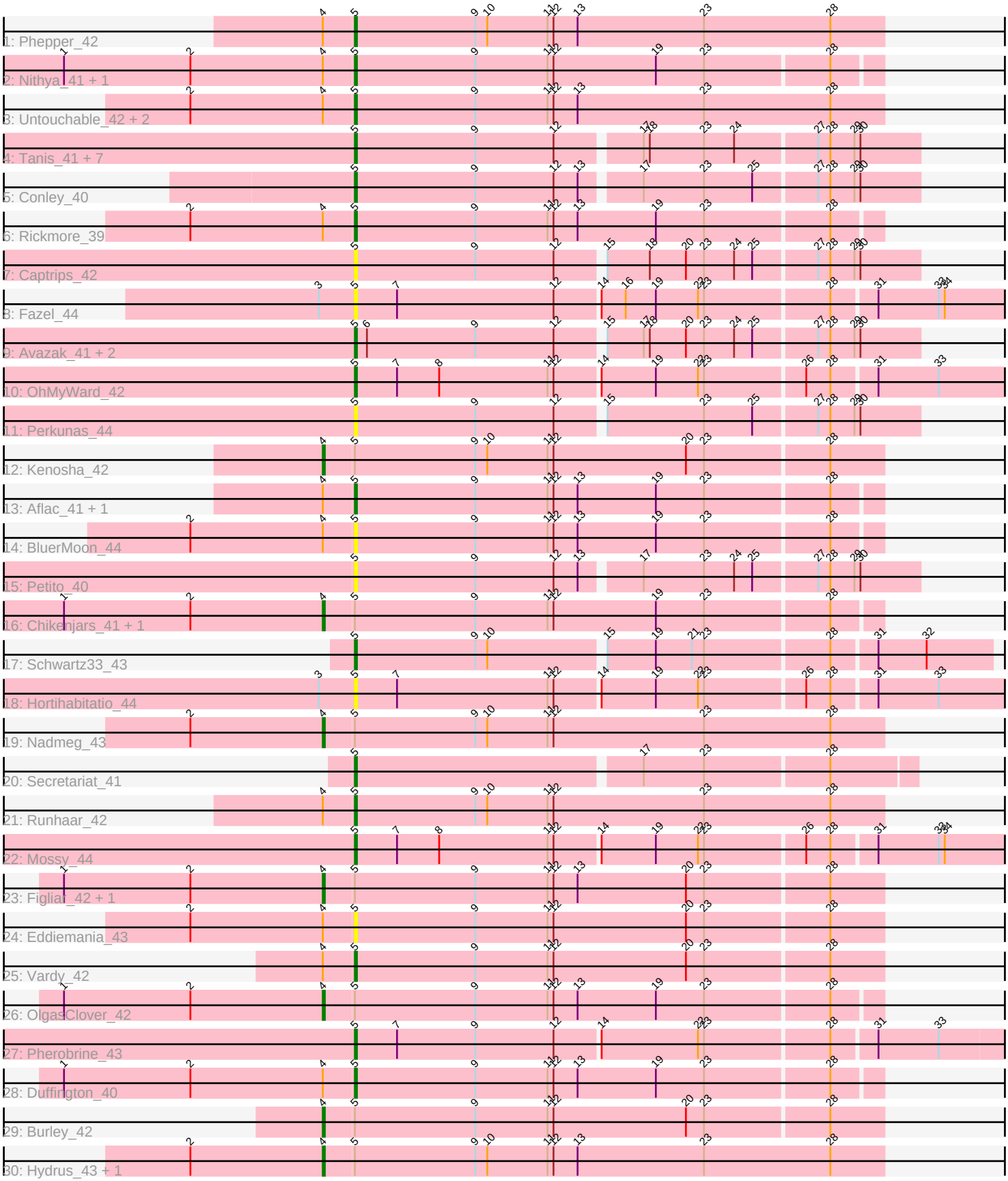
Pham 2840


1: Phepper_42
2: Nithya_41 + 1
3: Untouchable_42 + 2
4: Tanis_41 + 7
5: Conley_40
6: Rickmore_39
7: Captrips_42
8: Fazel_44
9: Avazak_41 + 2
10: OhMyWard_42
11: Perkunas_44
12: Kenosha_42
13: Aflac_41 + 1
14: BluerMoon_44
15: Petito_40
16: Chikenjars_41 + 1
17: Schwartz33_43
18: Hortihabitatio_44
19: Nadmeg_43
20: Secretariat_41
21: Runhaar_42
22: Mossy_44
23: Figliat_42 + 1
24: Eddiemania_43
25: Vardy_42
26: OlgasClover_42
27: Pherobrine_43
28: Duffington_40
29: Burley_42
30: Hydrus_43 + 1

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 2840 Report

This analysis was run 04/28/24 on database version 559.

