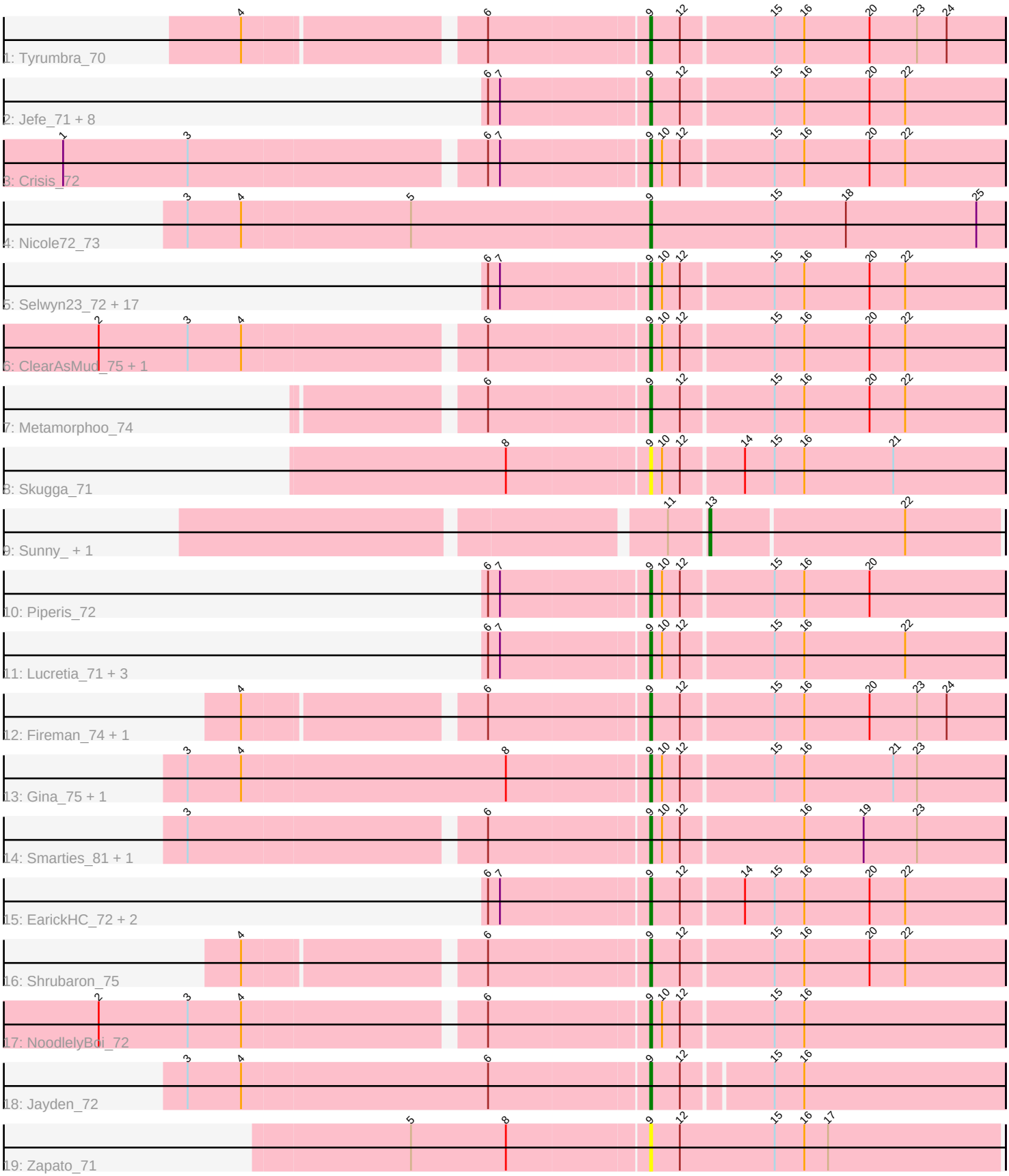
Pham 347684


1: Tyrumbra_70
2: Jefe_71 + 8
3: Crisis_72
4: Nicole72_73
5: Selwyn23_72 + 17
6: ClearAsMud_75 + 1
7: Metamorphoo_74
8: Skugga_71
9: Sunny_ + 1
10: Piperis_72
11: Lucretia_71 + 3
12: Fireman_74 + 1
13: Gina_75 + 1
14: Smarties_81 + 1
15: EarickHC_72 + 2
16: Shrubaron_75
17: NoodlelyBoi_72
18: Jayden_72
19: Zapato_71

