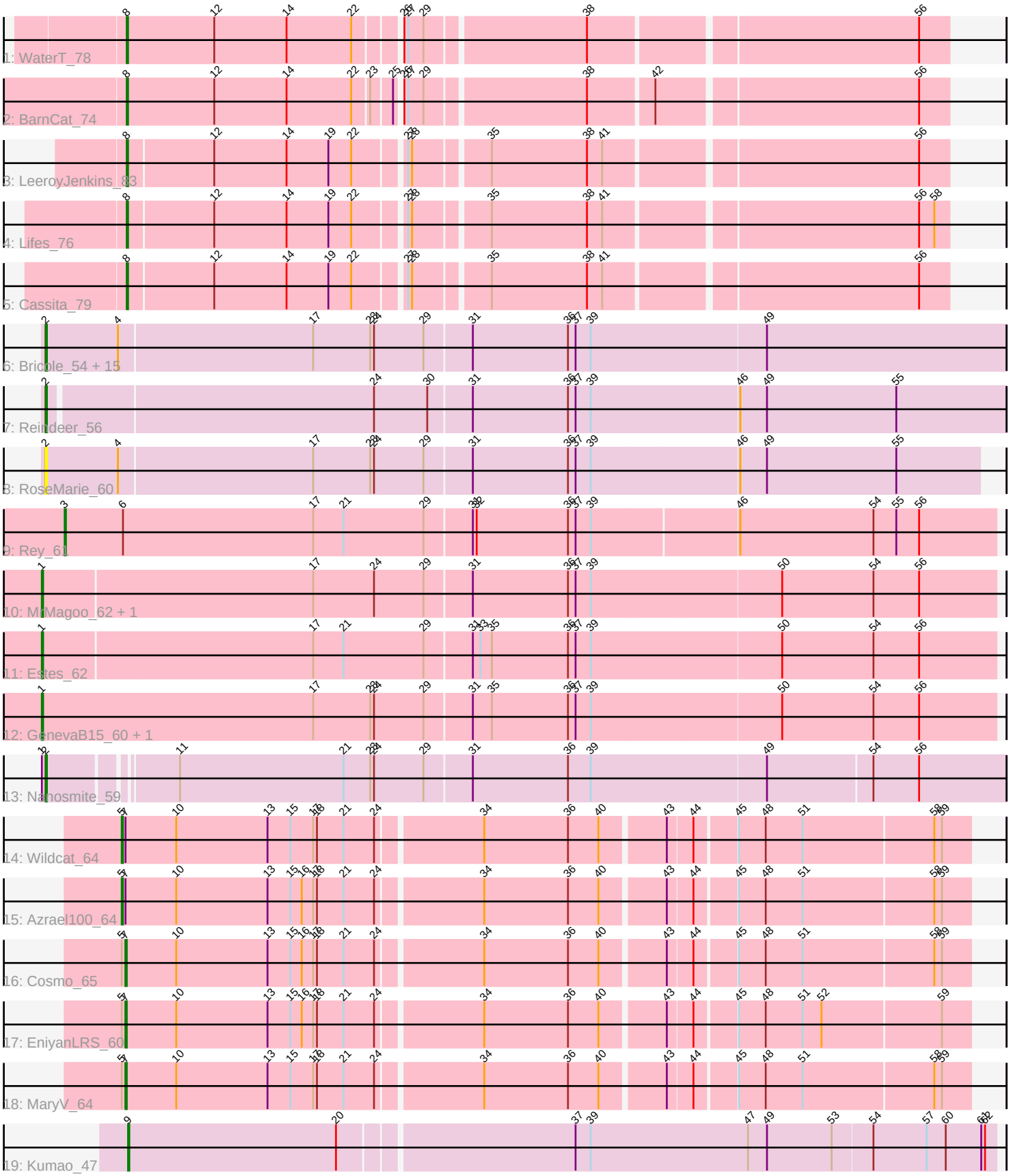
Pham 347840


1: WaterT_78
2: BarnCat_74
3: LeeroyJenkins_83
4: Lifes_76
5: Cassita_79
6: Bricole_54 + 15
7: Reindeer_56
8: RoseMarie_60
9: Rey_61
10: MaMagoo_62 + 1
11: Estes_62
12: GenevaB15_60 + 1
13: Nanosmite_59
14: Wildcat_64
15: Azrael100_64
16: Cosmo_65
17: EniyanLRS_60
18: MaryV_64
19: Kumao_47