Pham number 2840 has 46 members, 12 are drafts.

Phages represented in each track:
• Track 1 : Phepper_42
• Track 2 : Nithya_41, AlainaMarie_41
• Track 3 : Untouchable_42, Zeph_46, Madvan_42
• Track 4 : Tanis_41, Gravy_40, Gill_41, Magel_42, Odesza_40, Roney_41, Capybara_41, Kerry_40
• Track 5 : Conley_40
• Track 6 : Rickmore_39
• Track 7 : Captrips_42
• Track 8 : Fazel_44
• Track 9 : Avazak_41, Artorias_40, FortCran_44
• Track 10 : OhMyWard_42
• Track 11 : Perkunas_44
• Track 12 : Kenosha_42
• Track 13 : Aflac_41, TenaciousP_45
• Track 14 : BluerMoon_44
• Track 15 : Petito_40
• Track 16 : Chikenjars_41, EndAve_42
• Track 17 : Schwartz33_43
• Track 18 : Hortihabitatio_44
• Track 19 : Nadmeg_43
• Track 20 : Secretariat_41
• Track 21 : Runhaar_42
• Track 22 : Mossy_44
• Track 23 : Figliar_42, Jodelie19_43
• Track 24 : Eddiemania_43
• Track 25 : Vardy_42
• Track 26 : OlgasClover_42
• Track 27 : Pherobrine_43
• Track 28 : Duffington_40
• Track 29 : Burley_42
• Track 30 : Hydrus_43, Crocheter_42

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

The start number called the most often in the published annotations is 5, it was called in 24 of the 34 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aflac_41, AlainaMarie_41, Artorias_40, Avazak_41, BluerMoon_44, Captrips_42, Capybara_41, Conley_40, Duffington_40, Eddiemania_43, Fazel_44, FortCran_44, Gill_41, Gravy_40, Hortihabitatio_44, Kerry_40, Madvan_42, Magel_42, Mossy_44, Nithya_41, Odesza_40, OhMyWard_42, Perkunas_44, Petito_40, Phepper_42, Pherobrine_43, Rickmore_39, Roney_41, Runhaar_42, Schwartz33_43, Secretariat_41, Tanis_41, TenaciousP_45, Untouchable_42, Vardy_42, Zeph_46,

Genes that have the "Most Annotated" start but do not call it:
• Burley_42, Chikenjars_41, Crocheter_42, EndAve_42, Figliar_42, Hydrus_43, Jodelie19_43, Kenosha_42, Nadmeg_43, OlgasClover_42,

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

Summary by start number:

Start 4:
• Found in 24 of 46 (52.2%) of genes in pham
• Manual Annotations of this start: 10 of 34
• Called 41.7% of time when present
• Phage (with cluster) where this start called: Burley_42 (DJ), Chikenjars_41 (DJ), Crocheter_42 (DJ), EndAve_42 (DJ), Figliar_42 (DJ), Hydrus_43 (DJ), Jodelie19_43 (DJ), Kenosha_42 (DJ), Nadmeg_43 (DJ), OlgasClover_42 (DJ),

Start 5:
• Found in 46 of 46 (100.0%) of genes in pham
• Manual Annotations of this start: 24 of 34
• Called 78.3% of time when present
• Phage (with cluster) where this start called: Aflac_41 (DJ), AlainaMarie_41 (DJ), Artorias_40 (DJ), Avazak_41 (DJ), BluerMoon_44 (DJ), Captrips_42 (DJ), Capybara_41 (DJ), Conley_40 (DJ), Duffington_40 (DJ), Eddiemania_43 (DJ), Fazel_44 (DJ), FortCran_44 (DJ), Gill_41 (DJ), Gravy_40 (DJ), Hortihabitatio_44 (DJ), Kerry_40 (DJ), Madvan_42 (DJ), Magel_42 (DJ), Mossy_44 (DJ), Nithya_41 (DJ), Odesza_40 (DJ), OhMyWard_42 (DJ), Perkunas_44 (DJ), Petito_40 (DJ), Phepper_42 (DJ), Pherobrine_43 (DJ), Rickmore_39 (DJ), Roney_41 (DJ), Runhaar_42 (DJ), Schwartz33_43 (DJ), Secretariat_41 (DJ), Tanis_41 (DJ), TenaciousP_45 (DJ), Untouchable_42 (DJ), Vardy_42 (DJ), Zeph_46 (DJ),

