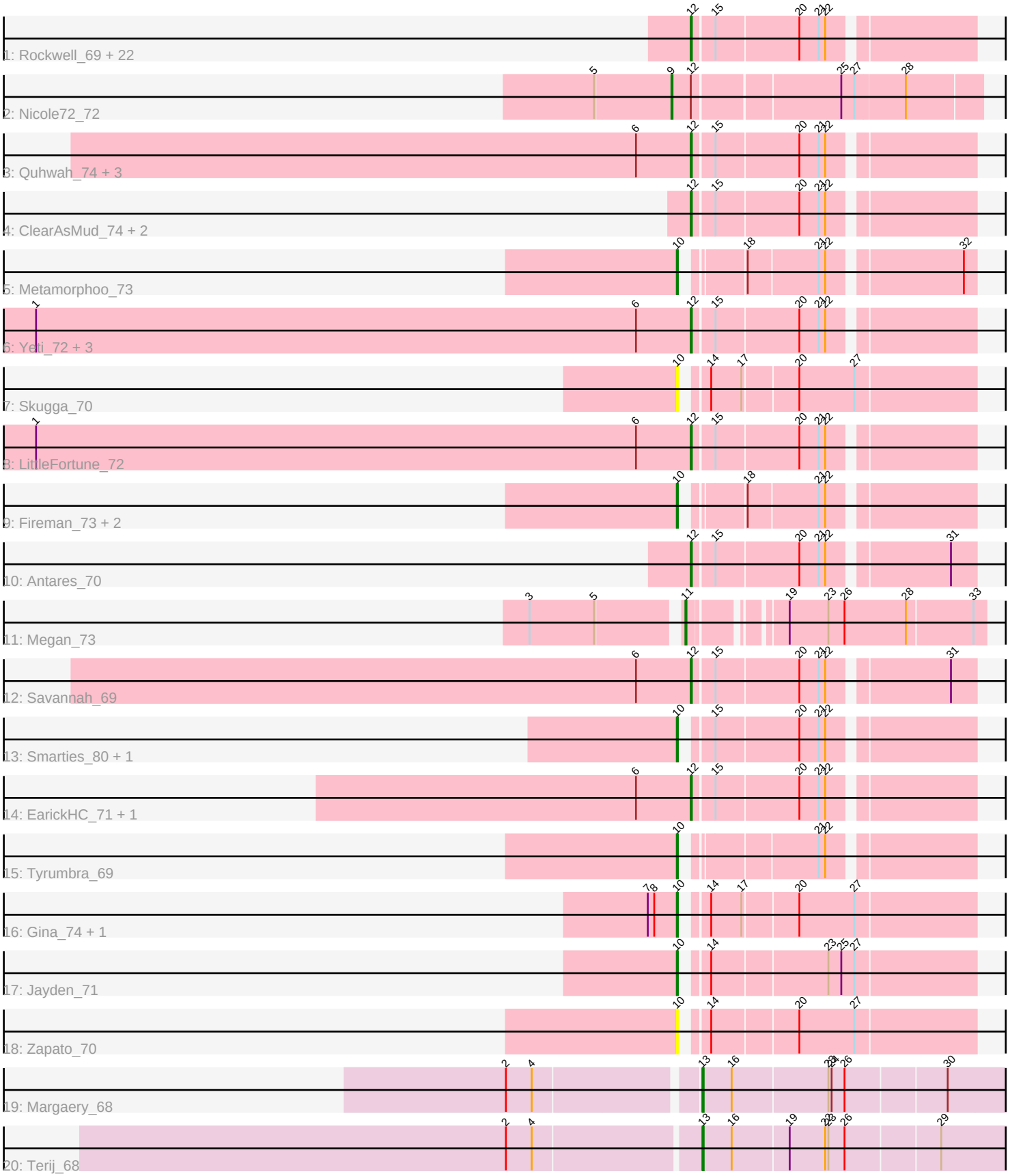
Pham 341032


1: Rockwell_69 + 22
2: Nicole72_72
3: Quhwah_74 + 3
4: ClearAsMud_74 + 2
5: Metamorphoo_73
6: Yeti_72 + 3
7: Skugga_70
8: LittleFortune_72
9: Fireman_73 + 2
10: Antares_70
11: Megan_73
12: Savannah_69
13: Smarties_80 + 1
14: EarickHC_71 + 1
15: Tyrumbra_69
16: Gina_74 + 1
17: Jayden_71
18: Zapato_70
19: Margaery_68
20: Terij_68

