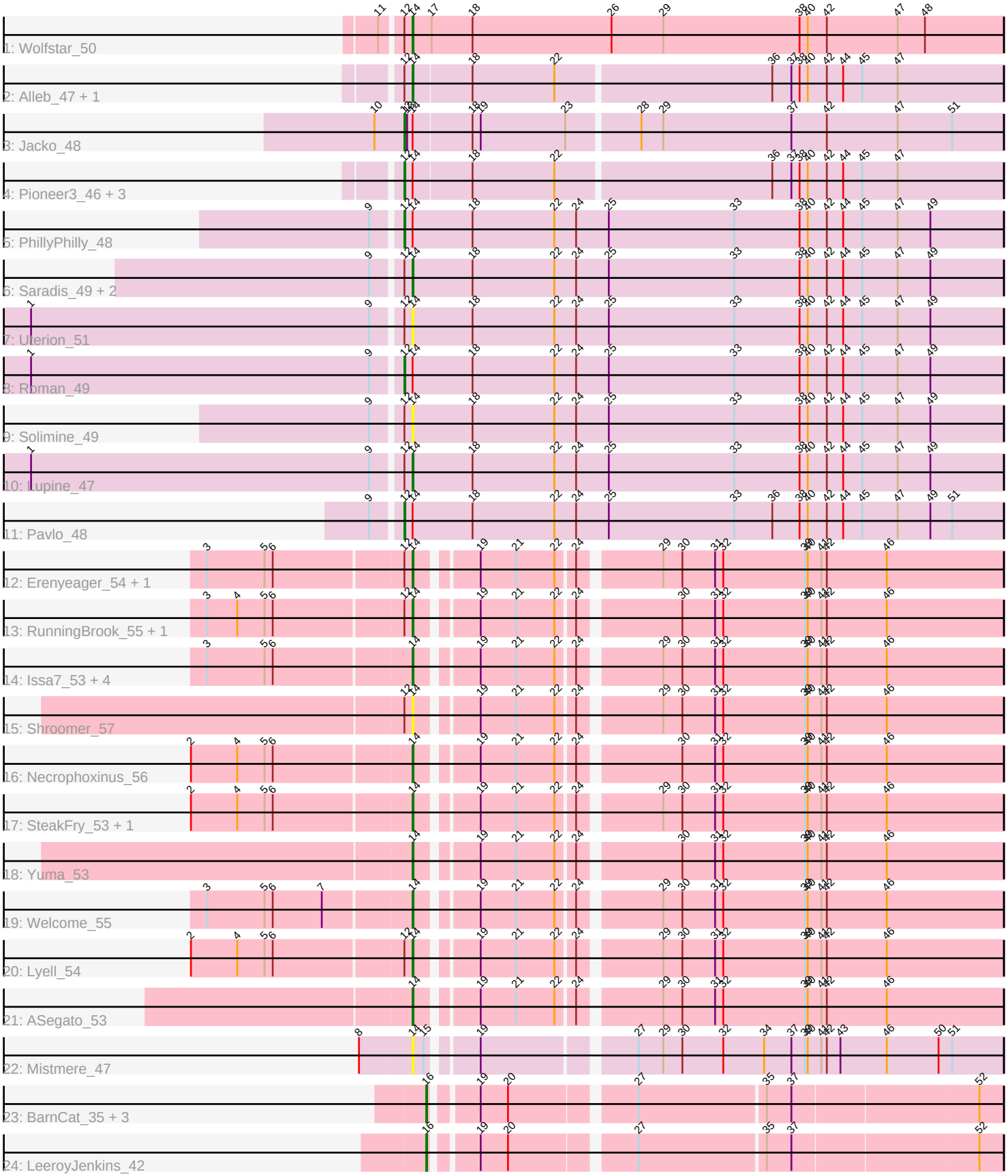
Pham 291313


1: Wolfstar_50
2: Alleb_47 + 1
3: Jacko_48
4: Pioneer3_46 + 3
5: PhillyPhilly_48
6: Saradis_49 + 2
7: Uterion_51
8: Roman_49
9: Solimine_49
10: Lupine_47
11: Pavlo_48
12: Erenyeager_54 + 1
13: RunningBrook_55 + 1
14: Issa7_53 + 4
15: Shroomer_57
16: Necrophoxinus_56
17: SteakFry_53 + 1
18: Yuma_53
19: Welcome_55
20: Lyell_54
21: ASegato_53
22: Mistmere_47
23: BarnCat_35 + 3
24: LeeroyJenkins_42

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 291313 Report

This analysis was run 03/28/26 on database version 641.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 291313 has 40 members, 9 are drafts.

