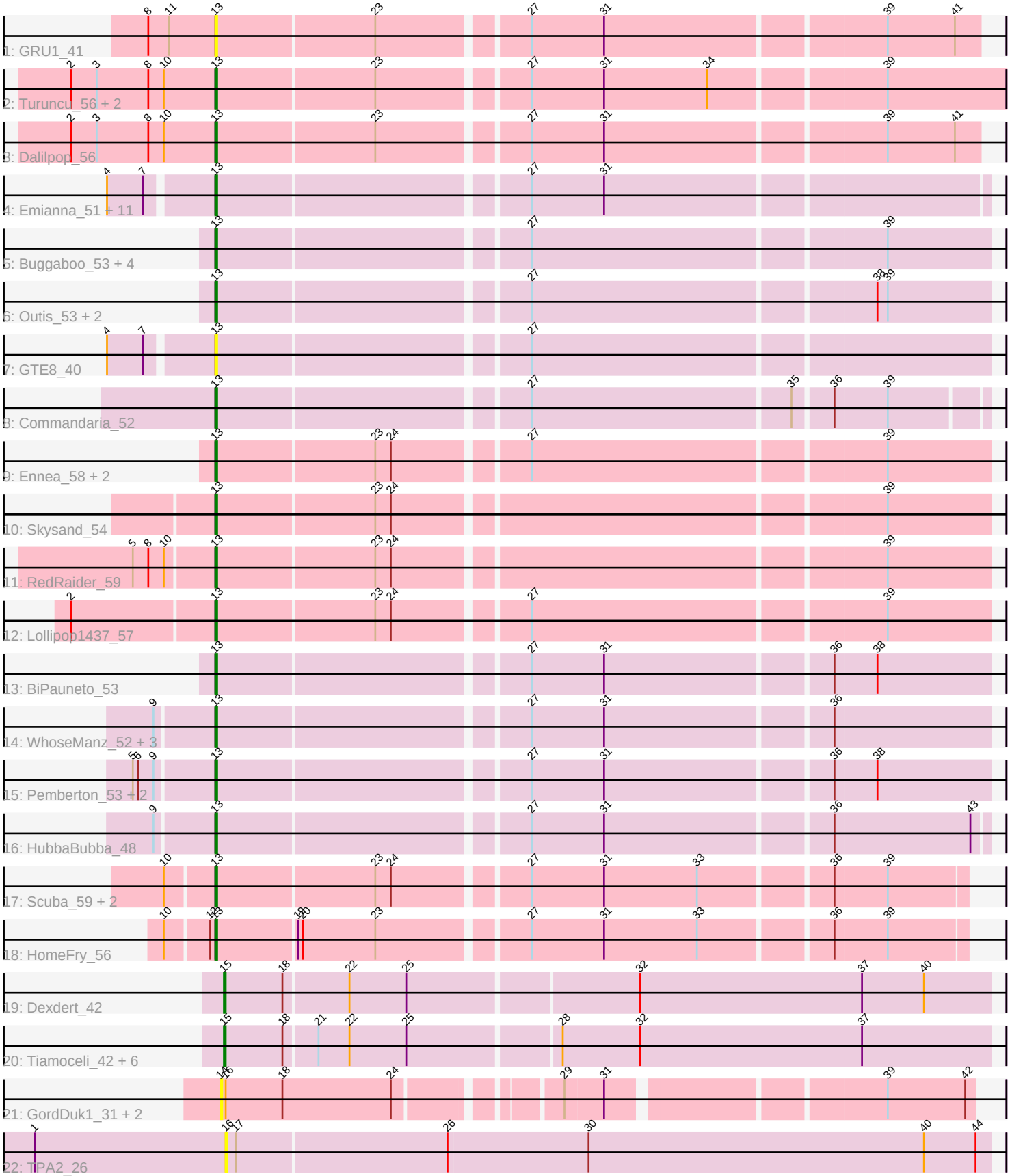
Pham 347662


1: GRU1_41
2: Turuncu_56 + 2
3: Dalilpop_56
4: Emianna_51 + 11
5: Buggaboo_53 + 4
6: Outis_53 + 2
7: GTE8_40
8: Commandaria_52
9: Ennea_58 + 2
10: Skysand_54
11: RedRaider_59
12: Lollipop1437_57
13: BiPauneto_53
14: WhoseManz_52 + 3
15: Pemberton_53 + 2
16: HubbaBubba_48
17: Scuba_59 + 2
18: HomeFry_56
19: Dexdert_42
20: Tiamoceli_42 + 6
21: GordDuk1_31 + 2
22: TIPA2_26

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 347662 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347662 has 58 members, 8 are drafts.