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 347684 Report

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

Pham number 347684 has 54 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Tyrumbra_70
• Track 2 : Jefe_71, Yeti_73, BeagleBug_70, CrazyRich_70, LittleFortune_73, Hermeonysus_71, Honeyfin_72, PhedwardCullen_70, PierreOrion_71
• Track 3 : Crisis_72
• Track 4 : Nicole72_73
• Track 5 : Selwyn23_72, Quhwah_75, Onika_70, Glorp_72, Cranjis_72, Jollipop_72, PiperSansNom_72, Antares_71, Kowalski_70, Shotgun_71, Ganandorf_70, Scumberland_73, Rockwell_70, Germa_73, Paschalis_71, Ramiel05_70, Savannah_70, BrazzalePHS_70
• Track 6 : ClearAsMud_75, SirFrank_71
• Track 7 : Metamorphoo_74
• Track 8 : Skugga_71
• Track 9 : Sunny_, Merry_
• Track 10 : Piperis_72
• Track 11 : Lucretia_71, Phrancesco_71, Pulchra_73, Busephilis_70
• Track 12 : Fireman_74, RobsFeet_75
• Track 13 : Gina_75, Teamocil_75
• Track 14 : Smarties_81, Ariadne_81
• Track 15 : EarickHC_72, KaiHaiDragon_72, Phorgeous_71
• Track 16 : Shrubaron_75
• Track 17 : NoodlelyBoi_72
• Track 18 : Jayden_72
• Track 19 : Zapato_71

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

The start number called the most often in the published annotations is 9, it was called in 46 of the 48 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Antares_71, Ariadne_81, BeagleBug_70, BrazzalePHS_70, Busephilis_70, ClearAsMud_75, Cranjis_72, CrazyRich_70, Crisis_72, EarickHC_72, Fireman_74, Ganandorf_70, Germa_73, Gina_75, Glorp_72, Hermeonysus_71, Honeyfin_72, Jayden_72, Jefe_71, Jollipop_72, KaiHaiDragon_72, Kowalski_70, LittleFortune_73,

Lucretia_71, Metamorphoo_74, Nicole72_73, NoodlelyBoi_72, Onika_70, Paschalis_71, PhedwardCullen_70, Phorgeous_71, Phrancesco_71, PierreOrion_71, PiperSansNom_72, Piperis_72, Pulchra_73, Quhwah_75, Ramiel05_70, RobsFeet_75, Rockwell_70, Savannah_70, Scumberland_73, Selwyn23_72, Shotgun_71, Shrubaron_75, SirFrank_71, Skugga_71, Smarties_81, Teamocil_75, Tyrumbra_70, Yeti_73, Zapato_71,

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

Genes that do not have the "Most Annotated" start:
• Merry_, Sunny_,

Summary by start number:

Start 9:
• Found in 52 of 54 (96.3%) of genes in pham
• Manual Annotations of this start: 46 of 48
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Antares_71 (EC), Ariadne_81 (EC), BeagleBug_70 (EC), BrazzalePHS_70 (EC), Busephilis_70 (EC), ClearAsMud_75 (EC), Cranjis_72 (EC), CrazyRich_70 (EC), Crisis_72 (EC), EarickHC_72 (EC), Fireman_74 (EC), Ganandorf_70 (EC), Germa_73 (EC), Gina_75 (EC), Glorp_72 (EC), Hermeonysus_71 (EC), Honeyfin_72 (EC), Jayden_72 (EC), Jefe_71 (EC), Jollipop_72 (EC), KaiHaiDragon_72 (EC), Kowalski_70 (EC), LittleFortune_73 (EC), Lucretia_71 (EC), Metamorphoo_74 (EC), Nicole72_73 (EC), NoodlelyBoi_72 (EC), Onika_70 (EC), Paschalis_71 (EC), PhedwardCullen_70 (EC), Phorgeous_71 (EC), Phrancesco_71 (EC), PierreOrion_71 (EC), PiperSansNom_72 (EC), Piperis_72 (EC), Pulchra_73 (EC), Quhwah_75 (EC), Ramiel05_70 (EC), RobsFeet_75 (EC), Rockwell_70 (EC), Savannah_70 (EC), Scumberland_73 (EC), Selwyn23_72 (EC), Shotgun_71 (EC), Shrubaron_75 (EC), SirFrank_71 (EC), Skugga_71 (EC), Smarties_81 (EC), Teamocil_75 (EC), Tyrumbra_70 (EC), Yeti_73 (EC), Zapato_71 (EC),

Start 13:
• Found in 2 of 54 (3.7%) of genes in pham
• Manual Annotations of this start: 2 of 48
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Merry_ (EC), Sunny_ (EC),

Summary by clusters:

There is one cluster represented in this pham: EC

Info for manual annotations of cluster EC:
•Start number 9 was manually annotated 46 times for cluster EC.
•Start number 13 was manually annotated 2 times for cluster EC.