Phages represented in each track:
- Track 1 : Wolfstar_50
- Track 2 : Alleb_47, Platte_46
- Track 3 : Jacko_48
- Track 4 : Pioneer3_46, Tandem_46, Hortus1_46, OlinDD_46
- Track 5 : PhillyPhilly_48
- Track 6 : Saradis_49, Hubbs_49, DejaVu_50
- Track 7 : Uterion_51
- Track 8 : Roman_49
- Track 9 : Solimine_49
- Track 10 : Lupine_47
- Track 11 : Pavlo_48
- Track 12 : Erenyeager_54, Casablancas_55
- Track 13 : RunningBrook_55, DustyDino_57
- Track 14 : Issa7_53, StevieWelch_54, Fork_50, Deschain_55, Musetta_54
- Track 15 : Shroomer_57
- Track 16 : Necrophoxinus_56
- Track 17 : SteakFry_53, HollowPurple_55
- Track 18 : Yuma_53
- Track 19 : Welcome_55
- Track 20 : Lyell_54
- Track 21 : ASegato_53
- Track 22 : Mistmere_47
- Track 23 : BarnCat_35, Cassita_41, Lifes_37, WaterT_40
- Track 24 : LeeroyJenkins_42

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

The start number called the most often in the published annotations is 14, it was called in 18 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ASegato_53, Alleb_47, Casablancas_55, DejaVu_50, Deschain_55, DustyDino_57, Erenyeager_54, Fork_50, HollowPurple_55, Hubbs_49, Issa7_53, Lupine_47, Lyell_54, Mistmere_47, Musetta_54, Necrophoxinus_56, Platte_46, RunningBrook_55, Saradis_49, Shroomer_57, Solimine_49, SteakFry_53, StevieWelch_54, Uterion_51, Welcome_55, Wolfstar_50, Yuma_53,

Genes that have the "Most Annotated" start but do not call it:
• Hortus1_46, Jacko_48, OlinDD_46, Pavlo_48, PhillyPhilly_48, Pioneer3_46, Roman_49, Tandem_46,

Genes that do not have the "Most Annotated" start:
• BarnCat_35, Cassita_41, LeeroyJenkins_42, Lifes_37, WaterT_40,

Summary by start number:

Start 12:
• Found in 23 of 40 (57.5%) of genes in pham
• Manual Annotations of this start: 8 of 31
• Called 34.8% of time when present
• Phage (with cluster) where this start called: Hortus1_46 (ED1), Jacko_48 (ED1), OlinDD_46 (ED1), Pavlo_48 (ED1), PhillyPhilly_48 (ED1), Pioneer3_46 (ED1), Roman_49 (ED1), Tandem_46 (ED1),

Start 14:
• Found in 35 of 40 (87.5%) of genes in pham
• Manual Annotations of this start: 18 of 31
• Called 77.1% of time when present
• Phage (with cluster) where this start called: ASegato_53 (ED2), Alleb_47 (ED1), Casablancas_55 (ED2), DejaVu_50 (ED1), Deschain_55 (ED2), DustyDino_57 (ED2), Erenyeager_54 (ED2), Fork_50 (ED2), HollowPurple_55 (ED2), Hubbs_49 (ED1), Issa7_53 (ED2), Lupine_47 (ED1), Lyell_54 (ED2), Mistmere_47 (ED3), Musetta_54 (ED2), Necrophoxinus_56 (ED2), Platte_46 (ED1), RunningBrook_55 (ED2), Saradis_49 (ED1), Shroomer_57 (ED2), Solimine_49 (ED1), SteakFry_53 (ED2), StevieWelch_54 (ED2), Uterion_51 (ED1), Welcome_55 (ED2), Wolfstar_50 (ED), Yuma_53 (ED2),

Start 16:
• Found in 5 of 40 (12.5%) of genes in pham
• Manual Annotations of this start: 5 of 31
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BarnCat_35 (GB), Cassita_41 (GB), LeeroyJenkins_42 (GB), Lifes_37 (GB), WaterT_40 (GB),

Summary by clusters:

There are 5 clusters represented in this pham: ED2, ED, ED1, GB, ED3,

Info for manual annotations of cluster ED:
•Start number 14 was manually annotated 1 time for cluster ED.

