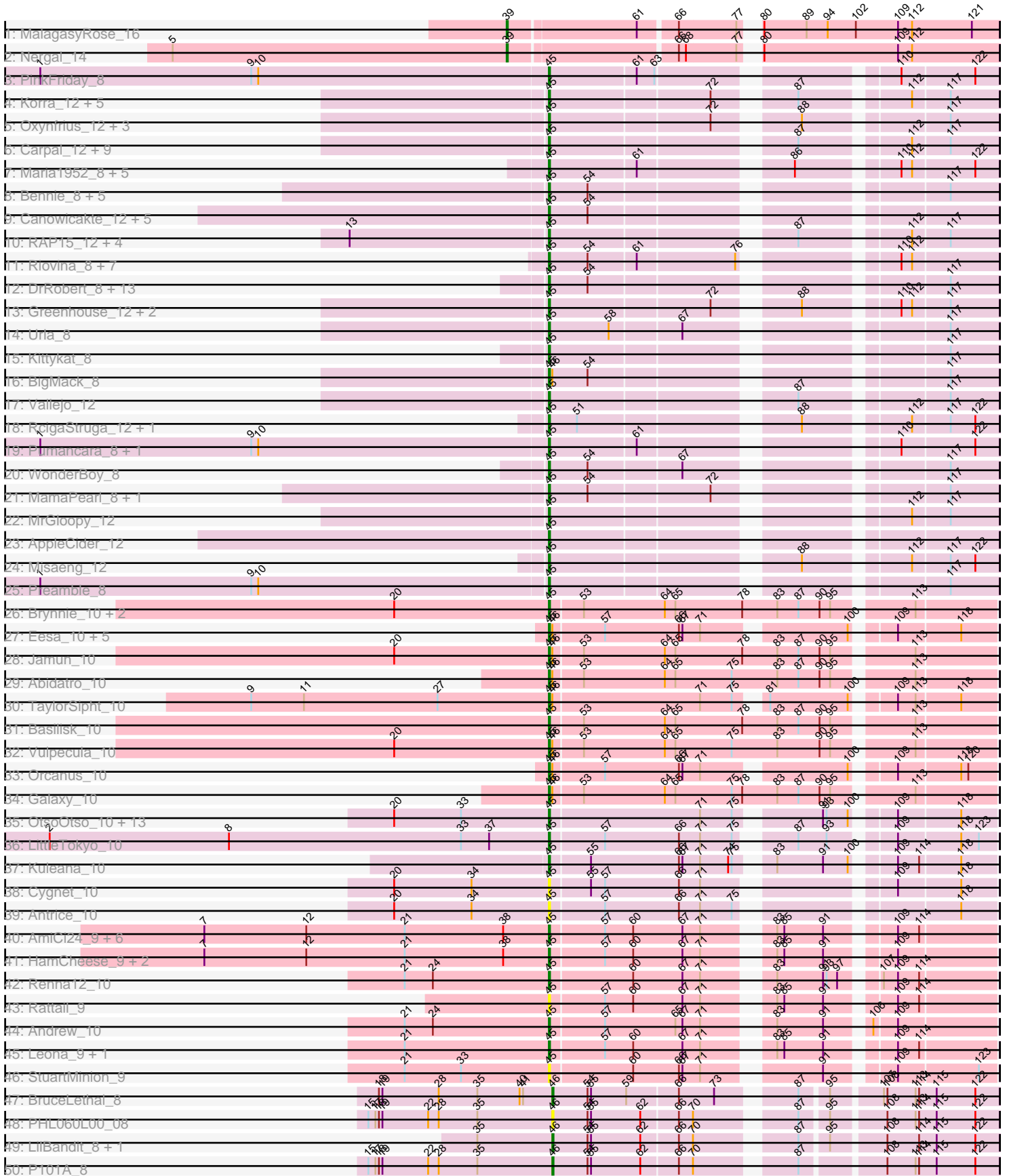
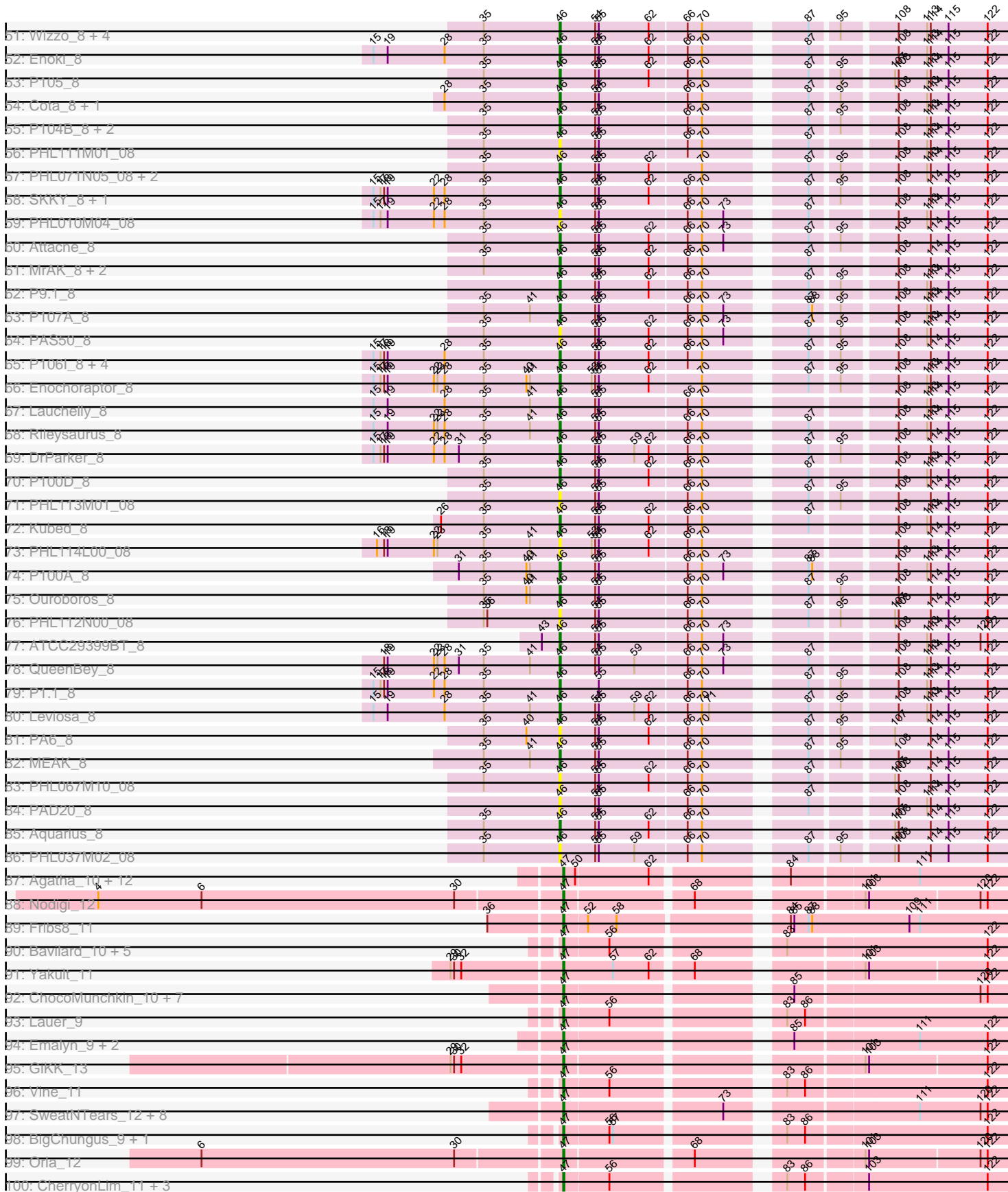


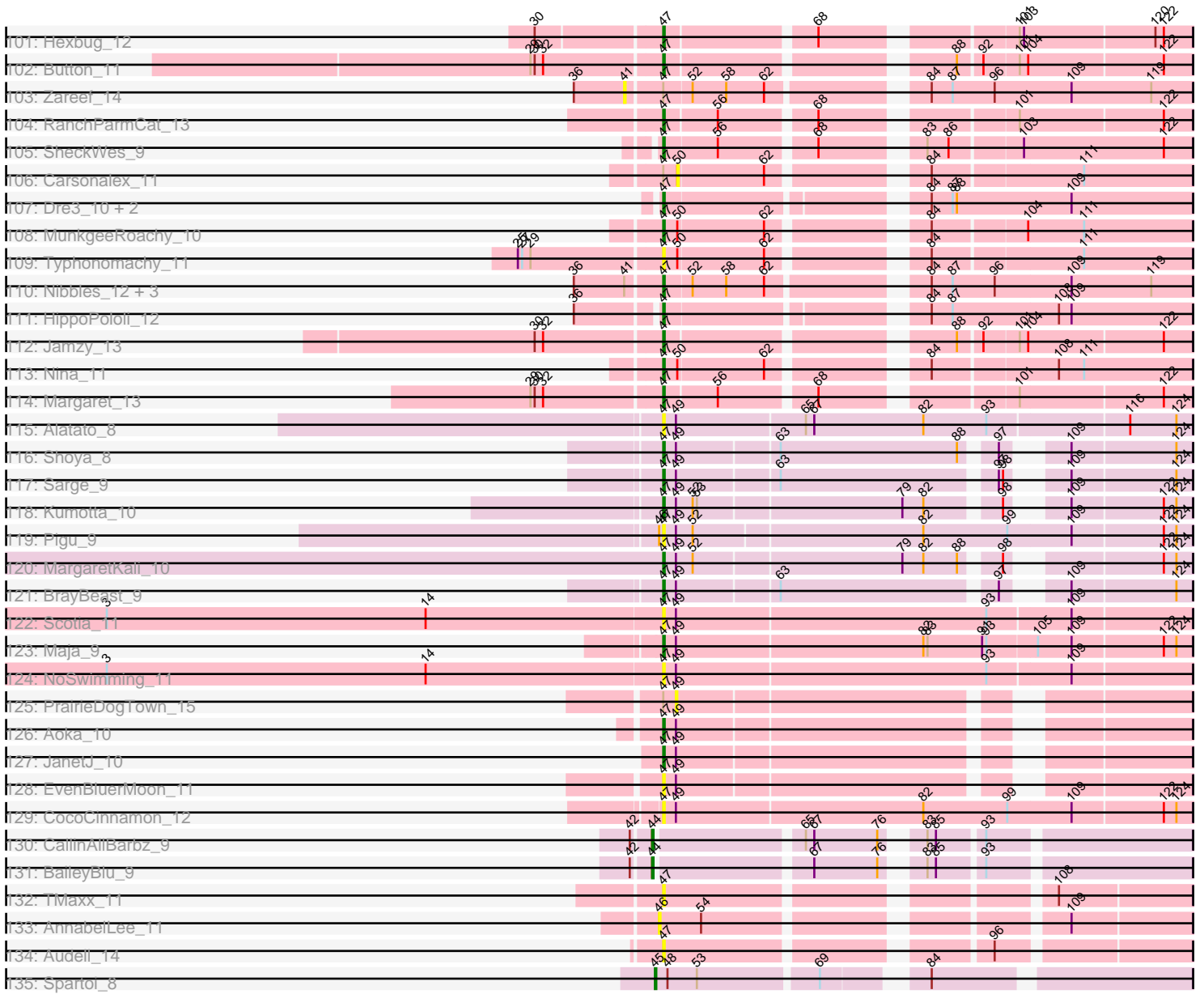
Pham 215771



Pham 215771



Pham 215771



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 215771 Report

This analysis was run 02/22/25 on database version 588.

Pham number 215771 has 285 members, 61 are drafts.

Phages represented in each track:

- Track 1 : MalagasyRose_16
- Track 2 : Nergal_14
- Track 3 : PinkFriday_8
- Track 4 : Korra_12, Dino_12, Wawa_12, BrotherBLo_12, Kalizoi_12, Zorro_12
- Track 5 : Oxyfriuus_12, Lakshmi_12, Albanese_12, GreenHearts_12
- Track 6 : Carpal_12, Fluke_12, Potatoes_12, Cholula_12, Glenn_12, Beethoven_12, TattModd_12, Rozby_12, Riverdale_12, Immaculata_12
- Track 7 : Maria1952_8, KingBob_8, Sergei_8, Daiboju_8, Temper16_8, Herb_8
- Track 8 : Bennie_8, HeadNerd_8, Moki_8, DreamTeam_8, Gisselle_8, Huckleberry_8
- Track 9 : Canowicakte_12, Suppi_12, Wayne_12, Litotes_12, PartyCup_12, CallieOMalley_12
- Track 10 : RAP15_12, Savage2526_12, Jumboset_12, MeganNoll_12, Scuttle_12
- Track 11 : Riovina_8, Vulture_8, HunterDalle_8, Eunoia_8, Aledel_8, OMalley_8, AustinPowers_8, Chridison_8
- Track 12 : DrRobert_8, Christian_8, Lennox_8, Nancia_8, Makoto_8, CristinaYang_8, Lucy_8, Bodacious_8, PitaDog_8, Pterodactyl_8, LilStuart_8, Lasagna_8, ChewChew_8, OurGirlNessie_8
- Track 13 : Greenhouse_12, Joann_12, Nubia_12
- Track 14 : Urla_8
- Track 15 : Kittykat_8
- Track 16 : BigMack_8
- Track 17 : Vallejo_12
- Track 18 : RcigaStruga_12, Huntingdon_12
- Track 19 : Pumancara_8, Supakev_8
- Track 20 : WonderBoy_8
- Track 21 : MamaPearl_8, EstebanJulior_8
- Track 22 : MrGloopy_12
- Track 23 : AppleCider_12
- Track 24 : Misaeng_12
- Track 25 : Preamble_8
- Track 26 : Brynnie_10, Chickaboom_9, Ruchi_10
- Track 27 : Eesa_10, Pelletreau_11, Gravel_11, Toad24_11, KendraB23_11, Westrich_11
- Track 28 : Jamun_10
- Track 29 : Abidatro_10
- Track 30 : TaylorSipht_10