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 341032 Report

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

Pham number 341032 has 55 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Rockwell_69, Crisis_71, Selwyn23_71, Scumberland_72, PhedwardCullen_69, Piperis_71, Cranjis_71, Lucretia_70, Jollipop_71, Glorp_71, Phrancesco_70, PiperSansNom_71, BrazzalePHS_69, Busephilis_69, Hermeonysus_70, Pulchra_72, Germa_72, Paschalis_70, Onika_69, BeagleBug_69, CrazyRich_69, Ramiel05_69, Kowalski_69
• Track 2 : Nicole72_72
• Track 3 : Quhwah_74, Shotgun_70, Ganandorf_69, Jefe_70
• Track 4 : ClearAsMud_74, SirFrank_70, NoodlelyBoi_71
• Track 5 : Metamorphoo_73
• Track 6 : Yeti_72, Honeyfin_71, PierreOrion_70, Phorgeous_70
• Track 7 : Skugga_70
• Track 8 : LittleFortune_72
• Track 9 : Fireman_73, Shrubaron_74, RobsFeet_74
• Track 10 : Antares_70
• Track 11 : Megan_73
• Track 12 : Savannah_69
• Track 13 : Smarties_80, Ariadne_80
• Track 14 : EarickHC_71, KaiHaiDragon_71
• Track 15 : Tyrumbra_69
• Track 16 : Gina_74, Teamocil_74
• Track 17 : Jayden_71
• Track 18 : Zapato_70
• Track 19 : Margaery_68
• Track 20 : Terij_68

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

The start number called the most often in the published annotations is 12, it was called in 35 of the 49 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Antares_70, BeagleBug_69, BrazzalePHS_69, Busephilis_69, ClearAsMud_74, Cranjis_71, CrazyRich_69, Crisis_71, EarickHC_71, Ganandorf_69, Germa_72, Glorp_71, Hermeonysus_70, Honeyfin_71, Jefe_70, Jollipop_71, KaiHaiDragon_71,

Kowalski_69, LittleFortune_72, Lucretia_70, NoodlelyBoi_71, Onika_69, Paschalis_70, PhedwardCullen_69, Phorgeous_70, Phrancesco_70, PierreOrion_70, PiperSansNom_71, Piperis_71, Pulchra_72, Quhwah_74, Ramiel05_69, Rockwell_69, Savannah_69, Scumberland_72, Selwyn23_71, Shotgun_70, SirFrank_70, Yeti_72,

Genes that have the "Most Annotated" start but do not call it:
• Nicole72_72,

Genes that do not have the "Most Annotated" start:
• Ariadne_80, Fireman_73, Gina_74, Jayden_71, Margaery_68, Megan_73, Metamorphoo_73, RobsFeet_74, Shrubaron_74, Skugga_70, Smarties_80, Teamocil_74, Terij_68, Tyrumbra_69, Zapato_70,

Summary by start number:

Start 9:
• Found in 1 of 55 (1.8%) of genes in pham
• Manual Annotations of this start: 1 of 49
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Nicole72_72 (EC),

Start 10:
• Found in 12 of 55 (21.8%) of genes in pham
• Manual Annotations of this start: 10 of 49
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ariadne_80 (EC), Fireman_73 (EC), Gina_74 (EC), Jayden_71 (EC), Metamorphoo_73 (EC), RobsFeet_74 (EC), Shrubaron_74 (EC), Skugga_70 (EC), Smarties_80 (EC), Teamocil_74 (EC), Tyrumbra_69 (EC), Zapato_70 (EC),

Start 11:
• Found in 1 of 55 (1.8%) of genes in pham
• Manual Annotations of this start: 1 of 49
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Megan_73 (EC),

