Pham 347465


1: Mercedes_37
2: Ixel_42
3: Jayden_81
4: NoodlelyBoi_81
5: Phrancesco_81 + 6
6: BeagleBug_80 + 6
7: Piperis_82 + 18
8: Zapato_81
9: Paschalis_81
10: Metamorphoo_82
11: Smarties_90 + 1
12: ClearAsMud_84
13: SirFrank_80
14: Ganandorf_79
15: Phorgeous_81
16: NarutoRun_58 + 15
17: Rie18_58
18: Karate_57
19: JDawG_57 + 6
20: Snakehole_59
21: Tongui_58
22: SilentWarrior_59 + 6
23: Gilda_58
24: CoolCookie_57
25: Crestdrop_58
26: WinnieLou_58 + 1
27: FountainFog_57
28: OverHedge_57
29: Kozie_78
30: Margaery_77
31: Cressida_81
32: Terij_78
33: Mema_41
34: Leaf_123 + 1
35: Erasmago_269
36: MisoSoup_64
37: FuzzBuster_74

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 347465 Report

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

Pham number 347465 has 97 members, 11 are drafts.

Phages represented in each track:
- Track 1 : Mercedes_37
- Track 2 : Ixel_42
- Track 3 : Jayden_81
- Track 4 : NoodlelyBoi_81
- Track 5 : Phrancesco_81, KaiHaiDragon_82, PhedwardCullen_79, EarickHC_82, Quhwah_85, Pulchra_83, CrazyRich_79
- Track 6 : BeagleBug_80, Onika_80, Germa_83, Glorp_82, Selwyn23_82, Busephilis_80, Antares_81
- Track 7 : Piperis_82, Savannah_80, Shotgun_80, Jollipop_82, BrazzalePHS_80, LittleFortune_82, Rockwell_80, PiperSansNom_82, Scumberland_83, Yeti_82, Jefe_81, Honeyfin_81, Ramiel05_80, Lucretia_81, PierreOrion_80, Cranjis_82, Crisis_82, Kowalski_80, Hermeonysus_81
- Track 8 : Zapato_81
- Track 9 : Paschalis_81
- Track 10 : Metamorphoo_82
- Track 11 : Smarties_90, Ariadne_90
- Track 12 : ClearAsMud_84
- Track 13 : SirFrank_80
- Track 14 : Ganandorf_79
- Track 15 : Phorgeous_81
- Track 16 : NarutoRun_58, Artiphact_58, Pharpay_57, Tiggy93_58, AnnaSerena_58, Poultress_57, Cybele_58, Kate_58, OhDear_58, Anakin_58, Krampus_58, Rachella_58, PhunaPhoke_58, Neptune_58, SafetyGuy_57, Potty_57
- Track 17 : Rie18_58
- Track 18 : Karate_57
- Track 19 : JDawG_57, MortySmith_56, Haunter_58, Tedro_58, Dauntless_57, Erudite_57, Aesir_57
- Track 20 : Snakehole_59
- Track 21 : Tongui_58
- Track 22 : SilentWarrior_59, Hiddenleaf_59, JingleBells_58, Chivey_59, FreddieHg_59, DannyDe_59, Annapurna_59
- Track 23 : Gilda_58
- Track 24 : CoolCookie_57
- Track 25 : Crestdrop_58
- Track 26 : WinnieLou_58, Hager_59
- Track 27 : FountainFog_57
- Track 28 : OverHedge_57

• Track 29 : Kozie_78
• Track 30 : Margaery_77
• Track 31 : Cressida_81
• Track 32 : Terij_78
• Track 33 : Mema_41
• Track 34 : Leaf_123, Dewdrop_123
• Track 35 : Erasmago_269
• Track 36 : MisoSoup_64
• Track 37 : FuzzBuster_74

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

The start number called the most often in the published annotations is 23, it was called in 40 of the 86 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Antares_81, Ariadne_90, BeagleBug_80, BrazzalePHS_80, Busephilis_80, ClearAsMud_84, Cranjis_82, CrazyRich_79, Cressida_81, Crisis_82, EarickHC_82, Ganandorf_79, Germa_83, Glorp_82, Hermeonysus_81, Honeyfin_81, Jayden_81, Jefe_81, Jollipop_82, KaiHaiDragon_82, Kowalski_80, LittleFortune_82, Lucretia_81, Metamorphoo_82, NoodlelyBoi_81, Onika_80, Paschalis_81, PhedwardCullen_79, Phorgeous_81, Phrancesco_81, PierreOrion_80, PiperSansNom_82, Piperis_82, Pulchra_83, Quhwah_85, Ramiel05_80, Rockwell_80, Savannah_80, Scumberland_83, Selwyn23_82, Shotgun_80, SirFrank_80, Smarties_90, Yeti_82,

Genes that have the "Most Annotated" start but do not call it:
• Margaery_77, Terij_78,

Genes that do not have the "Most Annotated" start:
• Aesir_57, Anakin_58, AnnaSerena_58, Annapurna_59, Artiphact_58, Chivey_59, CoolCookie_57, Crestdrop_58, Cybele_58, DannyDe_59, Dauntless_57, Dewdrop_123, Erasmago_269, Erudite_57, FountainFog_57, FreddieHg_59, FuzzBuster_74, Gilda_58, Hager_59, Haunter_58, Hiddenleaf_59, Ixel_42, JDawG_57, JingleBells_58, Karate_57, Kate_58, Kozie_78, Krampus_58, Leaf_123, Mema_41, Mercedes_37, MisoSoup_64, MortySmith_56, NarutoRun_58, Neptune_58, OhDear_58, OverHedge_57, Pharpay_57, PhunaPhoke_58, Potty_57, Poultress_57, Rachella_58, Rie18_58, SafetyGuy_57, SilentWarrior_59, Snakehole_59, Tedro_58, Tiggy93_58, Tongui_58, WinnieLou_58, Zapato_81,

Summary by start number:

Start 13:
• Found in 2 of 97 (2.1%) of genes in pham
• Manual Annotations of this start: 2 of 86
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dewdrop_123 (GC), Leaf_123 (GC),

Start 14:
• Found in 1 of 97 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 86

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Margaery_77 (EI),

Start 15:
• Found in 1 of 97 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 86
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Terij_78 (EI),

Start 20:
• Found in 1 of 97 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 86
• Called 100.0% of time when present
• Phage (with cluster) where this start called: MisoSoup_64 (GM),

Start 22:
• Found in 1 of 97 (1.0%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Erasmago_269 (GD2),