Info for manual annotations of cluster ED1:
•Start number 12 was manually annotated 8 times for cluster ED1.

•Start number 14 was manually annotated 5 times for cluster ED1.

Info for manual annotations of cluster ED2:
•Start number 14 was manually annotated 12 times for cluster ED2.

Info for manual annotations of cluster GB:
•Start number 16 was manually annotated 5 times for cluster GB.

Gene Information:

Gene: ASegato_53 Start: 25411, Stop: 26022, Start Num: 14
Candidate Starts for ASegato_53:
(Start: 14 @25411 has 18 MA's), (19, 25468), (21, 25507), (22, 25549), (24, 25567), (29, 25648), (30, 25669), (31, 25705), (32, 25714), (39, 25804), (40, 25807), (41, 25822), (42, 25828), (46, 25894),

Gene: Alleb_47 Start: 24469, Stop: 25107, Start Num: 14
Candidate Starts for Alleb_47:
(Start: 12 @24460 has 8 MA's), (Start: 14 @24469 has 18 MA's), (18, 24532), (22, 24622), (36, 24853), (37, 24874), (38, 24883), (40, 24892), (42, 24913), (44, 24931), (45, 24952), (47, 24991),

Gene: BarnCat_35 Start: 18745, Stop: 19329, Start Num: 16
Candidate Starts for BarnCat_35:
(Start: 16 @18745 has 5 MA's), (19, 18787), (20, 18817), (27, 18943), (35, 19078), (37, 19105), (52, 19303),

Gene: Casablancas_55 Start: 25496, Stop: 26107, Start Num: 14
Candidate Starts for Casablancas_55:
(3, 25277), (5, 25340), (6, 25349), (Start: 12 @25487 has 8 MA's), (Start: 14 @25496 has 18 MA's), (19, 25553), (21, 25592), (22, 25634), (24, 25652), (29, 25733), (30, 25754), (31, 25790), (32, 25799), (39, 25889), (40, 25892), (41, 25907), (42, 25913), (46, 25979),

Gene: Cassita_41 Start: 21121, Stop: 21705, Start Num: 16
Candidate Starts for Cassita_41:
(Start: 16 @21121 has 5 MA's), (19, 21163), (20, 21193), (27, 21319), (35, 21454), (37, 21481), (52, 21679),

Gene: DejaVu_50 Start: 24677, Stop: 25327, Start Num: 14
Candidate Starts for DejaVu_50:
(9, 24638), (Start: 12 @24668 has 8 MA's), (Start: 14 @24677 has 18 MA's), (18, 24743), (22, 24833), (24, 24857), (25, 24893), (33, 25031), (38, 25103), (40, 25112), (42, 25133), (44, 25151), (45, 25172), (47, 25211), (49, 25247),

Gene: Deschain_55 Start: 26160, Stop: 26771, Start Num: 14
Candidate Starts for Deschain_55:
(3, 25941), (5, 26004), (6, 26013), (Start: 14 @26160 has 18 MA's), (19, 26217), (21, 26256), (22, 26298), (24, 26316), (29, 26397), (30, 26418), (31, 26454), (32, 26463), (39, 26553), (40, 26556), (41, 26571), (42, 26577), (46, 26643),

Gene: DustyDino_57 Start: 26354, Stop: 26965, Start Num: 14
Candidate Starts for DustyDino_57:

(3, 26135), (4, 26168), (5, 26198), (6, 26207), (Start: 12 @26345 has 8 MA's), (Start: 14 @26354 has 18 MA's), (19, 26411), (21, 26450), (22, 26492), (24, 26510), (30, 26612), (31, 26648), (32, 26657), (39, 26747), (40, 26750), (41, 26765), (42, 26771), (46, 26837),

Gene: Erenyeager_54 Start: 25746, Stop: 26357, Start Num: 14
Candidate Starts for Erenyeager_54:
(3, 25527), (5, 25590), (6, 25599), (Start: 12 @25737 has 8 MA's), (Start: 14 @25746 has 18 MA's), (19, 25803), (21, 25842), (22, 25884), (24, 25902), (29, 25983), (30, 26004), (31, 26040), (32, 26049), (39, 26139), (40, 26142), (41, 26157), (42, 26163), (46, 26229),

Gene: Fork_50 Start: 25061, Stop: 25672, Start Num: 14
Candidate Starts for Fork_50:
(3, 24842), (5, 24905), (6, 24914), (Start: 14 @25061 has 18 MA's), (19, 25118), (21, 25157), (22, 25199), (24, 25217), (29, 25298), (30, 25319), (31, 25355), (32, 25364), (39, 25454), (40, 25457), (41, 25472), (42, 25478), (46, 25544),