Start 12:
• Found in 40 of 55 (72.7%) of genes in pham
• Manual Annotations of this start: 35 of 49
• Called 97.5% of time when present
• Phage (with cluster) where this start called: Antares_70 (EC), BeagleBug_69 (EC), BrazzalePHS_69 (EC), Busephilis_69 (EC), ClearAsMud_74 (EC), Cranjis_71 (EC), CrazyRich_69 (EC), Crisis_71 (EC), EarickHC_71 (EC), Ganandorf_69 (EC), Germa_72 (EC), Glorp_71 (EC), Hermeonysus_70 (EC), Honeyfin_71 (EC), Jefe_70 (EC), Jollipop_71 (EC), KaiHaiDragon_71 (EC), Kowalski_69 (EC), LittleFortune_72 (EC), Lucretia_70 (EC), NoodlelyBoi_71 (EC), Onika_69 (EC), Paschalis_70 (EC), PhedwardCullen_69 (EC), Phorgeous_70 (EC), Phrancesco_70 (EC), PierreOrion_70 (EC), PiperSansNom_71 (EC), Piperis_71 (EC), Pulchra_72 (EC), Quhwah_74 (EC), Ramiel05_69 (EC), Rockwell_69 (EC), Savannah_69 (EC), Scumberland_72 (EC), Selwyn23_71 (EC), Shotgun_70 (EC), SirFrank_70 (EC), Yeti_72 (EC),

Start 13:

• Found in 2 of 55 (3.6%) of genes in pham
• Manual Annotations of this start: 2 of 49
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Margaery_68 (EI), Terij_68 (EI),

Summary by clusters:

There are 2 clusters represented in this pham: EI, EC,

Info for manual annotations of cluster EC:
•Start number 9 was manually annotated 1 time for cluster EC.
•Start number 10 was manually annotated 10 times for cluster EC.
•Start number 11 was manually annotated 1 time for cluster EC.
•Start number 12 was manually annotated 35 times for cluster EC.

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

Gene Information:

Gene: Antares_70 Start: 43243, Stop: 43485, Start Num: 12
Candidate Starts for Antares_70:
(Start: 12 @43243 has 35 MA's), (15, 43261), (20, 43336), (21, 43354), (22, 43360), (31, 43462),

Gene: Ariadne_80 Start: 44832, Stop: 45074, Start Num: 10
Candidate Starts for Ariadne_80:
(Start: 10 @44832 has 10 MA's), (15, 44850), (20, 44925), (21, 44943), (22, 44949),

Gene: BeagleBug_69 Start: 43023, Stop: 43265, Start Num: 12
Candidate Starts for BeagleBug_69:
(Start: 12 @43023 has 35 MA's), (15, 43041), (20, 43116), (21, 43134), (22, 43140),

Gene: BrazzalePHS_69 Start: 43011, Stop: 43253, Start Num: 12
Candidate Starts for BrazzalePHS_69:
(Start: 12 @43011 has 35 MA's), (15, 43029), (20, 43104), (21, 43122), (22, 43128),

Gene: Busephilis_69 Start: 42950, Stop: 43192, Start Num: 12
Candidate Starts for Busephilis_69:
(Start: 12 @42950 has 35 MA's), (15, 42968), (20, 43043), (21, 43061), (22, 43067),

Gene: ClearAsMud_74 Start: 43531, Stop: 43773, Start Num: 12
Candidate Starts for ClearAsMud_74:
(Start: 12 @43531 has 35 MA's), (15, 43549), (20, 43624), (21, 43642), (22, 43648),

Gene: Cranjis_71 Start: 43198, Stop: 43440, Start Num: 12
Candidate Starts for Cranjis_71:
(Start: 12 @43198 has 35 MA's), (15, 43216), (20, 43291), (21, 43309), (22, 43315),

Gene: CrazyRich_69 Start: 43004, Stop: 43246, Start Num: 12
Candidate Starts for CrazyRich_69:
(Start: 12 @43004 has 35 MA's), (15, 43022), (20, 43097), (21, 43115), (22, 43121),