Start 23:
• Found in 46 of 97 (47.4%) of genes in pham
• Manual Annotations of this start: 40 of 86
• Called 95.7% of time when present
• Phage (with cluster) where this start called: Antares_81 (EC), Ariadne_90 (EC), BeagleBug_80 (EC), BrazzalePHS_80 (EC), Busephilis_80 (EC), ClearAsMud_84 (EC), Cranjis_82 (EC), CrazyRich_79 (EC), Cressida_81 (EI), Crisis_82 (EC), EarickHC_82 (EC), Ganandorf_79 (EC), Germa_83 (EC), Glorp_82 (EC), Hermeonysus_81 (EC), Honeyfin_81 (EC), Jayden_81 (EC), Jefe_81 (EC), Jollipop_82 (EC), KaiHaiDragon_82 (EC), Kowalski_80 (EC), LittleFortune_82 (EC), Lucretia_81 (EC), Metamorphoo_82 (EC), NoodlelyBoi_81 (EC), Onika_80 (EC), Paschalis_81 (EC), PhedwardCullen_79 (EC), Phorgeous_81 (EC), Phrancesco_81 (EC), PierreOrion_80 (EC), PiperSansNom_82 (EC), Piperis_82 (EC), Pulchra_83 (EC), Quhwah_85 (EC), Ramiel05_80 (EC), Rockwell_80 (EC), Savannah_80 (EC), Scumberland_83 (EC), Selwyn23_82 (EC), Shotgun_80 (EC), SirFrank_80 (EC), Smarties_90 (EC), Yeti_82 (EC),

Start 24:
• Found in 46 of 97 (47.4%) of genes in pham
• Manual Annotations of this start: 39 of 86
• Called 93.5% of time when present
• Phage (with cluster) where this start called: Aesir_57 (EF), Anakin_58 (EF), AnnaSerena_58 (EF), Annapurna_59 (EF), Artiphact_58 (EF), Chivey_59 (EF), CoolCookie_57 (EF), Crestdrop_58 (EF), Cybele_58 (EF), DannyDe_59 (EF), Dauntless_57 (EF), Erudite_57 (EF), FountainFog_57 (EF), FreddieHg_59 (EF), FuzzBuster_74 (GM), Gilda_58 (EF), Hager_59 (EF), Haunter_58 (EF), Hiddenleaf_59 (EF), JDawG_57 (EF), JingleBells_58 (EF), Karate_57 (EF), Kate_58 (EF), Krampus_58 (EF), Mercedes_37 (EA), MortySmith_56 (EF), NarutoRun_58 (EF), Neptune_58 (EF), OhDear_58 (EF), OverHedge_57 (EF), Pharpay_57 (EF), PhunaPhoke_58 (EF), Potty_57 (EF), Poultress_57 (EF), Rachella_58 (EF), Rie18_58 (EF), SafetyGuy_57 (EF), SilentWarrior_59 (EF), Snakehole_59 (EF), Tedro_58 (EF), Tiggy93_58 (EF), Tongui_58 (EF), WinnieLou_58 (EF),

Start 29:
• Found in 1 of 97 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 86
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kozie_78 (EI),

Start 36:
• Found in 5 of 97 (5.2%) of genes in pham
• No Manual Annotations of this start.
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Mema_41 (EL),

Start 37:
• Found in 1 of 97 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 86
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ixel_42 (EA11),

Start 54:
• Found in 1 of 97 (1.0%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Zapato_81 (EC),

Summary by clusters:

There are 9 clusters represented in this pham: EL, GD2, EA11, EF, EA, EC, GC, EI, GM,

Info for manual annotations of cluster EA:
•Start number 24 was manually annotated 1 time for cluster EA.

Info for manual annotations of cluster EA11:
•Start number 37 was manually annotated 1 time for cluster EA11.

Info for manual annotations of cluster EC:
•Start number 23 was manually annotated 39 times for cluster EC.

Info for manual annotations of cluster EF:
•Start number 24 was manually annotated 37 times for cluster EF.

Info for manual annotations of cluster EI:
•Start number 14 was manually annotated 1 time for cluster EI.
•Start number 15 was manually annotated 1 time for cluster EI.
•Start number 23 was manually annotated 1 time for cluster EI.
•Start number 29 was manually annotated 1 time for cluster EI.

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

Info for manual annotations of cluster GM:
•Start number 20 was manually annotated 1 time for cluster GM.
•Start number 24 was manually annotated 1 time for cluster GM.

Gene Information:

Gene: Aesir_57 Start: 43316, Stop: 44947, Start Num: 24
Candidate Starts for Aesir_57:
(18, 43265), (Start: 24 @43316 has 39 MA's), (26, 43361), (28, 43391), (42, 43565), (44, 43583), (45, 43601), (65, 43835), (66, 43844), (71, 43901), (77, 43976), (79, 43988), (111, 44375), (119, 44456), (139, 44633), (141, 44642), (145, 44681), (168, 44843), (174, 44921),

Gene: Anakin_58 Start: 43655, Stop: 45286, Start Num: 24
Candidate Starts for Anakin_58:
(Start: 24 @43655 has 39 MA's), (26, 43700), (28, 43730), (44, 43922), (45, 43940), (65, 44174), (66, 44183), (71, 44240), (77, 44315), (79, 44327), (119, 44795), (139, 44972), (141, 44981), (145, 45020), (168, 45182), (174, 45260),

Gene: AnnaSerena_58 Start: 43689, Stop: 45320, Start Num: 24
Candidate Starts for AnnaSerena_58:
(Start: 24 @43689 has 39 MA's), (26, 43734), (28, 43764), (44, 43956), (45, 43974), (65, 44208), (66, 44217), (71, 44274), (77, 44349), (79, 44361), (119, 44829), (139, 45006), (141, 45015), (145, 45054), (168, 45216), (174, 45294),

Gene: Annapurna_59 Start: 43165, Stop: 44796, Start Num: 24
Candidate Starts for Annapurna_59:
(18, 43114), (Start: 24 @43165 has 39 MA's), (26, 43210), (28, 43240), (44, 43432), (45, 43450), (65, 43684), (66, 43693), (71, 43750), (77, 43825), (79, 43837), (111, 44224), (119, 44305), (139, 44482), (141, 44491), (145, 44530), (168, 44692), (174, 44770),

Gene: Antares_81 Start: 47473, Stop: 48798, Start Num: 23
Candidate Starts for Antares_81:
(Start: 23 @47473 has 40 MA's), (63, 47902), (78, 48016), (80, 48037), (94, 48193), (96, 48208), (102, 48310), (116, 48442), (146, 48694), (151, 48712), (154, 48733), (157, 48754), (158, 48757), (161, 48781),