Gene: HollowPurple_55 Start: 25617, Stop: 26228, Start Num: 14
Candidate Starts for HollowPurple_55:
(2, 25380), (4, 25431), (5, 25461), (6, 25470), (Start: 14 @25617 has 18 MA's), (19, 25674), (21, 25713), (22, 25755), (24, 25773), (29, 25854), (30, 25875), (31, 25911), (32, 25920), (39, 26010), (40, 26013), (41, 26028), (42, 26034), (46, 26100),

Gene: Hortus1_46 Start: 24450, Stop: 25097, Start Num: 12
Candidate Starts for Hortus1_46:
(Start: 12 @24450 has 8 MA's), (Start: 14 @24459 has 18 MA's), (18, 24522), (22, 24612), (36, 24843), (37, 24864), (38, 24873), (40, 24882), (42, 24903), (44, 24921), (45, 24942), (47, 24981),

Gene: Hubbs_49 Start: 24889, Stop: 25539, Start Num: 14
Candidate Starts for Hubbs_49:
(9, 24850), (Start: 12 @24880 has 8 MA's), (Start: 14 @24889 has 18 MA's), (18, 24955), (22, 25045), (24, 25069), (25, 25105), (33, 25243), (38, 25315), (40, 25324), (42, 25345), (44, 25363), (45, 25384), (47, 25423), (49, 25459),

Gene: Issa7_53 Start: 25065, Stop: 25676, Start Num: 14
Candidate Starts for Issa7_53:
(3, 24846), (5, 24909), (6, 24918), (Start: 14 @25065 has 18 MA's), (19, 25122), (21, 25161), (22, 25203), (24, 25221), (29, 25302), (30, 25323), (31, 25359), (32, 25368), (39, 25458), (40, 25461), (41, 25476), (42, 25482), (46, 25548),

Gene: Jacko_48 Start: 22655, Stop: 23302, Start Num: 12
Candidate Starts for Jacko_48:
(10, 22622), (Start: 12 @22655 has 8 MA's), (13, 22658), (Start: 14 @22664 has 18 MA's), (18, 22727), (19, 22736), (23, 22829), (28, 22904), (29, 22928), (37, 23069), (42, 23108), (47, 23186), (51, 23246),

Gene: LeeroyJenkins_42 Start: 22004, Stop: 22588, Start Num: 16
Candidate Starts for LeeroyJenkins_42:
(Start: 16 @22004 has 5 MA's), (19, 22046), (20, 22076), (27, 22202), (35, 22337), (37, 22364), (52, 22562),

Gene: Lifes_37 Start: 18776, Stop: 19360, Start Num: 16
Candidate Starts for Lifes_37:
(Start: 16 @18776 has 5 MA's), (19, 18818), (20, 18848), (27, 18974), (35, 19109), (37, 19136), (52, 19334),

Gene: Lupine_47 Start: 24091, Stop: 24741, Start Num: 14
Candidate Starts for Lupine_47:
(1, 23680), (9, 24052), (Start: 12 @24082 has 8 MA's), (Start: 14 @24091 has 18 MA's), (18, 24157), (22, 24247), (24, 24271), (25, 24307), (33, 24445), (38, 24517), (40, 24526), (42, 24547), (44, 24565), (45, 24586), (47, 24625), (49, 24661),

Gene: Lyell_54 Start: 25665, Stop: 26276, Start Num: 14
Candidate Starts for Lyell_54:
(2, 25428), (4, 25479), (5, 25509), (6, 25518), (Start: 12 @25656 has 8 MA's), (Start: 14 @25665 has 18 MA's), (19, 25722), (21, 25761), (22, 25803), (24, 25821), (29, 25902), (30, 25923), (31, 25959), (32, 25968), (39, 26058), (40, 26061), (41, 26076), (42, 26082), (46, 26148),

Gene: Mistmere_47 Start: 23530, Stop: 24141, Start Num: 14
Candidate Starts for Mistmere_47:
(8, 23473), (Start: 14 @23530 has 18 MA's), (15, 23542), (19, 23587), (27, 23740), (29, 23767), (30, 23788), (32, 23833), (34, 23878), (37, 23908), (39, 23923), (40, 23926), (41, 23941), (42, 23947), (43, 23962), (46, 24013), (50, 24070), (51, 24085),