Gene: Crisis_71 Start: 43013, Stop: 43255, Start Num: 12
Candidate Starts for Crisis_71:
(Start: 12 @43013 has 35 MA's), (15, 43031), (20, 43106), (21, 43124), (22, 43130),

Gene: EarickHC_71 Start: 42935, Stop: 43177, Start Num: 12
Candidate Starts for EarickHC_71:
(6, 42884), (Start: 12 @42935 has 35 MA's), (15, 42953), (20, 43028), (21, 43046), (22, 43052),

Gene: Fireman_73 Start: 44974, Stop: 45210, Start Num: 10
Candidate Starts for Fireman_73:
(Start: 10 @44974 has 10 MA's), (18, 45016), (21, 45079), (22, 45085),

Gene: Ganandorf_69 Start: 43031, Stop: 43273, Start Num: 12
Candidate Starts for Ganandorf_69:
(6, 42980), (Start: 12 @43031 has 35 MA's), (15, 43049), (20, 43124), (21, 43142), (22, 43148),

Gene: Germa_72 Start: 42861, Stop: 43103, Start Num: 12
Candidate Starts for Germa_72:
(Start: 12 @42861 has 35 MA's), (15, 42879), (20, 42954), (21, 42972), (22, 42978),

Gene: Gina_74 Start: 43076, Stop: 43327, Start Num: 10
Candidate Starts for Gina_74:
(7, 43049), (8, 43055), (Start: 10 @43076 has 10 MA's), (14, 43091), (17, 43118), (20, 43166), (27, 43217),

Gene: Glorp_71 Start: 42995, Stop: 43237, Start Num: 12
Candidate Starts for Glorp_71:
(Start: 12 @42995 has 35 MA's), (15, 43013), (20, 43088), (21, 43106), (22, 43112),

Gene: Hermeonysus_70 Start: 42920, Stop: 43162, Start Num: 12
Candidate Starts for Hermeonysus_70:
(Start: 12 @42920 has 35 MA's), (15, 42938), (20, 43013), (21, 43031), (22, 43037),

Gene: Honeyfin_71 Start: 43180, Stop: 43422, Start Num: 12
Candidate Starts for Honeyfin_71:
(1, 42571), (6, 43129), (Start: 12 @43180 has 35 MA's), (15, 43198), (20, 43273), (21, 43291), (22, 43297),

Gene: Jayden_71 Start: 43432, Stop: 43683, Start Num: 10
Candidate Starts for Jayden_71:
(Start: 10 @43432 has 10 MA's), (14, 43447), (23, 43549), (25, 43561), (27, 43573),

Gene: Jefe_70 Start: 42981, Stop: 43223, Start Num: 12
Candidate Starts for Jefe_70:
(6, 42930), (Start: 12 @42981 has 35 MA's), (15, 42999), (20, 43074), (21, 43092), (22, 43098),

Gene: Jollipop_71 Start: 43369, Stop: 43611, Start Num: 12
Candidate Starts for Jollipop_71:
(Start: 12 @43369 has 35 MA's), (15, 43387), (20, 43462), (21, 43480), (22, 43486),

Gene: KaiHaiDragon_71 Start: 42935, Stop: 43177, Start Num: 12
Candidate Starts for KaiHaiDragon_71:

(6, 42884), (Start: 12 @42935 has 35 MA's), (15, 42953), (20, 43028), (21, 43046), (22, 43052),

Gene: Kowalski_69 Start: 43006, Stop: 43248, Start Num: 12
Candidate Starts for Kowalski_69:
(Start: 12 @43006 has 35 MA's), (15, 43024), (20, 43099), (21, 43117), (22, 43123),

Gene: LittleFortune_72 Start: 43291, Stop: 43533, Start Num: 12
Candidate Starts for LittleFortune_72:
(1, 42682), (6, 43240), (Start: 12 @43291 has 35 MA's), (15, 43309), (20, 43384), (21, 43402), (22, 43408),

Gene: Lucretia_70 Start: 42913, Stop: 43155, Start Num: 12
Candidate Starts for Lucretia_70:
(Start: 12 @42913 has 35 MA's), (15, 42931), (20, 43006), (21, 43024), (22, 43030),

