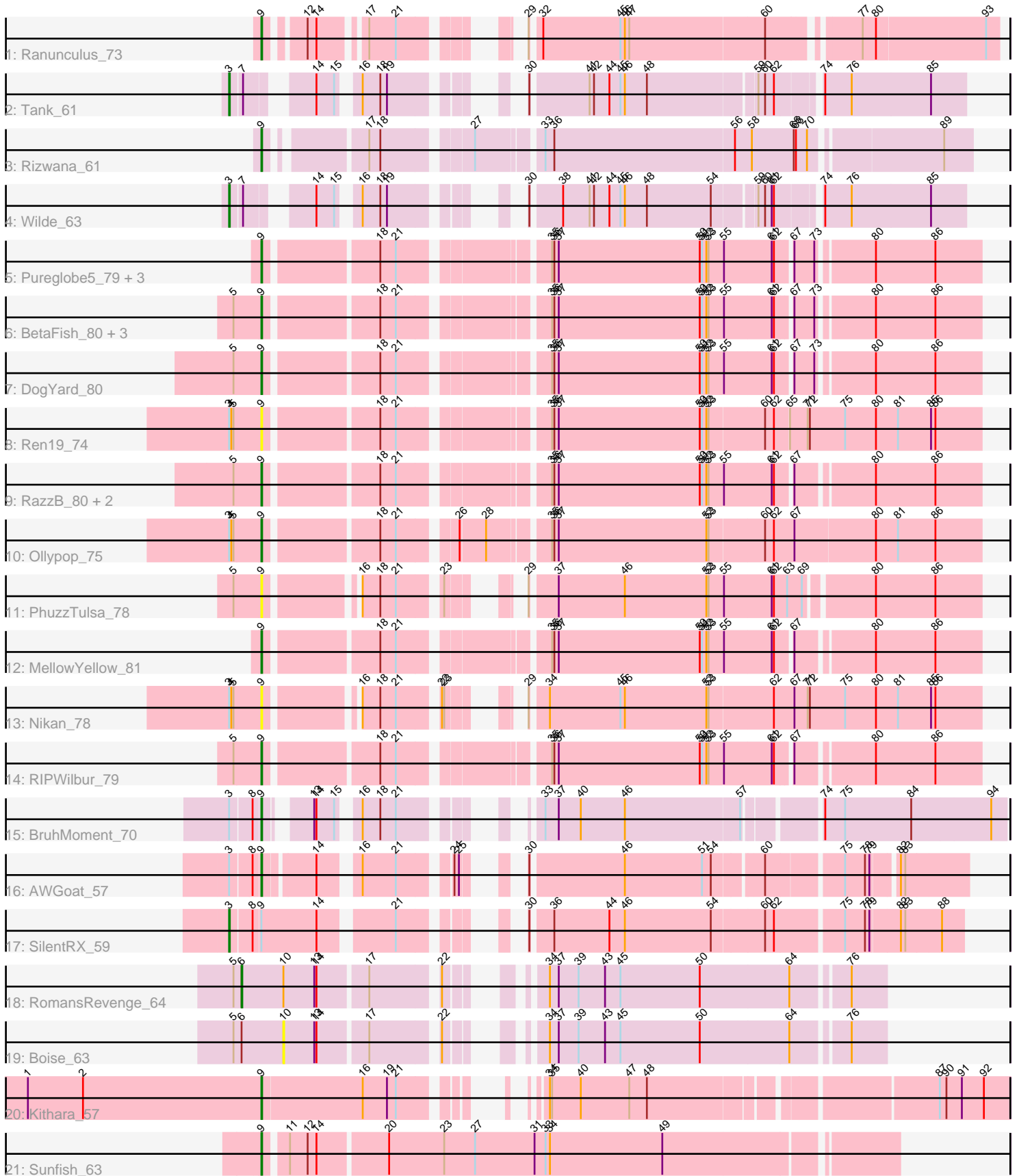


Pham 311893



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 311893 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311893 has 29 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Ranunculus_73
- Track 2 : Tank_61
- Track 3 : Rizwana_61
- Track 4 : Wilde_63
- Track 5 : Pureglobe5_79, Pointis_77, Hive_76, Kubulix_80
- Track 6 : BetaFish_80, Popstraw_76, Odyssey395_81, Beagle_81
- Track 7 : DogYard_80
- Track 8 : Ren19_74
- Track 9 : RazzB_80, Forrestell_80, NyleyClemson_79
- Track 10 : Ollypop_75
- Track 11 : PhuzzTulsa_78
- Track 12 : MellowYellow_81
- Track 13 : Nikan_78
- Track 14 : RIPWilbur_79
- Track 15 : BruhMoment_70
- Track 16 : AWGoat_57
- Track 17 : SilentRX_59
- Track 18 : RomansRevenge_64
- Track 19 : Boise_63
- Track 20 : Kithara_57
- Track 21 : Sunfish_63