Gene Information:

Gene: Antares_71 Start: 43482, Stop: 43658, Start Num: 9

Candidate Starts for Antares_71:
(6, 43404), (7, 43410), (Start: 9 @43482 has 46 MA's), (10, 43488), (12, 43497), (15, 43542), (16, 43557), (20, 43590), (22, 43608),

Gene: Ariadne_81 Start: 45071, Stop: 45247, Start Num: 9
Candidate Starts for Ariadne_81:
(3, 44852), (6, 44993), (Start: 9 @45071 has 46 MA's), (10, 45077), (12, 45086), (16, 45146), (19, 45176), (23, 45203),

Gene: BeagleBug_70 Start: 43262, Stop: 43438, Start Num: 9
Candidate Starts for BeagleBug_70:
(6, 43184), (7, 43190), (Start: 9 @43262 has 46 MA's), (12, 43277), (15, 43322), (16, 43337), (20, 43370), (22, 43388),

Gene: BrazzalePHS_70 Start: 43250, Stop: 43426, Start Num: 9
Candidate Starts for BrazzalePHS_70:
(6, 43172), (7, 43178), (Start: 9 @43250 has 46 MA's), (10, 43256), (12, 43265), (15, 43310), (16, 43325), (20, 43358), (22, 43376),

Gene: Busephilis_70 Start: 43189, Stop: 43365, Start Num: 9
Candidate Starts for Busephilis_70:
(6, 43111), (7, 43117), (Start: 9 @43189 has 46 MA's), (10, 43195), (12, 43204), (15, 43249), (16, 43264), (22, 43315),

Gene: ClearAsMud_75 Start: 43770, Stop: 43946, Start Num: 9
Candidate Starts for ClearAsMud_75:
(2, 43506), (3, 43551), (4, 43578), (6, 43692), (Start: 9 @43770 has 46 MA's), (10, 43776), (12, 43785), (15, 43830), (16, 43845), (20, 43878), (22, 43896),

Gene: Cranjis_72 Start: 43437, Stop: 43613, Start Num: 9
Candidate Starts for Cranjis_72:
(6, 43359), (7, 43365), (Start: 9 @43437 has 46 MA's), (10, 43443), (12, 43452), (15, 43497), (16, 43512), (20, 43545), (22, 43563),

Gene: CrazyRich_70 Start: 43243, Stop: 43419, Start Num: 9
Candidate Starts for CrazyRich_70:
(6, 43165), (7, 43171), (Start: 9 @43243 has 46 MA's), (12, 43258), (15, 43303), (16, 43318), (20, 43351), (22, 43369),

Gene: Crisis_72 Start: 43252, Stop: 43428, Start Num: 9
Candidate Starts for Crisis_72:
(1, 42970), (3, 43033), (6, 43174), (7, 43180), (Start: 9 @43252 has 46 MA's), (10, 43258), (12, 43267), (15, 43312), (16, 43327), (20, 43360), (22, 43378),

Gene: EarickHC_72 Start: 43174, Stop: 43350, Start Num: 9
Candidate Starts for EarickHC_72:
(6, 43096), (7, 43102), (Start: 9 @43174 has 46 MA's), (12, 43189), (14, 43219), (15, 43234), (16, 43249), (20, 43282), (22, 43300),

Gene: Fireman_74 Start: 45207, Stop: 45383, Start Num: 9
Candidate Starts for Fireman_74:
(4, 45018), (6, 45129), (Start: 9 @45207 has 46 MA's), (12, 45222), (15, 45267), (16, 45282), (20, 45315), (23, 45339), (24, 45354),

Gene: Ganandorf_70 Start: 43270, Stop: 43446, Start Num: 9
Candidate Starts for Ganandorf_70:
(6, 43192), (7, 43198), (Start: 9 @43270 has 46 MA's), (10, 43276), (12, 43285), (15, 43330), (16, 43345), (20, 43378), (22, 43396),