Gene: Margaery_68 Start: 44047, Stop: 44331, Start Num: 13
Candidate Starts for Margaery_68:
(2, 43882), (4, 43906), (Start: 13 @44047 has 2 MA's), (16, 44074), (23, 44161), (24, 44164), (26, 44176), (30, 44266),

Gene: Megan_73 Start: 48707, Stop: 48955, Start Num: 11
Candidate Starts for Megan_73:
(3, 48578), (5, 48638), (Start: 11 @48707 has 1 MA's), (19, 48776), (23, 48812), (26, 48827), (28, 48884), (33, 48944),

Gene: Metamorphoo_73 Start: 44268, Stop: 44504, Start Num: 10
Candidate Starts for Metamorphoo_73:
(Start: 10 @44268 has 10 MA's), (18, 44310), (21, 44373), (22, 44379), (32, 44493),

Gene: Nicole72_72 Start: 48673, Stop: 48945, Start Num: 9
Candidate Starts for Nicole72_72:
(5, 48604), (Start: 9 @48673 has 1 MA's), (Start: 12 @48691 has 35 MA's), (25, 48820), (27, 48832), (28, 48877),

Gene: NoodlelyBoi_71 Start: 43780, Stop: 44022, Start Num: 12
Candidate Starts for NoodlelyBoi_71:
(Start: 12 @43780 has 35 MA's), (15, 43798), (20, 43873), (21, 43891), (22, 43897),

Gene: Onika_69 Start: 43009, Stop: 43251, Start Num: 12
Candidate Starts for Onika_69:
(Start: 12 @43009 has 35 MA's), (15, 43027), (20, 43102), (21, 43120), (22, 43126),

Gene: Paschalis_70 Start: 43034, Stop: 43276, Start Num: 12
Candidate Starts for Paschalis_70:
(Start: 12 @43034 has 35 MA's), (15, 43052), (20, 43127), (21, 43145), (22, 43151),

Gene: PhedwardCullen_69 Start: 42751, Stop: 42993, Start Num: 12
Candidate Starts for PhedwardCullen_69:
(Start: 12 @42751 has 35 MA's), (15, 42769), (20, 42844), (21, 42862), (22, 42868),

Gene: Phorgeous_70 Start: 42817, Stop: 43059, Start Num: 12
Candidate Starts for Phorgeous_70:

(1, 42208), (6, 42766), (Start: 12 @42817 has 35 MA's), (15, 42835), (20, 42910), (21, 42928), (22, 42934),

Gene: Phrancesco_70 Start: 43140, Stop: 43382, Start Num: 12
Candidate Starts for Phrancesco_70:
(Start: 12 @43140 has 35 MA's), (15, 43158), (20, 43233), (21, 43251), (22, 43257),

Gene: PierreOrion_70 Start: 43246, Stop: 43488, Start Num: 12
Candidate Starts for PierreOrion_70:
(1, 42637), (6, 43195), (Start: 12 @43246 has 35 MA's), (15, 43264), (20, 43339), (21, 43357), (22, 43363),

Gene: PiperSansNom_71 Start: 43319, Stop: 43561, Start Num: 12
Candidate Starts for PiperSansNom_71:
(Start: 12 @43319 has 35 MA's), (15, 43337), (20, 43412), (21, 43430), (22, 43436),

Gene: Piperis_71 Start: 42942, Stop: 43184, Start Num: 12
Candidate Starts for Piperis_71:
(Start: 12 @42942 has 35 MA's), (15, 42960), (20, 43035), (21, 43053), (22, 43059),

Gene: Pulchra_72 Start: 43338, Stop: 43580, Start Num: 12
Candidate Starts for Pulchra_72:
(Start: 12 @43338 has 35 MA's), (15, 43356), (20, 43431), (21, 43449), (22, 43455),

Gene: Quhwah_74 Start: 43627, Stop: 43869, Start Num: 12
Candidate Starts for Quhwah_74:
(6, 43576), (Start: 12 @43627 has 35 MA's), (15, 43645), (20, 43720), (21, 43738), (22, 43744),