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

The start number called the most often in the published annotations is 9, it was called in 18 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AWGoat_57, Beagle_81, BetaFish_80, BruhMoment_70, DogYard_80, Forrestell_80, Hive_76, Kithara_57, Kubulix_80, MellowYellow_81, Nikan_78, NyleyClemson_79, Odyssey395_81, Ollypop_75, PhuzzTulsa_78, Pointis_77, Popstraw_76, Pureglobe5_79, RIPWilbur_79, Ranunculus_73, RazzB_80, Ren19_74, Rizwana_61, Sunfish_63,

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

- SilentRX_59,

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

- Boise_63, RomansRevenge_64, Tank_61, Wilde_63,

Summary by start number:

Start 3:

- Found in 8 of 29 (27.6%) of genes in pham
- Manual Annotations of this start: 3 of 22
- Called 37.5% of time when present
- Phage (with cluster) where this start called: SilentRX_59 (AP4), Tank_61 (AP1), Wilde_63 (AP1),

Start 6:

- Found in 2 of 29 (6.9%) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 50.0% of time when present
- Phage (with cluster) where this start called: RomansRevenge_64 (FT),

Start 9:

- Found in 25 of 29 (86.2%) of genes in pham
- Manual Annotations of this start: 18 of 22
- Called 96.0% of time when present
- Phage (with cluster) where this start called: AWGoat_57 (AP4), Beagle_81 (AP2), BetaFish_80 (AP2), BruhMoment_70 (AP3), DogYard_80 (AP2), Forrestell_80 (AP2), Hive_76 (AP2), Kithara_57 (singleton), Kubulix_80 (AP2), MellowYellow_81 (AP2), Nikan_78 (AP2), NyleyClemson_79 (AP2), Odyssey395_81 (AP2), Ollypop_75 (AP2), PhuzzTulsa_78 (AP2), Pointis_77 (AP2), Popstraw_76 (AP2), Pureglobe5_79 (AP2), RIPWilbur_79 (AP2), Ranunculus_73 (AP), RazzB_80 (AP2), Ren19_74 (AP2), Rizwana_61 (AP1), Sunfish_63 (singleton),

Start 10:

- Found in 2 of 29 (6.9%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Boise_63 (FT),

Summary by clusters:

There are 7 clusters represented in this pham: singleton, FT, AP2, AP3, AP1, AP4, AP,

Info for manual annotations of cluster AP:

- Start number 9 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AP1:

- Start number 3 was manually annotated 2 times for cluster AP1.
- Start number 9 was manually annotated 1 time for cluster AP1.

Info for manual annotations of cluster AP2:

- Start number 9 was manually annotated 12 times for cluster AP2.

Info for manual annotations of cluster AP3:

- Start number 9 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:

- Start number 3 was manually annotated 1 time for cluster AP4.
- Start number 9 was manually annotated 1 time for cluster AP4.

Info for manual annotations of cluster FT:

- Start number 6 was manually annotated 1 time for cluster FT.

Gene Information:

Gene: AWGoat_57 Start: 42937, Stop: 42152, Start Num: 9

Candidate Starts for AWGoat_57:

(Start: 3 @42973 has 3 MA's), (8, 42946), (Start: 9 @42937 has 18 MA's), (14, 42874), (16, 42832), (21, 42787), (24, 42730), (25, 42724), (30, 42697), (46, 42577), (51, 42472), (54, 42460), (60, 42400), (75, 42304), (78, 42277), (79, 42271), (82, 42241), (83, 42235),

Gene: Beagle_81 Start: 48714, Stop: 47827, Start Num: 9

Candidate Starts for Beagle_81:

(5, 48750), (Start: 9 @48714 has 18 MA's), (18, 48573), (21, 48552), (35, 48381), (36, 48378), (37, 48372), (50, 48180), (51, 48177), (52, 48171), (53, 48168), (55, 48150), (61, 48087), (62, 48084), (67, 48066), (73, 48039), (80, 47970), (86, 47889),

Gene: BetaFish_80 Start: 49443, Stop: 48556, Start Num: 9

Candidate Starts for BetaFish_80:

(5, 49479), (Start: 9 @49443 has 18 MA's), (18, 49302), (21, 49281), (35, 49110), (36, 49107), (37, 49101), (50, 48909), (51, 48906), (52, 48900), (53, 48897), (55, 48879), (61, 48816), (62, 48813), (67, 48795), (73, 48768), (80, 48699), (86, 48618),

Gene: Boise_63 Start: 45422, Stop: 44724, Start Num: 10

Candidate Starts for Boise_63:

(5, 45488), (Start: 6 @45479 has 1 MA's), (10, 45422), (13, 45380), (14, 45377), (17, 45314), (22, 45233), (34, 45164), (37, 45152), (39, 45125), (43, 45089), (45, 45068), (50, 44960), (64, 44840), (76, 44771),

Gene: BruhMoment_70 Start: 47914, Stop: 47087, Start Num: 9

Candidate Starts for BruhMoment_70:

(Start: 3 @47950 has 3 MA's), (8, 47923), (Start: 9 @47914 has 18 MA's), (13, 47869), (14, 47866), (15, 47842), (16, 47824), (18, 47800), (21, 47779), (33, 47677), (37, 47659), (40, 47629), (46, 47569), (57, 47416), (74, 47329), (75, 47302), (84, 47212), (94, 47107),

Gene: DogYard_80 Start: 48930, Stop: 48043, Start Num: 9

Candidate Starts for DogYard_80:

(5, 48966), (Start: 9 @48930 has 18 MA's), (18, 48789), (21, 48768), (35, 48597), (36, 48594), (37, 48588), (50, 48396), (51, 48393), (52, 48387), (53, 48384), (55, 48366), (61, 48303), (62, 48300), (67, 48282), (73, 48255), (80, 48186), (86, 48105),

Gene: Forrestell_80 Start: 48173, Stop: 47286, Start Num: 9

Candidate Starts for Forrestell_80:

(5, 48209), (Start: 9 @48173 has 18 MA's), (18, 48032), (21, 48011), (35, 47840), (36, 47837), (37, 47831), (50, 47639), (51, 47636), (52, 47630), (53, 47627), (55, 47609), (61, 47546), (62, 47543), (67, 47525), (80, 47429), (86, 47348),

Gene: Hive_76 Start: 48710, Stop: 47823, Start Num: 9

Candidate Starts for Hive_76:

(Start: 9 @48710 has 18 MA's), (18, 48569), (21, 48548), (35, 48377), (36, 48374), (37, 48368), (50, 48176), (51, 48173), (52, 48167), (53, 48164), (55, 48146), (61, 48083), (62, 48080), (67, 48062), (73, 48035), (80, 47966), (86, 47885),

Gene: Kithara_57 Start: 44025, Stop: 43174, Start Num: 9

Candidate Starts for Kithara_57:

(1, 44343), (2, 44268), (Start: 9 @44025 has 18 MA's), (16, 43890), (19, 43857), (21, 43845), (34, 43755), (35, 43752), (40, 43713), (47, 43647), (48, 43623), (87, 43269), (90, 43260), (91, 43239), (92, 43209),

Gene: Kubulix_80 Start: 48600, Stop: 47713, Start Num: 9

Candidate Starts for Kubulix_80:

(Start: 9 @48600 has 18 MA's), (18, 48459), (21, 48438), (35, 48267), (36, 48264), (37, 48258), (50, 48066), (51, 48063), (52, 48057), (53, 48054), (55, 48036), (61, 47973), (62, 47970), (67, 47952), (73, 47925), (80, 47856), (86, 47775),

Gene: MellowYellow_81 Start: 48842, Stop: 47955, Start Num: 9

Candidate Starts for MellowYellow_81:

(Start: 9 @48842 has 18 MA's), (18, 48701), (21, 48680), (35, 48509), (36, 48506), (37, 48500), (50, 48308), (51, 48305), (52, 48299), (53, 48296), (55, 48278), (61, 48215), (62, 48212), (67, 48194), (80, 48098), (86, 48017),