Gene: Ariadne_90 Start: 48355, Stop: 49632, Start Num: 23
Candidate Starts for Ariadne_90:
(Start: 23 @48355 has 40 MA's), (39, 48568), (44, 48607), (60, 48757), (62, 48766), (78, 48898), (80, 48919), (94, 49075), (96, 49090), (97, 49111), (116, 49324), (122, 49387), (139, 49486), (146, 49528), (148, 49537), (151, 49546), (157, 49588), (158, 49591), (161, 49615),

Gene: Artiphact_58 Start: 43679, Stop: 45310, Start Num: 24
Candidate Starts for Artiphact_58:
(Start: 24 @43679 has 39 MA's), (26, 43724), (28, 43754), (44, 43946), (45, 43964), (65, 44198), (66, 44207), (71, 44264), (77, 44339), (79, 44351), (119, 44819), (139, 44996), (141, 45005), (145, 45044), (168, 45206), (174, 45284),

Gene: BeagleBug_80 Start: 47276, Stop: 48601, Start Num: 23
Candidate Starts for BeagleBug_80:

(Start: 23 @47276 has 40 MA's), (63, 47705), (78, 47819), (80, 47840), (94, 47996), (96, 48011), (102, 48113), (116, 48245), (146, 48497), (151, 48515), (154, 48536), (157, 48557), (158, 48560), (161, 48584),

Gene: BrazzalePHS_80 Start: 47273, Stop: 48598, Start Num: 23
Candidate Starts for BrazzalePHS_80:
(Start: 23 @47273 has 40 MA's), (63, 47702), (78, 47816), (80, 47837), (94, 47993), (96, 48008), (102, 48110), (116, 48242), (146, 48494), (151, 48512), (154, 48533), (157, 48554), (158, 48557), (161, 48581),

Gene: Busephilis_80 Start: 47180, Stop: 48505, Start Num: 23
Candidate Starts for Busephilis_80:
(Start: 23 @47180 has 40 MA's), (63, 47609), (78, 47723), (80, 47744), (94, 47900), (96, 47915), (102, 48017), (116, 48149), (146, 48401), (151, 48419), (154, 48440), (157, 48461), (158, 48464), (161, 48488),

Gene: Chivey_59 Start: 43119, Stop: 44750, Start Num: 24
Candidate Starts for Chivey_59:
(18, 43068), (Start: 24 @43119 has 39 MA's), (26, 43164), (28, 43194), (44, 43386), (45, 43404), (65, 43638), (66, 43647), (71, 43704), (77, 43779), (79, 43791), (111, 44178), (119, 44259), (139, 44436), (141, 44445), (145, 44484), (168, 44646), (174, 44724),

Gene: ClearAsMud_84 Start: 47498, Stop: 48823, Start Num: 23
Candidate Starts for ClearAsMud_84:
(Start: 23 @47498 has 40 MA's), (45, 47768), (63, 47927), (70, 47957), (72, 47975), (80, 48062), (92, 48206), (94, 48218), (96, 48233), (102, 48335), (116, 48467), (146, 48719), (151, 48737), (154, 48758), (157, 48779), (158, 48782), (161, 48806),

Gene: CoolCookie_57 Start: 43699, Stop: 45330, Start Num: 24
Candidate Starts for CoolCookie_57:
(18, 43648), (Start: 24 @43699 has 39 MA's), (26, 43744), (28, 43774), (42, 43948), (44, 43966), (65, 44218), (66, 44227), (71, 44284), (77, 44359), (79, 44371), (111, 44758), (119, 44839), (139, 45016), (141, 45025), (145, 45064), (168, 45226), (174, 45304),

Gene: Cranjis_82 Start: 47460, Stop: 48785, Start Num: 23
Candidate Starts for Cranjis_82:
(Start: 23 @47460 has 40 MA's), (63, 47889), (78, 48003), (80, 48024), (94, 48180), (96, 48195), (102, 48297), (116, 48429), (146, 48681), (151, 48699), (154, 48720), (157, 48741), (158, 48744), (161, 48768),

Gene: CrazyRich_79 Start: 46970, Stop: 48295, Start Num: 23
Candidate Starts for CrazyRich_79:
(Start: 23 @46970 has 40 MA's), (63, 47399), (78, 47513), (80, 47534), (88, 47633), (94, 47690), (96, 47705), (102, 47807), (116, 47939), (146, 48191), (151, 48209), (154, 48230), (157, 48251), (158, 48254), (161, 48278),

Gene: Cressida_81 Start: 48489, Stop: 49766, Start Num: 23
Candidate Starts for Cressida_81:
(Start: 23 @48489 has 40 MA's), (27, 48546), (33, 48624), (36, 48681), (44, 48747), (46, 48771), (69, 48939), (70, 48948), (71, 48957), (78, 49032), (79, 49038), (80, 49053), (94, 49209), (96, 49224), (106, 49365), (134, 49593), (138, 49620), (147, 49668),

Gene: Crestdrop_58 Start: 43390, Stop: 45021, Start Num: 24

Candidate Starts for Crestdrop_58:
(18, 43339), (Start: 24 @43390 has 39 MA's), (26, 43435), (42, 43639), (44, 43657), (45, 43675), (65, 43909), (66, 43918), (71, 43975), (77, 44050), (79, 44062), (111, 44449), (119, 44530), (139, 44707), (141, 44716), (145, 44755), (168, 44917), (169, 44929), (174, 44995),

Gene: Crisis_82 Start: 47416, Stop: 48741, Start Num: 23
Candidate Starts for Crisis_82:
(Start: 23 @47416 has 40 MA's), (63, 47845), (78, 47959), (80, 47980), (94, 48136), (96, 48151), (102, 48253), (116, 48385), (146, 48637), (151, 48655), (154, 48676), (157, 48697), (158, 48700), (161, 48724),

Gene: Cybele_58 Start: 43673, Stop: 45316, Start Num: 24
Candidate Starts for Cybele_58:
(Start: 24 @43673 has 39 MA's), (26, 43718), (28, 43748), (44, 43940), (45, 43958), (65, 44192), (66, 44201), (71, 44258), (77, 44333), (79, 44345), (119, 44813), (139, 44990), (141, 44999), (145, 45038), (168, 45212), (174, 45290),

Gene: DannyDe_59 Start: 43120, Stop: 44751, Start Num: 24
Candidate Starts for DannyDe_59:
(18, 43069), (Start: 24 @43120 has 39 MA's), (26, 43165), (28, 43195), (44, 43387), (45, 43405), (65, 43639), (66, 43648), (71, 43705), (77, 43780), (79, 43792), (111, 44179), (119, 44260), (139, 44437), (141, 44446), (145, 44485), (168, 44647), (174, 44725),

Gene: Dauntless_57 Start: 43251, Stop: 44882, Start Num: 24
Candidate Starts for Dauntless_57:
(18, 43200), (Start: 24 @43251 has 39 MA's), (26, 43296), (28, 43326), (42, 43500), (44, 43518), (45, 43536), (65, 43770), (66, 43779), (71, 43836), (77, 43911), (79, 43923), (111, 44310), (119, 44391), (139, 44568), (141, 44577), (145, 44616), (168, 44778), (174, 44856),