Phages represented in each track:
• Track 1 : GRU1_41
• Track 2 : Turuncu_56, Flapper_56, GTE5_43
• Track 3 : Dalilpop_56
• Track 4 : Emianna_51, Kurt_51, KidneyBean_51, GrootJr_53, Wheezy_51, NovumRegina_51, Jifall16_50, Tracker_51, Arti_51, Foxboro_52, Phomeo_50, NatB6_51
• Track 5 : Buggaboo_53, Kabluna_55, SuperSulley_53, NosilaM_55, Bonum_55
• Track 6 : Outis_53, StarStruck_53, MerCougar_53
• Track 7 : GTE8_40
• Track 8 : Commandaria_52
• Track 9 : Ennea_58, Patio_55, Float294_54
• Track 10 : Skysand_54
• Track 11 : RedRaider_59
• Track 12 : Lollipop1437_57
• Track 13 : BiPauneto_53
• Track 14 : WhoseManz_52, NadineRae_51, IDyn_52, Marietta_53
• Track 15 : Pemberton_53, Sukkupi_52, Yndexa_52
• Track 16 : HubbaBubba_48
• Track 17 : Scuba_59, Pleakley_59, Fury_59
• Track 18 : HomeFry_56
• Track 19 : Dexdert_42
• Track 20 : Tiamoceli_42, Chickadee_41, EdmundFerry_40, Kwekel_41, GTE6_41, RoadKill_39, Twonlo_39
• Track 21 : GordDuk1_31, GordTnk2_31, Gmala1_31
• Track 22 : TPA2_26

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

The start number called the most often in the published annotations is 13, it was called in 43 of the 50 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arti_51, BiPauneto_53, Bonum_55, Buggaboo_53, Commandaria_52, Dalilpop_56, Emianna_51, Ennea_58, Flapper_56, Float294_54, Foxboro_52, Fury_59, GRU1_41,

GTE5_43, GTE8_40, GrootJr_53, HomeFry_56, HubbaBubba_48, IDyn_52, Jifall16_50, Kabluna_55, KidneyBean_51, Kurt_51, Lollipop1437_57, Marietta_53, MerCougar_53, NadineRae_51, NatB6_51, NosilaM_55, NovumRegina_51, Outis_53, Patio_55, Pemberton_53, Phomeo_50, Pleakley_59, RedRaider_59, Scuba_59, Skysand_54, StarStruck_53, Sukkupi_52, SuperSulley_53, Tracker_51, Turuncu_56, Wheezy_51, WhoseManz_52, Yndexa_52,

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

Genes that do not have the "Most Annotated" start:
• Chickadee_41, Dexdert_42, EdmundFerry_40, GTE6_41, Gmala1_31, GordDuk1_31, GordTnk2_31, Kwekel_41, RoadKill_39, TPA2_26, Tiamoceli_42, Twonlo_39,

Summary by start number:

Start 13:
• Found in 46 of 58 (79.3%) of genes in pham
• Manual Annotations of this start: 43 of 50
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arti_51 (CR2), BiPauneto_53 (CR4), Bonum_55 (CR2), Buggaboo_53 (CR2), Commandaria_52 (CR2), Dalilpop_56 (CR1), Emianna_51 (CR2), Ennea_58 (CR3), Flapper_56 (CR1), Float294_54 (CR3), Foxboro_52 (CR2), Fury_59 (CR5), GRU1_41 (CR1), GTE5_43 (CR1), GTE8_40 (CR2), GrootJr_53 (CR2), HomeFry_56 (CR5), HubbaBubba_48 (CR4), IDyn_52 (CR4), Jifall16_50 (CR2), Kabluna_55 (CR2), KidneyBean_51 (CR2), Kurt_51 (CR2), Lollipop1437_57 (CR3), Marietta_53 (CR4), MerCougar_53 (CR2), NadineRae_51 (CR4), NatB6_51 (CR2), NosilaM_55 (CR2), NovumRegina_51 (CR2), Outis_53 (CR2), Patio_55 (CR3), Pemberton_53 (CR4), Phomeo_50 (CR2), Pleakley_59 (CR5), RedRaider_59 (CR3), Scuba_59 (CR5), Skysand_54 (CR3), StarStruck_53 (CR2), Sukkupi_52 (CR4), SuperSulley_53 (CR2), Tracker_51 (CR2), Turuncu_56 (CR1), Wheezy_51 (CR2), WhoseManz_52 (CR4), Yndexa_52 (CR4),