Summary by clusters:

There is one cluster represented in this pham: DJ

Info for manual annotations of cluster DJ:
•Start number 4 was manually annotated 10 times for cluster DJ.
•Start number 5 was manually annotated 24 times for cluster DJ.

Gene Information:

Gene: Aflac_41 Start: 33202, Stop: 33459, Start Num: 5
Candidate Starts for Aflac_41:
(Start: 4 @33187 has 10 MA's), (Start: 5 @33202 has 24 MA's), (9, 33262), (11, 33298), (12, 33301), (13, 33313), (19, 33352), (23, 33376), (28, 33436),

Gene: AlainaMarie_41 Start: 33181, Stop: 33438, Start Num: 5
Candidate Starts for AlainaMarie_41:
(1, 33037), (2, 33100), (Start: 4 @33166 has 10 MA's), (Start: 5 @33181 has 24 MA's), (9, 33241), (11, 33277), (12, 33280), (19, 33331), (23, 33355), (28, 33415),

Gene: Artorias_40 Start: 30906, Stop: 31178, Start Num: 5
Candidate Starts for Artorias_40:
(Start: 5 @30906 has 24 MA's), (6, 30912), (9, 30966), (12, 31005), (15, 31026), (17, 31044), (18, 31047), (20, 31065), (23, 31074), (24, 31089), (25, 31098), (27, 31128), (28, 31134), (29, 31146), (30, 31149),

Gene: Avazak_41 Start: 31271, Stop: 31543, Start Num: 5
Candidate Starts for Avazak_41:
(Start: 5 @31271 has 24 MA's), (6, 31277), (9, 31331), (12, 31370), (15, 31391), (17, 31409), (18, 31412), (20, 31430), (23, 31439), (24, 31454), (25, 31463), (27, 31493), (28, 31499), (29, 31511), (30, 31514),

Gene: BluerMoon_44 Start: 33198, Stop: 33455, Start Num: 5
Candidate Starts for BluerMoon_44:
(2, 33117), (Start: 4 @33183 has 10 MA's), (Start: 5 @33198 has 24 MA's), (9, 33258), (11, 33294), (12, 33297), (13, 33309), (19, 33348), (23, 33372), (28, 33432),

Gene: Burley_42 Start: 33190, Stop: 33465, Start Num: 4
Candidate Starts for Burley_42:
(Start: 4 @33190 has 10 MA's), (Start: 5 @33205 has 24 MA's), (9, 33265), (11, 33301), (12, 33304), (20, 33370), (23, 33379), (28, 33439),

Gene: Captrips_42 Start: 30944, Stop: 31216, Start Num: 5
Candidate Starts for Captrips_42:
(Start: 5 @30944 has 24 MA's), (9, 31004), (12, 31043), (15, 31064), (18, 31085), (20, 31103), (23, 31112), (24, 31127), (25, 31136), (27, 31166), (28, 31172), (29, 31184), (30, 31187),

Gene: Capybara_41 Start: 31333, Stop: 31605, Start Num: 5
Candidate Starts for Capybara_41:
(Start: 5 @31333 has 24 MA's), (9, 31393), (12, 31432), (17, 31471), (18, 31474), (23, 31501), (24, 31516), (27, 31555), (28, 31561), (29, 31573), (30, 31576),

Gene: Chikenjars_41 Start: 33177, Stop: 33449, Start Num: 4
Candidate Starts for Chikenjars_41:
(1, 33048), (2, 33111), (Start: 4 @33177 has 10 MA's), (Start: 5 @33192 has 24 MA's), (9, 33252), (11, 33288), (12, 33291), (19, 33342), (23, 33366), (28, 33426),

Gene: Conley_40 Start: 31883, Stop: 32155, Start Num: 5
Candidate Starts for Conley_40:
(Start: 5 @31883 has 24 MA's), (9, 31943), (12, 31982), (13, 31994), (17, 32021), (23, 32051), (25, 32075), (27, 32105), (28, 32111), (29, 32123), (30, 32126),