Gene: Germa_73 Start: 43100, Stop: 43276, Start Num: 9
Candidate Starts for Germa_73:
(6, 43022), (7, 43028), (Start: 9 @43100 has 46 MA's), (10, 43106), (12, 43115), (15, 43160), (16, 43175), (20, 43208), (22, 43226),

Gene: Gina_75 Start: 43324, Stop: 43500, Start Num: 9
Candidate Starts for Gina_75:
(3, 43096), (4, 43123), (8, 43255), (Start: 9 @43324 has 46 MA's), (10, 43330), (12, 43339), (15, 43384), (16, 43399), (21, 43444), (23, 43456),

Gene: Glorp_72 Start: 43234, Stop: 43410, Start Num: 9
Candidate Starts for Glorp_72:
(6, 43156), (7, 43162), (Start: 9 @43234 has 46 MA's), (10, 43240), (12, 43249), (15, 43294), (16, 43309), (20, 43342), (22, 43360),

Gene: Hermeonysus_71 Start: 43159, Stop: 43335, Start Num: 9
Candidate Starts for Hermeonysus_71:
(6, 43081), (7, 43087), (Start: 9 @43159 has 46 MA's), (12, 43174), (15, 43219), (16, 43234), (20, 43267), (22, 43285),

Gene: Honeyfin_72 Start: 43419, Stop: 43595, Start Num: 9
Candidate Starts for Honeyfin_72:
(6, 43341), (7, 43347), (Start: 9 @43419 has 46 MA's), (12, 43434), (15, 43479), (16, 43494), (20, 43527), (22, 43545),

Gene: Jayden_72 Start: 43680, Stop: 43853, Start Num: 9
Candidate Starts for Jayden_72:
(3, 43452), (4, 43479), (6, 43602), (Start: 9 @43680 has 46 MA's), (12, 43695), (15, 43737), (16, 43752),

Gene: Jefe_71 Start: 43220, Stop: 43396, Start Num: 9
Candidate Starts for Jefe_71:
(6, 43142), (7, 43148), (Start: 9 @43220 has 46 MA's), (12, 43235), (15, 43280), (16, 43295), (20, 43328), (22, 43346),

Gene: Jollipop_72 Start: 43608, Stop: 43784, Start Num: 9
Candidate Starts for Jollipop_72:
(6, 43530), (7, 43536), (Start: 9 @43608 has 46 MA's), (10, 43614), (12, 43623), (15, 43668), (16, 43683), (20, 43716), (22, 43734),

Gene: KaiHaiDragon_72 Start: 43174, Stop: 43350, Start Num: 9
Candidate Starts for KaiHaiDragon_72:
(6, 43096), (7, 43102), (Start: 9 @43174 has 46 MA's), (12, 43189), (14, 43219), (15, 43234), (16, 43249), (20, 43282), (22, 43300),

Gene: Kowalski_70 Start: 43245, Stop: 43421, Start Num: 9
Candidate Starts for Kowalski_70:

(6, 43167), (7, 43173), (Start: 9 @43245 has 46 MA's), (10, 43251), (12, 43260), (15, 43305), (16, 43320), (20, 43353), (22, 43371),

Gene: LittleFortune_73 Start: 43530, Stop: 43706, Start Num: 9
Candidate Starts for LittleFortune_73:
(6, 43452), (7, 43458), (Start: 9 @43530 has 46 MA's), (12, 43545), (15, 43590), (16, 43605), (20, 43638), (22, 43656),

Gene: Lucretia_71 Start: 43152, Stop: 43328, Start Num: 9
Candidate Starts for Lucretia_71:
(6, 43074), (7, 43080), (Start: 9 @43152 has 46 MA's), (10, 43158), (12, 43167), (15, 43212), (16, 43227), (22, 43278),

Gene: Merry_ Start: 44856, Stop: 44999, Start Num: 13
Candidate Starts for Merry_:
(11, 44838), (Start: 13 @44856 has 2 MA's), (22, 44952),

Gene: Metamorphoo_74 Start: 44501, Stop: 44677, Start Num: 9
Candidate Starts for Metamorphoo_74:
(6, 44423), (Start: 9 @44501 has 46 MA's), (12, 44516), (15, 44561), (16, 44576), (20, 44609), (22, 44627),