Gene: Dewdrop_123 Start: 75555, Stop: 77261, Start Num: 13
Candidate Starts for Dewdrop_123:
(12, 75549), (Start: 13 @75555 has 2 MA's), (Start: 24 @75639 has 39 MA's), (36, 75849), (49, 75960), (64, 76164), (69, 76194), (70, 76203), (74, 76260), (75, 76269), (81, 76332), (86, 76398), (94, 76494), (96, 76509), (116, 76743), (120, 76800), (124, 76818), (129, 76893), (144, 77016), (159, 77100), (164, 77154), (167, 77190),

Gene: EarickHC_82 Start: 47338, Stop: 48663, Start Num: 23
Candidate Starts for EarickHC_82:
(Start: 23 @47338 has 40 MA's), (63, 47767), (78, 47881), (80, 47902), (88, 48001), (94, 48058), (96, 48073), (102, 48175), (116, 48307), (146, 48559), (151, 48577), (154, 48598), (157, 48619), (158, 48622), (161, 48646),

Gene: Erasmago_269 Start: 149411, Stop: 150913, Start Num: 22
Candidate Starts for Erasmago_269:
(22, 149411), (27, 149477), (39, 149639), (60, 149837), (77, 149978), (79, 149990), (87, 150089), (115, 150407), (144, 150674), (152, 150704), (160, 150761), (170, 150860), (172, 150878),

Gene: Erudite_57 Start: 43251, Stop: 44882, Start Num: 24
Candidate Starts for Erudite_57:
(18, 43200), (Start: 24 @43251 has 39 MA's), (26, 43296), (28, 43326), (42, 43500), (44, 43518), (45, 43536), (65, 43770), (66, 43779), (71, 43836), (77, 43911), (79, 43923), (111, 44310), (119, 44391), (139, 44568), (141, 44577), (145, 44616), (168, 44778), (174, 44856),

Gene: FountainFog_57 Start: 42893, Stop: 44521, Start Num: 24
Candidate Starts for FountainFog_57:
(Start: 24 @42893 has 39 MA's), (26, 42938), (45, 43178), (65, 43412), (66, 43421), (68, 43445), (71, 43478), (77, 43553), (79, 43565), (119, 44033), (141, 44219), (145, 44258), (169, 44429),

Gene: FreddieHg_59 Start: 43136, Stop: 44767, Start Num: 24
Candidate Starts for FreddieHg_59:
(18, 43085), (Start: 24 @43136 has 39 MA's), (26, 43181), (28, 43211), (44, 43403), (45, 43421), (65, 43655), (66, 43664), (71, 43721), (77, 43796), (79, 43808), (111, 44195), (119, 44276), (139, 44453), (141, 44462), (145, 44501), (168, 44663), (174, 44741),

Gene: FuzzBuster_74 Start: 44531, Stop: 43062, Start Num: 24
Candidate Starts for FuzzBuster_74:
(Start: 24 @44531 has 39 MA's), (36, 44333), (44, 44267), (47, 44237), (69, 44054), (73, 44006), (74, 43988), (77, 43961), (86, 43856), (95, 43766), (102, 43661), (118, 43505), (123, 43466), (129, 43388), (134, 43349), (141, 43298), (163, 43139), (165, 43109),

Gene: Ganandorf_79 Start: 46824, Stop: 48149, Start Num: 23
Candidate Starts for Ganandorf_79:
(Start: 23 @46824 has 40 MA's), (63, 47253), (78, 47367), (80, 47388), (88, 47487), (94, 47544), (96, 47559), (102, 47661), (116, 47793), (151, 48063), (154, 48084), (157, 48105), (158, 48108), (161, 48132),

Gene: Germa_83 Start: 47268, Stop: 48593, Start Num: 23
Candidate Starts for Germa_83:
(Start: 23 @47268 has 40 MA's), (63, 47697), (78, 47811), (80, 47832), (94, 47988), (96, 48003), (102, 48105), (116, 48237), (146, 48489), (151, 48507), (154, 48528), (157, 48549), (158, 48552), (161, 48576),

Gene: Gilda_58 Start: 43677, Stop: 45308, Start Num: 24
Candidate Starts for Gilda_58:
(Start: 24 @43677 has 39 MA's), (26, 43722), (28, 43752), (44, 43944), (45, 43962), (65, 44196), (66, 44205), (71, 44262), (77, 44337), (79, 44349), (119, 44817), (139, 44994), (141, 45003), (145, 45042), (168, 45204), (174, 45282),

Gene: Glorp_82 Start: 47225, Stop: 48550, Start Num: 23
Candidate Starts for Glorp_82:
(Start: 23 @47225 has 40 MA's), (63, 47654), (78, 47768), (80, 47789), (94, 47945), (96, 47960), (102, 48062), (116, 48194), (146, 48446), (151, 48464), (154, 48485), (157, 48506), (158, 48509), (161, 48533),

Gene: Hager_59 Start: 43064, Stop: 44692, Start Num: 24
Candidate Starts for Hager_59:
(Start: 24 @43064 has 39 MA's), (26, 43109), (45, 43349), (65, 43583), (66, 43592), (71, 43649), (78, 43730), (79, 43736), (111, 44123), (119, 44204), (141, 44390), (145, 44429), (168, 44585),

Gene: Haunter_58 Start: 42889, Stop: 44520, Start Num: 24
Candidate Starts for Haunter_58:
(18, 42838), (Start: 24 @42889 has 39 MA's), (26, 42934), (28, 42964), (42, 43138), (44, 43156), (45, 43174), (65, 43408), (66, 43417), (71, 43474), (77, 43549), (79, 43561), (111, 43948), (119, 44029), (139, 44206), (141, 44215), (145, 44254), (168, 44416), (174, 44494),

Gene: Hermeonysus_81 Start: 47181, Stop: 48506, Start Num: 23

Candidate Starts for Hermeonysus_81:
(Start: 23 @47181 has 40 MA's), (63, 47610), (78, 47724), (80, 47745), (94, 47901), (96, 47916), (102, 48018), (116, 48150), (146, 48402), (151, 48420), (154, 48441), (157, 48462), (158, 48465), (161, 48489),

Gene: Hiddenleaf_59 Start: 43119, Stop: 44750, Start Num: 24
Candidate Starts for Hiddenleaf_59:
(18, 43068), (Start: 24 @43119 has 39 MA's), (26, 43164), (28, 43194), (44, 43386), (45, 43404), (65, 43638), (66, 43647), (71, 43704), (77, 43779), (79, 43791), (111, 44178), (119, 44259), (139, 44436), (141, 44445), (145, 44484), (168, 44646), (174, 44724),