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 347840 Report

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

Pham number 347840 has 36 members, 3 are drafts.

Phages represented in each track:
• Track 1 : WaterT_78
• Track 2 : BarnCat_74
• Track 3 : LeeroyJenkins_83
• Track 4 : Lifes_76
• Track 5 : Cassita_79
• Track 6 : Bricole_54, Dulcita_55, Glaske16_55, Bongo_54, LilhomieP_53, Diminimus_55, IPhane7_54, Auspice_54, Skinny_55, FreakyGoo_55, SlimJimmy_53, KleverKiS_55, TpudiCK_56, PegLeg_54, Izel_55, TyDawg_54
• Track 7 : Reindeer_56
• Track 8 : RoseMarie_60
• Track 9 : Rey_61
• Track 10 : MrMagoo_62, GardenSalsa_62
• Track 11 : Estes_62
• Track 12 : GenevaB15_60, Aziz_60
• Track 13 : Nanosmite_59
• Track 14 : Wildcat_64
• Track 15 : Azrael100_64
• Track 16 : Cosmo_65
• Track 17 : EniyanLRS_60
• Track 18 : MaryV_64
• Track 19 : Kumao_47

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

The start number called the most often in the published annotations is 2, it was called in 16 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Auspice_54, Bongo_54, Bricole_54, Diminimus_55, Dulcita_55, FreakyGoo_55, Glaske16_55, IPhane7_54, Izel_55, KleverKiS_55, LilhomieP_53, Nanosmite_59, PegLeg_54, Reindeer_56, RoseMarie_60, Skinny_55, SlimJimmy_53, TpudiCK_56, TyDawg_54,

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

•

Genes that do not have the "Most Annotated" start:
• Aziz_60, Azrael100_64, BarnCat_74, Cassita_79, Cosmo_65, EniyanLRS_60, Estes_62, GardenSalsa_62, GenevaB15_60, Kumao_47, LeeroyJenkins_83, Lifes_76, MaryV_64, MrMagoo_62, Rey_61, WaterT_78, Wildcat_64,

Summary by start number:

Start 1:
• Found in 6 of 36 (16.7%) of genes in pham
• Manual Annotations of this start: 5 of 33
• Called 83.3% of time when present
• Phage (with cluster) where this start called: Aziz_60 (M2), Estes_62 (M2), GardenSalsa_62 (M2), GenevaB15_60 (M2), MrMagoo_62 (M2),

Start 2:
• Found in 19 of 36 (52.8%) of genes in pham
• Manual Annotations of this start: 16 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Auspice_54 (M1), Bongo_54 (M1), Bricole_54 (M1), Diminimus_55 (M1), Dulcita_55 (M1), FreakyGoo_55 (M1), Glaske16_55 (M1), IPhane7_54 (M1), Izel_55 (M1), KleverKiS_55 (M1), LilhomieP_53 (M1), Nanosmite_59 (M3), PegLeg_54 (M1), Reindeer_56 (M1), RoseMarie_60 (M1), Skinny_55 (M1), SlimJimmy_53 (M1), TpudiCK_56 (M1), TyDawg_54 (M1),

Start 3:
• Found in 1 of 36 (2.8%) of genes in pham
• Manual Annotations of this start: 1 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Rey_61 (M2),

