster DS:

- Start number 11 was manually annotated 5 times for cluster DS.

Info for manual annotations of cluster EG:

- Start number 14 was manually annotated 17 times for cluster EG.
- Start number 17 was manually annotated 4 times for cluster EG.

Info for manual annotations of cluster EK2:

- Start number 12 was manually annotated 1 time for cluster EK2.

Info for manual annotations of cluster EM1:

- Start number 14 was manually annotated 1 time for cluster EM1.

Info for manual annotations of cluster GD3:

- Start number 11 was manually annotated 1 time for cluster GD3.

### ***Gene Information:***

Gene: Abscondus\_6 Start: 1603, Stop: 1334, Start Num: 23

Candidate Starts for Abscondus\_6:

(1, 2167), (2, 2137), (3, 2056), (4, 1948), (5, 1909), (Start: 23 @1603 has 13 MA's), (26, 1573), (Start: 28 @1558 has 1 MA's), (42, 1477), (48, 1441),

Gene: AluminumJesus\_75 Start: 51316, Stop: 51035, Start Num: 14

Candidate Starts for AluminumJesus\_75:

(Start: 14 @51316 has 18 MA's), (35, 51187), (40, 51172),

Gene: Aphelion\_7 Start: 1779, Stop: 1510, Start Num: 23

Candidate Starts for Aphelion\_7:

(4, 2124), (5, 2085), (Start: 23 @1779 has 13 MA's), (Start: 28 @1734 has 1 MA's), (42, 1653), (48, 1617),

Gene: Ashton\_27 Start: 15701, Stop: 15408, Start Num: 12

Candidate Starts for Ashton\_27:

(6, 15821), (7, 15800), (9, 15752), (Start: 12 @15701 has 1 MA's), (36, 15563),

Gene: BabyDotz\_77 Start: 52957, Stop: 52679, Start Num: 17

Candidate Starts for BabyDotz\_77:

(Start: 14 @52966 has 18 MA's), (Start: 17 @52957 has 4 MA's), (22, 52939), (40, 52822), (41, 52819), (43, 52816),

Gene: Bachita\_8 Start: 2279, Stop: 2010, Start Num: 23

Candidate Starts for Bachita\_8:

(1, 2843), (2, 2813), (3, 2732), (4, 2624), (5, 2585), (Start: 23 @2279 has 13 MA's), (Start: 28 @2234 has 1 MA's), (42, 2153), (48, 2117),

Gene: Blab\_75 Start: 51607, Stop: 51326, Start Num: 14

Candidate Starts for Blab\_75:

(Start: 14 @51607 has 18 MA's), (35, 51478), (40, 51463),

Gene: BlueNGold\_41 Start: 14735, Stop: 14454, Start Num: 11  
Candidate Starts for BlueNGold\_41:  
(Start: 11 @14735 has 9 MA's), (19, 14702), (21, 14693),

Gene: Boopy\_43 Start: 14747, Stop: 14466, Start Num: 11  
Candidate Starts for Boopy\_43:  
(Start: 11 @14747 has 9 MA's), (19, 14714), (21, 14705),

Gene: Burro\_22 Start: 15917, Stop: 15615, Start Num: 14  
Candidate Starts for Burro\_22:  
(8, 16013), (13, 15920), (Start: 14 @15917 has 18 MA's), (20, 15893), (22, 15890), (34, 15797), (39, 15767), (45, 15752), (51, 15683),

Gene: Casend\_79 Start: 52248, Stop: 51961, Start Num: 14  
Candidate Starts for Casend\_79:  
(Start: 14 @52248 has 18 MA's), (Start: 17 @52239 has 4 MA's), (22, 52221), (40, 52104), (41, 52101), (43, 52098),

Gene: Cece\_218 Start: 133451, Stop: 133741, Start Num: 11  
Candidate Starts for Cece\_218:  
(Start: 11 @133451 has 9 MA's), (32, 133550), (51, 133673), (52, 133679),

Gene: ClubL\_7 Start: 1779, Stop: 1510, Start Num: 23  
Candidate Starts for ClubL\_7:  
(4, 2124), (5, 2085), (Start: 23 @1779 has 13 MA's), (Start: 28 @1734 has 1 MA's), (42, 1653), (48, 1617),