- Track 31 : Basilisk_10
- Track 32 : Vulpecula_10
- Track 33 : Orcanus_10
- Track 34 : Galaxy_10
- Track 35 : OtsoOtso_10, Melons_11, Bibble12_11, Polka_10, Cote_11, Lunar_11, Daob_11, Bedetta_11, Coral_10, Colusalem_10, HannahPhantana_11, Kepler_10, Jerole_11, Amelia_11
- Track 36 : LittleTokyo_10
- Track 37 : Kuleana_10
- Track 38 : Cygnet_10
- Track 39 : Antrice_10
- Track 40 : AmiCi24_9, DanHam62_9, KHumphrey_9, Glotell_9, Juno112_9, Atlantica_9, RedFox_9
- Track 41 : HamCheese_9, Camara_9, PhluffyCoco_9
- Track 42 : Renna12_10
- Track 43 : Rattail_9
- Track 44 : Andrew_10
- Track 45 : Leona_9, Babushka_9
- Track 46 : StuartMinion_9
- Track 47 : BruceLethal_8
- Track 48 : PHL060L00_08
- Track 49 : LilBandit_8, P14.4_8
- Track 50 : P101A_8
- Track 51 : Wizzo_8, Supernova_8, Solid_8, P107C_8, ATCC29399BC_8
- Track 52 : Enoki_8
- Track 53 : P105_8
- Track 54 : Cota_8, Keiki_8
- Track 55 : P104B_8, Procrass1_8, Stormborn_8
- Track 56 : PHL111M01_08
- Track 57 : PHL071N05_08, P108C_8, Pirate_8
- Track 58 : SKKY_8, Moyashi_8
- Track 59 : PHL010M04_08
- Track 60 : Attacne_8
- Track 61 : MrAK_8, P100.1_8, P104A_8
- Track 62 : P9.1_8
- Track 63 : P107A_8
- Track 64 : PAS50_8
- Track 65 : P106I_8, P106L_8, P106C_8, P106A_8, P106M_8
- Track 66 : Enochoraptor_8
- Track 67 : Lauchelly_8
- Track 68 : Rileysaurus_8
- Track 69 : DrParker_8
- Track 70 : P100D_8
- Track 71 : PHL113M01_08
- Track 72 : Kubed_8
- Track 73 : PHL114L00_08
- Track 74 : P100A_8
- Track 75 : Ouroboros_8
- Track 76 : PHL112N00_08
- Track 77 : ATCC29399BT_8
- Track 78 : QueenBey_8
- Track 79 : P1.1_8
- Track 80 : Leviosa_8

- Track 81 : PA6_8
- Track 82 : MEAK_8
- Track 83 : PHL067M10_08
- Track 84 : PAD20_8
- Track 85 : Aquarius_8
- Track 86 : PHL037M02_08
- Track 87 : Agatha_10, Elliott_10, Cozz_10, Burnsey_10, Quasar_10, GoldHunter_11, PsychoKiller_10, ChickenTender_12, RedBaron_11, Starburst_11, Socotra_11, Axym_10, Sopesian_10
- Track 88 : Nodigi_12
- Track 89 : Fribs8_11
- Track 90 : Bavidard_10, PotPie_10, SummitAcademy_9, Elinal_11, Yucky_12, KayGee_10
- Track 91 : Yakult_11
- Track 92 : ChocoMunchkin_10, SteamedHams_12, Tolls_12, GTE2_08, AndPeggy_9, BillDoor_12, CanesSauce_10, Yarn_9
- Track 93 : Lauer_9
- Track 94 : Emalyn_9, Amok_9, AikoCarson_9
- Track 95 : GiKK_13
- Track 96 : Vine_11
- Track 97 : SweatNTears_12, Yummy_11, Biskit_11, Buttrmlkdreams_10, SketchMex_9, Troje_10, MScarn_12, Blondies_10, Horseradish_11
- Track 98 : BigChungus_9, Feastonyet_9
- Track 99 : Orla_12
- Track 100 : CherryonLim_11, MAnor_10, Pons_10, Mayweather_11
- Track 101 : Hexbug_12
- Track 102 : Button_11
- Track 103 : Zareef_14
- Track 104 : RanchParmCat_13
- Track 105 : SheckWes_9
- Track 106 : Carsonalex_11
- Track 107 : Dre3_10, Cleo_10, Gibbous_10
- Track 108 : MunkgeeRoachy_10
- Track 109 : Typhonmarchy_11
- Track 110 : Nibbles_12, Survivors_12, MaVan_12, Azira_12
- Track 111 : HippoPololi_12
- Track 112 : Jamzy_13
- Track 113 : Nina_11
- Track 114 : Margaret_13
- Track 115 : Alatato_8
- Track 116 : Shoya_8
- Track 117 : Sarge_9
- Track 118 : Kumotta_10
- Track 119 : Pigu_9
- Track 120 : MargaretKali_10
- Track 121 : BrayBeast_9
- Track 122 : Scotia_11
- Track 123 : Maja_9
- Track 124 : NoSwimming_11
- Track 125 : PrairieDogTown_15
- Track 126 : Aoka_10
- Track 127 : JanetJ_10
- Track 128 : EvenBluerMoon_11

- Track 129 : CocoCinnamon_12
- Track 130 : CallinAllBarbz_9
- Track 131 : BaileyBlu_9
- Track 132 : TMaxx_11
- Track 133 : AnnabelLee_11
- Track 134 : Audell_14
- Track 135 : Spartoi_8

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

The start number called the most often in the published annotations is 45, it was called in 113 of the 224 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abidatro_10, Albanese_12, Aledel_8, Amelia_11, AmiCi24_9, Andrew_10, Antrice_10, AppleCider_12, Atlantica_9, AustinPowers_8, Babushka_9, Basilisk_10, Bedetta_11, Beethoven_12, Bennie_8, Bibble12_11, BigMack_8, Bodacious_8, BrotherBLo_12, Brynnie_10, CallieOMalley_12, Camara_9, Canowicakte_12, Carpal_12, ChewChew_8, Chickaboom_9, Cholula_12, Chridison_8, Christian_8, Colusalem_10, Coral_10, Cote_11, CristinaYang_8, Cygnet_10, Daiboju_8, DanHam62_9, Daob_11, Dino_12, DrRobert_8, DreamTeam_8, Eesa_10, EstebanJulior_8, Eunoia_8, Fluke_12, Galaxy_10, Gisselle_8, Glenn_12, Glotell_9, Gravel_11, GreenHearts_12, Greenhouse_12, HamCheese_9, HannahPhantana_11, HeadNerd_8, Herb_8, Huckleberry_8, HunterDalle_8, Huntingdon_12, Immaculata_12, Jamun_10, Jerole_11, Joann_12, Jumboset_12, Juno112_9, KHumphrey_9, Kalizoi_12, KendraB23_11, Kepler_10, KingBob_8, Kittykat_8, Korra_12, Kuleana_10, Lakshmi_12, Lasagna_8, Lennox_8, Leona_9, LilStuart_8, Litotes_12, LittleTokyo_10, Lucy_8, Lunar_11, Makoto_8, MamaPearl_8, Maria1952_8, MeganNoll_12, Melons_11, Misaeng_12, Moki_8, MrGloopy_12, Nancia_8, Nubia_12, OMalley_8, Orcanus_10, OtsoOtso_10, OurGirlNessie_8, Oxynfrius_12, PartyCup_12, Pelletreau_11, PhluffyCoco_9, PinkFriday_8, PitaDog_8, Polka_10, Potatoes_12, Preamble_8, Pterodactyl_8, Pumancara_8, RAP15_12, Rattail_9, RcigaStruga_12, RedFox_9, Renna12_10, Riovina_8, Riverdale_12, Rozby_12, Ruchi_10, Savage2526_12, Scuttle_12, Sergei_8, Spartoi_8, StuartMinion_9, Supakev_8, Suppi_12, TattModd_12, TaylorSipht_10, Temper16_8, Toad24_11, Urla_8, Vallejo_12, Vulpecula_10, Vulture_8, Wawa_12, Wayne_12, Westrich_11, WonderBoy_8, Zorro_12,

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

-

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

- ATCC29399BC_8, ATCC29399BT_8, Agatha_10, AikoCarson_9, Alatato_8, Amok_9, AndPeggy_9, AnnabelLee_11, Aoka_10, Aquarius_8, Attacne_8, Audell_14, Axym_10, Azira_12, BaileyBlu_9, Bavailard_10, BigChungus_9, BillDoor_12, Biskit_11, Blondies_10, BrayBeast_9, BruceLethal_8, Burnsey_10, Button_11, Buttrmikedreams_10, CallinAllBarbz_9, CanesSauce_10, Carsonalex_11, CherryonLim_11, ChickenTender_12, ChocoMunchkin_10, Cleo_10, CocoCinnamon_12, Cota_8, Cozz_10, DrParker_8, Dre3_10, Elinal_11, Elliott_10, Emalyn_9, Enochoraptor_8, Enoki_8, EvenBluerMoon_11, Feastonyeet_9,

Fribs8_11, GTE2_08, GiKK_13, Gibbous_10, GoldHunter_11, Hexbug_12, HippoPololi_12, Horseradish_11, Jamzy_13, JanetJ_10, KayGee_10, Keiki_8, Kubed_8, Kumotta_10, Lauchelly_8, Lauer_9, Leviosa_8, LilBandit_8, MAnor_10, MEAK_8, MScarn_12, MaVan_12, Maja_9, MalagasyRose_16, MargaretKali_10, Margaret_13, Mayweather_11, Moyashi_8, MrAK_8, MunkgeeRoachy_10, Nergal_14, Nibbles_12, Nina_11, NoSwimming_11, Nodigi_12, Orla_12, Ouroboros_8, P1.1_8, P100.1_8, P100A_8, P100D_8, P101A_8, P104A_8, P104B_8, P105_8, P106A_8, P106C_8, P106I_8, P106L_8, P106M_8, P107A_8, P107C_8, P108C_8, P14.4_8, P9.1_8, PA6_8, PAD20_8, PAS50_8, PHL010M04_08, PHL037M02_08, PHL060L00_08, PHL067M10_08, PHL071N05_08, PHL111M01_08, PHL112N00_08, PHL113M01_08, PHL114L00_08, Pigu_9, Pirate_8, Pons_10, PotPie_10, PrairieDogTown_15, Procrass1_8, PsychoKiller_10, Quasar_10, QueenBey_8, RanchParmCat_13, RedBaron_11, Rileysaurus_8, SKKY_8, Sarge_9, Scotia_11, SheckWes_9, Shoya_8, SketchMex_9, Socotra_11, Solid_8, Sopeesian_10, Starburst_11, SteamedHams_12, Stormborn_8, SummitAcademy_9, Supernova_8, Survivors_12, SweatNTears_12, TMaxx_11, Tolls_12, Troje_10, Typhonmarchy_11, Vine_11, Wizzo_8, Yakult_11, Yarn_9, Yucky_12, Yummy_11, Zareef_14,

Summary by start number:

Start 39:

- Found in 2 of 285 (0.7%) of genes in pham
- Manual Annotations of this start: 2 of 224
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MalagasyRose_16 (AG), Nergal_14 (AG),

Start 41:

- Found in 16 of 285 (5.6%) of genes in pham
- No Manual Annotations of this start.
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Zareef_14 (CT),

Start 44:

- Found in 2 of 285 (0.7%) of genes in pham
- Manual Annotations of this start: 2 of 224
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BaileyBlu_9 (FP), CallinAllBarbz_9 (FP),

Start 45:

- Found in 135 of 285 (47.4%) of genes in pham
- Manual Annotations of this start: 113 of 224
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abidatro_10 (AS1), Albanese_12 (AK), Aledel_8 (AK), Amelia_11 (AS2), AmiCi24_9 (AS3), Andrew_10 (AS3), Antrice_10 (AS2), AppleCider_12 (AK), Atlantica_9 (AS3), AustinPowers_8 (AK), Babushka_9 (AS3), Basilisk_10 (AS1), Bedetta_11 (AS2), Beethoven_12 (AK), Bennie_8 (AK), Bibble12_11 (AS2), BigMack_8 (AK), Bodacious_8 (AK), BrotherBLo_12 (AK), Brynnie_10 (AS1), CallieOMalley_12 (AK), Camara_9 (AS3), Canowicakte_12 (AK), Carpal_12 (AK), ChewChew_8 (AK), Chickaboom_9 (AS1), Cholula_12 (AK), Chrison_8 (AK), Christian_8 (AK), Colusalem_10 (AS2), Coral_10 (AS2), Cote_11 (AS2), CristinaYang_8 (AK), Cygnet_10 (AS2), Daiboju_8 (AK), DanHam62_9 (AS3),

Daob_11 (AS2), Dino_12 (AK), DrRobert_8 (AK), DreamTeam_8 (AK), Eesa_10 (AS1), EstebanJulior_8 (AK), Eunoia_8 (AK), Fluke_12 (AK), Galaxy_10 (AS1), Gisselle_8 (AK), Glenn_12 (AK), Glotell_9 (AS3), Gravel_11 (AS1), GreenHearts_12 (AK), Greenhouse_12 (AK), HamCheese_9 (AS3), HannahPhantana_11 (AS2), HeadNerd_8 (AK), Herb_8 (AK), Huckleberry_8 (AK), HunterDalle_8 (AK), Huntingdon_12 (AK), Immaculata_12 (AK), Jamun_10 (AS1), Jerole_11 (AS2), Joann_12 (AK), Jumboset_12 (AK), Juno112_9 (AS3), KHumphrey_9 (AS3), Kalizoi_12 (AK), KendraB23_11 (AS1), Kepler_10 (AS2), KingBob_8 (AK), Kittykat_8 (AK), Korra_12 (AK), Kuleana_10 (AS2), Lakshmi_12 (AK), Lasagna_8 (AK), Lennox_8 (AK), Leona_9 (AS3), LilStuart_8 (AK), Litotes_12 (AK), LittleTokyo_10 (AS2), Lucy_8 (AK), Lunar_11 (AS2), Makoto_8 (AK), MamaPearl_8 (AK), Maria1952_8 (AK), MeganNoll_12 (AK), Melons_11 (AS2), Misaeng_12 (AK), Moki_8 (AK), MrGloopy_12 (AK), Nancia_8 (AK), Nubia_12 (AK), OMalley_8 (AK), Orcanus_10 (AS1), OtsoOtso_10 (AS2), OurGirlNessie_8 (AK), Oxynfrius_12 (AK), PartyCup_12 (AK), Pelletreau_11 (AS1), PhluffyCoco_9 (AS3), PinkFriday_8 (AK), PitaDog_8 (AK), Polka_10 (AS2), Potatoes_12 (AK), Preamble_8 (AK), Pterodactyl_8 (AK), Pumancara_8 (AK), RAP15_12 (AK), Rattail_9 (AS3), RcigaStruga_12 (AK), RedFox_9 (AS3), Renna12_10 (AS3), Rivovina_8 (AK), Riverdale_12 (AK), Rozby_12 (AK), Ruchi_10 (AS1), Savage2526_12 (AK), Scuttle_12 (AK), Sergei_8 (AK), Spartoi_8 (singleton), StuartMinion_9 (AS3), Supakev_8 (AK), Suppi_12 (AK), TattModd_12 (AK), TaylorSipht_10 (AS1), Temper16_8 (AK), Toad24_11 (AS1), Urla_8 (AK), Vallejo_12 (AK), Vulpecula_10 (AS1), Vulture_8 (AK), Wawa_12 (AK), Wayne_12 (AK), Westrich_11 (AS1), WonderBoy_8 (AK), Zorro_12 (AK),

Start 46:

- Found in 72 of 285 (25.3%) of genes in pham
- Manual Annotations of this start: 45 of 224
- Called 80.6% of time when present
- Phage (with cluster) where this start called: ATCC29399BC_8 (BU), ATCC29399BT_8 (BU), AnnabelLee_11 (FR), Aquarius_8 (BU), Attacne_8 (BU), BruceLethal_8 (BU), Cota_8 (BU), DrParker_8 (BU), Enochoraptor_8 (BU), Enoki_8 (BU), Keiki_8 (BU), Kubed_8 (BU), Lauchelly_8 (BU), Leviosa_8 (BU), LilBandit_8 (BU), MEAK_8 (BU), Moyashi_8 (BU), MrAK_8 (BU), Ouroboros_8 (BU), P1.1_8 (BU), P100.1_8 (BU), P100A_8 (BU), P100D_8 (BU), P101A_8 (BU), P104A_8 (BU), P104B_8 (BU), P105_8 (BU), P106A_8 (BU), P106C_8 (BU), P106I_8 (BU), P106L_8 (BU), P106M_8 (BU), P107A_8 (BU), P107C_8 (BU), P108C_8 (BU), P14.4_8 (BU), P9.1_8 (BU), PA6_8 (BU), PAD20_8 (BU), PAS50_8 (BU), PHL010M04_08 (BU), PHL037M02_08 (BU), PHL060L00_08 (BU), PHL067M10_08 (BU), PHL071N05_08 (BU), PHL111M01_08 (BU), PHL112N00_08 (BU), PHL113M01_08 (BU), PHL114L00_08 (BU), Pirate_8 (BU), Procrass1_8 (BU), QueenBey_8 (BU), Rileysaurus_8 (BU), SKKY_8 (BU), Solid_8 (BU), Stormborn_8 (BU), Supernova_8 (BU), Wizzo_8 (BU),

Start 47:

- Found in 88 of 285 (30.9%) of genes in pham
- Manual Annotations of this start: 62 of 224
- Called 96.6% of time when present
- Phage (with cluster) where this start called: Agatha_10 (CT), AikoCarson_9 (CT), Alatato_8 (FB), Amok_9 (CT), AndPeggy_9 (CT), Aoka_10 (FO), Audell_14 (FR), Axym_10 (CT), Azira_12 (CT), Bavidard_10 (CT), BigChungus_9 (CT), BillDoor_12 (CT), Biskit_11 (CT), Blondies_10 (CT), BrayBeast_9 (FB), Burnsey_10 (CT), Button_11 (CT), Buttrmlkdreams_10 (CT), CanesSauce_10 (CT), CherryonLim_11 (CT), ChickenTender_12 (CT), ChocoMunchkin_10 (CT), Cleo_10 (CT),

CocoCinnamon_12 (FO), Cozz_10 (CT), Dre3_10 (CT), Elinal_11 (CT), Elliott_10 (CT), Emalyn_9 (CT), EvenBluerMoon_11 (FO), Feastonyeet_9 (CT), Fribs8_11 (CT), GTE2_08 (CT), GiKK_13 (CT), Gibbous_10 (CT), GoldHunter_11 (CT), Hexbug_12 (CT), HippoPololi_12 (CT), Horseradish_11 (CT), Jamzy_13 (CT), JanetJ_10 (FO), KayGee_10 (CT), Kumotta_10 (FB), Lauer_9 (CT), MAnor_10 (CT), MScarn_12 (CT), MaVan_12 (CT), Maja_9 (FO), MargaretKali_10 (FB), Margaret_13 (CT), Mayweather_11 (CT), MunkgeeRoachy_10 (CT), Nibbles_12 (CT), Nina_11 (CT), NoSwimming_11 (FO), Nodigi_12 (CT), Orla_12 (CT), Pigu_9 (FB), Pons_10 (CT), PotPie_10 (CT), PsychoKiller_10 (CT), Quasar_10 (CT), RanchParmCat_13 (CT), RedBaron_11 (CT), Sarge_9 (FB), Scotia_11 (FO), SheckWes_9 (CT), Shoya_8 (FB), SketchMex_9 (CT), Socotra_11 (CT), Sopespian_10 (CT), Starburst_11 (CT), SteamedHams_12 (CT), SummitAcademy_9 (CT), Survivors_12 (CT), SweatNTears_12 (CT), TMaxx_11 (FR), Tolls_12 (CT), Troje_10 (CT), Typhonomachy_11 (CT), Vine_11 (CT), Yakult_11 (CT), Yarn_9 (CT), Yucky_12 (CT), Yummy_11 (CT),

Start 49:

- Found in 15 of 285 (5.3%) of genes in pham
- No Manual Annotations of this start.
- Called 6.7% of time when present
- Phage (with cluster) where this start called: PrairieDogTown_15 (FO),

Start 50:

- Found in 17 of 285 (6.0%) of genes in pham
- No Manual Annotations of this start.
- Called 5.9% of time when present
- Phage (with cluster) where this start called: Carsonalex_11 (CT),

Summary by clusters:

There are 12 clusters represented in this pham: AS3, AS2, AS1, AG, AK, FR, FP, BU, FB, singleton, FO, CT,

Info for manual annotations of cluster AG:

- Start number 39 was manually annotated 2 times for cluster AG.

Info for manual annotations of cluster AK:

- Start number 45 was manually annotated 83 times for cluster AK.

Info for manual annotations of cluster AS1:

- Start number 45 was manually annotated 11 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 45 was manually annotated 11 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 45 was manually annotated 7 times for cluster AS3.

Info for manual annotations of cluster BU:

- Start number 46 was manually annotated 45 times for cluster BU.

Info for manual annotations of cluster CT:

- Start number 47 was manually annotated 54 times for cluster CT.

Info for manual annotations of cluster FB:

•Start number 47 was manually annotated 5 times for cluster FB.

Info for manual annotations of cluster FO:

•Start number 47 was manually annotated 3 times for cluster FO.

Info for manual annotations of cluster FP:

•Start number 44 was manually annotated 2 times for cluster FP.

Gene Information:

Gene: ATCC29399BC_8 Start: 6098, Stop: 6445, Start Num: 46

Candidate Starts for ATCC29399BC_8:

(35, 6035), (Start: 46 @6098 has 45 MA's), (54, 6128), (55, 6131), (62, 6173), (66, 6203), (70, 6215), (87, 6287), (95, 6308), (108, 6350), (113, 6374), (114, 6377), (115, 6392), (122, 6425),

Gene: ATCC29399BT_8 Start: 6095, Stop: 6442, Start Num: 46

Candidate Starts for ATCC29399BT_8:

(43, 6080), (Start: 46 @6095 has 45 MA's), (54, 6125), (55, 6128), (66, 6200), (70, 6212), (73, 6230), (108, 6347), (113, 6371), (114, 6374), (115, 6389), (120, 6416), (122, 6422),

Gene: Abidatro_10 Start: 7704, Stop: 8066, Start Num: 45

Candidate Starts for Abidatro_10:

(Start: 45 @7704 has 113 MA's), (Start: 46 @7707 has 45 MA's), (53, 7731), (64, 7800), (65, 7809), (75, 7857), (83, 7896), (87, 7914), (90, 7932), (95, 7941), (113, 8001),

Gene: Agatha_10 Start: 6923, Stop: 7264, Start Num: 47

Candidate Starts for Agatha_10:

(Start: 47 @6923 has 62 MA's), (50, 6932), (62, 6992), (84, 7085), (111, 7187),

Gene: AikoCarson_9 Start: 6653, Stop: 6994, Start Num: 47

Candidate Starts for AikoCarson_9:

(Start: 47 @6653 has 62 MA's), (85, 6818), (111, 6917), (122, 6974),

Gene: Alatato_8 Start: 6552, Stop: 6920, Start Num: 47

Candidate Starts for Alatato_8:

(Start: 47 @6552 has 62 MA's), (49, 6561), (65, 6651), (67, 6657), (82, 6735), (93, 6780), (116, 6876), (124, 6909),

Gene: Albanese_12 Start: 9846, Stop: 10184, Start Num: 45

Candidate Starts for Albanese_12:

(Start: 45 @9846 has 113 MA's), (72, 9978), (88, 10035), (117, 10143),

Gene: Aledel_8 Start: 6923, Stop: 7261, Start Num: 45

Candidate Starts for Aledel_8:

(Start: 45 @6923 has 113 MA's), (54, 6956), (61, 6995), (76, 7076), (110, 7181), (112, 7190),

Gene: Amelia_11 Start: 7903, Stop: 8244, Start Num: 45

Candidate Starts for Amelia_11:

(20, 7771), (33, 7828), (Start: 45 @7903 has 113 MA's), (71, 8029), (75, 8056), (91, 8116), (93, 8119), (100, 8137), (109, 8164), (118, 8215),

Gene: AmiCi24_9 Start: 7312, Stop: 7650, Start Num: 45

Candidate Starts for AmiCi24_9:

(7, 7018), (12, 7105), (21, 7189), (38, 7273), (Start: 45 @7312 has 113 MA's), (57, 7357), (60, 7381), (67, 7423), (71, 7438), (83, 7483), (85, 7489), (91, 7522), (109, 7570), (114, 7588),

Gene: Amok_9 Start: 6653, Stop: 6994, Start Num: 47

Candidate Starts for Amok_9:

(Start: 47 @6653 has 62 MA's), (85, 6818), (111, 6917), (122, 6974),

Gene: AndPeggy_9 Start: 6941, Stop: 7282, Start Num: 47

Candidate Starts for AndPeggy_9:

(Start: 47 @6941 has 62 MA's), (85, 7106), (120, 7256), (122, 7262),

Gene: Andrew_10 Start: 7691, Stop: 8029, Start Num: 45

Candidate Starts for Andrew_10:

(21, 7568), (24, 7592), (Start: 45 @7691 has 113 MA's), (57, 7736), (65, 7796), (67, 7802), (71, 7817), (83, 7862), (91, 7901), (106, 7931), (109, 7949),

Gene: AnnabelLee_11 Start: 7129, Stop: 7464, Start Num: 46

Candidate Starts for AnnabelLee_11:

(Start: 46 @7129 has 45 MA's), (54, 7159), (109, 7381),

Gene: Antrice_10 Start: 7647, Stop: 7985, Start Num: 45

Candidate Starts for Antrice_10:

(20, 7515), (34, 7581), (Start: 45 @7647 has 113 MA's), (57, 7692), (66, 7755), (71, 7773), (75, 7800), (118, 7956),

Gene: Aoka_10 Start: 8106, Stop: 8438, Start Num: 47

Candidate Starts for Aoka_10:

(Start: 47 @8106 has 62 MA's), (49, 8115),

Gene: AppleCider_12 Start: 9802, Stop: 10140, Start Num: 45

Candidate Starts for AppleCider_12:

(Start: 45 @9802 has 113 MA's),

Gene: Aquarius_8 Start: 6088, Stop: 6435, Start Num: 46

Candidate Starts for Aquarius_8:

(35, 6025), (Start: 46 @6088 has 45 MA's), (54, 6118), (55, 6121), (62, 6163), (66, 6193), (70, 6205), (107, 6337), (108, 6340), (114, 6367), (115, 6382), (122, 6415),

Gene: Atlantica_9 Start: 7312, Stop: 7650, Start Num: 45

Candidate Starts for Atlantica_9:

(7, 7018), (12, 7105), (21, 7189), (38, 7273), (Start: 45 @7312 has 113 MA's), (57, 7357), (60, 7381), (67, 7423), (71, 7438), (83, 7483), (85, 7489), (91, 7522), (109, 7570), (114, 7588),

Gene: Attacne_8 Start: 6099, Stop: 6446, Start Num: 46

Candidate Starts for Attacne_8:

(35, 6036), (Start: 46 @6099 has 45 MA's), (54, 6129), (55, 6132), (62, 6174), (66, 6204), (70, 6216), (73, 6234), (87, 6288), (95, 6309), (108, 6351), (114, 6378), (115, 6393), (122, 6426),

Gene: Audell_14 Start: 10469, Stop: 10801, Start Num: 47

Candidate Starts for Audell_14:

(Start: 47 @10469 has 62 MA's), (96, 10673),

Gene: AustinPowers_8 Start: 6924, Stop: 7262, Start Num: 45

Candidate Starts for AustinPowers_8:

(Start: 45 @6924 has 113 MA's), (54, 6957), (61, 6996), (76, 7077), (110, 7182), (112, 7191),

Gene: Axym_10 Start: 6923, Stop: 7264, Start Num: 47

Candidate Starts for Axym_10:

(Start: 47 @6923 has 62 MA's), (50, 6932), (62, 6992), (84, 7085), (111, 7187),

Gene: Azira_12 Start: 7820, Stop: 8170, Start Num: 47

Candidate Starts for Azira_12:

(36, 7760), (41, 7796), (Start: 47 @7820 has 62 MA's), (52, 7838), (58, 7862), (62, 7889), (84, 7985), (87, 8000), (96, 8030), (109, 8084), (119, 8141),

Gene: Babushka_9 Start: 7360, Stop: 7698, Start Num: 45

Candidate Starts for Babushka_9:

(21, 7237), (Start: 45 @7360 has 113 MA's), (57, 7405), (60, 7429), (67, 7471), (71, 7486), (83, 7531), (85, 7537), (91, 7570), (109, 7618), (114, 7636),

Gene: BaileyBlu_9 Start: 6175, Stop: 6513, Start Num: 44

Candidate Starts for BaileyBlu_9:

(42, 6163), (Start: 44 @6175 has 2 MA's), (67, 6277), (76, 6322), (83, 6340), (85, 6346), (93, 6376),

Gene: Basilisk_10 Start: 8028, Stop: 8390, Start Num: 45

Candidate Starts for Basilisk_10:

(Start: 45 @8028 has 113 MA's), (53, 8055), (64, 8124), (65, 8133), (78, 8190), (83, 8220), (87, 8238), (90, 8256), (95, 8265), (113, 8325),

Gene: Bavilard_10 Start: 7475, Stop: 7816, Start Num: 47

Candidate Starts for Bavilard_10:

(Start: 47 @7475 has 62 MA's), (56, 7511), (83, 7634), (122, 7796),

Gene: Bedetta_11 Start: 7903, Stop: 8244, Start Num: 45

Candidate Starts for Bedetta_11:

(20, 7771), (33, 7828), (Start: 45 @7903 has 113 MA's), (71, 8029), (75, 8056), (91, 8116), (93, 8119), (100, 8137), (109, 8164), (118, 8215),

Gene: Beethoven_12 Start: 9762, Stop: 10100, Start Num: 45

Candidate Starts for Beethoven_12:

(Start: 45 @9762 has 113 MA's), (87, 9948), (112, 10029), (117, 10059),

Gene: Bennie_8 Start: 6907, Stop: 7245, Start Num: 45

Candidate Starts for Bennie_8:

(Start: 45 @6907 has 113 MA's), (54, 6940), (117, 7204),

Gene: Bible12_11 Start: 7906, Stop: 8247, Start Num: 45

Candidate Starts for Bible12_11:

(20, 7774), (33, 7831), (Start: 45 @7906 has 113 MA's), (71, 8032), (75, 8059), (91, 8119), (93, 8122), (100, 8140), (109, 8167), (118, 8218),

Gene: BigChungus_9 Start: 6720, Stop: 7061, Start Num: 47
Candidate Starts for BigChungus_9:
(Start: 47 @6720 has 62 MA's), (56, 6756), (57, 6759), (83, 6879), (86, 6894), (122, 7041),

Gene: BigMack_8 Start: 6907, Stop: 7245, Start Num: 45
Candidate Starts for BigMack_8:
(Start: 45 @6907 has 113 MA's), (Start: 46 @6910 has 45 MA's), (54, 6940), (117, 7204),