Start 5:
• Found in 5 of 36 (13.9%) of genes in pham
• Manual Annotations of this start: 2 of 33
• Called 40.0% of time when present
• Phage (with cluster) where this start called: Azrael100_64 (V), Wildcat_64 (V),

Start 7:
• Found in 5 of 36 (13.9%) of genes in pham
• Manual Annotations of this start: 3 of 33
• Called 60.0% of time when present
• Phage (with cluster) where this start called: Cosmo_65 (V), EniyanLRS_60 (V), MaryV_64 (V),

Start 8:
• Found in 5 of 36 (13.9%) of genes in pham
• Manual Annotations of this start: 5 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BarnCat_74 (GB), Cassita_79 (GB), LeeroyJenkins_83 (GB), Lifes_76 (GB), WaterT_78 (GB),

Start 9:
• Found in 1 of 36 (2.8%) of genes in pham
• Manual Annotations of this start: 1 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kumao_47 (singleton),

Summary by clusters:

There are 6 clusters represented in this pham: singleton, V, M1, GB, M3, M2,

Info for manual annotations of cluster GB:
•Start number 8 was manually annotated 5 times for cluster GB.

Info for manual annotations of cluster M1:
•Start number 2 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M2:
•Start number 1 was manually annotated 5 times for cluster M2.
•Start number 3 was manually annotated 1 time for cluster M2.

Info for manual annotations of cluster M3:
•Start number 2 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster V:
•Start number 5 was manually annotated 2 times for cluster V.
•Start number 7 was manually annotated 3 times for cluster V.

Gene Information:

Gene: Auspice_54 Start: 38464, Stop: 39210, Start Num: 2
Candidate Starts for Auspice_54:
(Start: 2 @38464 has 16 MA's), (4, 38521), (17, 38671), (23, 38716), (24, 38719), (29, 38758), (31, 38794), (36, 38869), (37, 38875), (39, 38887), (49, 39022),

Gene: Aziz_60 Start: 40496, Stop: 41239, Start Num: 1
Candidate Starts for Aziz_60:
(Start: 1 @40496 has 5 MA's), (17, 40709), (23, 40754), (24, 40757), (29, 40796), (31, 40832), (35, 40847), (36, 40907), (37, 40913), (39, 40925), (50, 41072), (54, 41144), (56, 41180),

Gene: Azrael100_64 Start: 43489, Stop: 44124, Start Num: 5
Candidate Starts for Azrael100_64:
(Start: 5 @43489 has 2 MA's), (Start: 7 @43492 has 3 MA's), (10, 43531), (13, 43603), (15, 43621), (16, 43630), (17, 43639), (18, 43642), (21, 43663), (24, 43687), (34, 43765), (36, 43831), (40, 43855), (43, 43903), (44, 43921), (45, 43951), (48, 43972), (51, 43999), (58, 44098), (59, 44104),

Gene: BarnCat_74 Start: 44719, Stop: 44108, Start Num: 8
Candidate Starts for BarnCat_74:
(Start: 8 @44719 has 5 MA's), (12, 44650), (14, 44593), (22, 44542), (23, 44530), (25, 44515), (26, 44512), (27, 44509), (29, 44497), (38, 44377), (42, 44329), (56, 44131),

Gene: Bongo_54 Start: 38468, Stop: 39214, Start Num: 2

Candidate Starts for Bongo_54:
(Start: 2 @38468 has 16 MA's), (4, 38525), (17, 38675), (23, 38720), (24, 38723), (29, 38762), (31, 38798), (36, 38873), (37, 38879), (39, 38891), (49, 39026),

Gene: Bricole_54 Start: 38450, Stop: 39196, Start Num: 2
Candidate Starts for Bricole_54:
(Start: 2 @38450 has 16 MA's), (4, 38507), (17, 38657), (23, 38702), (24, 38705), (29, 38744), (31, 38780), (36, 38855), (37, 38861), (39, 38873), (49, 39008),