Gene: Crocheter_42 Start: 33590, Stop: 33868, Start Num: 4

Candidate Starts for Crocheter_42:
(2, 33524), (Start: 4 @33590 has 10 MA's), (Start: 5 @33605 has 24 MA's), (9, 33665), (10, 33671), (11, 33701), (12, 33704), (13, 33716), (23, 33779), (28, 33842),

Gene: Duffington_40 Start: 32854, Stop: 33111, Start Num: 5
Candidate Starts for Duffington_40:
(1, 32710), (2, 32773), (Start: 4 @32839 has 10 MA's), (Start: 5 @32854 has 24 MA's), (9, 32914), (11, 32950), (12, 32953), (13, 32965), (19, 33004), (23, 33028), (28, 33088),

Gene: Eddiemania_43 Start: 34113, Stop: 34373, Start Num: 5
Candidate Starts for Eddiemania_43:
(2, 34032), (Start: 4 @34098 has 10 MA's), (Start: 5 @34113 has 24 MA's), (9, 34173), (11, 34209), (12, 34212), (20, 34278), (23, 34287), (28, 34347),

Gene: EndAve_42 Start: 33346, Stop: 33618, Start Num: 4
Candidate Starts for EndAve_42:
(1, 33217), (2, 33280), (Start: 4 @33346 has 10 MA's), (Start: 5 @33361 has 24 MA's), (9, 33421), (11, 33457), (12, 33460), (19, 33511), (23, 33535), (28, 33595),

Gene: Fazel_44 Start: 32846, Stop: 33163, Start Num: 5
Candidate Starts for Fazel_44:
(3, 32828), (Start: 5 @32846 has 24 MA's), (7, 32867), (12, 32945), (14, 32966), (16, 32978), (19, 32993), (22, 33014), (23, 33017), (28, 33077), (31, 33098), (33, 33128), (34, 33131),

Gene: Figliar_42 Start: 33492, Stop: 33767, Start Num: 4
Candidate Starts for Figliar_42:
(1, 33363), (2, 33426), (Start: 4 @33492 has 10 MA's), (Start: 5 @33507 has 24 MA's), (9, 33567), (11, 33603), (12, 33606), (13, 33618), (20, 33672), (23, 33681), (28, 33741),

Gene: FortCran_44 Start: 30906, Stop: 31178, Start Num: 5
Candidate Starts for FortCran_44:
(Start: 5 @30906 has 24 MA's), (6, 30912), (9, 30966), (12, 31005), (15, 31026), (17, 31044), (18, 31047), (20, 31065), (23, 31074), (24, 31089), (25, 31098), (27, 31128), (28, 31134), (29, 31146), (30, 31149),

Gene: Gill_41 Start: 31350, Stop: 31622, Start Num: 5
Candidate Starts for Gill_41:
(Start: 5 @31350 has 24 MA's), (9, 31410), (12, 31449), (17, 31488), (18, 31491), (23, 31518), (24, 31533), (27, 31572), (28, 31578), (29, 31590), (30, 31593),

Gene: Gravy_40 Start: 31023, Stop: 31295, Start Num: 5
Candidate Starts for Gravy_40:
(Start: 5 @31023 has 24 MA's), (9, 31083), (12, 31122), (17, 31161), (18, 31164), (23, 31191), (24, 31206), (27, 31245), (28, 31251), (29, 31263), (30, 31266),

Gene: Hortihabitatio_44 Start: 33293, Stop: 33607, Start Num: 5
Candidate Starts for Hortihabitatio_44:
(3, 33275), (Start: 5 @33293 has 24 MA's), (7, 33314), (11, 33389), (12, 33392), (14, 33413), (19, 33440), (22, 33461), (23, 33464), (26, 33512), (28, 33524), (31, 33545), (33, 33575),

Gene: Hydrus_43 Start: 34108, Stop: 34386, Start Num: 4
Candidate Starts for Hydrus_43:

(2, 34042), (Start: 4 @34108 has 10 MA's), (Start: 5 @34123 has 24 MA's), (9, 34183), (10, 34189), (11, 34219), (12, 34222), (13, 34234), (23, 34297), (28, 34360),