Gene: Honeyfin_81 Start: 47014, Stop: 48339, Start Num: 23
Candidate Starts for Honeyfin_81:
(Start: 23 @47014 has 40 MA's), (63, 47443), (78, 47557), (80, 47578), (94, 47734), (96, 47749), (102, 47851), (116, 47983), (146, 48235), (151, 48253), (154, 48274), (157, 48295), (158, 48298), (161, 48322),

Gene: Ixel_42 Start: 31006, Stop: 29819, Start Num: 37
Candidate Starts for Ixel_42:
(21, 31210), (30, 31114), (32, 31075), (Start: 37 @31006 has 1 MA's), (43, 30958), (50, 30907), (55, 30835), (82, 30589), (83, 30565), (92, 30442), (93, 30433), (100, 30364), (103, 30295), (110, 30223), (117, 30157), (126, 30088), (128, 30052), (130, 30037), (132, 30022), (142, 29950), (150, 29899), (153, 29890), (156, 29866),

Gene: JDawG_57 Start: 43311, Stop: 44942, Start Num: 24
Candidate Starts for JDawG_57:
(18, 43260), (Start: 24 @43311 has 39 MA's), (26, 43356), (28, 43386), (42, 43560), (44, 43578), (45, 43596), (65, 43830), (66, 43839), (71, 43896), (77, 43971), (79, 43983), (111, 44370), (119, 44451), (139, 44628), (141, 44637), (145, 44676), (168, 44838), (174, 44916),

Gene: Jayden_81 Start: 46981, Stop: 48267, Start Num: 23
Candidate Starts for Jayden_81:
(Start: 23 @46981 has 40 MA's), (45, 47251), (69, 47434), (70, 47443), (90, 47671), (94, 47701), (114, 47941), (116, 47950), (122, 48013), (140, 48121), (146, 48163), (148, 48172), (158, 48226), (161, 48250),

Gene: Jefe_81 Start: 47236, Stop: 48561, Start Num: 23
Candidate Starts for Jefe_81:
(Start: 23 @47236 has 40 MA's), (63, 47665), (78, 47779), (80, 47800), (94, 47956), (96, 47971), (102, 48073), (116, 48205), (146, 48457), (151, 48475), (154, 48496), (157, 48517), (158, 48520), (161, 48544),

Gene: JingleBells_58 Start: 43225, Stop: 44856, Start Num: 24
Candidate Starts for JingleBells_58:
(18, 43174), (Start: 24 @43225 has 39 MA's), (26, 43270), (28, 43300), (44, 43492), (45, 43510), (65, 43744), (66, 43753), (71, 43810), (77, 43885), (79, 43897), (111, 44284), (119, 44365), (139, 44542), (141, 44551), (145, 44590), (168, 44752), (174, 44830),

Gene: Jollipop_82 Start: 47601, Stop: 48926, Start Num: 23
Candidate Starts for Jollipop_82:
(Start: 23 @47601 has 40 MA's), (63, 48030), (78, 48144), (80, 48165), (94, 48321), (96, 48336), (102, 48438), (116, 48570), (146, 48822), (151, 48840), (154, 48861), (157, 48882), (158, 48885), (161, 48909),

Gene: KaiHaiDragon_82 Start: 47338, Stop: 48663, Start Num: 23
Candidate Starts for KaiHaiDragon_82:
(Start: 23 @47338 has 40 MA's), (63, 47767), (78, 47881), (80, 47902), (88, 48001), (94, 48058), (96, 48073), (102, 48175), (116, 48307), (146, 48559), (151, 48577), (154, 48598), (157, 48619), (158, 48622), (161, 48646),

Gene: Karate_57 Start: 43493, Stop: 45124, Start Num: 24
Candidate Starts for Karate_57:
(Start: 24 @43493 has 39 MA's), (26, 43538), (28, 43568), (42, 43742), (44, 43760), (45, 43778), (65, 44012), (66, 44021), (71, 44078), (77, 44153), (79, 44165), (119, 44633), (132, 44753), (139, 44810), (141, 44819), (145, 44858), (168, 45020), (174, 45098),

Gene: Kate_58 Start: 43594, Stop: 45225, Start Num: 24
Candidate Starts for Kate_58:
(Start: 24 @43594 has 39 MA's), (26, 43639), (28, 43669), (44, 43861), (45, 43879), (65, 44113), (66, 44122), (71, 44179), (77, 44254), (79, 44266), (119, 44734), (139, 44911), (141, 44920), (145, 44959), (168, 45121), (174, 45199),

Gene: Kowalski_80 Start: 47268, Stop: 48593, Start Num: 23
Candidate Starts for Kowalski_80:
(Start: 23 @47268 has 40 MA's), (63, 47697), (78, 47811), (80, 47832), (94, 47988), (96, 48003), (102, 48105), (116, 48237), (146, 48489), (151, 48507), (154, 48528), (157, 48549), (158, 48552), (161, 48576),

Gene: Kozie_78 Start: 48031, Stop: 49293, Start Num: 29
Candidate Starts for Kozie_78:
(Start: 29 @48031 has 1 MA's), (42, 48199), (46, 48241), (51, 48256), (61, 48367), (76, 48505), (91, 48679), (99, 48751), (100, 48769), (121, 49009), (131, 49087),

Gene: Krampus_58 Start: 43690, Stop: 45321, Start Num: 24
Candidate Starts for Krampus_58:
(Start: 24 @43690 has 39 MA's), (26, 43735), (28, 43765), (44, 43957), (45, 43975), (65, 44209), (66, 44218), (71, 44275), (77, 44350), (79, 44362), (119, 44830), (139, 45007), (141, 45016), (145, 45055), (168, 45217), (174, 45295),

Gene: Leaf_123 Start: 75555, Stop: 77261, Start Num: 13
Candidate Starts for Leaf_123:
(12, 75549), (Start: 13 @75555 has 2 MA's), (Start: 24 @75639 has 39 MA's), (36, 75849), (49, 75960), (64, 76164), (69, 76194), (70, 76203), (74, 76260), (75, 76269), (81, 76332), (86, 76398), (94, 76494), (96, 76509), (116, 76743), (120, 76800), (124, 76818), (129, 76893), (144, 77016), (159, 77100), (164, 77154), (167, 77190),

Gene: LittleFortune_82 Start: 47257, Stop: 48582, Start Num: 23
Candidate Starts for LittleFortune_82:
(Start: 23 @47257 has 40 MA's), (63, 47686), (78, 47800), (80, 47821), (94, 47977), (96, 47992), (102, 48094), (116, 48226), (146, 48478), (151, 48496), (154, 48517), (157, 48538), (158, 48541), (161, 48565),