Gene: Cassita_79 Start: 45743, Stop: 45132, Start Num: 8
Candidate Starts for Cassita_79:
(Start: 8 @45743 has 5 MA's), (12, 45677), (14, 45620), (19, 45587), (22, 45569), (27, 45533), (28, 45530), (35, 45476), (38, 45401), (41, 45389), (56, 45155),

Gene: Cosmo_65 Start: 43493, Stop: 44125, Start Num: 7
Candidate Starts for Cosmo_65:
(Start: 5 @43490 has 2 MA's), (Start: 7 @43493 has 3 MA's), (10, 43532), (13, 43604), (15, 43622), (16, 43631), (17, 43640), (18, 43643), (21, 43664), (24, 43688), (34, 43766), (36, 43832), (40, 43856), (43, 43904), (44, 43922), (45, 43952), (48, 43973), (51, 44000), (58, 44099), (59, 44105),

Gene: Diminimus_55 Start: 38463, Stop: 39209, Start Num: 2
Candidate Starts for Diminimus_55:
(Start: 2 @38463 has 16 MA's), (4, 38520), (17, 38670), (23, 38715), (24, 38718), (29, 38757), (31, 38793), (36, 38868), (37, 38874), (39, 38886), (49, 39021),

Gene: Dulcita_55 Start: 38464, Stop: 39210, Start Num: 2
Candidate Starts for Dulcita_55:
(Start: 2 @38464 has 16 MA's), (4, 38521), (17, 38671), (23, 38716), (24, 38719), (29, 38758), (31, 38794), (36, 38869), (37, 38875), (39, 38887), (49, 39022),

Gene: EniyanLRS_60 Start: 43027, Stop: 43659, Start Num: 7
Candidate Starts for EniyanLRS_60:
(Start: 5 @43024 has 2 MA's), (Start: 7 @43027 has 3 MA's), (10, 43066), (13, 43138), (15, 43156), (16, 43165), (17, 43174), (18, 43177), (21, 43198), (24, 43222), (34, 43300), (36, 43366), (40, 43390), (43, 43438), (44, 43456), (45, 43486), (48, 43507), (51, 43534), (52, 43549), (59, 43639),

Gene: Estes_62 Start: 40753, Stop: 41493, Start Num: 1
Candidate Starts for Estes_62:
(Start: 1 @40753 has 5 MA's), (17, 40963), (21, 40987), (29, 41050), (31, 41086), (33, 41092), (35, 41101), (36, 41161), (37, 41167), (39, 41179), (50, 41326), (54, 41398), (56, 41434),

Gene: FreakyGoo_55 Start: 38464, Stop: 39210, Start Num: 2
Candidate Starts for FreakyGoo_55:
(Start: 2 @38464 has 16 MA's), (4, 38521), (17, 38671), (23, 38716), (24, 38719), (29, 38758), (31, 38794), (36, 38869), (37, 38875), (39, 38887), (49, 39022),

Gene: GardenSalsa_62 Start: 40903, Stop: 41643, Start Num: 1
Candidate Starts for GardenSalsa_62:
(Start: 1 @40903 has 5 MA's), (17, 41113), (24, 41161), (29, 41200), (31, 41236), (36, 41311), (37, 41317), (39, 41329), (50, 41476), (54, 41548), (56, 41584),

Gene: GenevaB15_60 Start: 40496, Stop: 41239, Start Num: 1
Candidate Starts for GenevaB15_60:

(Start: 1 @40496 has 5 MA's), (17, 40709), (23, 40754), (24, 40757), (29, 40796), (31, 40832), (35, 40847), (36, 40907), (37, 40913), (39, 40925), (50, 41072), (54, 41144), (56, 41180),

Gene: Glaske16_55 Start: 38463, Stop: 39209, Start Num: 2
Candidate Starts for Glaske16_55:
(Start: 2 @38463 has 16 MA's), (4, 38520), (17, 38670), (23, 38715), (24, 38718), (29, 38757), (31, 38793), (36, 38868), (37, 38874), (39, 38886), (49, 39021),

