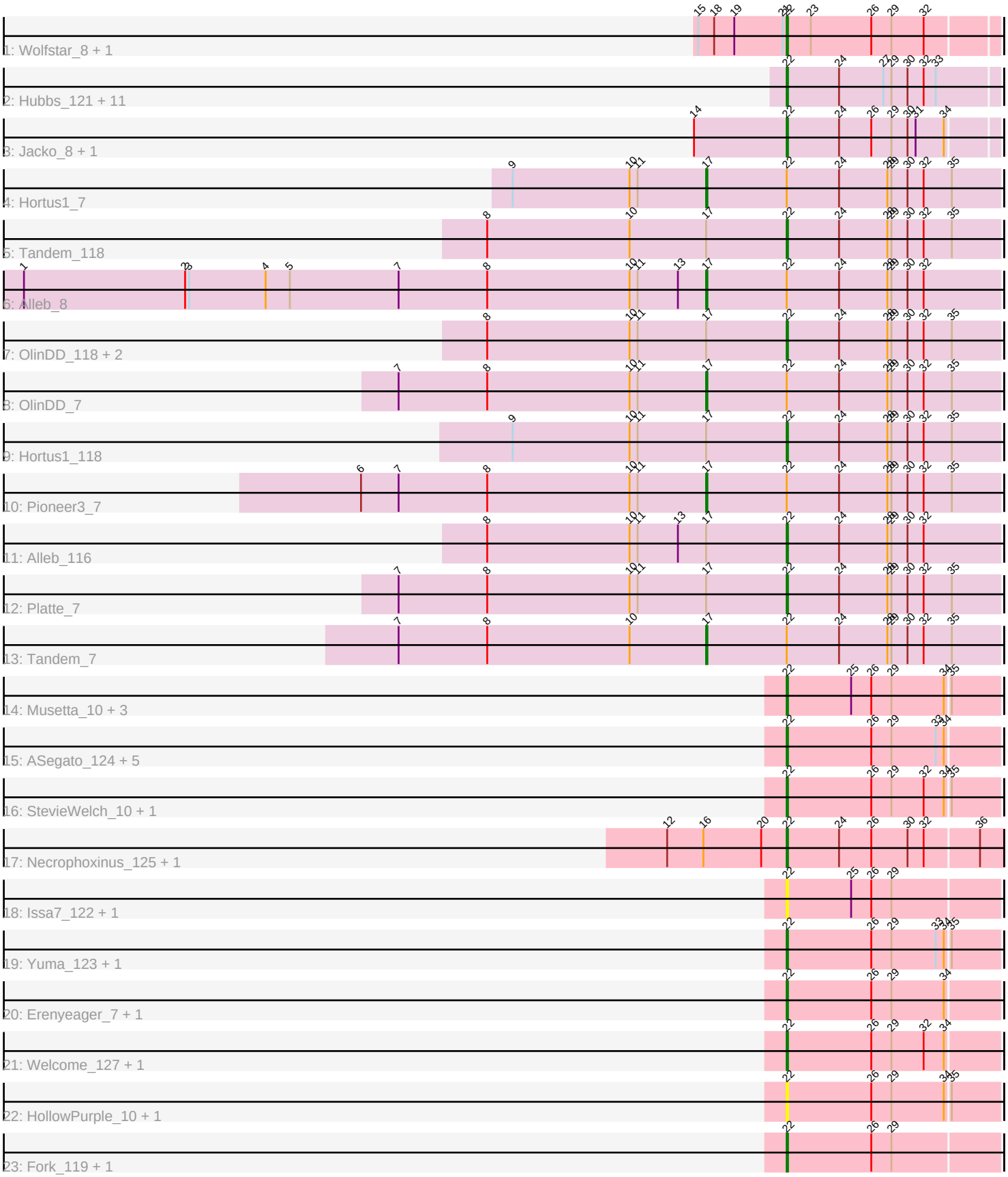
Pham 200308


1: Wolfstar_8 + 1
2: Hubbs_121 + 11
3: Jacko_8 + 1
4: Hortus1_7
5: Tandem_118
6: Alleb_8
7: OlinDD_118 + 2
8: OlinDD_7
9: Hortus1_118
10: Pioneer3_7
11: Alleb_116
12: Platte_7
13: Tandem_7
14: Musetta_10 + 3
15: ASegato_124 + 5
16: StevieWelch_10 + 1
17: Necrophoxinus_125 + 1
18: Issa7_122 + 1
19: Yuma_123 + 1
20: Erenyeager_7 + 1
21: Welcome_127 + 1
22: HollowPurple_10 + 1
23: Fork_119 + 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 200308 Report

This analysis was run 01/18/25 on database version 583.