Gene: Cucurbita\_7 Start: 1779, Stop: 1510, Start Num: 23  
Candidate Starts for Cucurbita\_7:  
(4, 2124), (5, 2085), (Start: 23 @1779 has 13 MA's), (Start: 28 @1734 has 1 MA's), (42, 1653), (48, 1617),

Gene: Culver\_6 Start: 1603, Stop: 1334, Start Num: 23  
Candidate Starts for Culver\_6:  
(1, 2167), (2, 2137), (3, 2056), (4, 1948), (5, 1909), (Start: 23 @1603 has 13 MA's), (26, 1573), (Start: 28 @1558 has 1 MA's), (42, 1477), (48, 1441),

Gene: DonaldDuck\_80 Start: 51591, Stop: 51313, Start Num: 17  
Candidate Starts for DonaldDuck\_80:  
(Start: 14 @51600 has 18 MA's), (Start: 17 @51591 has 4 MA's), (22, 51573), (40, 51456), (41, 51453), (43, 51450),

Gene: Dusty\_6 Start: 1603, Stop: 1334, Start Num: 23  
Candidate Starts for Dusty\_6:  
(1, 2167), (2, 2137), (3, 2056), (4, 1948), (5, 1909), (Start: 23 @1603 has 13 MA's), (26, 1573), (Start: 28 @1558 has 1 MA's), (42, 1477), (48, 1441),

Gene: Engineer\_7 Start: 1779, Stop: 1510, Start Num: 23  
Candidate Starts for Engineer\_7:  
(Start: 23 @1779 has 13 MA's), (Start: 28 @1734 has 1 MA's), (42, 1653), (48, 1617),

Gene: Forza\_42 Start: 14663, Stop: 14382, Start Num: 11  
Candidate Starts for Forza\_42:

(Start: 11 @14663 has 9 MA's), (19, 14630), (21, 14621),

Gene: Gazebo\_79 Start: 52534, Stop: 52253, Start Num: 14

Candidate Starts for Gazebo\_79:

(Start: 14 @52534 has 18 MA's), (35, 52405), (40, 52390),

Gene: Gibbles\_95 Start: 69566, Stop: 69255, Start Num: 10

Candidate Starts for Gibbles\_95:

(Start: 10 @69566 has 3 MA's), (Start: 11 @69560 has 9 MA's), (16, 69539), (18, 69533), (19, 69527), (33, 69437), (36, 69413), (47, 69359),

Gene: GodonK\_167 Start: 85677, Stop: 85414, Start Num: 24

Candidate Starts for GodonK\_167:

(Start: 24 @85677 has 1 MA's), (25, 85671), (Start: 28 @85635 has 1 MA's), (30, 85629), (31, 85626), (37, 85566), (44, 85551), (49, 85515), (52, 85473),

Gene: Grassboy\_83 Start: 52649, Stop: 52362, Start Num: 14

Candidate Starts for Grassboy\_83:

(Start: 14 @52649 has 18 MA's), (Start: 17 @52640 has 4 MA's), (22, 52622), (40, 52505), (43, 52499), (50, 52433),

Gene: Hyperion\_77 Start: 51797, Stop: 51516, Start Num: 14

Candidate Starts for Hyperion\_77:

(Start: 14 @51797 has 18 MA's), (35, 51668), (40, 51653),

Gene: Jehoshaphat\_80 Start: 52516, Stop: 52229, Start Num: 14

Candidate Starts for Jehoshaphat\_80:

(Start: 14 @52516 has 18 MA's), (Start: 17 @52507 has 4 MA's), (22, 52489), (40, 52372), (41, 52369), (43, 52366),

Gene: Kampe\_96 Start: 69516, Stop: 69205, Start Num: 10

Candidate Starts for Kampe\_96:

(Start: 10 @69516 has 3 MA's), (Start: 11 @69510 has 9 MA's), (18, 69483), (33, 69387), (47, 69309),

Gene: Kyva\_82 Start: 52664, Stop: 52386, Start Num: 17

Candidate Starts for Kyva\_82:

(Start: 14 @52673 has 18 MA's), (Start: 17 @52664 has 4 MA's), (22, 52646), (40, 52529), (43, 52523), (50, 52457),

Gene: Llemily\_80 Start: 51295, Stop: 51008, Start Num: 14

Candidate Starts for Llemily\_80:

(Start: 14 @51295 has 18 MA's), (Start: 17 @51286 has 4 MA's), (22, 51268), (40, 51151), (41, 51148), (43, 51145),