Gene: Nikan_78 Start: 48689, Stop: 47850, Start Num: 9

Candidate Starts for Nikan_78:

(Start: 3 @48731 has 3 MA's), (4, 48728), (5, 48725), (Start: 9 @48689 has 18 MA's), (16, 48584), (18, 48560), (21, 48539), (22, 48494), (23, 48491), (29, 48449), (34, 48431), (45, 48335), (46, 48329), (52, 48218), (53, 48215), (62, 48131), (67, 48104), (71, 48086), (72, 48083), (75, 48035), (80, 47993), (81, 47963), (85, 47918), (86, 47912),

Gene: NyleyClemson_79 Start: 48457, Stop: 47570, Start Num: 9

Candidate Starts for NyleyClemson_79:

(5, 48493), (Start: 9 @48457 has 18 MA's), (18, 48316), (21, 48295), (35, 48124), (36, 48121), (37, 48115), (50, 47923), (51, 47920), (52, 47914), (53, 47911), (55, 47893), (61, 47830), (62, 47827), (67, 47809), (80, 47713), (86, 47632),

Gene: Odyssey395_81 Start: 48951, Stop: 48064, Start Num: 9

Candidate Starts for Odyssey395_81:

(5, 48987), (Start: 9 @48951 has 18 MA's), (18, 48810), (21, 48789), (35, 48618), (36, 48615), (37, 48609), (50, 48417), (51, 48414), (52, 48408), (53, 48405), (55, 48387), (61, 48324), (62, 48321), (67, 48303), (73, 48276), (80, 48207), (86, 48126),

Gene: Ollypop_75 Start: 48994, Stop: 48086, Start Num: 9

Candidate Starts for Ollypop_75:

(Start: 3 @49036 has 3 MA's), (4, 49033), (5, 49030), (Start: 9 @48994 has 18 MA's), (18, 48853), (21, 48832), (26, 48766), (28, 48733), (35, 48661), (36, 48658), (37, 48652), (52, 48451), (53, 48448), (60, 48376), (62, 48364), (67, 48337), (80, 48229), (81, 48199), (86, 48148),

Gene: PhuzzTulsa_78 Start: 49079, Stop: 48258, Start Num: 9

Candidate Starts for PhuzzTulsa_78:

(5, 49115), (Start: 9 @49079 has 18 MA's), (16, 48974), (18, 48950), (21, 48929), (23, 48881), (29, 48839), (37, 48809), (46, 48719), (52, 48608), (53, 48605), (55, 48587), (61, 48524), (62, 48521), (63, 48503), (69, 48485), (80, 48401), (86, 48320),

Gene: Pointis_77 Start: 48527, Stop: 47640, Start Num: 9

Candidate Starts for Pointis_77:

(Start: 9 @48527 has 18 MA's), (18, 48386), (21, 48365), (35, 48194), (36, 48191), (37, 48185), (50, 47993), (51, 47990), (52, 47984), (53, 47981), (55, 47963), (61, 47900), (62, 47897), (67, 47879), (73, 47852), (80, 47783), (86, 47702),

Gene: Popstraw_76 Start: 48689, Stop: 47802, Start Num: 9

Candidate Starts for Popstraw_76:

(5, 48725), (Start: 9 @48689 has 18 MA's), (18, 48548), (21, 48527), (35, 48356), (36, 48353), (37, 48347), (50, 48155), (51, 48152), (52, 48146), (53, 48143), (55, 48125), (61, 48062), (62, 48059), (67, 48041), (73, 48014), (80, 47945), (86, 47864),

Gene: Pureglobe5_79 Start: 48971, Stop: 48084, Start Num: 9

Candidate Starts for Pureglobe5_79:

(Start: 9 @48971 has 18 MA's), (18, 48830), (21, 48809), (35, 48638), (36, 48635), (37, 48629), (50, 48437), (51, 48434), (52, 48428), (53, 48425), (55, 48407), (61, 48344), (62, 48341), (67, 48323), (73, 48296), (80, 48227), (86, 48146),

Gene: RIPWilbur_79 Start: 48491, Stop: 47604, Start Num: 9

Candidate Starts for RIPWilbur_79:

(5, 48527), (Start: 9 @48491 has 18 MA's), (18, 48350), (21, 48329), (35, 48158), (36, 48155), (37, 48149), (50, 47957), (51, 47954), (52, 47948), (53, 47945), (55, 47927), (61, 47864), (62, 47861), (67, 47843), (80, 47747), (86, 47666),