Start 14:
• Found in 3 of 58 (5.2%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gmala1_31 (DF1), GordDuk1_31 (DF1), GordTnk2_31 (DF1),

Start 15:
• Found in 8 of 58 (13.8%) of genes in pham
• Manual Annotations of this start: 7 of 50
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chickadee_41 (DE3), Dexdert_42 (DE3), EdmundFerry_40 (DE3), GTE6_41 (DE3), Kwekel_41 (DE3), RoadKill_39 (DE3), Tiamoceli_42 (DE3), Twonlo_39 (DE3),

Start 16:
• Found in 4 of 58 (6.9%) of genes in pham
• No Manual Annotations of this start.
• Called 25.0% of time when present

• Phage (with cluster) where this start called: TPA2_26 (singleton),

Summary by clusters:

There are 8 clusters represented in this pham: CR2, CR3, singleton, CR1, CR4, CR5, DE3, DF1,

Info for manual annotations of cluster CR1:
•Start number 13 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:
•Start number 13 was manually annotated 21 times for cluster CR2.

Info for manual annotations of cluster CR3:
•Start number 13 was manually annotated 6 times for cluster CR3.

Info for manual annotations of cluster CR4:
•Start number 13 was manually annotated 9 times for cluster CR4.

Info for manual annotations of cluster CR5:
•Start number 13 was manually annotated 4 times for cluster CR5.

Info for manual annotations of cluster DE3:
•Start number 15 was manually annotated 7 times for cluster DE3.

Gene Information:

Gene: Arti_51 Start: 39161, Stop: 39586, Start Num: 13
Candidate Starts for Arti_51:
(4, 39104), (7, 39125), (Start: 13 @39161 has 43 MA's), (27, 39332), (31, 39374),

Gene: BiPauneto_53 Start: 38687, Stop: 39115, Start Num: 13
Candidate Starts for BiPauneto_53:
(Start: 13 @38687 has 43 MA's), (27, 38858), (31, 38900), (36, 39026), (38, 39050),

Gene: Bonum_55 Start: 39814, Stop: 40242, Start Num: 13
Candidate Starts for Bonum_55:
(Start: 13 @39814 has 43 MA's), (27, 39985), (39, 40183),

Gene: Buggaboo_53 Start: 40293, Stop: 40721, Start Num: 13
Candidate Starts for Buggaboo_53:
(Start: 13 @40293 has 43 MA's), (27, 40464), (39, 40662),

Gene: Chickadee_41 Start: 36536, Stop: 36970, Start Num: 15
Candidate Starts for Chickadee_41:
(Start: 15 @36536 has 7 MA's), (18, 36569), (21, 36587), (22, 36605), (25, 36638), (28, 36722), (32, 36767), (37, 36896),

Gene: Commandaria_52 Start: 40288, Stop: 40710, Start Num: 13
Candidate Starts for Commandaria_52:

(Start: 13 @40288 has 43 MA's), (27, 40459), (35, 40606), (36, 40627), (39, 40657),

Gene: Dalilpop_56 Start: 41448, Stop: 41870, Start Num: 13
Candidate Starts for Dalilpop_56:
(2, 41364), (3, 41379), (8, 41409), (10, 41418), (Start: 13 @41448 has 43 MA's), (23, 41538), (27, 41619), (31, 41661), (39, 41817), (41, 41856),

Gene: Dexdert_42 Start: 36796, Stop: 37230, Start Num: 15
Candidate Starts for Dexdert_42:
(Start: 15 @36796 has 7 MA's), (18, 36829), (22, 36865), (25, 36898), (32, 37027), (37, 37156), (40, 37192),

Gene: EdmundFerry_40 Start: 36565, Stop: 36999, Start Num: 15
Candidate Starts for EdmundFerry_40:
(Start: 15 @36565 has 7 MA's), (18, 36598), (21, 36616), (22, 36634), (25, 36667), (28, 36751), (32, 36796), (37, 36925),