Gene: Lonelysoil\_76 Start: 51052, Stop: 50765, Start Num: 14

Candidate Starts for Lonelysoil\_76:

(Start: 14 @51052 has 18 MA's), (Start: 17 @51043 has 4 MA's), (22, 51025), (40, 50908), (41, 50905), (43, 50902),

Gene: Lozinak\_7 Start: 1779, Stop: 1510, Start Num: 23

Candidate Starts for Lozinak\_7:

(4, 2124), (5, 2085), (Start: 23 @1779 has 13 MA's), (Start: 28 @1734 has 1 MA's), (42, 1653), (48, 1617),

Gene: Mareelih\_41 Start: 14165, Stop: 13884, Start Num: 11

Candidate Starts for Mareelih\_41:

(Start: 11 @14165 has 9 MA's), (19, 14132), (21, 14123),

Gene: Mashley\_79 Start: 52319, Stop: 52038, Start Num: 14

Candidate Starts for Mashley\_79:

(Start: 14 @52319 has 18 MA's), (35, 52190), (40, 52175),

Gene: Miskis\_8 Start: 1779, Stop: 1510, Start Num: 23

Candidate Starts for Miskis\_8:

(4, 2124), (5, 2085), (Start: 23 @1779 has 13 MA's), (Start: 28 @1734 has 1 MA's), (42, 1653), (48, 1617),

Gene: Namago\_81 Start: 52020, Stop: 51733, Start Num: 14

Candidate Starts for Namago\_81:

(Start: 14 @52020 has 18 MA's), (Start: 17 @52011 has 4 MA's), (22, 51993), (40, 51876), (41, 51873), (43, 51870),

Gene: Norvs\_7 Start: 1779, Stop: 1510, Start Num: 23

Candidate Starts for Norvs\_7:

(4, 2124), (5, 2085), (Start: 23 @1779 has 13 MA's), (Start: 28 @1734 has 1 MA's), (42, 1653), (48, 1617),

Gene: OneUp\_6 Start: 1509, Stop: 1234, Start Num: 23

Candidate Starts for OneUp\_6:

(Start: 23 @1509 has 13 MA's), (38, 1392),

Gene: Orchid\_95 Start: 69511, Stop: 69206, Start Num: 11

Candidate Starts for Orchid\_95:

(Start: 10 @69517 has 3 MA's), (Start: 11 @69511 has 9 MA's), (18, 69484), (33, 69388), (47, 69310),

Gene: PatrickStar\_96 Start: 69516, Stop: 69205, Start Num: 10

Candidate Starts for PatrickStar\_96:

(Start: 10 @69516 has 3 MA's), (Start: 11 @69510 has 9 MA's), (18, 69483), (33, 69387), (47, 69309),

Gene: Phabia\_78 Start: 51707, Stop: 51420, Start Num: 14

Candidate Starts for Phabia\_78:

(Start: 14 @51707 has 18 MA's), (Start: 17 @51698 has 4 MA's), (22, 51680), (40, 51563), (41, 51560), (43, 51557),

Gene: Phendrix\_157 Start: 84630, Stop: 84319, Start Num: 11

Candidate Starts for Phendrix\_157:

(Start: 11 @84630 has 9 MA's), (25, 84576), (27, 84552), (37, 84471), (44, 84456), (49, 84420), (52, 84378),

Gene: PhinkBoden\_8 Start: 2279, Stop: 2010, Start Num: 23

Candidate Starts for PhinkBoden\_8:

(1, 2843), (2, 2813), (3, 2732), (4, 2624), (5, 2585), (Start: 23 @2279 has 13 MA's), (Start: 28 @2234 has 1 MA's), (42, 2153), (48, 2117),

Gene: Quammi\_77 Start: 51407, Stop: 51120, Start Num: 14

Candidate Starts for Quammi\_77:



(Start: 14 @51407 has 18 MA's), (Start: 17 @51398 has 4 MA's), (22, 51380), (40, 51263), (41, 51260), (43, 51257),

Gene: RobinSparkles\_99 Start: 69573, Stop: 69268, Start Num: 11

Candidate Starts for RobinSparkles\_99:

(Start: 10 @69579 has 3 MA's), (Start: 11 @69573 has 9 MA's), (33, 69450), (36, 69426), (47, 69372),