Pham number 200308 has 54 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Wolfstar_8, Wolfstar_124
• Track 2 : Hubbs_121, Roman_123, DejaVu_7, Hubbs_7, PhillyPhilly_118, Pavlo_119, Lupine_117, PhillyPhilly_8, Lupine_7, DejaVu_123, Pavlo_7, Roman_7
• Track 3 : Jacko_8, Jacko_117
• Track 4 : Hortus1_7
• Track 5 : Tandem_118
• Track 6 : Alleb_8
• Track 7 : OlinDD_118, Platte_117, Pioneer3_118
• Track 8 : OlinDD_7
• Track 9 : Hortus1_118
• Track 10 : Pioneer3_7
• Track 11 : Alleb_116
• Track 12 : Platte_7
• Track 13 : Tandem_7
• Track 14 : Musetta_10, Lyell_125, Lyell_10, Musetta_123
• Track 15 : ASegato_124, DustyDino_10, ASegato_10, DustyDino_128, RunningBrook_9, RunningBrook_125
• Track 16 : StevieWelch_10, StevieWelch_128
• Track 17 : Necrophoxinus_125, Necrophoxinus_9
• Track 18 : Issa7_122, Issa7_8
• Track 19 : Yuma_123, Yuma_10
• Track 20 : Erenyeager_7, Erenyeager_122
• Track 21 : Welcome_127, Welcome_10
• Track 22 : HollowPurple_10, HollowPurple_125
• Track 23 : Fork_119, Fork_7

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

The start number called the most often in the published annotations is 22, it was called in 45 of the 50 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ASegato_10, ASegato_124, Alleb_116, DejaVu_123, DejaVu_7, DustyDino_10, DustyDino_128, Erenyeager_122, Erenyeager_7, Fork_119, Fork_7,

HollowPurple_10, HollowPurple_125, Hortus1_118, Hubbs_121, Hubbs_7, Issa7_122, Issa7_8, Jacko_117, Jacko_8, Lupine_117, Lupine_7, Lyell_10, Lyell_125, Musetta_10, Musetta_123, Necrophoxinus_125, Necrophoxinus_9, OlinDD_118, Pavlo_119, Pavlo_7, PhillyPhilly_118, PhillyPhilly_8, Pioneer3_118, Platte_117, Platte_7, Roman_123, Roman_7, RunningBrook_125, RunningBrook_9, StevieWelch_10, StevieWelch_128, Tandem_118, Welcome_10, Welcome_127, Wolfstar_124, Wolfstar_8, Yuma_10, Yuma_123,

Genes that have the "Most Annotated" start but do not call it:
• Alleb_8, Hortus1_7, OlinDD_7, Pioneer3_7, Tandem_7,

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

Summary by start number:

Start 17:
• Found in 12 of 54 (22.2%) of genes in pham
• Manual Annotations of this start: 5 of 50
• Called 41.7% of time when present
• Phage (with cluster) where this start called: Alleb_8 (ED1), Hortus1_7 (ED1), OlinDD_7 (ED1), Pioneer3_7 (ED1), Tandem_7 (ED1),

Start 22:
• Found in 54 of 54 (100.0%) of genes in pham
• Manual Annotations of this start: 45 of 50
• Called 90.7% of time when present
• Phage (with cluster) where this start called: ASegato_10 (ED2), ASegato_124 (ED2), Alleb_116 (ED1), DejaVu_123 (ED1), DejaVu_7 (ED1), DustyDino_10 (ED2), DustyDino_128 (ED2), Erenyeager_122 (ED2), Erenyeager_7 (ED2), Fork_119 (ED2), Fork_7 (ED2), HollowPurple_10 (ED2), HollowPurple_125 (ED2), Hortus1_118 (ED1), Hubbs_121 (ED1), Hubbs_7 (ED1), Issa7_122 (ED2), Issa7_8 (ED2), Jacko_117 (ED1), Jacko_8 (ED1), Lupine_117 (ED1), Lupine_7 (ED1), Lyell_10 (ED2), Lyell_125 (ED2), Musetta_10 (ED2), Musetta_123 (ED2), Necrophoxinus_125 (ED2), Necrophoxinus_9 (ED2), OlinDD_118 (ED1), Pavlo_119 (ED1), Pavlo_7 (ED1), PhillyPhilly_118 (ED1), PhillyPhilly_8 (ED1), Pioneer3_118 (ED1), Platte_117 (ED1), Platte_7 (ED1), Roman_123 (ED1), Roman_7 (ED1), RunningBrook_125 (ED2), RunningBrook_9 (ED2), StevieWelch_10 (ED2), StevieWelch_128 (ED2), Tandem_118 (ED1), Welcome_10 (ED2), Welcome_127 (ED2), Wolfstar_124 (ED), Wolfstar_8 (ED), Yuma_10 (ED2), Yuma_123 (ED2),

Summary by clusters:

There are 3 clusters represented in this pham: ED2, ED, ED1,

Info for manual annotations of cluster ED:
•Start number 22 was manually annotated 2 times for cluster ED.

Info for manual annotations of cluster ED1:
•Start number 17 was manually annotated 5 times for cluster ED1.
•Start number 22 was manually annotated 21 times for cluster ED1.