Gene: Emianna_51 Start: 40153, Stop: 40578, Start Num: 13
Candidate Starts for Emianna_51:
(4, 40096), (7, 40117), (Start: 13 @40153 has 43 MA's), (27, 40324), (31, 40366),

Gene: Ennea_58 Start: 41167, Stop: 41595, Start Num: 13
Candidate Starts for Ennea_58:
(Start: 13 @41167 has 43 MA's), (23, 41257), (24, 41266), (27, 41338), (39, 41536),

Gene: Flapper_56 Start: 40879, Stop: 41316, Start Num: 13
Candidate Starts for Flapper_56:
(2, 40795), (3, 40810), (8, 40840), (10, 40849), (Start: 13 @40879 has 43 MA's), (23, 40969), (27, 41050), (31, 41092), (34, 41152), (39, 41248),

Gene: Float294_54 Start: 40609, Stop: 41037, Start Num: 13
Candidate Starts for Float294_54:
(Start: 13 @40609 has 43 MA's), (23, 40699), (24, 40708), (27, 40780), (39, 40978),

Gene: Foxboro_52 Start: 40659, Stop: 41084, Start Num: 13
Candidate Starts for Foxboro_52:
(4, 40602), (7, 40623), (Start: 13 @40659 has 43 MA's), (27, 40830), (31, 40872),

Gene: Fury_59 Start: 39331, Stop: 39744, Start Num: 13
Candidate Starts for Fury_59:
(10, 39304), (Start: 13 @39331 has 43 MA's), (23, 39421), (24, 39430), (27, 39502), (31, 39544), (33, 39598), (36, 39670), (39, 39700),

Gene: GRU1_41 Start: 32426, Stop: 32848, Start Num: 13
Candidate Starts for GRU1_41:
(8, 32387), (11, 32399), (Start: 13 @32426 has 43 MA's), (23, 32516), (27, 32597), (31, 32639), (39, 32795), (41, 32834),

Gene: GTE5_43 Start: 33736, Stop: 34173, Start Num: 13
Candidate Starts for GTE5_43:
(2, 33652), (3, 33667), (8, 33697), (10, 33706), (Start: 13 @33736 has 43 MA's), (23, 33826), (27, 33907), (31, 33949), (34, 34009), (39, 34105),

Gene: GTE6_41 Start: 37057, Stop: 37491, Start Num: 15
Candidate Starts for GTE6_41:
(Start: 15 @37057 has 7 MA's), (18, 37090), (21, 37108), (22, 37126), (25, 37159), (28, 37243), (32, 37288), (37, 37417),

Gene: GTE8_40 Start: 33411, Stop: 33839, Start Num: 13
Candidate Starts for GTE8_40:
(4, 33354), (7, 33375), (Start: 13 @33411 has 43 MA's), (27, 33582),

Gene: Gmala1_31 Start: 36456, Stop: 36854, Start Num: 14
Candidate Starts for Gmala1_31:
(14, 36456), (16, 36459), (18, 36492), (24, 36555), (29, 36636), (31, 36657), (39, 36804), (42, 36849),

Gene: GordDuk1_31 Start: 36394, Stop: 36792, Start Num: 14
Candidate Starts for GordDuk1_31:
(14, 36394), (16, 36397), (18, 36430), (24, 36493), (29, 36574), (31, 36595), (39, 36742), (42, 36787),

Gene: GordTnk2_31 Start: 36363, Stop: 36761, Start Num: 14
Candidate Starts for GordTnk2_31:
(14, 36363), (16, 36366), (18, 36399), (24, 36462), (29, 36543), (31, 36564), (39, 36711), (42, 36756),

Gene: GrootJr_53 Start: 39535, Stop: 39960, Start Num: 13
Candidate Starts for GrootJr_53:
(4, 39478), (7, 39499), (Start: 13 @39535 has 43 MA's), (27, 39706), (31, 39748),

Gene: HomeFry_56 Start: 37982, Stop: 38395, Start Num: 13
Candidate Starts for HomeFry_56:
(10, 37955), (12, 37979), (Start: 13 @37982 has 43 MA's), (19, 38027), (20, 38030), (23, 38072), (27, 38153), (31, 38195), (33, 38249), (36, 38321), (39, 38351),

Gene: HubbaBubba_48 Start: 35702, Stop: 36127, Start Num: 13
Candidate Starts for HubbaBubba_48:
(9, 35669), (Start: 13 @35702 has 43 MA's), (27, 35873), (31, 35915), (36, 36041), (43, 36119),