Gene: Nicole72_73 Start: 48942, Stop: 49121, Start Num: 9
Candidate Starts for Nicole72_73:
(3, 48711), (4, 48738), (5, 48822), (Start: 9 @48942 has 46 MA's), (15, 49005), (18, 49041), (25, 49107),

Gene: NoodlelyBoi_72 Start: 44019, Stop: 44195, Start Num: 9
Candidate Starts for NoodlelyBoi_72:
(2, 43755), (3, 43800), (4, 43827), (6, 43941), (Start: 9 @44019 has 46 MA's), (10, 44025), (12, 44034), (15, 44079), (16, 44094),

Gene: Onika_70 Start: 43248, Stop: 43424, Start Num: 9
Candidate Starts for Onika_70:
(6, 43170), (7, 43176), (Start: 9 @43248 has 46 MA's), (10, 43254), (12, 43263), (15, 43308), (16, 43323), (20, 43356), (22, 43374),

Gene: Paschalis_71 Start: 43273, Stop: 43449, Start Num: 9
Candidate Starts for Paschalis_71:
(6, 43195), (7, 43201), (Start: 9 @43273 has 46 MA's), (10, 43279), (12, 43288), (15, 43333), (16, 43348), (20, 43381), (22, 43399),

Gene: PhedwardCullen_70 Start: 42990, Stop: 43166, Start Num: 9
Candidate Starts for PhedwardCullen_70:
(6, 42912), (7, 42918), (Start: 9 @42990 has 46 MA's), (12, 43005), (15, 43050), (16, 43065), (20, 43098), (22, 43116),

Gene: Phorgeous_71 Start: 43056, Stop: 43232, Start Num: 9
Candidate Starts for Phorgeous_71:
(6, 42978), (7, 42984), (Start: 9 @43056 has 46 MA's), (12, 43071), (14, 43101), (15, 43116), (16, 43131), (20, 43164), (22, 43182),

Gene: Phrancesco_71 Start: 43379, Stop: 43555, Start Num: 9

Candidate Starts for Phrancesco_71:
(6, 43301), (7, 43307), (Start: 9 @43379 has 46 MA's), (10, 43385), (12, 43394), (15, 43439), (16, 43454), (22, 43505),

Gene: PierreOrion_71 Start: 43485, Stop: 43661, Start Num: 9
Candidate Starts for PierreOrion_71:
(6, 43407), (7, 43413), (Start: 9 @43485 has 46 MA's), (12, 43500), (15, 43545), (16, 43560), (20, 43593), (22, 43611),

Gene: PiperSansNom_72 Start: 43558, Stop: 43734, Start Num: 9
Candidate Starts for PiperSansNom_72:
(6, 43480), (7, 43486), (Start: 9 @43558 has 46 MA's), (10, 43564), (12, 43573), (15, 43618), (16, 43633), (20, 43666), (22, 43684),

Gene: Piperis_72 Start: 43181, Stop: 43357, Start Num: 9
Candidate Starts for Piperis_72:
(6, 43103), (7, 43109), (Start: 9 @43181 has 46 MA's), (10, 43187), (12, 43196), (15, 43241), (16, 43256), (20, 43289),

Gene: Pulchra_73 Start: 43577, Stop: 43753, Start Num: 9
Candidate Starts for Pulchra_73:
(6, 43499), (7, 43505), (Start: 9 @43577 has 46 MA's), (10, 43583), (12, 43592), (15, 43637), (16, 43652), (22, 43703),

Gene: Quhwah_75 Start: 43866, Stop: 44042, Start Num: 9
Candidate Starts for Quhwah_75:
(6, 43788), (7, 43794), (Start: 9 @43866 has 46 MA's), (10, 43872), (12, 43881), (15, 43926), (16, 43941), (20, 43974), (22, 43992),

Gene: Ramiel05_70 Start: 43245, Stop: 43421, Start Num: 9
Candidate Starts for Ramiel05_70:
(6, 43167), (7, 43173), (Start: 9 @43245 has 46 MA's), (10, 43251), (12, 43260), (15, 43305), (16, 43320), (20, 43353), (22, 43371),

Gene: RobsFeet_75 Start: 44787, Stop: 44963, Start Num: 9
Candidate Starts for RobsFeet_75:
(4, 44598), (6, 44709), (Start: 9 @44787 has 46 MA's), (12, 44802), (15, 44847), (16, 44862), (20, 44895), (23, 44919), (24, 44934),