Gene: Lucretia_81 Start: 47310, Stop: 48635, Start Num: 23
Candidate Starts for Lucretia_81:
(Start: 23 @47310 has 40 MA's), (63, 47739), (78, 47853), (80, 47874), (94, 48030), (96, 48045), (102, 48147), (116, 48279), (146, 48531), (151, 48549), (154, 48570), (157, 48591), (158, 48594), (161,

48618),

Gene: Margaery_77 Start: 47888, Stop: 49243, Start Num: 14
Candidate Starts for Margaery_77:
(1, 47039), (2, 47486), (4, 47696), (5, 47732), (6, 47750), (7, 47762), (10, 47858), (Start: 14 @47888 has 1 MA's), (Start: 23 @47963 has 40 MA's), (27, 48017), (42, 48200), (44, 48218), (46, 48242), (57, 48341), (78, 48503), (79, 48509), (87, 48608), (96, 48695), (106, 48836), (116, 48929), (119, 48980), (123, 48998), (132, 49049), (147, 49145),

Gene: Mema_41 Start: 31761, Stop: 32876, Start Num: 36
Candidate Starts for Mema_41:
(36, 31761), (40, 31797), (48, 31863), (51, 31881), (53, 31914), (56, 31959), (84, 32199), (89, 32277), (94, 32310), (102, 32424), (122, 32619), (126, 32649), (127, 32670), (130, 32694), (131, 32700), (135, 32742),

Gene: Mercedes_37 Start: 29517, Stop: 28231, Start Num: 24
Candidate Starts for Mercedes_37:
(8, 29709), (9, 29640), (11, 29616), (17, 29577), (19, 29559), (Start: 24 @29517 has 39 MA's), (25, 29475), (31, 29394), (35, 29328), (70, 29061), (111, 28593), (116, 28563), (119, 28512), (132, 28419), (134, 28401), (136, 28383), (157, 28266), (161, 28239),

Gene: Metamorphoo_82 Start: 48066, Stop: 49349, Start Num: 23
Candidate Starts for Metamorphoo_82:
(Start: 23 @48066 has 40 MA's), (42, 48300), (59, 48456), (70, 48525), (72, 48543), (78, 48609), (102, 48903), (114, 49026), (121, 49095), (137, 49185), (146, 49245), (151, 49263), (158, 49308), (161, 49332),

Gene: MisoSoup_64 Start: 40326, Stop: 39097, Start Num: 20
Candidate Starts for MisoSoup_64:
(16, 40362), (Start: 20 @40326 has 1 MA's), (Start: 24 @40299 has 39 MA's), (48, 40005), (58, 39891), (67, 39843), (77, 39732), (80, 39705), (98, 39507), (105, 39417), (107, 39402), (113, 39336), (114, 39333), (125, 39240), (130, 39177), (133, 39147),

Gene: MortySmith_56 Start: 42725, Stop: 44356, Start Num: 24
Candidate Starts for MortySmith_56:
(18, 42674), (Start: 24 @42725 has 39 MA's), (26, 42770), (28, 42800), (42, 42974), (44, 42992), (45, 43010), (65, 43244), (66, 43253), (71, 43310), (77, 43385), (79, 43397), (111, 43784), (119, 43865), (139, 44042), (141, 44051), (145, 44090), (168, 44252), (174, 44330),

Gene: NarutoRun_58 Start: 43655, Stop: 45286, Start Num: 24
Candidate Starts for NarutoRun_58:
(Start: 24 @43655 has 39 MA's), (26, 43700), (28, 43730), (44, 43922), (45, 43940), (65, 44174), (66, 44183), (71, 44240), (77, 44315), (79, 44327), (119, 44795), (139, 44972), (141, 44981), (145, 45020), (168, 45182), (174, 45260),

Gene: Neptune_58 Start: 43673, Stop: 45316, Start Num: 24
Candidate Starts for Neptune_58:
(Start: 24 @43673 has 39 MA's), (26, 43718), (28, 43748), (44, 43940), (45, 43958), (65, 44192), (66, 44201), (71, 44258), (77, 44333), (79, 44345), (119, 44813), (139, 44990), (141, 44999), (145, 45038), (168, 45212), (174, 45290),

Gene: NoodlelyBoi_81 Start: 47603, Stop: 48928, Start Num: 23
Candidate Starts for NoodlelyBoi_81:

(Start: 23 @47603 has 40 MA's), (63, 48032), (78, 48146), (80, 48167), (94, 48323), (96, 48338), (102, 48440), (116, 48572), (146, 48824), (151, 48842), (154, 48863), (157, 48884), (158, 48887), (161, 48911),

Gene: OhDear_58 Start: 43653, Stop: 45284, Start Num: 24
Candidate Starts for OhDear_58:
(Start: 24 @43653 has 39 MA's), (26, 43698), (28, 43728), (44, 43920), (45, 43938), (65, 44172), (66, 44181), (71, 44238), (77, 44313), (79, 44325), (119, 44793), (139, 44970), (141, 44979), (145, 45018), (168, 45180), (174, 45258),

Gene: Onika_80 Start: 47239, Stop: 48564, Start Num: 23
Candidate Starts for Onika_80:
(Start: 23 @47239 has 40 MA's), (63, 47668), (78, 47782), (80, 47803), (94, 47959), (96, 47974), (102, 48076), (116, 48208), (146, 48460), (151, 48478), (154, 48499), (157, 48520), (158, 48523), (161, 48547),

Gene: OverHedge_57 Start: 43551, Stop: 45182, Start Num: 24
Candidate Starts for OverHedge_57:
(18, 43500), (Start: 24 @43551 has 39 MA's), (26, 43596), (28, 43626), (44, 43818), (45, 43836), (52, 43917), (65, 44070), (66, 44079), (71, 44136), (77, 44211), (79, 44223), (119, 44691), (139, 44868), (141, 44877), (145, 44916), (163, 45021), (168, 45078), (174, 45156),

Gene: Paschalis_81 Start: 47266, Stop: 48591, Start Num: 23
Candidate Starts for Paschalis_81:
(Start: 23 @47266 has 40 MA's), (42, 47500), (63, 47695), (78, 47809), (80, 47830), (94, 47986), (96, 48001), (102, 48103), (116, 48235), (146, 48487), (151, 48505), (154, 48526), (157, 48547), (158, 48550), (161, 48574),

Gene: Pharpay_57 Start: 43700, Stop: 45331, Start Num: 24
Candidate Starts for Pharpay_57:
(Start: 24 @43700 has 39 MA's), (26, 43745), (28, 43775), (44, 43967), (45, 43985), (65, 44219), (66, 44228), (71, 44285), (77, 44360), (79, 44372), (119, 44840), (139, 45017), (141, 45026), (145, 45065), (168, 45227), (174, 45305),