Gene: IPhane7_54 Start: 38468, Stop: 39214, Start Num: 2
Candidate Starts for IPhane7_54:
(Start: 2 @38468 has 16 MA's), (4, 38525), (17, 38675), (23, 38720), (24, 38723), (29, 38762), (31, 38798), (36, 38873), (37, 38879), (39, 38891), (49, 39026),

Gene: Izel_55 Start: 38463, Stop: 39209, Start Num: 2
Candidate Starts for Izel_55:
(Start: 2 @38463 has 16 MA's), (4, 38520), (17, 38670), (23, 38715), (24, 38718), (29, 38757), (31, 38793), (36, 38868), (37, 38874), (39, 38886), (49, 39021),

Gene: KleverKiS_55 Start: 38444, Stop: 39190, Start Num: 2
Candidate Starts for KleverKiS_55:
(Start: 2 @38444 has 16 MA's), (4, 38501), (17, 38651), (23, 38696), (24, 38699), (29, 38738), (31, 38774), (36, 38849), (37, 38855), (39, 38867), (49, 39002),

Gene: Kumao_47 Start: 37947, Stop: 38612, Start Num: 9
Candidate Starts for Kumao_47:
(Start: 9 @37947 has 1 MA's), (20, 38109), (37, 38286), (39, 38298), (47, 38421), (49, 38436), (53, 38487), (54, 38517), (57, 38559), (60, 38574), (61, 38601), (62, 38604),

Gene: LeeroyJenkins_83 Start: 46836, Stop: 46225, Start Num: 8
Candidate Starts for LeeroyJenkins_83:
(Start: 8 @46836 has 5 MA's), (12, 46770), (14, 46713), (19, 46680), (22, 46662), (27, 46626), (28, 46623), (35, 46569), (38, 46494), (41, 46482), (56, 46248),

Gene: Lifes_76 Start: 43663, Stop: 43052, Start Num: 8
Candidate Starts for Lifes_76:
(Start: 8 @43663 has 5 MA's), (12, 43597), (14, 43540), (19, 43507), (22, 43489), (27, 43453), (28, 43450), (35, 43396), (38, 43321), (41, 43309), (56, 43075), (58, 43063),

Gene: LilhomieP_53 Start: 38468, Stop: 39214, Start Num: 2
Candidate Starts for LilhomieP_53:
(Start: 2 @38468 has 16 MA's), (4, 38525), (17, 38675), (23, 38720), (24, 38723), (29, 38762), (31, 38798), (36, 38873), (37, 38879), (39, 38891), (49, 39026),

Gene: MaryV_64 Start: 43314, Stop: 43946, Start Num: 7
Candidate Starts for MaryV_64:
(Start: 5 @43311 has 2 MA's), (Start: 7 @43314 has 3 MA's), (10, 43353), (13, 43425), (15, 43443), (17, 43461), (18, 43464), (21, 43485), (24, 43509), (34, 43587), (36, 43653), (40, 43677), (43, 43725), (44, 43743), (45, 43773), (48, 43794), (51, 43821), (58, 43920), (59, 43926),

Gene: MrMagoo_62 Start: 40903, Stop: 41643, Start Num: 1
Candidate Starts for MrMagoo_62:
(Start: 1 @40903 has 5 MA's), (17, 41113), (24, 41161), (29, 41200), (31, 41236), (36, 41311), (37, 41317), (39, 41329), (50, 41476), (54, 41548), (56, 41584),

Gene: Nanosmite_59 Start: 40129, Stop: 40860, Start Num: 2
Candidate Starts for Nanosmite_59:
(Start: 1 @40126 has 5 MA's), (Start: 2 @40129 has 16 MA's), (11, 40219), (21, 40348), (23, 40369), (24, 40372), (29, 40411), (31, 40447), (36, 40522), (39, 40540), (49, 40675), (54, 40756), (56, 40792),