Gene: Musetta_54 Start: 25781, Stop: 26392, Start Num: 14
Candidate Starts for Musetta_54:
(3, 25562), (5, 25625), (6, 25634), (Start: 14 @25781 has 18 MA's), (19, 25838), (21, 25877), (22, 25919), (24, 25937), (29, 26018), (30, 26039), (31, 26075), (32, 26084), (39, 26174), (40, 26177), (41, 26192), (42, 26198), (46, 26264),

Gene: Necrophoxinus_56 Start: 26360, Stop: 26971, Start Num: 14
Candidate Starts for Necrophoxinus_56:
(2, 26123), (4, 26174), (5, 26204), (6, 26213), (Start: 14 @26360 has 18 MA's), (19, 26417), (21, 26456), (22, 26498), (24, 26516), (30, 26618), (31, 26654), (32, 26663), (39, 26753), (40, 26756), (41, 26771), (42, 26777), (46, 26843),

Gene: OlinDD_46 Start: 24449, Stop: 25096, Start Num: 12
Candidate Starts for OlinDD_46:
(Start: 12 @24449 has 8 MA's), (Start: 14 @24458 has 18 MA's), (18, 24521), (22, 24611), (36, 24842), (37, 24863), (38, 24872), (40, 24881), (42, 24902), (44, 24920), (45, 24941), (47, 24980),

Gene: Pavlo_48 Start: 24727, Stop: 25386, Start Num: 12
Candidate Starts for Pavlo_48:
(9, 24697), (Start: 12 @24727 has 8 MA's), (Start: 14 @24736 has 18 MA's), (18, 24802), (22, 24892), (24, 24916), (25, 24952), (33, 25090), (36, 25132), (38, 25162), (40, 25171), (42, 25192), (44, 25210), (45, 25231), (47, 25270), (49, 25306), (51, 25330),

Gene: PhillyPhilly_48 Start: 24261, Stop: 24920, Start Num: 12
Candidate Starts for PhillyPhilly_48:
(9, 24231), (Start: 12 @24261 has 8 MA's), (Start: 14 @24270 has 18 MA's), (18, 24336), (22, 24426), (24, 24450), (25, 24486), (33, 24624), (38, 24696), (40, 24705), (42, 24726), (44, 24744), (45, 24765), (47, 24804), (49, 24840),

Gene: Pioneer3_46 Start: 24457, Stop: 25104, Start Num: 12
Candidate Starts for Pioneer3_46:
(Start: 12 @24457 has 8 MA's), (Start: 14 @24466 has 18 MA's), (18, 24529), (22, 24619), (36, 24850), (37, 24871), (38, 24880), (40, 24889), (42, 24910), (44, 24928), (45, 24949), (47, 24988),

Gene: Platte_46 Start: 24251, Stop: 24889, Start Num: 14
Candidate Starts for Platte_46:
(Start: 12 @24242 has 8 MA's), (Start: 14 @24251 has 18 MA's), (18, 24314), (22, 24404), (36, 24635), (37, 24656), (38, 24665), (40, 24674), (42, 24695), (44, 24713), (45, 24734), (47, 24773),

Gene: Roman_49 Start: 24728, Stop: 25387, Start Num: 12
Candidate Starts for Roman_49:
(1, 24326), (9, 24698), (Start: 12 @24728 has 8 MA's), (Start: 14 @24737 has 18 MA's), (18, 24803), (22, 24893), (24, 24917), (25, 24953), (33, 25091), (38, 25163), (40, 25172), (42, 25193), (44, 25211), (45, 25232), (47, 25271), (49, 25307),

Gene: RunningBrook_55 Start: 26354, Stop: 26965, Start Num: 14
Candidate Starts for RunningBrook_55:
(3, 26135), (4, 26168), (5, 26198), (6, 26207), (Start: 12 @26345 has 8 MA's), (Start: 14 @26354 has 18 MA's), (19, 26411), (21, 26450), (22, 26492), (24, 26510), (30, 26612), (31, 26648), (32, 26657), (39, 26747), (40, 26750), (41, 26765), (42, 26771), (46, 26837),

Gene: Saradis_49 Start: 24329, Stop: 24979, Start Num: 14
Candidate Starts for Saradis_49:
(9, 24290), (Start: 12 @24320 has 8 MA's), (Start: 14 @24329 has 18 MA's), (18, 24395), (22, 24485), (24, 24509), (25, 24545), (33, 24683), (38, 24755), (40, 24764), (42, 24785), (44, 24803), (45, 24824), (47, 24863), (49, 24899),