Gene: Ramiel05_69 Start: 43006, Stop: 43248, Start Num: 12
Candidate Starts for Ramiel05_69:
(Start: 12 @43006 has 35 MA's), (15, 43024), (20, 43099), (21, 43117), (22, 43123),

Gene: RobsFeet_74 Start: 44554, Stop: 44790, Start Num: 10
Candidate Starts for RobsFeet_74:
(Start: 10 @44554 has 10 MA's), (18, 44596), (21, 44659), (22, 44665),

Gene: Rockwell_69 Start: 43030, Stop: 43272, Start Num: 12
Candidate Starts for Rockwell_69:
(Start: 12 @43030 has 35 MA's), (15, 43048), (20, 43123), (21, 43141), (22, 43147),

Gene: Savannah_69 Start: 43057, Stop: 43299, Start Num: 12
Candidate Starts for Savannah_69:
(6, 43006), (Start: 12 @43057 has 35 MA's), (15, 43075), (20, 43150), (21, 43168), (22, 43174), (31, 43276),

Gene: Scumberland_72 Start: 43252, Stop: 43494, Start Num: 12
Candidate Starts for Scumberland_72:
(Start: 12 @43252 has 35 MA's), (15, 43270), (20, 43345), (21, 43363), (22, 43369),

Gene: Selwyn23_71 Start: 43169, Stop: 43411, Start Num: 12
Candidate Starts for Selwyn23_71:
(Start: 12 @43169 has 35 MA's), (15, 43187), (20, 43262), (21, 43280), (22, 43286),

Gene: Shotgun_70 Start: 42936, Stop: 43178, Start Num: 12
Candidate Starts for Shotgun_70:
(6, 42885), (Start: 12 @42936 has 35 MA's), (15, 42954), (20, 43029), (21, 43047), (22, 43053),

Gene: Shrubaron_74 Start: 44149, Stop: 44385, Start Num: 10
Candidate Starts for Shrubaron_74:
(Start: 10 @44149 has 10 MA's), (18, 44191), (21, 44254), (22, 44260),

Gene: SirFrank_70 Start: 43226, Stop: 43468, Start Num: 12
Candidate Starts for SirFrank_70:
(Start: 12 @43226 has 35 MA's), (15, 43244), (20, 43319), (21, 43337), (22, 43343),

Gene: Skugga_70 Start: 43465, Stop: 43716, Start Num: 10
Candidate Starts for Skugga_70:
(Start: 10 @43465 has 10 MA's), (14, 43480), (17, 43507), (20, 43555), (27, 43606),

Gene: Smarties_80 Start: 44832, Stop: 45074, Start Num: 10
Candidate Starts for Smarties_80:
(Start: 10 @44832 has 10 MA's), (15, 44850), (20, 44925), (21, 44943), (22, 44949),

Gene: Teamocil_74 Start: 43169, Stop: 43420, Start Num: 10
Candidate Starts for Teamocil_74:
(7, 43142), (8, 43148), (Start: 10 @43169 has 10 MA's), (14, 43184), (17, 43211), (20, 43259), (27, 43310),

Gene: Terij_68 Start: 43103, Stop: 43387, Start Num: 13
Candidate Starts for Terij_68:
(2, 42932), (4, 42956), (Start: 13 @43103 has 2 MA's), (16, 43130), (19, 43181), (22, 43214), (23, 43217), (26, 43232), (29, 43316),

Gene: Tyrumbra_69 Start: 43779, Stop: 44015, Start Num: 10
Candidate Starts for Tyrumbra_69:
(Start: 10 @43779 has 10 MA's), (21, 43884), (22, 43890),

Gene: Yeti_72 Start: 42968, Stop: 43210, Start Num: 12
Candidate Starts for Yeti_72:
(1, 42359), (6, 42917), (Start: 12 @42968 has 35 MA's), (15, 42986), (20, 43061), (21, 43079), (22, 43085),

Gene: Zapato_70 Start: 43695, Stop: 43946, Start Num: 10
Candidate Starts for Zapato_70:
(Start: 10 @43695 has 10 MA's), (14, 43710), (20, 43785), (27, 43836),