Gene: Ranunculus_73 Start: 51059, Stop: 50235, Start Num: 9

Candidate Starts for Ranunculus_73:

(Start: 9 @51059 has 18 MA's), (12, 51017), (14, 51005), (17, 50954), (21, 50918), (29, 50828), (32, 50819), (45, 50714), (46, 50708), (47, 50702), (60, 50522), (77, 50417), (80, 50399), (93, 50252),

Gene: RazzB_80 Start: 48583, Stop: 47696, Start Num: 9

Candidate Starts for RazzB_80:

(5, 48619), (Start: 9 @48583 has 18 MA's), (18, 48442), (21, 48421), (35, 48250), (36, 48247), (37, 48241), (50, 48049), (51, 48046), (52, 48040), (53, 48037), (55, 48019), (61, 47956), (62, 47953), (67, 47935), (80, 47839), (86, 47758),

Gene: Ren19_74 Start: 48354, Stop: 47446, Start Num: 9

Candidate Starts for Ren19_74:

(Start: 3 @48396 has 3 MA's), (4, 48393), (5, 48390), (Start: 9 @48354 has 18 MA's), (18, 48213), (21, 48192), (35, 48021), (36, 48018), (37, 48012), (50, 47820), (51, 47817), (52, 47811), (53, 47808), (60, 47736), (62, 47724), (65, 47706), (71, 47682), (72, 47679), (75, 47631), (80, 47589), (81, 47559), (85, 47514), (86, 47508),

Gene: Rizwana_61 Start: 45189, Stop: 44326, Start Num: 9

Candidate Starts for Rizwana_61:

(Start: 9 @45189 has 18 MA's), (17, 45078), (18, 45063), (27, 44958), (33, 44880), (36, 44868), (56, 44625), (58, 44604), (66, 44547), (68, 44544), (70, 44529), (89, 44364),

Gene: RomansRevenge_64 Start: 45479, Stop: 44724, Start Num: 6

Candidate Starts for RomansRevenge_64:

(5, 45488), (Start: 6 @45479 has 1 MA's), (10, 45422), (13, 45380), (14, 45377), (17, 45314), (22, 45233), (34, 45164), (37, 45152), (39, 45125), (43, 45089), (45, 45068), (50, 44960), (64, 44840), (76, 44771),

Gene: SilentRX_59 Start: 44240, Stop: 43395, Start Num: 3

Candidate Starts for SilentRX_59:

(Start: 3 @44240 has 3 MA's), (8, 44213), (Start: 9 @44204 has 18 MA's), (14, 44129), (21, 44042), (30, 43952), (36, 43928), (44, 43853), (46, 43832), (54, 43715), (60, 43646), (62, 43634), (75, 43547), (78, 43520), (79, 43514), (82, 43475), (83, 43469), (88, 43424),

Gene: Sunfish_63 Start: 42090, Stop: 41269, Start Num: 9

Candidate Starts for Sunfish_63:

(Start: 9 @42090 has 18 MA's), (11, 42063), (12, 42039), (14, 42027), (20, 41937), (23, 41862), (27, 41820), (31, 41739), (33, 41724), (34, 41718), (49, 41565),

Gene: Tank_61 Start: 45214, Stop: 44408, Start Num: 3

Candidate Starts for Tank_61:

(Start: 3 @45214 has 3 MA's), (7, 45199), (14, 45133), (15, 45109), (16, 45091), (18, 45067), (19, 45058), (30, 44956), (41, 44884), (42, 44878), (44, 44857), (45, 44842), (46, 44836), (48, 44806), (59, 44668), (60, 44659), (62, 44647), (74, 44596), (76, 44560), (85, 44455),

Gene: Wilde_63 Start: 45513, Stop: 44707, Start Num: 3

Candidate Starts for Wilde_63:

(Start: 3 @45513 has 3 MA's), (7, 45498), (14, 45432), (15, 45408), (16, 45390), (18, 45366), (19, 45357), (30, 45255), (38, 45219), (41, 45183), (42, 45177), (44, 45156), (45, 45141), (46, 45135), (48, 45105), (54, 45018), (59, 44967), (60, 44958), (61, 44949), (62, 44946), (74, 44895), (76, 44859), (85, 44754),