Gene: Rockwell_70 Start: 43269, Stop: 43445, Start Num: 9
Candidate Starts for Rockwell_70:
(6, 43191), (7, 43197), (Start: 9 @43269 has 46 MA's), (10, 43275), (12, 43284), (15, 43329), (16, 43344), (20, 43377), (22, 43395),

Gene: Savannah_70 Start: 43296, Stop: 43472, Start Num: 9
Candidate Starts for Savannah_70:
(6, 43218), (7, 43224), (Start: 9 @43296 has 46 MA's), (10, 43302), (12, 43311), (15, 43356), (16, 43371), (20, 43404), (22, 43422),

Gene: Scumberland_73 Start: 43491, Stop: 43667, Start Num: 9
Candidate Starts for Scumberland_73:
(6, 43413), (7, 43419), (Start: 9 @43491 has 46 MA's), (10, 43497), (12, 43506), (15, 43551), (16, 43566), (20, 43599), (22, 43617),

Gene: Selwyn23_72 Start: 43408, Stop: 43584, Start Num: 9
Candidate Starts for Selwyn23_72:
(6, 43330), (7, 43336), (Start: 9 @43408 has 46 MA's), (10, 43414), (12, 43423), (15, 43468), (16, 43483), (20, 43516), (22, 43534),

Gene: Shotgun_71 Start: 43175, Stop: 43351, Start Num: 9
Candidate Starts for Shotgun_71:
(6, 43097), (7, 43103), (Start: 9 @43175 has 46 MA's), (10, 43181), (12, 43190), (15, 43235), (16, 43250), (20, 43283), (22, 43301),

Gene: Shrubaron_75 Start: 44382, Stop: 44558, Start Num: 9
Candidate Starts for Shrubaron_75:
(4, 44193), (6, 44304), (Start: 9 @44382 has 46 MA's), (12, 44397), (15, 44442), (16, 44457), (20, 44490), (22, 44508),

Gene: SirFrank_71 Start: 43465, Stop: 43641, Start Num: 9
Candidate Starts for SirFrank_71:
(2, 43201), (3, 43246), (4, 43273), (6, 43387), (Start: 9 @43465 has 46 MA's), (10, 43471), (12, 43480), (15, 43525), (16, 43540), (20, 43573), (22, 43591),

Gene: Skugga_71 Start: 43713, Stop: 43889, Start Num: 9
Candidate Starts for Skugga_71:
(8, 43644), (Start: 9 @43713 has 46 MA's), (10, 43719), (12, 43728), (14, 43758), (15, 43773), (16, 43788), (21, 43833),

Gene: Smarties_81 Start: 45071, Stop: 45247, Start Num: 9
Candidate Starts for Smarties_81:
(3, 44852), (6, 44993), (Start: 9 @45071 has 46 MA's), (10, 45077), (12, 45086), (16, 45146), (19, 45176), (23, 45203),

Gene: Sunny_ Start: 44858, Stop: 45001, Start Num: 13
Candidate Starts for Sunny_:
(11, 44840), (Start: 13 @44858 has 2 MA's), (22, 44954),

Gene: Teamocil_75 Start: 43417, Stop: 43593, Start Num: 9
Candidate Starts for Teamocil_75:
(3, 43189), (4, 43216), (8, 43348), (Start: 9 @43417 has 46 MA's), (10, 43423), (12, 43432), (15, 43477), (16, 43492), (21, 43537), (23, 43549),

Gene: Tyrumbra_70 Start: 44012, Stop: 44188, Start Num: 9
Candidate Starts for Tyrumbra_70:
(4, 43823), (6, 43934), (Start: 9 @44012 has 46 MA's), (12, 44027), (15, 44072), (16, 44087), (20, 44120), (23, 44144), (24, 44159),

Gene: Yeti_73 Start: 43207, Stop: 43383, Start Num: 9
Candidate Starts for Yeti_73:
(6, 43129), (7, 43135), (Start: 9 @43207 has 46 MA's), (12, 43222), (15, 43267), (16, 43282), (20, 43315), (22, 43333),

Gene: Zapato_71 Start: 43943, Stop: 44119, Start Num: 9
Candidate Starts for Zapato_71:

(5, 43826), (8, 43874), (Start: 9 @43943 has 46 MA's), (12, 43958), (15, 44006), (16, 44021), (17, 44033),