Gene: PegLeg_54 Start: 38467, Stop: 39213, Start Num: 2
Candidate Starts for PegLeg_54:
(Start: 2 @38467 has 16 MA's), (4, 38524), (17, 38674), (23, 38719), (24, 38722), (29, 38761), (31, 38797), (36, 38872), (37, 38878), (39, 38890), (49, 39025),

Gene: Reindeer_56 Start: 39670, Stop: 40410, Start Num: 2
Candidate Starts for Reindeer_56:
(Start: 2 @39670 has 16 MA's), (24, 39919), (30, 39961), (31, 39994), (36, 40069), (37, 40075), (39, 40087), (46, 40201), (49, 40222), (55, 40324),

Gene: Rey_61 Start: 40778, Stop: 41500, Start Num: 3
Candidate Starts for Rey_61:
(Start: 3 @40778 has 1 MA's), (6, 40823), (17, 40973), (21, 40997), (29, 41060), (31, 41096), (32, 41099), (36, 41171), (37, 41177), (39, 41189), (46, 41300), (54, 41405), (55, 41423), (56, 41441),

Gene: RoseMarie_60 Start: 42108, Stop: 42833, Start Num: 2
Candidate Starts for RoseMarie_60:
(Start: 2 @42108 has 16 MA's), (4, 42165), (17, 42315), (23, 42360), (24, 42363), (29, 42402), (31, 42438), (36, 42513), (37, 42519), (39, 42531), (46, 42645), (49, 42666), (55, 42768),

Gene: Skinny_55 Start: 38897, Stop: 39643, Start Num: 2
Candidate Starts for Skinny_55:
(Start: 2 @38897 has 16 MA's), (4, 38954), (17, 39104), (23, 39149), (24, 39152), (29, 39191), (31, 39227), (36, 39302), (37, 39308), (39, 39320), (49, 39455),

Gene: SlimJimmy_53 Start: 38451, Stop: 39197, Start Num: 2
Candidate Starts for SlimJimmy_53:
(Start: 2 @38451 has 16 MA's), (4, 38508), (17, 38658), (23, 38703), (24, 38706), (29, 38745), (31, 38781), (36, 38856), (37, 38862), (39, 38874), (49, 39009),

Gene: TpudiCK_56 Start: 38467, Stop: 39213, Start Num: 2
Candidate Starts for TpudiCK_56:
(Start: 2 @38467 has 16 MA's), (4, 38524), (17, 38674), (23, 38719), (24, 38722), (29, 38761), (31, 38797), (36, 38872), (37, 38878), (39, 38890), (49, 39025),

Gene: TyDawg_54 Start: 38468, Stop: 39214, Start Num: 2
Candidate Starts for TyDawg_54:
(Start: 2 @38468 has 16 MA's), (4, 38525), (17, 38675), (23, 38720), (24, 38723), (29, 38762), (31, 38798), (36, 38873), (37, 38879), (39, 38891), (49, 39026),

Gene: WaterT_78 Start: 45315, Stop: 44704, Start Num: 8
Candidate Starts for WaterT_78:
(Start: 8 @45315 has 5 MA's), (12, 45246), (14, 45189), (22, 45138), (26, 45108), (27, 45105), (29, 45093), (38, 44973), (56, 44727),

Gene: Wildcat_64 Start: 43321, Stop: 43956, Start Num: 5
Candidate Starts for Wildcat_64:

(Start: 5 @43321 has 2 MA's), (Start: 7 @43324 has 3 MA's), (10, 43363), (13, 43435), (15, 43453), (17, 43471), (18, 43474), (21, 43495), (24, 43519), (34, 43597), (36, 43663), (40, 43687), (43, 43735), (44, 43753), (45, 43783), (48, 43804), (51, 43831), (58, 43930), (59, 43936),