Gene: PhedwardCullen_79 Start: 46717, Stop: 48042, Start Num: 23
Candidate Starts for PhedwardCullen_79:
(Start: 23 @46717 has 40 MA's), (63, 47146), (78, 47260), (80, 47281), (88, 47380), (94, 47437), (96, 47452), (102, 47554), (116, 47686), (146, 47938), (151, 47956), (154, 47977), (157, 47998), (158, 48001), (161, 48025),

Gene: Phorgeous_81 Start: 47055, Stop: 48380, Start Num: 23
Candidate Starts for Phorgeous_81:
(Start: 23 @47055 has 40 MA's), (63, 47484), (78, 47598), (80, 47619), (87, 47703), (94, 47775), (96, 47790), (102, 47892), (116, 48024), (146, 48276), (151, 48294), (154, 48315), (157, 48336), (158, 48339), (161, 48363),

Gene: Phrancesco_81 Start: 47366, Stop: 48691, Start Num: 23
Candidate Starts for Phrancesco_81:
(Start: 23 @47366 has 40 MA's), (63, 47795), (78, 47909), (80, 47930), (88, 48029), (94, 48086), (96, 48101), (102, 48203), (116, 48335), (146, 48587), (151, 48605), (154, 48626), (157, 48647), (158, 48650), (161, 48674),

Gene: PhunaPhoke_58 Start: 43670, Stop: 45301, Start Num: 24

Candidate Starts for PhunaPhoke_58:
(Start: 24 @43670 has 39 MA's), (26, 43715), (28, 43745), (44, 43937), (45, 43955), (65, 44189), (66, 44198), (71, 44255), (77, 44330), (79, 44342), (119, 44810), (139, 44987), (141, 44996), (145, 45035), (168, 45197), (174, 45275),

Gene: PierreOrion_80 Start: 47075, Stop: 48400, Start Num: 23
Candidate Starts for PierreOrion_80:
(Start: 23 @47075 has 40 MA's), (63, 47504), (78, 47618), (80, 47639), (94, 47795), (96, 47810), (102, 47912), (116, 48044), (146, 48296), (151, 48314), (154, 48335), (157, 48356), (158, 48359), (161, 48383),

Gene: PiperSansNom_82 Start: 47575, Stop: 48900, Start Num: 23
Candidate Starts for PiperSansNom_82:
(Start: 23 @47575 has 40 MA's), (63, 48004), (78, 48118), (80, 48139), (94, 48295), (96, 48310), (102, 48412), (116, 48544), (146, 48796), (151, 48814), (154, 48835), (157, 48856), (158, 48859), (161, 48883),

Gene: Piperis_82 Start: 47174, Stop: 48499, Start Num: 23
Candidate Starts for Piperis_82:
(Start: 23 @47174 has 40 MA's), (63, 47603), (78, 47717), (80, 47738), (94, 47894), (96, 47909), (102, 48011), (116, 48143), (146, 48395), (151, 48413), (154, 48434), (157, 48455), (158, 48458), (161, 48482),

Gene: Potty_57 Start: 43600, Stop: 45231, Start Num: 24
Candidate Starts for Potty_57:
(Start: 24 @43600 has 39 MA's), (26, 43645), (28, 43675), (44, 43867), (45, 43885), (65, 44119), (66, 44128), (71, 44185), (77, 44260), (79, 44272), (119, 44740), (139, 44917), (141, 44926), (145, 44965), (168, 45127), (174, 45205),

Gene: Poultress_57 Start: 43897, Stop: 45528, Start Num: 24
Candidate Starts for Poultress_57:
(Start: 24 @43897 has 39 MA's), (26, 43942), (28, 43972), (44, 44164), (45, 44182), (65, 44416), (66, 44425), (71, 44482), (77, 44557), (79, 44569), (119, 45037), (139, 45214), (141, 45223), (145, 45262), (168, 45424), (174, 45502),

Gene: Pulchra_83 Start: 47741, Stop: 49066, Start Num: 23
Candidate Starts for Pulchra_83:
(Start: 23 @47741 has 40 MA's), (63, 48170), (78, 48284), (80, 48305), (88, 48404), (94, 48461), (96, 48476), (102, 48578), (116, 48710), (146, 48962), (151, 48980), (154, 49001), (157, 49022), (158, 49025), (161, 49049),

Gene: Quhwah_85 Start: 47895, Stop: 49220, Start Num: 23
Candidate Starts for Quhwah_85:
(Start: 23 @47895 has 40 MA's), (63, 48324), (78, 48438), (80, 48459), (88, 48558), (94, 48615), (96, 48630), (102, 48732), (116, 48864), (146, 49116), (151, 49134), (154, 49155), (157, 49176), (158, 49179), (161, 49203),

Gene: Rachella_58 Start: 43681, Stop: 45312, Start Num: 24
Candidate Starts for Rachella_58:
(Start: 24 @43681 has 39 MA's), (26, 43726), (28, 43756), (44, 43948), (45, 43966), (65, 44200), (66, 44209), (71, 44266), (77, 44341), (79, 44353), (119, 44821), (139, 44998), (141, 45007), (145, 45046), (168, 45208), (174, 45286),

Gene: Ramiel05_80 Start: 47268, Stop: 48593, Start Num: 23
Candidate Starts for Ramiel05_80:
(Start: 23 @47268 has 40 MA's), (63, 47697), (78, 47811), (80, 47832), (94, 47988), (96, 48003), (102, 48105), (116, 48237), (146, 48489), (151, 48507), (154, 48528), (157, 48549), (158, 48552), (161, 48576),

Gene: Rie18_58 Start: 43470, Stop: 45098, Start Num: 24
Candidate Starts for Rie18_58:
(Start: 24 @43470 has 39 MA's), (26, 43515), (45, 43755), (65, 43989), (66, 43998), (71, 44055), (78, 44136), (119, 44610), (141, 44796), (145, 44835), (169, 45006),

Gene: Rockwell_80 Start: 47292, Stop: 48617, Start Num: 23
Candidate Starts for Rockwell_80:
(Start: 23 @47292 has 40 MA's), (63, 47721), (78, 47835), (80, 47856), (94, 48012), (96, 48027), (102, 48129), (116, 48261), (146, 48513), (151, 48531), (154, 48552), (157, 48573), (158, 48576), (161, 48600),

Gene: SafetyGuy_57 Start: 43661, Stop: 45292, Start Num: 24
Candidate Starts for SafetyGuy_57:
(Start: 24 @43661 has 39 MA's), (26, 43706), (28, 43736), (44, 43928), (45, 43946), (65, 44180), (66, 44189), (71, 44246), (77, 44321), (79, 44333), (119, 44801), (139, 44978), (141, 44987), (145, 45026), (168, 45188), (174, 45266),