Gene: Jodelie19_43 Start: 34947, Stop: 35222, Start Num: 4
Candidate Starts for Jodelie19_43:
(1, 34818), (2, 34881), (Start: 4 @34947 has 10 MA's), (Start: 5 @34962 has 24 MA's), (9, 35022), (11, 35058), (12, 35061), (13, 35073), (20, 35127), (23, 35136), (28, 35196),

Gene: Kenosha_42 Start: 34000, Stop: 34275, Start Num: 4
Candidate Starts for Kenosha_42:
(Start: 4 @34000 has 10 MA's), (Start: 5 @34015 has 24 MA's), (9, 34075), (10, 34081), (11, 34111), (12, 34114), (20, 34180), (23, 34189), (28, 34249),

Gene: Kerry_40 Start: 31023, Stop: 31295, Start Num: 5
Candidate Starts for Kerry_40:
(Start: 5 @31023 has 24 MA's), (9, 31083), (12, 31122), (17, 31161), (18, 31164), (23, 31191), (24, 31206), (27, 31245), (28, 31251), (29, 31263), (30, 31266),

Gene: Madvan_42 Start: 33246, Stop: 33509, Start Num: 5
Candidate Starts for Madvan_42:
(2, 33165), (Start: 4 @33231 has 10 MA's), (Start: 5 @33246 has 24 MA's), (9, 33306), (11, 33342), (12, 33345), (13, 33357), (23, 33420), (28, 33483),

Gene: Magel_42 Start: 31254, Stop: 31526, Start Num: 5
Candidate Starts for Magel_42:
(Start: 5 @31254 has 24 MA's), (9, 31314), (12, 31353), (17, 31392), (18, 31395), (23, 31422), (24, 31437), (27, 31476), (28, 31482), (29, 31494), (30, 31497),

Gene: Mossy_44 Start: 35063, Stop: 35377, Start Num: 5
Candidate Starts for Mossy_44:
(Start: 5 @35063 has 24 MA's), (7, 35084), (8, 35105), (11, 35159), (12, 35162), (14, 35183), (19, 35210), (22, 35231), (23, 35234), (26, 35282), (28, 35294), (31, 35315), (33, 35345), (34, 35348),

Gene: Nadmeg_43 Start: 34663, Stop: 34941, Start Num: 4
Candidate Starts for Nadmeg_43:
(2, 34597), (Start: 4 @34663 has 10 MA's), (Start: 5 @34678 has 24 MA's), (9, 34738), (10, 34744), (11, 34774), (12, 34777), (23, 34852), (28, 34915),

Gene: Nithya_41 Start: 33182, Stop: 33439, Start Num: 5
Candidate Starts for Nithya_41:
(1, 33038), (2, 33101), (Start: 4 @33167 has 10 MA's), (Start: 5 @33182 has 24 MA's), (9, 33242), (11, 33278), (12, 33281), (19, 33332), (23, 33356), (28, 33416),

Gene: Odesza_40 Start: 31024, Stop: 31296, Start Num: 5
Candidate Starts for Odesza_40:
(Start: 5 @31024 has 24 MA's), (9, 31084), (12, 31123), (17, 31162), (18, 31165), (23, 31192), (24, 31207), (27, 31246), (28, 31252), (29, 31264), (30, 31267),

Gene: OhMyWard_42 Start: 34405, Stop: 34719, Start Num: 5
Candidate Starts for OhMyWard_42:
(Start: 5 @34405 has 24 MA's), (7, 34426), (8, 34447), (11, 34501), (12, 34504), (14, 34525), (19, 34552), (22, 34573), (23, 34576), (26, 34624), (28, 34636), (31, 34657), (33, 34687),

Gene: OlgasClover_42 Start: 34231, Stop: 34503, Start Num: 4
Candidate Starts for OlgasClover_42:
(1, 34102), (2, 34165), (Start: 4 @34231 has 10 MA's), (Start: 5 @34246 has 24 MA's), (9, 34306), (11, 34342), (12, 34345), (13, 34357), (19, 34396), (23, 34420), (28, 34480),

Gene: Perkunas_44 Start: 31314, Stop: 31586, Start Num: 5
Candidate Starts for Perkunas_44:
(Start: 5 @31314 has 24 MA's), (9, 31374), (12, 31413), (15, 31434), (23, 31482), (25, 31506), (27, 31536), (28, 31542), (29, 31554), (30, 31557),