Gene: IDyn_52 Start: 37131, Stop: 37559, Start Num: 13
Candidate Starts for IDyn_52:
(9, 37098), (Start: 13 @37131 has 43 MA's), (27, 37302), (31, 37344), (36, 37470),

Gene: Jifall16_50 Start: 39807, Stop: 40232, Start Num: 13
Candidate Starts for Jifall16_50:
(4, 39750), (7, 39771), (Start: 13 @39807 has 43 MA's), (27, 39978), (31, 40020),

Gene: Kabluna_55 Start: 39229, Stop: 39657, Start Num: 13
Candidate Starts for Kabluna_55:
(Start: 13 @39229 has 43 MA's), (27, 39400), (39, 39598),

Gene: KidneyBean_51 Start: 39931, Stop: 40356, Start Num: 13
Candidate Starts for KidneyBean_51:
(4, 39874), (7, 39895), (Start: 13 @39931 has 43 MA's), (27, 40102), (31, 40144),

Gene: Kurt_51 Start: 40168, Stop: 40593, Start Num: 13
Candidate Starts for Kurt_51:
(4, 40111), (7, 40132), (Start: 13 @40168 has 43 MA's), (27, 40339), (31, 40381),

Gene: Kwekel_41 Start: 36497, Stop: 36931, Start Num: 15
Candidate Starts for Kwekel_41:
(Start: 15 @36497 has 7 MA's), (18, 36530), (21, 36548), (22, 36566), (25, 36599), (28, 36683), (32, 36728), (37, 36857),

Gene: Lollipop1437_57 Start: 41155, Stop: 41583, Start Num: 13
Candidate Starts for Lollipop1437_57:
(2, 41074), (Start: 13 @41155 has 43 MA's), (23, 41245), (24, 41254), (27, 41326), (39, 41524),

Gene: Marietta_53 Start: 37025, Stop: 37453, Start Num: 13
Candidate Starts for Marietta_53:
(9, 36992), (Start: 13 @37025 has 43 MA's), (27, 37196), (31, 37238), (36, 37364),

Gene: MerCougar_53 Start: 40431, Stop: 40859, Start Num: 13
Candidate Starts for MerCougar_53:
(Start: 13 @40431 has 43 MA's), (27, 40602), (38, 40794), (39, 40800),

Gene: NadineRae_51 Start: 36272, Stop: 36697, Start Num: 13
Candidate Starts for NadineRae_51:
(9, 36239), (Start: 13 @36272 has 43 MA's), (27, 36443), (31, 36485), (36, 36611),

Gene: NatB6_51 Start: 39225, Stop: 39650, Start Num: 13
Candidate Starts for NatB6_51:
(4, 39168), (7, 39189), (Start: 13 @39225 has 43 MA's), (27, 39396), (31, 39438),

Gene: NosilaM_55 Start: 40126, Stop: 40554, Start Num: 13
Candidate Starts for NosilaM_55:
(Start: 13 @40126 has 43 MA's), (27, 40297), (39, 40495),

Gene: NovumRegina_51 Start: 39534, Stop: 39959, Start Num: 13
Candidate Starts for NovumRegina_51:
(4, 39477), (7, 39498), (Start: 13 @39534 has 43 MA's), (27, 39705), (31, 39747),

Gene: Outis_53 Start: 40125, Stop: 40553, Start Num: 13
Candidate Starts for Outis_53:
(Start: 13 @40125 has 43 MA's), (27, 40296), (38, 40488), (39, 40494),

Gene: Patio_55 Start: 40391, Stop: 40819, Start Num: 13
Candidate Starts for Patio_55:
(Start: 13 @40391 has 43 MA's), (23, 40481), (24, 40490), (27, 40562), (39, 40760),

Gene: Pemberton_53 Start: 37004, Stop: 37432, Start Num: 13
Candidate Starts for Pemberton_53:
(5, 36959), (6, 36962), (9, 36971), (Start: 13 @37004 has 43 MA's), (27, 37175), (31, 37217), (36, 37343), (38, 37367),

Gene: Phomeo_50 Start: 39803, Stop: 40228, Start Num: 13
Candidate Starts for Phomeo_50:
(4, 39746), (7, 39767), (Start: 13 @39803 has 43 MA's), (27, 39974), (31, 40016),

Gene: Pleakley_59 Start: 39332, Stop: 39745, Start Num: 13
Candidate Starts for Pleakley_59:

(10, 39305), (Start: 13 @39332 has 43 MA's), (23, 39422), (24, 39431), (27, 39503), (31, 39545), (33, 39599), (36, 39671), (39, 39701),

Gene: RedRaider_59 Start: 42413, Stop: 42841, Start Num: 13
Candidate Starts for RedRaider_59:
(5, 42368), (8, 42377), (10, 42386), (Start: 13 @42413 has 43 MA's), (23, 42503), (24, 42512), (39, 42782),

Gene: RoadKill_39 Start: 36060, Stop: 36494, Start Num: 15
Candidate Starts for RoadKill_39:
(Start: 15 @36060 has 7 MA's), (18, 36093), (21, 36111), (22, 36129), (25, 36162), (28, 36246), (32, 36291), (37, 36420),

Gene: Scuba_59 Start: 39406, Stop: 39819, Start Num: 13
Candidate Starts for Scuba_59:
(10, 39379), (Start: 13 @39406 has 43 MA's), (23, 39496), (24, 39505), (27, 39577), (31, 39619), (33, 39673), (36, 39745), (39, 39775),

Gene: Skysand_54 Start: 40611, Stop: 41039, Start Num: 13
Candidate Starts for Skysand_54:
(Start: 13 @40611 has 43 MA's), (23, 40701), (24, 40710), (39, 40980),

Gene: StarStruck_53 Start: 40125, Stop: 40553, Start Num: 13
Candidate Starts for StarStruck_53:
(Start: 13 @40125 has 43 MA's), (27, 40296), (38, 40488), (39, 40494),

Gene: Sukkupi_52 Start: 38578, Stop: 39006, Start Num: 13
Candidate Starts for Sukkupi_52:
(5, 38533), (6, 38536), (9, 38545), (Start: 13 @38578 has 43 MA's), (27, 38749), (31, 38791), (36, 38917), (38, 38941),

Gene: SuperSulley_53 Start: 40293, Stop: 40721, Start Num: 13
Candidate Starts for SuperSulley_53:
(Start: 13 @40293 has 43 MA's), (27, 40464), (39, 40662),

Gene: TPA2_26 Start: 16553, Stop: 16993, Start Num: 16
Candidate Starts for TPA2_26:
(1, 16442), (16, 16553), (17, 16559), (26, 16679), (30, 16760), (40, 16955), (44, 16985),

Gene: Tiamoceli_42 Start: 37393, Stop: 37827, Start Num: 15
Candidate Starts for Tiamoceli_42:
(Start: 15 @37393 has 7 MA's), (18, 37426), (21, 37444), (22, 37462), (25, 37495), (28, 37579), (32, 37624), (37, 37753),

Gene: Tracker_51 Start: 38952, Stop: 39377, Start Num: 13
Candidate Starts for Tracker_51:
(4, 38895), (7, 38916), (Start: 13 @38952 has 43 MA's), (27, 39123), (31, 39165),

Gene: Turuncu_56 Start: 40541, Stop: 40978, Start Num: 13
Candidate Starts for Turuncu_56:
(2, 40457), (3, 40472), (8, 40502), (10, 40511), (Start: 13 @40541 has 43 MA's), (23, 40631), (27, 40712), (31, 40754), (34, 40814), (39, 40910),

Gene: Twonlo_39 Start: 36011, Stop: 36445, Start Num: 15
Candidate Starts for Twonlo_39:
(Start: 15 @36011 has 7 MA's), (18, 36044), (21, 36062), (22, 36080), (25, 36113), (28, 36197), (32, 36242), (37, 36371),

Gene: Wheezy_51 Start: 39157, Stop: 39582, Start Num: 13
Candidate Starts for Wheezy_51:
(4, 39100), (7, 39121), (Start: 13 @39157 has 43 MA's), (27, 39328), (31, 39370),

Gene: WhoseManz_52 Start: 36638, Stop: 37066, Start Num: 13
Candidate Starts for WhoseManz_52:
(9, 36605), (Start: 13 @36638 has 43 MA's), (27, 36809), (31, 36851), (36, 36977),

Gene: Yndexa_52 Start: 38578, Stop: 39006, Start Num: 13
Candidate Starts for Yndexa_52:
(5, 38533), (6, 38536), (9, 38545), (Start: 13 @38578 has 43 MA's), (27, 38749), (31, 38791), (36, 38917), (38, 38941),