Gene: Savannah_80 Start: 47460, Stop: 48785, Start Num: 23
Candidate Starts for Savannah_80:
(Start: 23 @47460 has 40 MA's), (63, 47889), (78, 48003), (80, 48024), (94, 48180), (96, 48195), (102, 48297), (116, 48429), (146, 48681), (151, 48699), (154, 48720), (157, 48741), (158, 48744), (161, 48768),

Gene: Scumberland_83 Start: 47514, Stop: 48839, Start Num: 23
Candidate Starts for Scumberland_83:
(Start: 23 @47514 has 40 MA's), (63, 47943), (78, 48057), (80, 48078), (94, 48234), (96, 48249), (102, 48351), (116, 48483), (146, 48735), (151, 48753), (154, 48774), (157, 48795), (158, 48798), (161, 48822),

Gene: Selwyn23_82 Start: 47399, Stop: 48724, Start Num: 23
Candidate Starts for Selwyn23_82:
(Start: 23 @47399 has 40 MA's), (63, 47828), (78, 47942), (80, 47963), (94, 48119), (96, 48134), (102, 48236), (116, 48368), (146, 48620), (151, 48638), (154, 48659), (157, 48680), (158, 48683), (161, 48707),

Gene: Shotgun_80 Start: 46770, Stop: 48095, Start Num: 23
Candidate Starts for Shotgun_80:
(Start: 23 @46770 has 40 MA's), (63, 47199), (78, 47313), (80, 47334), (94, 47490), (96, 47505), (102, 47607), (116, 47739), (146, 47991), (151, 48009), (154, 48030), (157, 48051), (158, 48054), (161, 48078),

Gene: SilentWarrior_59 Start: 43086, Stop: 44717, Start Num: 24
Candidate Starts for SilentWarrior_59:
(18, 43035), (Start: 24 @43086 has 39 MA's), (26, 43131), (28, 43161), (44, 43353), (45, 43371), (65, 43605), (66, 43614), (71, 43671), (77, 43746), (79, 43758), (111, 44145), (119, 44226), (139, 44403), (141, 44412), (145, 44451), (168, 44613), (174, 44691),

Gene: SirFrank_80 Start: 47190, Stop: 48515, Start Num: 23
Candidate Starts for SirFrank_80:
(Start: 23 @47190 has 40 MA's), (45, 47460), (63, 47619), (70, 47649), (72, 47667), (92, 47898), (94, 47910), (96, 47925), (102, 48027), (116, 48159), (146, 48411), (151, 48429), (157, 48471), (158, 48474), (161, 48498),

Gene: Smarties_90 Start: 48352, Stop: 49629, Start Num: 23
Candidate Starts for Smarties_90:
(Start: 23 @48352 has 40 MA's), (39, 48565), (44, 48604), (60, 48754), (62, 48763), (78, 48895), (80, 48916), (94, 49072), (96, 49087), (97, 49108), (116, 49321), (122, 49384), (139, 49483), (146, 49525), (148, 49534), (151, 49543), (157, 49585), (158, 49588), (161, 49612),

Gene: Snakehole_59 Start: 43097, Stop: 44728, Start Num: 24
Candidate Starts for Snakehole_59:
(18, 43046), (Start: 24 @43097 has 39 MA's), (26, 43142), (28, 43172), (44, 43364), (45, 43382), (65, 43616), (66, 43625), (71, 43682), (77, 43757), (79, 43769), (119, 44237), (139, 44414), (141, 44423), (145, 44462), (168, 44624), (174, 44702),

Gene: Tedro_58 Start: 43107, Stop: 44738, Start Num: 24
Candidate Starts for Tedro_58:
(18, 43056), (Start: 24 @43107 has 39 MA's), (26, 43152), (28, 43182), (42, 43356), (44, 43374), (45, 43392), (65, 43626), (66, 43635), (71, 43692), (77, 43767), (79, 43779), (111, 44166), (119, 44247), (139, 44424), (141, 44433), (145, 44472), (168, 44634), (174, 44712),

Gene: Terij_78 Start: 47347, Stop: 48885, Start Num: 15
Candidate Starts for Terij_78:
(1, 46399), (3, 46915), (Start: 15 @47347 has 1 MA's), (Start: 23 @47410 has 40 MA's), (27, 47464), (38, 47608), (41, 47641), (78, 47956), (79, 47962), (96, 48148), (116, 48382), (119, 48433), (120, 48439), (132, 48514), (149, 48619), (155, 48655), (166, 48742), (171, 48787), (173, 48823), (174, 48844),

Gene: Tiggy93_58 Start: 43699, Stop: 45330, Start Num: 24
Candidate Starts for Tiggy93_58:
(Start: 24 @43699 has 39 MA's), (26, 43744), (28, 43774), (44, 43966), (45, 43984), (65, 44218), (66, 44227), (71, 44284), (77, 44359), (79, 44371), (119, 44839), (139, 45016), (141, 45025), (145, 45064), (168, 45226), (174, 45304),

Gene: Tongui_58 Start: 43376, Stop: 45001, Start Num: 24
Candidate Starts for Tongui_58:
(Start: 24 @43376 has 39 MA's), (26, 43421), (45, 43661), (65, 43895), (66, 43904), (71, 43961), (77, 44036), (79, 44048), (119, 44516), (130, 44621), (141, 44702), (145, 44741), (168, 44897), (169, 44909),

Gene: WinnieLou_58 Start: 43064, Stop: 44692, Start Num: 24
Candidate Starts for WinnieLou_58:
(Start: 24 @43064 has 39 MA's), (26, 43109), (45, 43349), (65, 43583), (66, 43592), (71, 43649), (78, 43730), (79, 43736), (111, 44123), (119, 44204), (141, 44390), (145, 44429), (168, 44585),

Gene: Yeti_82 Start: 46796, Stop: 48121, Start Num: 23
Candidate Starts for Yeti_82:
(Start: 23 @46796 has 40 MA's), (63, 47225), (78, 47339), (80, 47360), (94, 47516), (96, 47531), (102, 47633), (116, 47765), (146, 48017), (151, 48035), (154, 48056), (157, 48077), (158, 48080), (161, 48104),

Gene: Zapato_81 Start: 47662, Stop: 48594, Start Num: 54
Candidate Starts for Zapato_81:
(34, 47506), (54, 47662), (74, 47848), (85, 47953), (101, 48115), (104, 48178), (108, 48211), (109, 48238), (112, 48256), (140, 48445), (143, 48463), (157, 48550), (158, 48553), (161, 48577), (162, 48580),