Gene: Petito_40 Start: 32418, Stop: 32690, Start Num: 5
Candidate Starts for Petito_40:
(Start: 5 @32418 has 24 MA's), (9, 32478), (12, 32517), (13, 32529), (17, 32556), (23, 32586), (24, 32601), (25, 32610), (27, 32640), (28, 32646), (29, 32658), (30, 32661),

Gene: Phepper_42 Start: 33245, Stop: 33508, Start Num: 5
Candidate Starts for Phepper_42:
(Start: 4 @33230 has 10 MA's), (Start: 5 @33245 has 24 MA's), (9, 33305), (10, 33311), (11, 33341), (12, 33344), (13, 33356), (23, 33419), (28, 33482),

Gene: Pherobrine_43 Start: 33888, Stop: 34229, Start Num: 5
Candidate Starts for Pherobrine_43:
(Start: 5 @33888 has 24 MA's), (7, 33909), (9, 33948), (12, 33987), (14, 34008), (22, 34056), (23, 34059), (28, 34119), (31, 34140), (33, 34170),

Gene: Rickmore_39 Start: 31300, Stop: 31557, Start Num: 5
Candidate Starts for Rickmore_39:
(2, 31219), (Start: 4 @31285 has 10 MA's), (Start: 5 @31300 has 24 MA's), (9, 31360), (11, 31396), (12, 31399), (13, 31411), (19, 31450), (23, 31474), (28, 31534),

Gene: Roney_41 Start: 31345, Stop: 31617, Start Num: 5
Candidate Starts for Roney_41:
(Start: 5 @31345 has 24 MA's), (9, 31405), (12, 31444), (17, 31483), (18, 31486), (23, 31513), (24, 31528), (27, 31567), (28, 31573), (29, 31585), (30, 31588),

Gene: Runhaar_42 Start: 33239, Stop: 33502, Start Num: 5
Candidate Starts for Runhaar_42:
(Start: 4 @33224 has 10 MA's), (Start: 5 @33239 has 24 MA's), (9, 33299), (10, 33305), (11, 33335), (12, 33338), (23, 33413), (28, 33476),

Gene: Schwartz33_43 Start: 33721, Stop: 34026, Start Num: 5
Candidate Starts for Schwartz33_43:
(Start: 5 @33721 has 24 MA's), (9, 33781), (10, 33787), (15, 33841), (19, 33865), (21, 33883), (23, 33889), (28, 33949), (31, 33970), (32, 33994),

Gene: Secretariat_41 Start: 32668, Stop: 32937, Start Num: 5
Candidate Starts for Secretariat_41:
(Start: 5 @32668 has 24 MA's), (17, 32806), (23, 32836), (28, 32896),

Gene: Tanis_41 Start: 31196, Stop: 31468, Start Num: 5
Candidate Starts for Tanis_41:
(Start: 5 @31196 has 24 MA's), (9, 31256), (12, 31295), (17, 31334), (18, 31337), (23, 31364), (24, 31379), (27, 31418), (28, 31424), (29, 31436), (30, 31439),

Gene: TenaciousP_45 Start: 34627, Stop: 34884, Start Num: 5
Candidate Starts for TenaciousP_45:
(Start: 4 @34612 has 10 MA's), (Start: 5 @34627 has 24 MA's), (9, 34687), (11, 34723), (12, 34726), (13, 34738), (19, 34777), (23, 34801), (28, 34861),

Gene: Untouchable_42 Start: 33605, Stop: 33868, Start Num: 5
Candidate Starts for Untouchable_42:
(2, 33524), (Start: 4 @33590 has 10 MA's), (Start: 5 @33605 has 24 MA's), (9, 33665), (11, 33701), (12, 33704), (13, 33716), (23, 33779), (28, 33842),

Gene: Vardy_42 Start: 33206, Stop: 33466, Start Num: 5
Candidate Starts for Vardy_42:
(Start: 4 @33191 has 10 MA's), (Start: 5 @33206 has 24 MA's), (9, 33266), (11, 33302), (12, 33305), (20, 33371), (23, 33380), (28, 33440),

Gene: Zeph_46 Start: 34103, Stop: 34366, Start Num: 5
Candidate Starts for Zeph_46:
(2, 34022), (Start: 4 @34088 has 10 MA's), (Start: 5 @34103 has 24 MA's), (9, 34163), (11, 34199), (12, 34202), (13, 34214), (23, 34277), (28, 34340),