Gene: Shroomer_57 Start: 25896, Stop: 26507, Start Num: 14
Candidate Starts for Shroomer_57:
(Start: 12 @25887 has 8 MA's), (Start: 14 @25896 has 18 MA's), (19, 25953), (21, 25992), (22, 26034), (24, 26052), (29, 26133), (30, 26154), (31, 26190), (32, 26199), (39, 26289), (40, 26292), (41, 26307), (42, 26313), (46, 26379),

Gene: Solimine_49 Start: 24743, Stop: 25393, Start Num: 14
Candidate Starts for Solimine_49:
(9, 24704), (Start: 12 @24734 has 8 MA's), (Start: 14 @24743 has 18 MA's), (18, 24809), (22, 24899), (24, 24923), (25, 24959), (33, 25097), (38, 25169), (40, 25178), (42, 25199), (44, 25217), (45, 25238), (47, 25277), (49, 25313),

Gene: SteakFry_53 Start: 25617, Stop: 26228, Start Num: 14
Candidate Starts for SteakFry_53:
(2, 25380), (4, 25431), (5, 25461), (6, 25470), (Start: 14 @25617 has 18 MA's), (19, 25674), (21, 25713), (22, 25755), (24, 25773), (29, 25854), (30, 25875), (31, 25911), (32, 25920), (39, 26010), (40, 26013), (41, 26028), (42, 26034), (46, 26100),

Gene: StevieWelch_54 Start: 25746, Stop: 26357, Start Num: 14
Candidate Starts for StevieWelch_54:
(3, 25527), (5, 25590), (6, 25599), (Start: 14 @25746 has 18 MA's), (19, 25803), (21, 25842), (22, 25884), (24, 25902), (29, 25983), (30, 26004), (31, 26040), (32, 26049), (39, 26139), (40, 26142), (41, 26157), (42, 26163), (46, 26229),

Gene: Tandem_46 Start: 24396, Stop: 25043, Start Num: 12
Candidate Starts for Tandem_46:
(Start: 12 @24396 has 8 MA's), (Start: 14 @24405 has 18 MA's), (18, 24468), (22, 24558), (36, 24789), (37, 24810), (38, 24819), (40, 24828), (42, 24849), (44, 24867), (45, 24888), (47, 24927),

Gene: Uterion_51 Start: 24838, Stop: 25488, Start Num: 14

Candidate Starts for Uterion_51:
(1, 24427), (9, 24799), (Start: 12 @24829 has 8 MA's), (Start: 14 @24838 has 18 MA's), (18, 24904), (22, 24994), (24, 25018), (25, 25054), (33, 25192), (38, 25264), (40, 25273), (42, 25294), (44, 25312), (45, 25333), (47, 25372), (49, 25408),

Gene: WaterT_40 Start: 20865, Stop: 21449, Start Num: 16
Candidate Starts for WaterT_40:
(Start: 16 @20865 has 5 MA's), (19, 20907), (20, 20937), (27, 21063), (35, 21198), (37, 21225), (52, 21423),

Gene: Welcome_55 Start: 25766, Stop: 26377, Start Num: 14
Candidate Starts for Welcome_55:
(3, 25547), (5, 25610), (6, 25619), (7, 25673), (Start: 14 @25766 has 18 MA's), (19, 25823), (21, 25862), (22, 25904), (24, 25922), (29, 26003), (30, 26024), (31, 26060), (32, 26069), (39, 26159), (40, 26162), (41, 26177), (42, 26183), (46, 26249),

Gene: Wolfstar_50 Start: 24646, Stop: 25296, Start Num: 14
Candidate Starts for Wolfstar_50:
(11, 24616), (Start: 12 @24637 has 8 MA's), (Start: 14 @24646 has 18 MA's), (17, 24667), (18, 24712), (26, 24865), (29, 24922), (38, 25072), (40, 25081), (42, 25102), (47, 25180), (48, 25210),

Gene: Yuma_53 Start: 25680, Stop: 26291, Start Num: 14
Candidate Starts for Yuma_53:
(Start: 14 @25680 has 18 MA's), (19, 25737), (21, 25776), (22, 25818), (24, 25836), (30, 25938), (31, 25974), (32, 25983), (39, 26073), (40, 26076), (41, 26091), (42, 26097), (46, 26163),