Gene: BillDoor_12 Start: 6906, Stop: 7247, Start Num: 47
Candidate Starts for BillDoor_12:
(Start: 47 @6906 has 62 MA's), (85, 7071), (120, 7221), (122, 7227),

Gene: Biskit_11 Start: 6907, Stop: 7248, Start Num: 47
Candidate Starts for Biskit_11:
(Start: 47 @6907 has 62 MA's), (73, 7030), (111, 7171), (120, 7222), (122, 7228),

Gene: Blondies_10 Start: 6902, Stop: 7243, Start Num: 47
Candidate Starts for Blondies_10:
(Start: 47 @6902 has 62 MA's), (73, 7025), (111, 7166), (120, 7217), (122, 7223),

Gene: Bodacious_8 Start: 6905, Stop: 7243, Start Num: 45
Candidate Starts for Bodacious_8:
(Start: 45 @6905 has 113 MA's), (54, 6938), (117, 7202),

Gene: BrayBeast_9 Start: 7001, Stop: 7333, Start Num: 47
Candidate Starts for BrayBeast_9:
(Start: 47 @7001 has 62 MA's), (49, 7010), (63, 7079), (97, 7223), (109, 7250), (124, 7322),

Gene: BrotherBLo_12 Start: 9769, Stop: 10107, Start Num: 45
Candidate Starts for BrotherBLo_12:
(Start: 45 @9769 has 113 MA's), (72, 9901), (87, 9955), (112, 10036), (117, 10066),

Gene: BruceLethal_8 Start: 6088, Stop: 6435, Start Num: 46
Candidate Starts for BruceLethal_8:
(18, 5941), (19, 5944), (28, 5992), (35, 6025), (40, 6061), (41, 6064), (Start: 46 @6088 has 45 MA's),
(54, 6118), (55, 6121), (59, 6151), (66, 6193), (73, 6223), (87, 6277), (95, 6298), (107, 6337), (108,
6340), (113, 6364), (114, 6367), (115, 6382), (122, 6415),

Gene: Brynnie_10 Start: 7840, Stop: 8202, Start Num: 45
Candidate Starts for Brynnie_10:
(20, 7708), (Start: 45 @7840 has 113 MA's), (53, 7867), (64, 7936), (65, 7945), (78, 8002), (83, 8032),
(87, 8050), (90, 8068), (95, 8077), (113, 8137),

Gene: Burnsey_10 Start: 6924, Stop: 7265, Start Num: 47
Candidate Starts for Burnsey_10:
(Start: 47 @6924 has 62 MA's), (50, 6933), (62, 6993), (84, 7086), (111, 7188),

Gene: Button_11 Start: 6943, Stop: 7281, Start Num: 47
Candidate Starts for Button_11:
(29, 6853), (30, 6856), (32, 6862), (Start: 47 @6943 has 62 MA's), (88, 7123), (92, 7138), (101, 7162),
(104, 7168), (122, 7261),

Gene: Buttrmilkdreams_10 Start: 6901, Stop: 7242, Start Num: 47

Candidate Starts for Buttrmlkdreams_10:

(Start: 47 @6901 has 62 MA's), (73, 7024), (111, 7165), (120, 7216), (122, 7222),

Gene: CallieOMalley_12 Start: 9802, Stop: 10140, Start Num: 45

Candidate Starts for CallieOMalley_12:

(Start: 45 @9802 has 113 MA's), (54, 9835),

Gene: CallinAllBarbz_9 Start: 6185, Stop: 6523, Start Num: 44

Candidate Starts for CallinAllBarbz_9:

(42, 6173), (Start: 44 @6185 has 2 MA's), (65, 6281), (67, 6287), (76, 6332), (83, 6350), (85, 6356), (93, 6386),

Gene: Camara_9 Start: 7313, Stop: 7651, Start Num: 45

Candidate Starts for Camara_9:

(7, 7019), (12, 7106), (21, 7190), (38, 7274), (Start: 45 @7313 has 113 MA's), (57, 7358), (60, 7382), (67, 7424), (71, 7439), (83, 7484), (85, 7490), (91, 7523), (109, 7571),

Gene: CanesSauce_10 Start: 6942, Stop: 7283, Start Num: 47

Candidate Starts for CanesSauce_10:

(Start: 47 @6942 has 62 MA's), (85, 7107), (120, 7257), (122, 7263),

Gene: Canowicakte_12 Start: 9837, Stop: 10175, Start Num: 45

Candidate Starts for Canowicakte_12:

(Start: 45 @9837 has 113 MA's), (54, 9870),

Gene: Carpal_12 Start: 9769, Stop: 10107, Start Num: 45

Candidate Starts for Carpal_12:

(Start: 45 @9769 has 113 MA's), (87, 9955), (112, 10036), (117, 10066),

Gene: Carsonalex_11 Start: 6989, Stop: 7321, Start Num: 50

Candidate Starts for Carsonalex_11:

(Start: 47 @6980 has 62 MA's), (50, 6989), (62, 7049), (84, 7142), (111, 7244),

Gene: CherryonLim_11 Start: 7446, Stop: 7787, Start Num: 47

Candidate Starts for CherryonLim_11:

(Start: 47 @7446 has 62 MA's), (56, 7482), (83, 7605), (86, 7620), (103, 7668), (122, 7767),

Gene: ChewChew_8 Start: 6904, Stop: 7242, Start Num: 45

Candidate Starts for ChewChew_8:

(Start: 45 @6904 has 113 MA's), (54, 6937), (117, 7201),

Gene: Chickaboom_9 Start: 7385, Stop: 7747, Start Num: 45

Candidate Starts for Chickaboom_9:

(20, 7253), (Start: 45 @7385 has 113 MA's), (53, 7412), (64, 7481), (65, 7490), (78, 7547), (83, 7577), (87, 7595), (90, 7613), (95, 7622), (113, 7682),

Gene: ChickenTender_12 Start: 6966, Stop: 7307, Start Num: 47

Candidate Starts for ChickenTender_12:

(Start: 47 @6966 has 62 MA's), (50, 6975), (62, 7035), (84, 7128), (111, 7230),

Gene: ChocoMunchkin_10 Start: 6942, Stop: 7283, Start Num: 47

Candidate Starts for ChocoMunchkin_10:

(Start: 47 @6942 has 62 MA's), (85, 7107), (120, 7257), (122, 7263),

Gene: Cholula_12 Start: 9814, Stop: 10152, Start Num: 45
Candidate Starts for Cholula_12:
(Start: 45 @9814 has 113 MA's), (87, 10000), (112, 10081), (117, 10111),

Gene: Chridison_8 Start: 6924, Stop: 7262, Start Num: 45
Candidate Starts for Chridison_8:
(Start: 45 @6924 has 113 MA's), (54, 6957), (61, 6996), (76, 7077), (110, 7182), (112, 7191),

Gene: Christian_8 Start: 6905, Stop: 7243, Start Num: 45
Candidate Starts for Christian_8:
(Start: 45 @6905 has 113 MA's), (54, 6938), (117, 7202),

Gene: Cleo_10 Start: 7123, Stop: 7470, Start Num: 47
Candidate Starts for Cleo_10:
(Start: 47 @7123 has 62 MA's), (84, 7285), (87, 7300), (88, 7303), (109, 7384),

Gene: CocoCinnamon_12 Start: 8205, Stop: 8576, Start Num: 47
Candidate Starts for CocoCinnamon_12:
(Start: 47 @8205 has 62 MA's), (49, 8214), (82, 8388), (99, 8448), (109, 8493), (122, 8556), (124, 8565),

Gene: Colusalem_10 Start: 7742, Stop: 8083, Start Num: 45
Candidate Starts for Colusalem_10:
(20, 7610), (33, 7667), (Start: 45 @7742 has 113 MA's), (71, 7868), (75, 7895), (91, 7955), (93, 7958), (100, 7976), (109, 8003), (118, 8054),

Gene: Coral_10 Start: 7742, Stop: 8083, Start Num: 45
Candidate Starts for Coral_10:
(20, 7610), (33, 7667), (Start: 45 @7742 has 113 MA's), (71, 7868), (75, 7895), (91, 7955), (93, 7958), (100, 7976), (109, 8003), (118, 8054),

Gene: Cota_8 Start: 6106, Stop: 6453, Start Num: 46
Candidate Starts for Cota_8:
(28, 6010), (35, 6043), (Start: 46 @6106 has 45 MA's), (54, 6136), (55, 6139), (66, 6211), (70, 6223), (87, 6295), (95, 6316), (108, 6358), (113, 6382), (114, 6385), (115, 6400), (122, 6433),

Gene: Cote_11 Start: 7903, Stop: 8244, Start Num: 45
Candidate Starts for Cote_11:
(20, 7771), (33, 7828), (Start: 45 @7903 has 113 MA's), (71, 8029), (75, 8056), (91, 8116), (93, 8119), (100, 8137), (109, 8164), (118, 8215),

Gene: Cozz_10 Start: 6924, Stop: 7265, Start Num: 47
Candidate Starts for Cozz_10:
(Start: 47 @6924 has 62 MA's), (50, 6933), (62, 6993), (84, 7086), (111, 7188),

Gene: CristinaYang_8 Start: 6905, Stop: 7243, Start Num: 45
Candidate Starts for CristinaYang_8:
(Start: 45 @6905 has 113 MA's), (54, 6938), (117, 7202),

Gene: Cygnet_10 Start: 7689, Stop: 8027, Start Num: 45
Candidate Starts for Cygnet_10:

(20, 7557), (34, 7623), (Start: 45 @7689 has 113 MA's), (55, 7722), (57, 7734), (66, 7797), (71, 7815), (109, 7947), (118, 7998),

Gene: Daiboju_8 Start: 6925, Stop: 7263, Start Num: 45

Candidate Starts for Daiboju_8:

(Start: 45 @6925 has 113 MA's), (61, 6997), (86, 7108), (110, 7183), (112, 7192), (122, 7243),

Gene: DanHam62_9 Start: 7312, Stop: 7650, Start Num: 45

Candidate Starts for DanHam62_9:

(7, 7018), (12, 7105), (21, 7189), (38, 7273), (Start: 45 @7312 has 113 MA's), (57, 7357), (60, 7381), (67, 7423), (71, 7438), (83, 7483), (85, 7489), (91, 7522), (109, 7570), (114, 7588),

Gene: Daob_11 Start: 7906, Stop: 8247, Start Num: 45

Candidate Starts for Daob_11:

(20, 7774), (33, 7831), (Start: 45 @7906 has 113 MA's), (71, 8032), (75, 8059), (91, 8119), (93, 8122), (100, 8140), (109, 8167), (118, 8218),

Gene: Dino_12 Start: 9768, Stop: 10106, Start Num: 45

Candidate Starts for Dino_12:

(Start: 45 @9768 has 113 MA's), (72, 9900), (87, 9954), (112, 10035), (117, 10065),

Gene: DrParker_8 Start: 6113, Stop: 6460, Start Num: 46

Candidate Starts for DrParker_8:

(15, 5957), (17, 5963), (18, 5966), (19, 5969), (22, 6008), (28, 6017), (31, 6029), (35, 6050), (Start: 46 @6113 has 45 MA's), (54, 6143), (55, 6146), (59, 6176), (62, 6188), (66, 6218), (70, 6230), (87, 6302), (95, 6323), (108, 6365), (114, 6392), (115, 6407), (122, 6440),

Gene: DrRobert_8 Start: 6905, Stop: 7243, Start Num: 45

Candidate Starts for DrRobert_8:

(Start: 45 @6905 has 113 MA's), (54, 6938), (117, 7202),

Gene: Dre3_10 Start: 7070, Stop: 7417, Start Num: 47

Candidate Starts for Dre3_10:

(Start: 47 @7070 has 62 MA's), (84, 7232), (87, 7247), (88, 7250), (109, 7331),

Gene: DreamTeam_8 Start: 6951, Stop: 7289, Start Num: 45

Candidate Starts for DreamTeam_8:

(Start: 45 @6951 has 113 MA's), (54, 6984), (117, 7248),

Gene: Eesa_10 Start: 7902, Stop: 8243, Start Num: 45

Candidate Starts for Eesa_10:

(Start: 45 @7902 has 113 MA's), (Start: 46 @7905 has 45 MA's), (57, 7947), (66, 8010), (67, 8013), (71, 8028), (100, 8136), (109, 8163), (118, 8214),

Gene: Elinal_11 Start: 6701, Stop: 7042, Start Num: 47

Candidate Starts for Elinal_11:

(Start: 47 @6701 has 62 MA's), (56, 6737), (83, 6860), (122, 7022),

Gene: Elliott_10 Start: 6923, Stop: 7264, Start Num: 47

Candidate Starts for Elliott_10:

(Start: 47 @6923 has 62 MA's), (50, 6932), (62, 6992), (84, 7085), (111, 7187),

Gene: Emalyn_9 Start: 6652, Stop: 6993, Start Num: 47

Candidate Starts for Emalyn_9:

(Start: 47 @6652 has 62 MA's), (85, 6817), (111, 6916), (122, 6973),

Gene: Enochoraptor_8 Start: 6109, Stop: 6456, Start Num: 46

Candidate Starts for Enochoraptor_8:

(15, 5953), (17, 5959), (18, 5962), (19, 5965), (22, 6004), (23, 6007), (28, 6013), (35, 6046), (40, 6082), (41, 6085), (Start: 46 @6109 has 45 MA's), (53, 6136), (54, 6139), (55, 6142), (62, 6184), (70, 6226), (87, 6298), (95, 6319), (108, 6361), (113, 6385), (114, 6388), (115, 6403), (122, 6436),

Gene: Enoki_8 Start: 6094, Stop: 6441, Start Num: 46

Candidate Starts for Enoki_8:

(15, 5938), (19, 5950), (28, 5998), (35, 6031), (Start: 46 @6094 has 45 MA's), (54, 6124), (55, 6127), (62, 6169), (66, 6199), (70, 6211), (87, 6283), (108, 6346), (113, 6370), (114, 6373), (115, 6388), (122, 6421),

Gene: EstebanJulior_8 Start: 6949, Stop: 7287, Start Num: 45

Candidate Starts for EstebanJulior_8:

(Start: 45 @6949 has 113 MA's), (54, 6982), (72, 7081), (117, 7246),

Gene: Eunoia_8 Start: 6923, Stop: 7261, Start Num: 45

Candidate Starts for Eunoia_8:

(Start: 45 @6923 has 113 MA's), (54, 6956), (61, 6995), (76, 7076), (110, 7181), (112, 7190),

Gene: EvenBluerMoon_11 Start: 8140, Stop: 8472, Start Num: 47

Candidate Starts for EvenBluerMoon_11:

(Start: 47 @8140 has 62 MA's), (49, 8149),

Gene: Feastonyeet_9 Start: 6720, Stop: 7061, Start Num: 47

Candidate Starts for Feastonyeet_9:

(Start: 47 @6720 has 62 MA's), (56, 6756), (57, 6759), (83, 6879), (86, 6894), (122, 7041),

Gene: Fluke_12 Start: 9810, Stop: 10148, Start Num: 45

Candidate Starts for Fluke_12:

(Start: 45 @9810 has 113 MA's), (87, 9996), (112, 10077), (117, 10107),

Gene: Fribs8_11 Start: 7633, Stop: 7983, Start Num: 47

Candidate Starts for Fribs8_11:

(36, 7573), (Start: 47 @7633 has 62 MA's), (52, 7651), (58, 7675), (84, 7798), (85, 7801), (87, 7813), (88, 7816), (109, 7897), (111, 7906),

Gene: GTE2_08 Start: 6602, Stop: 6943, Start Num: 47

Candidate Starts for GTE2_08:

(Start: 47 @6602 has 62 MA's), (85, 6767), (120, 6917), (122, 6923),

Gene: Galaxy_10 Start: 7711, Stop: 8073, Start Num: 45

Candidate Starts for Galaxy_10:

(Start: 45 @7711 has 113 MA's), (Start: 46 @7714 has 45 MA's), (53, 7738), (64, 7807), (65, 7816), (75, 7864), (78, 7873), (83, 7903), (87, 7921), (90, 7939), (95, 7948), (113, 8008),

Gene: GiKK_13 Start: 7246, Stop: 7584, Start Num: 47

Candidate Starts for GiKK_13:

(29, 7156), (30, 7159), (32, 7165), (Start: 47 @7246 has 62 MA's), (101, 7465), (103, 7468), (122, 7564),

Gene: Gibbous_10 Start: 7070, Stop: 7417, Start Num: 47

Candidate Starts for Gibbous_10:

(Start: 47 @7070 has 62 MA's), (84, 7232), (87, 7247), (88, 7250), (109, 7331),

Gene: Gisselle_8 Start: 6951, Stop: 7289, Start Num: 45

Candidate Starts for Gisselle_8:

(Start: 45 @6951 has 113 MA's), (54, 6984), (117, 7248),

Gene: Glenn_12 Start: 9820, Stop: 10158, Start Num: 45

Candidate Starts for Glenn_12:

(Start: 45 @9820 has 113 MA's), (87, 10006), (112, 10087), (117, 10117),

Gene: Glotell_9 Start: 7312, Stop: 7650, Start Num: 45

Candidate Starts for Glotell_9:

(7, 7018), (12, 7105), (21, 7189), (38, 7273), (Start: 45 @7312 has 113 MA's), (57, 7357), (60, 7381), (67, 7423), (71, 7438), (83, 7483), (85, 7489), (91, 7522), (109, 7570), (114, 7588),

Gene: GoldHunter_11 Start: 6924, Stop: 7265, Start Num: 47

Candidate Starts for GoldHunter_11:

(Start: 47 @6924 has 62 MA's), (50, 6933), (62, 6993), (84, 7086), (111, 7188),

Gene: Gravel_11 Start: 7898, Stop: 8239, Start Num: 45

Candidate Starts for Gravel_11:

(Start: 45 @7898 has 113 MA's), (Start: 46 @7901 has 45 MA's), (57, 7943), (66, 8006), (67, 8009), (71, 8024), (100, 8132), (109, 8159), (118, 8210),

Gene: GreenHearts_12 Start: 9892, Stop: 10230, Start Num: 45

Candidate Starts for GreenHearts_12:

(Start: 45 @9892 has 113 MA's), (72, 10024), (88, 10081), (117, 10189),

Gene: Greenhouse_12 Start: 9817, Stop: 10155, Start Num: 45

Candidate Starts for Greenhouse_12:

(Start: 45 @9817 has 113 MA's), (72, 9949), (88, 10006), (110, 10075), (112, 10084), (117, 10114),

Gene: HamCheese_9 Start: 7312, Stop: 7650, Start Num: 45

Candidate Starts for HamCheese_9:

(7, 7018), (12, 7105), (21, 7189), (38, 7273), (Start: 45 @7312 has 113 MA's), (57, 7357), (60, 7381), (67, 7423), (71, 7438), (83, 7483), (85, 7489), (91, 7522), (109, 7570),

Gene: HannahPhantana_11 Start: 7906, Stop: 8247, Start Num: 45

Candidate Starts for HannahPhantana_11:

(20, 7774), (33, 7831), (Start: 45 @7906 has 113 MA's), (71, 8032), (75, 8059), (91, 8119), (93, 8122), (100, 8140), (109, 8167), (118, 8218),

Gene: HeadNerd_8 Start: 6907, Stop: 7245, Start Num: 45

Candidate Starts for HeadNerd_8:

(Start: 45 @6907 has 113 MA's), (54, 6940), (117, 7204),

Gene: Herb_8 Start: 6925, Stop: 7263, Start Num: 45

Candidate Starts for Herb_8:

(Start: 45 @6925 has 113 MA's), (61, 6997), (86, 7108), (110, 7183), (112, 7192), (122, 7243),

Gene: Hexbug_12 Start: 7932, Stop: 8270, Start Num: 47
Candidate Starts for Hexbug_12:
(30, 7848), (Start: 47 @7932 has 62 MA's), (68, 8031), (101, 8151), (103, 8154), (120, 8244), (122, 8250),

Gene: HippoPololi_12 Start: 7722, Stop: 8069, Start Num: 47
Candidate Starts for HippoPololi_12:
(36, 7668), (Start: 47 @7722 has 62 MA's), (84, 7884), (87, 7899), (108, 7974), (109, 7983),

Gene: Horseradish_11 Start: 6805, Stop: 7146, Start Num: 47
Candidate Starts for Horseradish_11:
(Start: 47 @6805 has 62 MA's), (73, 6928), (111, 7069), (120, 7120), (122, 7126),

Gene: Huckleberry_8 Start: 6907, Stop: 7245, Start Num: 45
Candidate Starts for Huckleberry_8:
(Start: 45 @6907 has 113 MA's), (54, 6940), (117, 7204),

Gene: HunterDalle_8 Start: 6923, Stop: 7261, Start Num: 45
Candidate Starts for HunterDalle_8:
(Start: 45 @6923 has 113 MA's), (54, 6956), (61, 6995), (76, 7076), (110, 7181), (112, 7190),

Gene: Huntingdon_12 Start: 9803, Stop: 10141, Start Num: 45
Candidate Starts for Huntingdon_12:
(Start: 45 @9803 has 113 MA's), (51, 9827), (88, 9992), (112, 10070), (117, 10100), (122, 10121),

Gene: Immaculata_12 Start: 9814, Stop: 10152, Start Num: 45
Candidate Starts for Immaculata_12:
(Start: 45 @9814 has 113 MA's), (87, 10000), (112, 10081), (117, 10111),

Gene: Jamun_10 Start: 8052, Stop: 8414, Start Num: 45
Candidate Starts for Jamun_10:
(20, 7920), (Start: 45 @8052 has 113 MA's), (Start: 46 @8055 has 45 MA's), (53, 8079), (64, 8148), (65, 8157), (78, 8214), (83, 8244), (87, 8262), (90, 8280), (95, 8289), (113, 8349),

Gene: Jamzy_13 Start: 7256, Stop: 7594, Start Num: 47
Candidate Starts for Jamzy_13:
(30, 7169), (32, 7175), (Start: 47 @7256 has 62 MA's), (88, 7436), (92, 7451), (101, 7475), (104, 7481), (122, 7574),

Gene: JanetJ_10 Start: 7922, Stop: 8254, Start Num: 47
Candidate Starts for JanetJ_10:
(Start: 47 @7922 has 62 MA's), (49, 7931),

Gene: Jerole_11 Start: 7903, Stop: 8244, Start Num: 45
Candidate Starts for Jerole_11:
(20, 7771), (33, 7828), (Start: 45 @7903 has 113 MA's), (71, 8029), (75, 8056), (91, 8116), (93, 8119), (100, 8137), (109, 8164), (118, 8215),

Gene: Joann_12 Start: 9795, Stop: 10133, Start Num: 45
Candidate Starts for Joann_12:
(Start: 45 @9795 has 113 MA's), (72, 9927), (88, 9984), (110, 10053), (112, 10062), (117, 10092),

Gene: Jumboset_12 Start: 9763, Stop: 10101, Start Num: 45

Candidate Starts for Jumboset_12:

(13, 9598), (Start: 45 @9763 has 113 MA's), (87, 9949), (112, 10030), (117, 10060),

Gene: Juno112_9 Start: 7313, Stop: 7651, Start Num: 45

Candidate Starts for Juno112_9:

(7, 7019), (12, 7106), (21, 7190), (38, 7274), (Start: 45 @7313 has 113 MA's), (57, 7358), (60, 7382), (67, 7424), (71, 7439), (83, 7484), (85, 7490), (91, 7523), (109, 7571), (114, 7589),

Gene: KHumphrey_9 Start: 7312, Stop: 7650, Start Num: 45

Candidate Starts for KHumphrey_9:

(7, 7018), (12, 7105), (21, 7189), (38, 7273), (Start: 45 @7312 has 113 MA's), (57, 7357), (60, 7381), (67, 7423), (71, 7438), (83, 7483), (85, 7489), (91, 7522), (109, 7570), (114, 7588),

Gene: Kalizoi_12 Start: 9762, Stop: 10100, Start Num: 45

Candidate Starts for Kalizoi_12:

(Start: 45 @9762 has 113 MA's), (72, 9894), (87, 9948), (112, 10029), (117, 10059),

Gene: KayGee_10 Start: 6701, Stop: 7042, Start Num: 47

Candidate Starts for KayGee_10:

(Start: 47 @6701 has 62 MA's), (56, 6737), (83, 6860), (122, 7022),

Gene: Keiki_8 Start: 6106, Stop: 6453, Start Num: 46

Candidate Starts for Keiki_8:

(28, 6010), (35, 6043), (Start: 46 @6106 has 45 MA's), (54, 6136), (55, 6139), (66, 6211), (70, 6223), (87, 6295), (95, 6316), (108, 6358), (113, 6382), (114, 6385), (115, 6400), (122, 6433),

Gene: KendraB23_11 Start: 7899, Stop: 8240, Start Num: 45

Candidate Starts for KendraB23_11:

(Start: 45 @7899 has 113 MA's), (Start: 46 @7902 has 45 MA's), (57, 7944), (66, 8007), (67, 8010), (71, 8025), (100, 8133), (109, 8160), (118, 8211),

Gene: Kepler_10 Start: 7741, Stop: 8082, Start Num: 45

Candidate Starts for Kepler_10:

(20, 7609), (33, 7666), (Start: 45 @7741 has 113 MA's), (71, 7867), (75, 7894), (91, 7954), (93, 7957), (100, 7975), (109, 8002), (118, 8053),

Gene: KingBob_8 Start: 6925, Stop: 7263, Start Num: 45

Candidate Starts for KingBob_8:

(Start: 45 @6925 has 113 MA's), (61, 6997), (86, 7108), (110, 7183), (112, 7192), (122, 7243),

Gene: Kittykat_8 Start: 6948, Stop: 7286, Start Num: 45

Candidate Starts for Kittykat_8:

(Start: 45 @6948 has 113 MA's), (117, 7245),

Gene: Korra_12 Start: 9768, Stop: 10106, Start Num: 45

Candidate Starts for Korra_12:

(Start: 45 @9768 has 113 MA's), (72, 9900), (87, 9954), (112, 10035), (117, 10065),

Gene: Kubed_8 Start: 6096, Stop: 6443, Start Num: 46

Candidate Starts for Kubed_8:

(26, 5997), (35, 6033), (Start: 46 @6096 has 45 MA's), (54, 6126), (55, 6129), (62, 6171), (66, 6201), (70, 6213), (87, 6285), (108, 6348), (113, 6372), (114, 6375), (115, 6390), (122, 6423),

Gene: Kuleana_10 Start: 7701, Stop: 8042, Start Num: 45

Candidate Starts for Kuleana_10:

(Start: 45 @7701 has 113 MA's), (55, 7734), (66, 7809), (67, 7812), (71, 7827), (74, 7851), (75, 7854), (83, 7875), (91, 7914), (100, 7935), (109, 7962), (114, 7980), (118, 8013),

Gene: Kumotta_10 Start: 7839, Stop: 8171, Start Num: 47

Candidate Starts for Kumotta_10:

(Start: 47 @7839 has 62 MA's), (49, 7848), (52, 7860), (53, 7863), (79, 8004), (82, 8019), (98, 8064), (109, 8088), (122, 8151), (124, 8160),

Gene: Lakshmi_12 Start: 9822, Stop: 10160, Start Num: 45

Candidate Starts for Lakshmi_12:

(Start: 45 @9822 has 113 MA's), (72, 9954), (88, 10011), (117, 10119),

Gene: Lasagna_8 Start: 6905, Stop: 7243, Start Num: 45

Candidate Starts for Lasagna_8:

(Start: 45 @6905 has 113 MA's), (54, 6938), (117, 7202),

Gene: Lauchelly_8 Start: 6091, Stop: 6438, Start Num: 46

Candidate Starts for Lauchelly_8:

(15, 5935), (19, 5947), (28, 5995), (35, 6028), (41, 6067), (Start: 46 @6091 has 45 MA's), (54, 6121), (55, 6124), (66, 6196), (70, 6208), (108, 6343), (113, 6367), (114, 6370), (115, 6385), (122, 6418),

Gene: Lauer_9 Start: 6750, Stop: 7091, Start Num: 47

Candidate Starts for Lauer_9:

(Start: 47 @6750 has 62 MA's), (56, 6786), (83, 6909), (86, 6924),

Gene: Lennox_8 Start: 6905, Stop: 7243, Start Num: 45

Candidate Starts for Lennox_8:

(Start: 45 @6905 has 113 MA's), (54, 6938), (117, 7202),

Gene: Leona_9 Start: 7363, Stop: 7701, Start Num: 45

Candidate Starts for Leona_9:

(21, 7240), (Start: 45 @7363 has 113 MA's), (57, 7408), (60, 7432), (67, 7474), (71, 7489), (83, 7534), (85, 7540), (91, 7573), (109, 7621), (114, 7639),

Gene: Leviosa_8 Start: 6112, Stop: 6459, Start Num: 46

Candidate Starts for Leviosa_8:

(15, 5956), (19, 5968), (28, 6016), (35, 6049), (41, 6088), (Start: 46 @6112 has 45 MA's), (54, 6142), (55, 6145), (59, 6175), (62, 6187), (66, 6217), (70, 6229), (71, 6235), (87, 6301), (95, 6322), (108, 6364), (113, 6388), (114, 6391), (115, 6406), (122, 6439),

Gene: LilBandit_8 Start: 6096, Stop: 6443, Start Num: 46

Candidate Starts for LilBandit_8:

(35, 6033), (Start: 46 @6096 has 45 MA's), (54, 6126), (55, 6129), (62, 6171), (66, 6201), (70, 6213), (87, 6285), (95, 6306), (108, 6348), (114, 6375), (115, 6390), (122, 6423),

Gene: LilStuart_8 Start: 6905, Stop: 7243, Start Num: 45

Candidate Starts for LilStuart_8:

(Start: 45 @6905 has 113 MA's), (54, 6938), (117, 7202),

Gene: Litotes_12 Start: 9790, Stop: 10128, Start Num: 45

Candidate Starts for Litotes_12:

(Start: 45 @9790 has 113 MA's), (54, 9823),

Gene: LittleTokyo_10 Start: 7645, Stop: 7983, Start Num: 45

Candidate Starts for LittleTokyo_10:

(2, 7219), (8, 7372), (33, 7570), (37, 7594), (Start: 45 @7645 has 113 MA's), (57, 7690), (66, 7753), (71, 7771), (75, 7798), (87, 7834), (93, 7858), (109, 7903), (118, 7954), (123, 7969),

Gene: Lucy_8 Start: 6896, Stop: 7234, Start Num: 45

Candidate Starts for Lucy_8:

(Start: 45 @6896 has 113 MA's), (54, 6929), (117, 7193),

Gene: Lunar_11 Start: 7903, Stop: 8244, Start Num: 45

Candidate Starts for Lunar_11:

(20, 7771), (33, 7828), (Start: 45 @7903 has 113 MA's), (71, 8029), (75, 8056), (91, 8116), (93, 8119), (100, 8137), (109, 8164), (118, 8215),

Gene: MAnor_10 Start: 6691, Stop: 7032, Start Num: 47

Candidate Starts for MAnor_10:

(Start: 47 @6691 has 62 MA's), (56, 6727), (83, 6850), (86, 6865), (103, 6913), (122, 7012),

Gene: MEAK_8 Start: 6098, Stop: 6445, Start Num: 46

Candidate Starts for MEAK_8:

(35, 6035), (41, 6074), (Start: 46 @6098 has 45 MA's), (54, 6128), (55, 6131), (66, 6203), (70, 6215), (87, 6287), (95, 6308), (108, 6350), (114, 6377), (115, 6392), (122, 6425),

Gene: MScarn_12 Start: 6901, Stop: 7242, Start Num: 47

Candidate Starts for MScarn_12:

(Start: 47 @6901 has 62 MA's), (73, 7024), (111, 7165), (120, 7216), (122, 7222),

Gene: MaVan_12 Start: 7820, Stop: 8170, Start Num: 47

Candidate Starts for MaVan_12:

(36, 7760), (41, 7796), (Start: 47 @7820 has 62 MA's), (52, 7838), (58, 7862), (62, 7889), (84, 7985), (87, 8000), (96, 8030), (109, 8084), (119, 8141),

Gene: Maja_9 Start: 7424, Stop: 7792, Start Num: 47

Candidate Starts for Maja_9:

(Start: 47 @7424 has 62 MA's), (49, 7433), (82, 7607), (83, 7610), (91, 7649), (93, 7652), (105, 7685), (109, 7709), (122, 7772), (124, 7781),

Gene: Makoto_8 Start: 6905, Stop: 7243, Start Num: 45

Candidate Starts for Makoto_8:

(Start: 45 @6905 has 113 MA's), (54, 6938), (117, 7202),

Gene: MalagasyRose_16 Start: 9681, Stop: 10070, Start Num: 39

Candidate Starts for MalagasyRose_16:

(Start: 39 @9681 has 2 MA's), (61, 9786), (66, 9816), (77, 9864), (80, 9870), (89, 9906), (94, 9924), (102, 9948), (109, 9984), (112, 9996), (121, 10047),

Gene: MamaPearl_8 Start: 6949, Stop: 7287, Start Num: 45

Candidate Starts for MamaPearl_8:

(Start: 45 @6949 has 113 MA's), (54, 6982), (72, 7081), (117, 7246),

Gene: Margaret_13 Start: 7641, Stop: 7979, Start Num: 47

Candidate Starts for Margaret_13:

(29, 7551), (30, 7554), (32, 7560), (Start: 47 @7641 has 62 MA's), (56, 7677), (68, 7740), (101, 7860), (122, 7959),

Gene: MargaretKali_10 Start: 7474, Stop: 7806, Start Num: 47

Candidate Starts for MargaretKali_10:

(Start: 47 @7474 has 62 MA's), (49, 7483), (52, 7495), (79, 7639), (82, 7654), (88, 7678), (98, 7699), (122, 7786), (124, 7795),

Gene: Maria1952_8 Start: 6925, Stop: 7263, Start Num: 45

Candidate Starts for Maria1952_8:

(Start: 45 @6925 has 113 MA's), (61, 6997), (86, 7108), (110, 7183), (112, 7192), (122, 7243),

Gene: Mayweather_11 Start: 7324, Stop: 7665, Start Num: 47

Candidate Starts for Mayweather_11:

(Start: 47 @7324 has 62 MA's), (56, 7360), (83, 7483), (86, 7498), (103, 7546), (122, 7645),

Gene: MeganNoll_12 Start: 9820, Stop: 10158, Start Num: 45

Candidate Starts for MeganNoll_12:

(13, 9655), (Start: 45 @9820 has 113 MA's), (87, 10006), (112, 10087), (117, 10117),

Gene: Melons_11 Start: 7903, Stop: 8244, Start Num: 45

Candidate Starts for Melons_11:

(20, 7771), (33, 7828), (Start: 45 @7903 has 113 MA's), (71, 8029), (75, 8056), (91, 8116), (93, 8119), (100, 8137), (109, 8164), (118, 8215),

Gene: Misaeng_12 Start: 9868, Stop: 10206, Start Num: 45

Candidate Starts for Misaeng_12:

(Start: 45 @9868 has 113 MA's), (88, 10057), (112, 10135), (117, 10165), (122, 10186),

Gene: Moki_8 Start: 6907, Stop: 7245, Start Num: 45

Candidate Starts for Moki_8:

(Start: 45 @6907 has 113 MA's), (54, 6940), (117, 7204),

Gene: Moyashi_8 Start: 6116, Stop: 6463, Start Num: 46

Candidate Starts for Moyashi_8:

(15, 5960), (17, 5966), (18, 5969), (19, 5972), (22, 6011), (28, 6020), (35, 6053), (Start: 46 @6116 has 45 MA's), (54, 6146), (55, 6149), (62, 6191), (66, 6221), (70, 6233), (87, 6305), (95, 6326), (108, 6368), (114, 6395), (115, 6410), (122, 6443),

Gene: MrAK_8 Start: 6125, Stop: 6472, Start Num: 46

Candidate Starts for MrAK_8:

(35, 6062), (Start: 46 @6125 has 45 MA's), (54, 6155), (55, 6158), (62, 6200), (66, 6230), (70, 6242), (87, 6314), (108, 6377), (114, 6404), (115, 6419), (122, 6452),

Gene: MrGloopy_12 Start: 9753, Stop: 10091, Start Num: 45

Candidate Starts for MrGloopy_12:

(Start: 45 @9753 has 113 MA's), (112, 10020), (117, 10050),

Gene: MunkgeeRoachy_10 Start: 6971, Stop: 7312, Start Num: 47

Candidate Starts for MunkgeeRoachy_10:

(Start: 47 @6971 has 62 MA's), (50, 6980), (62, 7040), (84, 7133), (104, 7196), (111, 7235),

Gene: Nancia_8 Start: 6905, Stop: 7243, Start Num: 45
Candidate Starts for Nancia_8:
(Start: 45 @6905 has 113 MA's), (54, 6938), (117, 7202),

Gene: Nergal_14 Start: 10144, Stop: 10533, Start Num: 39
Candidate Starts for Nergal_14:
(5, 9859), (Start: 39 @10144 has 2 MA's), (66, 10279), (68, 10285), (77, 10327), (80, 10333), (109, 10447), (112, 10459),

Gene: Nibbles_12 Start: 7820, Stop: 8170, Start Num: 47
Candidate Starts for Nibbles_12:
(36, 7760), (41, 7796), (Start: 47 @7820 has 62 MA's), (52, 7838), (58, 7862), (62, 7889), (84, 7985), (87, 8000), (96, 8030), (109, 8084), (119, 8141),

Gene: Nina_11 Start: 7957, Stop: 8298, Start Num: 47
Candidate Starts for Nina_11:
(Start: 47 @7957 has 62 MA's), (50, 7966), (62, 8026), (84, 8119), (108, 8203), (111, 8221),

Gene: NoSwimming_11 Start: 9047, Stop: 9415, Start Num: 47
Candidate Starts for NoSwimming_11:
(3, 8651), (14, 8879), (Start: 47 @9047 has 62 MA's), (49, 9056), (93, 9275), (109, 9332),

Gene: Nodigi_12 Start: 7925, Stop: 8263, Start Num: 47
Candidate Starts for Nodigi_12:
(4, 7541), (6, 7628), (30, 7841), (Start: 47 @7925 has 62 MA's), (68, 8024), (101, 8144), (103, 8147), (120, 8237), (122, 8243),

Gene: Nubia_12 Start: 9782, Stop: 10120, Start Num: 45
Candidate Starts for Nubia_12:
(Start: 45 @9782 has 113 MA's), (72, 9914), (88, 9971), (110, 10040), (112, 10049), (117, 10079),

Gene: OMalley_8 Start: 6923, Stop: 7261, Start Num: 45
Candidate Starts for OMalley_8:
(Start: 45 @6923 has 113 MA's), (54, 6956), (61, 6995), (76, 7076), (110, 7181), (112, 7190),

Gene: Orcanus_10 Start: 7692, Stop: 8033, Start Num: 45
Candidate Starts for Orcanus_10:
(Start: 45 @7692 has 113 MA's), (Start: 46 @7695 has 45 MA's), (57, 7737), (66, 7800), (67, 7803), (71, 7818), (100, 7926), (109, 7953), (118, 8004), (120, 8010),

Gene: Orla_12 Start: 7929, Stop: 8267, Start Num: 47
Candidate Starts for Orla_12:
(6, 7632), (30, 7845), (Start: 47 @7929 has 62 MA's), (68, 8028), (101, 8148), (103, 8151), (120, 8241), (122, 8247),

Gene: OtsoOtso_10 Start: 7742, Stop: 8083, Start Num: 45
Candidate Starts for OtsoOtso_10:
(20, 7610), (33, 7667), (Start: 45 @7742 has 113 MA's), (71, 7868), (75, 7895), (91, 7955), (93, 7958), (100, 7976), (109, 8003), (118, 8054),

Gene: OurGirlNessie_8 Start: 6896, Stop: 7234, Start Num: 45
Candidate Starts for OurGirlNessie_8:
(Start: 45 @6896 has 113 MA's), (54, 6929), (117, 7193),

Gene: Ouroboros_8 Start: 6099, Stop: 6446, Start Num: 46

Candidate Starts for Ouroboros_8:

(35, 6036), (40, 6072), (41, 6075), (Start: 46 @6099 has 45 MA's), (54, 6129), (55, 6132), (66, 6204), (70, 6216), (87, 6288), (95, 6309), (108, 6351), (114, 6378), (115, 6393), (122, 6426),

Gene: Oxynfrius_12 Start: 9795, Stop: 10133, Start Num: 45

Candidate Starts for Oxynfrius_12:

(Start: 45 @9795 has 113 MA's), (72, 9927), (88, 9984), (117, 10092),

Gene: P1.1_8 Start: 6099, Stop: 6446, Start Num: 46

Candidate Starts for P1.1_8:

(15, 5943), (17, 5949), (18, 5952), (19, 5955), (22, 5994), (28, 6003), (35, 6036), (Start: 46 @6099 has 45 MA's), (55, 6132), (66, 6204), (70, 6216), (87, 6288), (95, 6309), (108, 6351), (113, 6375), (114, 6378), (115, 6393), (122, 6426),

Gene: P100.1_8 Start: 6089, Stop: 6436, Start Num: 46

Candidate Starts for P100.1_8:

(35, 6026), (Start: 46 @6089 has 45 MA's), (54, 6119), (55, 6122), (62, 6164), (66, 6194), (70, 6206), (87, 6278), (108, 6341), (114, 6368), (115, 6383), (122, 6416),

Gene: P100A_8 Start: 6111, Stop: 6458, Start Num: 46

Candidate Starts for P100A_8:

(31, 6027), (35, 6048), (40, 6084), (41, 6087), (Start: 46 @6111 has 45 MA's), (54, 6141), (55, 6144), (66, 6216), (70, 6228), (73, 6246), (87, 6300), (88, 6303), (108, 6363), (113, 6387), (114, 6390), (115, 6405), (122, 6438),

Gene: P100D_8 Start: 6093, Stop: 6440, Start Num: 46

Candidate Starts for P100D_8:

(35, 6030), (Start: 46 @6093 has 45 MA's), (54, 6123), (55, 6126), (62, 6168), (66, 6198), (70, 6210), (87, 6282), (108, 6345), (113, 6369), (114, 6372), (115, 6387), (122, 6420),

Gene: P101A_8 Start: 6092, Stop: 6439, Start Num: 46

Candidate Starts for P101A_8:

(15, 5936), (17, 5942), (18, 5945), (19, 5948), (22, 5987), (28, 5996), (35, 6029), (Start: 46 @6092 has 45 MA's), (54, 6122), (55, 6125), (62, 6167), (66, 6197), (70, 6209), (87, 6281), (108, 6344), (113, 6368), (114, 6371), (115, 6386), (122, 6419),

Gene: P104A_8 Start: 6094, Stop: 6441, Start Num: 46

Candidate Starts for P104A_8:

(35, 6031), (Start: 46 @6094 has 45 MA's), (54, 6124), (55, 6127), (62, 6169), (66, 6199), (70, 6211), (87, 6283), (108, 6346), (114, 6373), (115, 6388), (122, 6421),

Gene: P104B_8 Start: 6098, Stop: 6445, Start Num: 46

Candidate Starts for P104B_8:

(35, 6035), (Start: 46 @6098 has 45 MA's), (54, 6128), (55, 6131), (66, 6203), (70, 6215), (87, 6287), (95, 6308), (108, 6350), (113, 6374), (114, 6377), (115, 6392), (122, 6425),

Gene: P105_8 Start: 6088, Stop: 6435, Start Num: 46

Candidate Starts for P105_8:

(35, 6025), (Start: 46 @6088 has 45 MA's), (54, 6118), (55, 6121), (62, 6163), (66, 6193), (70, 6205), (87, 6277), (95, 6298), (107, 6337), (108, 6340), (113, 6364), (114, 6367), (115, 6382), (122, 6415),

Gene: P106A_8 Start: 6116, Stop: 6463, Start Num: 46

Candidate Starts for P106A_8:

(15, 5960), (17, 5966), (18, 5969), (19, 5972), (28, 6020), (35, 6053), (Start: 46 @6116 has 45 MA's), (54, 6146), (55, 6149), (62, 6191), (66, 6221), (70, 6233), (87, 6305), (95, 6326), (108, 6368), (114, 6395), (115, 6410), (122, 6443),

Gene: P106C_8 Start: 6116, Stop: 6463, Start Num: 46

Candidate Starts for P106C_8:

(15, 5960), (17, 5966), (18, 5969), (19, 5972), (28, 6020), (35, 6053), (Start: 46 @6116 has 45 MA's), (54, 6146), (55, 6149), (62, 6191), (66, 6221), (70, 6233), (87, 6305), (95, 6326), (108, 6368), (114, 6395), (115, 6410), (122, 6443),

Gene: P106I_8 Start: 6116, Stop: 6463, Start Num: 46

Candidate Starts for P106I_8:

(15, 5960), (17, 5966), (18, 5969), (19, 5972), (28, 6020), (35, 6053), (Start: 46 @6116 has 45 MA's), (54, 6146), (55, 6149), (62, 6191), (66, 6221), (70, 6233), (87, 6305), (95, 6326), (108, 6368), (114, 6395), (115, 6410), (122, 6443),

Gene: P106L_8 Start: 6116, Stop: 6463, Start Num: 46

Candidate Starts for P106L_8:

(15, 5960), (17, 5966), (18, 5969), (19, 5972), (28, 6020), (35, 6053), (Start: 46 @6116 has 45 MA's), (54, 6146), (55, 6149), (62, 6191), (66, 6221), (70, 6233), (87, 6305), (95, 6326), (108, 6368), (114, 6395), (115, 6410), (122, 6443),

Gene: P106M_8 Start: 6116, Stop: 6463, Start Num: 46

Candidate Starts for P106M_8:

(15, 5960), (17, 5966), (18, 5969), (19, 5972), (28, 6020), (35, 6053), (Start: 46 @6116 has 45 MA's), (54, 6146), (55, 6149), (62, 6191), (66, 6221), (70, 6233), (87, 6305), (95, 6326), (108, 6368), (114, 6395), (115, 6410), (122, 6443),

Gene: P107A_8 Start: 6102, Stop: 6449, Start Num: 46

Candidate Starts for P107A_8:

(35, 6039), (41, 6078), (Start: 46 @6102 has 45 MA's), (54, 6132), (55, 6135), (66, 6207), (70, 6219), (73, 6237), (87, 6291), (88, 6294), (95, 6312), (108, 6354), (113, 6378), (114, 6381), (115, 6396), (122, 6429),

Gene: P107C_8 Start: 6098, Stop: 6445, Start Num: 46

Candidate Starts for P107C_8:

(35, 6035), (Start: 46 @6098 has 45 MA's), (54, 6128), (55, 6131), (62, 6173), (66, 6203), (70, 6215), (87, 6287), (95, 6308), (108, 6350), (113, 6374), (114, 6377), (115, 6392), (122, 6425),

Gene: P108C_8 Start: 6102, Stop: 6449, Start Num: 46

Candidate Starts for P108C_8:

(35, 6039), (Start: 46 @6102 has 45 MA's), (54, 6132), (55, 6135), (62, 6177), (70, 6219), (87, 6291), (95, 6312), (108, 6354), (113, 6378), (114, 6381), (115, 6396), (122, 6429),

Gene: P14.4_8 Start: 6093, Stop: 6440, Start Num: 46

Candidate Starts for P14.4_8:

(35, 6030), (Start: 46 @6093 has 45 MA's), (54, 6123), (55, 6126), (62, 6168), (66, 6198), (70, 6210), (87, 6282), (95, 6303), (108, 6345), (114, 6372), (115, 6387), (122, 6420),

Gene: P9.1_8 Start: 6091, Stop: 6438, Start Num: 46

Candidate Starts for P9.1_8:

(Start: 46 @6091 has 45 MA's), (54, 6121), (55, 6124), (62, 6166), (66, 6196), (70, 6208), (87, 6280), (95, 6301), (108, 6343), (113, 6367), (114, 6370), (115, 6385), (122, 6418),

Gene: PA6_8 Start: 6101, Stop: 6448, Start Num: 46

Candidate Starts for PA6_8:

(35, 6038), (40, 6074), (Start: 46 @6101 has 45 MA's), (54, 6131), (55, 6134), (62, 6176), (66, 6206), (70, 6218), (87, 6290), (95, 6311), (107, 6350), (114, 6380), (115, 6395), (122, 6428),

Gene: PAD20_8 Start: 6099, Stop: 6446, Start Num: 46

Candidate Starts for PAD20_8:

(Start: 46 @6099 has 45 MA's), (54, 6129), (55, 6132), (66, 6204), (70, 6216), (87, 6288), (108, 6351), (113, 6375), (114, 6378), (115, 6393), (122, 6426),

Gene: PAS50_8 Start: 6096, Stop: 6443, Start Num: 46

Candidate Starts for PAS50_8:

(35, 6033), (Start: 46 @6096 has 45 MA's), (54, 6126), (55, 6129), (62, 6171), (66, 6201), (70, 6213), (73, 6231), (87, 6285), (95, 6306), (108, 6348), (113, 6372), (114, 6375), (115, 6390), (122, 6423),

Gene: PHL010M04_08 Start: 6091, Stop: 6438, Start Num: 46

Candidate Starts for PHL010M04_08:

(15, 5935), (17, 5941), (19, 5947), (22, 5986), (28, 5995), (35, 6028), (Start: 46 @6091 has 45 MA's), (54, 6121), (55, 6124), (66, 6196), (70, 6208), (73, 6226), (87, 6280), (108, 6343), (113, 6367), (114, 6370), (115, 6385), (122, 6418),

Gene: PHL037M02_08 Start: 6097, Stop: 6444, Start Num: 46

Candidate Starts for PHL037M02_08:

(35, 6034), (Start: 46 @6097 has 45 MA's), (54, 6127), (55, 6130), (59, 6160), (66, 6202), (70, 6214), (87, 6286), (95, 6307), (107, 6346), (108, 6349), (114, 6376), (115, 6391), (122, 6424),

Gene: PHL060L00_08 Start: 6089, Stop: 6436, Start Num: 46

Candidate Starts for PHL060L00_08:

(15, 5933), (17, 5939), (18, 5942), (19, 5945), (22, 5984), (28, 5993), (35, 6026), (Start: 46 @6089 has 45 MA's), (54, 6119), (55, 6122), (62, 6164), (66, 6194), (70, 6206), (87, 6278), (95, 6299), (108, 6341), (113, 6365), (114, 6368), (115, 6383), (122, 6416),

Gene: PHL067M10_08 Start: 6093, Stop: 6440, Start Num: 46

Candidate Starts for PHL067M10_08:

(35, 6030), (Start: 46 @6093 has 45 MA's), (54, 6123), (55, 6126), (62, 6168), (66, 6198), (70, 6210), (87, 6282), (107, 6342), (108, 6345), (114, 6372), (115, 6387), (122, 6420),

Gene: PHL071N05_08 Start: 6095, Stop: 6442, Start Num: 46

Candidate Starts for PHL071N05_08:

(35, 6032), (Start: 46 @6095 has 45 MA's), (54, 6125), (55, 6128), (62, 6170), (70, 6212), (87, 6284), (95, 6305), (108, 6347), (113, 6371), (114, 6374), (115, 6389), (122, 6422),

Gene: PHL111M01_08 Start: 6099, Stop: 6446, Start Num: 46

Candidate Starts for PHL111M01_08:

(35, 6036), (Start: 46 @6099 has 45 MA's), (54, 6129), (55, 6132), (66, 6204), (70, 6216), (87, 6288), (108, 6351), (113, 6375), (114, 6378), (115, 6393), (122, 6426),

Gene: PHL112N00_08 Start: 6099, Stop: 6446, Start Num: 46

Candidate Starts for PHL112N00_08:

(35, 6036), (36, 6039), (Start: 46 @6099 has 45 MA's), (54, 6129), (55, 6132), (66, 6204), (70, 6216), (87, 6288), (95, 6309), (107, 6348), (108, 6351), (114, 6378), (115, 6393), (122, 6426),

Gene: PHL113M01_08 Start: 6099, Stop: 6446, Start Num: 46

Candidate Starts for PHL113M01_08:

(35, 6036), (Start: 46 @6099 has 45 MA's), (54, 6129), (55, 6132), (66, 6204), (70, 6216), (87, 6288), (95, 6309), (108, 6351), (114, 6378), (115, 6393), (122, 6426),

Gene: PHL114L00_08 Start: 6098, Stop: 6445, Start Num: 46

Candidate Starts for PHL114L00_08:

(16, 5945), (18, 5951), (19, 5954), (22, 5993), (23, 5996), (35, 6035), (41, 6074), (Start: 46 @6098 has 45 MA's), (53, 6125), (54, 6128), (55, 6131), (62, 6173), (66, 6203), (70, 6215), (108, 6350), (114, 6377), (115, 6392), (122, 6425),

Gene: PartyCup_12 Start: 9837, Stop: 10175, Start Num: 45

Candidate Starts for PartyCup_12:

(Start: 45 @9837 has 113 MA's), (54, 9870),

Gene: Pelletreau_11 Start: 7898, Stop: 8239, Start Num: 45

Candidate Starts for Pelletreau_11:

(Start: 45 @7898 has 113 MA's), (Start: 46 @7901 has 45 MA's), (57, 7943), (66, 8006), (67, 8009), (71, 8024), (100, 8132), (109, 8159), (118, 8210),

Gene: PhluffyCoco_9 Start: 7312, Stop: 7650, Start Num: 45

Candidate Starts for PhluffyCoco_9:

(7, 7018), (12, 7105), (21, 7189), (38, 7273), (Start: 45 @7312 has 113 MA's), (57, 7357), (60, 7381), (67, 7423), (71, 7438), (83, 7483), (85, 7489), (91, 7522), (109, 7570),

Gene: Pigu_9 Start: 6514, Stop: 6882, Start Num: 47

Candidate Starts for Pigu_9:

(Start: 46 @6511 has 45 MA's), (Start: 47 @6514 has 62 MA's), (49, 6523), (52, 6535), (82, 6694), (99, 6754), (109, 6799), (122, 6862), (124, 6871),

Gene: PinkFriday_8 Start: 6926, Stop: 7264, Start Num: 45

Candidate Starts for PinkFriday_8:

(1, 6494), (9, 6674), (10, 6680), (Start: 45 @6926 has 113 MA's), (61, 6998), (63, 7013), (110, 7184), (122, 7244),

Gene: Pirate_8 Start: 6091, Stop: 6438, Start Num: 46

Candidate Starts for Pirate_8:

(35, 6028), (Start: 46 @6091 has 45 MA's), (54, 6121), (55, 6124), (62, 6166), (70, 6208), (87, 6280), (95, 6301), (108, 6343), (113, 6367), (114, 6370), (115, 6385), (122, 6418),

Gene: PitaDog_8 Start: 6896, Stop: 7234, Start Num: 45

Candidate Starts for PitaDog_8:

(Start: 45 @6896 has 113 MA's), (54, 6929), (117, 7193),

Gene: Polka_10 Start: 7742, Stop: 8083, Start Num: 45

Candidate Starts for Polka_10:

(20, 7610), (33, 7667), (Start: 45 @7742 has 113 MA's), (71, 7868), (75, 7895), (91, 7955), (93, 7958), (100, 7976), (109, 8003), (118, 8054),

Gene: Pons_10 Start: 6703, Stop: 7044, Start Num: 47

Candidate Starts for Pons_10:

(Start: 47 @6703 has 62 MA's), (56, 6739), (83, 6862), (86, 6877), (103, 6925), (122, 7024),

Gene: PotPie_10 Start: 7554, Stop: 7895, Start Num: 47

Candidate Starts for PotPie_10:

(Start: 47 @7554 has 62 MA's), (56, 7590), (83, 7713), (122, 7875),

Gene: Potatoes_12 Start: 9814, Stop: 10152, Start Num: 45

Candidate Starts for Potatoes_12:

(Start: 45 @9814 has 113 MA's), (87, 10000), (112, 10081), (117, 10111),

Gene: PrairieDogTown_15 Start: 8151, Stop: 8474, Start Num: 49

Candidate Starts for PrairieDogTown_15:

(Start: 47 @8142 has 62 MA's), (49, 8151),

Gene: Preamble_8 Start: 6906, Stop: 7244, Start Num: 45

Candidate Starts for Preamble_8:

(1, 6477), (9, 6657), (10, 6663), (Start: 45 @6906 has 113 MA's), (117, 7203),

Gene: Procrass1_8 Start: 6098, Stop: 6445, Start Num: 46

Candidate Starts for Procrass1_8:

(35, 6035), (Start: 46 @6098 has 45 MA's), (54, 6128), (55, 6131), (66, 6203), (70, 6215), (87, 6287), (95, 6308), (108, 6350), (113, 6374), (114, 6377), (115, 6392), (122, 6425),

Gene: PsychoKiller_10 Start: 6923, Stop: 7264, Start Num: 47

Candidate Starts for PsychoKiller_10:

(Start: 47 @6923 has 62 MA's), (50, 6932), (62, 6992), (84, 7085), (111, 7187),

Gene: Pterodactyl_8 Start: 6897, Stop: 7235, Start Num: 45

Candidate Starts for Pterodactyl_8:

(Start: 45 @6897 has 113 MA's), (54, 6930), (117, 7194),

Gene: Pumancara_8 Start: 6925, Stop: 7263, Start Num: 45

Candidate Starts for Pumancara_8:

(1, 6493), (9, 6673), (10, 6679), (Start: 45 @6925 has 113 MA's), (61, 6997), (110, 7183), (122, 7243),

Gene: Quasar_10 Start: 7538, Stop: 7879, Start Num: 47

Candidate Starts for Quasar_10:

(Start: 47 @7538 has 62 MA's), (50, 7547), (62, 7607), (84, 7700), (111, 7802),

Gene: QueenBey_8 Start: 6092, Stop: 6439, Start Num: 46

Candidate Starts for QueenBey_8:

(18, 5945), (19, 5948), (22, 5987), (23, 5990), (28, 5996), (31, 6008), (35, 6029), (41, 6068), (Start: 46 @6092 has 45 MA's), (54, 6122), (55, 6125), (59, 6155), (66, 6197), (70, 6209), (73, 6227), (87, 6281), (108, 6344), (113, 6368), (114, 6371), (115, 6386), (122, 6419),

Gene: RAP15_12 Start: 9820, Stop: 10158, Start Num: 45

Candidate Starts for RAP15_12:

(13, 9655), (Start: 45 @9820 has 113 MA's), (87, 10006), (112, 10087), (117, 10117),

Gene: RanchParmCat_13 Start: 7641, Stop: 7979, Start Num: 47

Candidate Starts for RanchParmCat_13:

(Start: 47 @7641 has 62 MA's), (56, 7677), (68, 7740), (101, 7860), (122, 7959),

Gene: Rattail_9 Start: 7363, Stop: 7701, Start Num: 45

Candidate Starts for Rattail_9:

(Start: 45 @7363 has 113 MA's), (57, 7408), (60, 7432), (67, 7474), (71, 7489), (83, 7534), (85, 7540), (91, 7573), (109, 7621), (114, 7639),

Gene: RcigaStruga_12 Start: 9803, Stop: 10141, Start Num: 45

Candidate Starts for RcigaStruga_12:

(Start: 45 @9803 has 113 MA's), (51, 9827), (88, 9992), (112, 10070), (117, 10100), (122, 10121),

Gene: RedBaron_11 Start: 6968, Stop: 7309, Start Num: 47

Candidate Starts for RedBaron_11:

(Start: 47 @6968 has 62 MA's), (50, 6977), (62, 7037), (84, 7130), (111, 7232),

Gene: RedFox_9 Start: 7312, Stop: 7650, Start Num: 45

Candidate Starts for RedFox_9:

(7, 7018), (12, 7105), (21, 7189), (38, 7273), (Start: 45 @7312 has 113 MA's), (57, 7357), (60, 7381), (67, 7423), (71, 7438), (83, 7483), (85, 7489), (91, 7522), (109, 7570), (114, 7588),

Gene: Renna12_10 Start: 7512, Stop: 7850, Start Num: 45

Candidate Starts for Renna12_10:

(21, 7389), (24, 7413), (Start: 45 @7512 has 113 MA's), (60, 7581), (67, 7623), (71, 7638), (83, 7683), (91, 7722), (93, 7725), (97, 7734), (107, 7758), (109, 7770), (114, 7788),

Gene: Rileysaurus_8 Start: 6087, Stop: 6434, Start Num: 46

Candidate Starts for Rileysaurus_8:

(15, 5931), (19, 5943), (22, 5982), (23, 5985), (28, 5991), (35, 6024), (41, 6063), (Start: 46 @6087 has 45 MA's), (54, 6117), (55, 6120), (66, 6192), (70, 6204), (87, 6276), (108, 6339), (113, 6363), (114, 6366), (115, 6381), (122, 6414),

Gene: Riovina_8 Start: 6923, Stop: 7261, Start Num: 45

Candidate Starts for Riovina_8:

(Start: 45 @6923 has 113 MA's), (54, 6956), (61, 6995), (76, 7076), (110, 7181), (112, 7190),

Gene: Riverdale_12 Start: 9751, Stop: 10089, Start Num: 45

Candidate Starts for Riverdale_12:

(Start: 45 @9751 has 113 MA's), (87, 9937), (112, 10018), (117, 10048),

Gene: Rozby_12 Start: 9751, Stop: 10089, Start Num: 45

Candidate Starts for Rozby_12:

(Start: 45 @9751 has 113 MA's), (87, 9937), (112, 10018), (117, 10048),

Gene: Ruchi_10 Start: 7974, Stop: 8336, Start Num: 45

Candidate Starts for Ruchi_10:

(20, 7842), (Start: 45 @7974 has 113 MA's), (53, 8001), (64, 8070), (65, 8079), (78, 8136), (83, 8166), (87, 8184), (90, 8202), (95, 8211), (113, 8271),

Gene: SKKY_8 Start: 6123, Stop: 6470, Start Num: 46

Candidate Starts for SKKY_8:

(15, 5967), (17, 5973), (18, 5976), (19, 5979), (22, 6018), (28, 6027), (35, 6060), (Start: 46 @6123 has 45 MA's), (54, 6153), (55, 6156), (62, 6198), (66, 6228), (70, 6240), (87, 6312), (95, 6333), (108, 6375), (114, 6402), (115, 6417), (122, 6450),

Gene: Sarge_9 Start: 6912, Stop: 7244, Start Num: 47
Candidate Starts for Sarge_9:
(Start: 47 @6912 has 62 MA's), (49, 6921), (63, 6990), (97, 7134), (98, 7137), (109, 7161), (124, 7233),

Gene: Savage2526_12 Start: 9814, Stop: 10152, Start Num: 45
Candidate Starts for Savage2526_12:
(13, 9649), (Start: 45 @9814 has 113 MA's), (87, 10000), (112, 10081), (117, 10111),

Gene: Scotia_11 Start: 9053, Stop: 9421, Start Num: 47
Candidate Starts for Scotia_11:
(3, 8657), (14, 8885), (Start: 47 @9053 has 62 MA's), (49, 9062), (93, 9281), (109, 9338),

Gene: Scuttle_12 Start: 9820, Stop: 10158, Start Num: 45
Candidate Starts for Scuttle_12:
(13, 9655), (Start: 45 @9820 has 113 MA's), (87, 10006), (112, 10087), (117, 10117),

Gene: Sergei_8 Start: 6925, Stop: 7263, Start Num: 45
Candidate Starts for Sergei_8:
(Start: 45 @6925 has 113 MA's), (61, 6997), (86, 7108), (110, 7183), (112, 7192), (122, 7243),

Gene: SheckWes_9 Start: 6691, Stop: 7032, Start Num: 47
Candidate Starts for SheckWes_9:
(Start: 47 @6691 has 62 MA's), (56, 6727), (68, 6790), (83, 6850), (86, 6865), (103, 6913), (122, 7012),

Gene: Shoya_8 Start: 6548, Stop: 6880, Start Num: 47
Candidate Starts for Shoya_8:
(Start: 47 @6548 has 62 MA's), (49, 6557), (63, 6626), (88, 6752), (97, 6770), (109, 6797), (124, 6869),

Gene: SketchMex_9 Start: 6907, Stop: 7248, Start Num: 47
Candidate Starts for SketchMex_9:
(Start: 47 @6907 has 62 MA's), (73, 7030), (111, 7171), (120, 7222), (122, 7228),

Gene: Socotra_11 Start: 6923, Stop: 7264, Start Num: 47
Candidate Starts for Socotra_11:
(Start: 47 @6923 has 62 MA's), (50, 6932), (62, 6992), (84, 7085), (111, 7187),

Gene: Solid_8 Start: 6099, Stop: 6446, Start Num: 46
Candidate Starts for Solid_8:
(35, 6036), (Start: 46 @6099 has 45 MA's), (54, 6129), (55, 6132), (62, 6174), (66, 6204), (70, 6216),
(87, 6288), (95, 6309), (108, 6351), (113, 6375), (114, 6378), (115, 6393), (122, 6426),

Gene: Sopespian_10 Start: 6923, Stop: 7264, Start Num: 47
Candidate Starts for Sopespian_10:
(Start: 47 @6923 has 62 MA's), (50, 6932), (62, 6992), (84, 7085), (111, 7187),

Gene: Spartoi_8 Start: 6006, Stop: 6344, Start Num: 45
Candidate Starts for Spartoi_8:
(Start: 45 @6006 has 113 MA's), (48, 6015), (53, 6036), (69, 6117), (84, 6174),

Gene: Starburst_11 Start: 6923, Stop: 7264, Start Num: 47
Candidate Starts for Starburst_11:
(Start: 47 @6923 has 62 MA's), (50, 6932), (62, 6992), (84, 7085), (111, 7187),

Gene: SteamedHams_12 Start: 6942, Stop: 7283, Start Num: 47
Candidate Starts for SteamedHams_12:
(Start: 47 @6942 has 62 MA's), (85, 7107), (120, 7257), (122, 7263),

Gene: Stormborn_8 Start: 6095, Stop: 6442, Start Num: 46
Candidate Starts for Stormborn_8:
(35, 6032), (Start: 46 @6095 has 45 MA's), (54, 6125), (55, 6128), (66, 6200), (70, 6212), (87, 6284),
(95, 6305), (108, 6347), (113, 6371), (114, 6374), (115, 6389), (122, 6422),

Gene: StuartMinion_9 Start: 7338, Stop: 7676, Start Num: 45
Candidate Starts for StuartMinion_9:
(21, 7215), (33, 7263), (Start: 45 @7338 has 113 MA's), (60, 7407), (66, 7446), (67, 7449), (71, 7464),
(91, 7548), (109, 7596), (123, 7662),

Gene: SummitAcademy_9 Start: 6769, Stop: 7110, Start Num: 47
Candidate Starts for SummitAcademy_9:
(Start: 47 @6769 has 62 MA's), (56, 6805), (83, 6928), (122, 7090),

Gene: Supakev_8 Start: 6925, Stop: 7263, Start Num: 45
Candidate Starts for Supakev_8:
(1, 6493), (9, 6673), (10, 6679), (Start: 45 @6925 has 113 MA's), (61, 6997), (110, 7183), (122, 7243),

Gene: Supernova_8 Start: 6091, Stop: 6438, Start Num: 46
Candidate Starts for Supernova_8:
(35, 6028), (Start: 46 @6091 has 45 MA's), (54, 6121), (55, 6124), (62, 6166), (66, 6196), (70, 6208),
(87, 6280), (95, 6301), (108, 6343), (113, 6367), (114, 6370), (115, 6385), (122, 6418),

Gene: Suppi_12 Start: 9837, Stop: 10175, Start Num: 45
Candidate Starts for Suppi_12:
(Start: 45 @9837 has 113 MA's), (54, 9870),

Gene: Survivors_12 Start: 7674, Stop: 8024, Start Num: 47
Candidate Starts for Survivors_12:
(36, 7614), (41, 7650), (Start: 47 @7674 has 62 MA's), (52, 7692), (58, 7716), (62, 7743), (84, 7839),
(87, 7854), (96, 7884), (109, 7938), (119, 7995),

Gene: SweatNTears_12 Start: 7427, Stop: 7768, Start Num: 47
Candidate Starts for SweatNTears_12:
(Start: 47 @7427 has 62 MA's), (73, 7550), (111, 7691), (120, 7742), (122, 7748),

Gene: TMaxx_11 Start: 7008, Stop: 7340, Start Num: 47
Candidate Starts for TMaxx_11:
(Start: 47 @7008 has 62 MA's), (108, 7248),

Gene: TattModd_12 Start: 9814, Stop: 10152, Start Num: 45
Candidate Starts for TattModd_12:
(Start: 45 @9814 has 113 MA's), (87, 10000), (112, 10081), (117, 10111),

Gene: TaylorSipht_10 Start: 7777, Stop: 8118, Start Num: 45
Candidate Starts for TaylorSipht_10:
(9, 7525), (11, 7570), (27, 7684), (Start: 45 @7777 has 113 MA's), (Start: 46 @7780 has 45 MA's), (71,
7903), (75, 7930), (81, 7945), (100, 8011), (109, 8038), (113, 8053), (118, 8089),

Gene: Temper16_8 Start: 6925, Stop: 7263, Start Num: 45

Candidate Starts for Temper16_8:

(Start: 45 @6925 has 113 MA's), (61, 6997), (86, 7108), (110, 7183), (112, 7192), (122, 7243),

Gene: Toad24_11 Start: 7899, Stop: 8240, Start Num: 45

Candidate Starts for Toad24_11:

(Start: 45 @7899 has 113 MA's), (Start: 46 @7902 has 45 MA's), (57, 7944), (66, 8007), (67, 8010), (71, 8025), (100, 8133), (109, 8160), (118, 8211),

Gene: Tolls_12 Start: 6945, Stop: 7286, Start Num: 47

Candidate Starts for Tolls_12:

(Start: 47 @6945 has 62 MA's), (85, 7110), (120, 7260), (122, 7266),

Gene: Troje_10 Start: 6901, Stop: 7242, Start Num: 47

Candidate Starts for Troje_10:

(Start: 47 @6901 has 62 MA's), (73, 7024), (111, 7165), (120, 7216), (122, 7222),

Gene: Typhonomachy_11 Start: 6923, Stop: 7264, Start Num: 47

Candidate Starts for Typhonomachy_11:

(25, 6824), (27, 6827), (29, 6833), (Start: 47 @6923 has 62 MA's), (50, 6932), (62, 6992), (84, 7085), (111, 7187),

Gene: Urla_8 Start: 6952, Stop: 7290, Start Num: 45

Candidate Starts for Urla_8:

(Start: 45 @6952 has 113 MA's), (58, 7003), (67, 7060), (117, 7249),

Gene: Vallejo_12 Start: 9752, Stop: 10090, Start Num: 45

Candidate Starts for Vallejo_12:

(Start: 45 @9752 has 113 MA's), (87, 9938), (117, 10049),

Gene: Vine_11 Start: 7698, Stop: 8039, Start Num: 47

Candidate Starts for Vine_11:

(Start: 47 @7698 has 62 MA's), (56, 7734), (83, 7857), (86, 7872), (122, 8019),

Gene: Vulpecula_10 Start: 8050, Stop: 8412, Start Num: 45

Candidate Starts for Vulpecula_10:

(20, 7918), (Start: 45 @8050 has 113 MA's), (Start: 46 @8053 has 45 MA's), (53, 8077), (64, 8146), (65, 8155), (75, 8203), (83, 8242), (90, 8278), (95, 8287), (113, 8347),

Gene: Vulture_8 Start: 6923, Stop: 7261, Start Num: 45

Candidate Starts for Vulture_8:

(Start: 45 @6923 has 113 MA's), (54, 6956), (61, 6995), (76, 7076), (110, 7181), (112, 7190),

Gene: Wawa_12 Start: 9789, Stop: 10127, Start Num: 45

Candidate Starts for Wawa_12:

(Start: 45 @9789 has 113 MA's), (72, 9921), (87, 9975), (112, 10056), (117, 10086),

Gene: Wayne_12 Start: 9883, Stop: 10221, Start Num: 45

Candidate Starts for Wayne_12:

(Start: 45 @9883 has 113 MA's), (54, 9916),

Gene: Westrich_11 Start: 7887, Stop: 8228, Start Num: 45

Candidate Starts for Westrich_11:

(Start: 45 @7887 has 113 MA's), (Start: 46 @7890 has 45 MA's), (57, 7932), (66, 7995), (67, 7998), (71, 8013), (100, 8121), (109, 8148), (118, 8199),

Gene: Wizzo_8 Start: 6103, Stop: 6450, Start Num: 46

Candidate Starts for Wizzo_8:

(35, 6040), (Start: 46 @6103 has 45 MA's), (54, 6133), (55, 6136), (62, 6178), (66, 6208), (70, 6220), (87, 6292), (95, 6313), (108, 6355), (113, 6379), (114, 6382), (115, 6397), (122, 6430),

Gene: WonderBoy_8 Start: 6905, Stop: 7243, Start Num: 45

Candidate Starts for WonderBoy_8:

(Start: 45 @6905 has 113 MA's), (54, 6938), (67, 7013), (117, 7202),

Gene: Yakult_11 Start: 6834, Stop: 7175, Start Num: 47

Candidate Starts for Yakult_11:

(29, 6744), (30, 6747), (32, 6753), (Start: 47 @6834 has 62 MA's), (57, 6876), (62, 6906), (68, 6936), (101, 7056), (103, 7059), (122, 7155),

Gene: Yarn_9 Start: 6935, Stop: 7276, Start Num: 47

Candidate Starts for Yarn_9:

(Start: 47 @6935 has 62 MA's), (85, 7100), (120, 7250), (122, 7256),

Gene: Yucky_12 Start: 7558, Stop: 7899, Start Num: 47

Candidate Starts for Yucky_12:

(Start: 47 @7558 has 62 MA's), (56, 7594), (83, 7717), (122, 7879),

Gene: Yummy_11 Start: 6805, Stop: 7146, Start Num: 47

Candidate Starts for Yummy_11:

(Start: 47 @6805 has 62 MA's), (73, 6928), (111, 7069), (120, 7120), (122, 7126),

Gene: Zareef_14 Start: 7797, Stop: 8171, Start Num: 41

Candidate Starts for Zareef_14:

(36, 7761), (41, 7797), (Start: 47 @7821 has 62 MA's), (52, 7839), (58, 7863), (62, 7890), (84, 7986), (87, 8001), (96, 8031), (109, 8085), (119, 8142),

Gene: Zorro_12 Start: 9768, Stop: 10106, Start Num: 45

Candidate Starts for Zorro_12:

(Start: 45 @9768 has 113 MA's), (72, 9900), (87, 9954), (112, 10035), (117, 10065),