Gene: Rudy\_76 Start: 51434, Stop: 51156, Start Num: 17

Candidate Starts for Rudy\_76:

(Start: 14 @51443 has 18 MA's), (Start: 17 @51434 has 4 MA's), (22, 51416), (40, 51299), (41, 51296), (43, 51293),

Gene: Sillytadpoles\_81 Start: 51274, Stop: 50996, Start Num: 17

Candidate Starts for Sillytadpoles\_81:

(Start: 14 @51283 has 18 MA's), (Start: 17 @51274 has 4 MA's), (22, 51256), (40, 51139), (41, 51136), (43, 51133),

Gene: Sixama\_41 Start: 13852, Stop: 13571, Start Num: 11

Candidate Starts for Sixama\_41:

(Start: 11 @13852 has 9 MA's), (27, 13774),

Gene: Smoothie\_7 Start: 1779, Stop: 1510, Start Num: 23

Candidate Starts for Smoothie\_7:

(4, 2124), (5, 2085), (Start: 23 @1779 has 13 MA's), (Start: 28 @1734 has 1 MA's), (42, 1653), (48, 1617),

Gene: Squash\_82 Start: 52656, Stop: 52369, Start Num: 14

Candidate Starts for Squash\_82:

(Start: 14 @52656 has 18 MA's), (22, 52629), (40, 52512), (41, 52509), (43, 52506),

Gene: StrawberryJamm\_84 Start: 51823, Stop: 51536, Start Num: 14

Candidate Starts for StrawberryJamm\_84:

(Start: 14 @51823 has 18 MA's), (Start: 17 @51814 has 4 MA's), (22, 51796), (40, 51679), (41, 51676), (43, 51673),

Gene: Tank\_52 Start: 40878, Stop: 40642, Start Num: 28

Candidate Starts for Tank\_52:

(15, 40950), (Start: 28 @40878 has 1 MA's), (29, 40875), (36, 40818), (45, 40788), (46, 40782),

Gene: Teehee\_79 Start: 52513, Stop: 52226, Start Num: 14

Candidate Starts for Teehee\_79:

(Start: 14 @52513 has 18 MA's), (Start: 17 @52504 has 4 MA's), (22, 52486), (40, 52369), (41, 52366), (43, 52363),

Gene: Tissue\_79 Start: 52271, Stop: 51993, Start Num: 17

Candidate Starts for Tissue\_79:

(Start: 14 @52280 has 18 MA's), (Start: 17 @52271 has 4 MA's), (22, 52253), (40, 52136), (43, 52130), (50, 52064),

Gene: Toniann\_7 Start: 1779, Stop: 1510, Start Num: 23

Candidate Starts for Toniann\_7:

(4, 2124), (5, 2085), (Start: 23 @1779 has 13 MA's), (Start: 28 @1734 has 1 MA's), (42, 1653), (48, 1617),

Gene: Viceroy\_77 Start: 51416, Stop: 51129, Start Num: 14

Candidate Starts for Viceroy\_77:

(Start: 14 @51416 has 18 MA's), (Start: 17 @51407 has 4 MA's), (22, 51389), (40, 51272), (41, 51269), (43, 51266),

Gene: Wayne3\_80 Start: 52267, Stop: 51989, Start Num: 17

Candidate Starts for Wayne3\_80:

(Start: 14 @52276 has 18 MA's), (Start: 17 @52267 has 4 MA's), (22, 52249), (40, 52132), (41, 52129), (43, 52126),

Gene: Wheelie\_78 Start: 51597, Stop: 51310, Start Num: 14

Candidate Starts for Wheelie\_78:

(Start: 14 @51597 has 18 MA's), (Start: 17 @51588 has 4 MA's), (22, 51570), (40, 51453), (41, 51450), (43, 51447),

Gene: WilliamBoone\_6 Start: 1630, Stop: 1361, Start Num: 23

Candidate Starts for WilliamBoone\_6:

(Start: 23 @1630 has 13 MA's), (Start: 28 @1585 has 1 MA's),

Gene: Zagie\_80 Start: 52091, Stop: 51813, Start Num: 17

Candidate Starts for Zagie\_80:

(Start: 14 @52100 has 18 MA's), (Start: 17 @52091 has 4 MA's), (22, 52073), (40, 51956), (41, 51953), (43, 51950),