Info for manual annotations of cluster ED2:

•Start number 22 was manually annotated 22 times for cluster ED2.

Gene Information:

Gene: ASegato_124 Start: 62989, Stop: 62834, Start Num: 22
Candidate Starts for ASegato_124:
(Start: 22 @62989 has 45 MA's), (26, 62926), (29, 62911), (33, 62878), (34, 62872),

Gene: ASegato_10 Start: 3540, Stop: 3385, Start Num: 22
Candidate Starts for ASegato_10:
(Start: 22 @3540 has 45 MA's), (26, 3477), (29, 3462), (33, 3429), (34, 3423),

Gene: Alleb_8 Start: 3008, Stop: 2790, Start Num: 17
Candidate Starts for Alleb_8:
(1, 3515), (2, 3395), (3, 3392), (4, 3335), (5, 3317), (7, 3236), (8, 3170), (10, 3065), (11, 3059), (13, 3029), (Start: 17 @3008 has 5 MA's), (Start: 22 @2948 has 45 MA's), (24, 2909), (28, 2873), (29, 2870), (30, 2858), (32, 2846),

Gene: Alleb_116 Start: 62427, Stop: 62269, Start Num: 22
Candidate Starts for Alleb_116:
(8, 62649), (10, 62544), (11, 62538), (13, 62508), (Start: 17 @62487 has 5 MA's), (Start: 22 @62427 has 45 MA's), (24, 62388), (28, 62352), (29, 62349), (30, 62337), (32, 62325),

Gene: DejaVu_7 Start: 2697, Stop: 2542, Start Num: 22
Candidate Starts for DejaVu_7:
(Start: 22 @2697 has 45 MA's), (24, 2658), (27, 2625), (29, 2619), (30, 2607), (32, 2595), (33, 2586),

Gene: DejaVu_123 Start: 63077, Stop: 62922, Start Num: 22
Candidate Starts for DejaVu_123:
(Start: 22 @63077 has 45 MA's), (24, 63038), (27, 63005), (29, 62999), (30, 62987), (32, 62975), (33, 62966),

Gene: DustyDino_10 Start: 3578, Stop: 3423, Start Num: 22
Candidate Starts for DustyDino_10:
(Start: 22 @3578 has 45 MA's), (26, 3515), (29, 3500), (33, 3467), (34, 3461),

Gene: DustyDino_128 Start: 63668, Stop: 63513, Start Num: 22
Candidate Starts for DustyDino_128:
(Start: 22 @63668 has 45 MA's), (26, 63605), (29, 63590), (33, 63557), (34, 63551),

Gene: Erenyeager_7 Start: 2956, Stop: 2801, Start Num: 22
Candidate Starts for Erenyeager_7:
(Start: 22 @2956 has 45 MA's), (26, 2893), (29, 2878), (34, 2839),

Gene: Erenyeager_122 Start: 62617, Stop: 62462, Start Num: 22
Candidate Starts for Erenyeager_122:
(Start: 22 @62617 has 45 MA's), (26, 62554), (29, 62539), (34, 62500),

Gene: Fork_119 Start: 61835, Stop: 61680, Start Num: 22
Candidate Starts for Fork_119:
(Start: 22 @61835 has 45 MA's), (26, 61772), (29, 61757),

Gene: Fork_7 Start: 2844, Stop: 2689, Start Num: 22
Candidate Starts for Fork_7:
(Start: 22 @2844 has 45 MA's), (26, 2781), (29, 2766),

Gene: HollowPurple_10 Start: 3540, Stop: 3385, Start Num: 22
Candidate Starts for HollowPurple_10:
(Start: 22 @3540 has 45 MA's), (26, 3477), (29, 3462), (34, 3423), (35, 3420),

Gene: HollowPurple_125 Start: 63613, Stop: 63458, Start Num: 22
Candidate Starts for HollowPurple_125:
(Start: 22 @63613 has 45 MA's), (26, 63550), (29, 63535), (34, 63496), (35, 63493),

Gene: Hortus1_7 Start: 2961, Stop: 2743, Start Num: 17
Candidate Starts for Hortus1_7:
(9, 3105), (10, 3018), (11, 3012), (Start: 17 @2961 has 5 MA's), (Start: 22 @2901 has 45 MA's), (24, 2862), (28, 2826), (29, 2823), (30, 2811), (32, 2799), (35, 2778),

Gene: Hortus1_118 Start: 62861, Stop: 62703, Start Num: 22
Candidate Starts for Hortus1_118:
(9, 63065), (10, 62978), (11, 62972), (Start: 17 @62921 has 5 MA's), (Start: 22 @62861 has 45 MA's), (24, 62822), (28, 62786), (29, 62783), (30, 62771), (32, 62759), (35, 62738),

Gene: Hubbs_121 Start: 63600, Stop: 63445, Start Num: 22
Candidate Starts for Hubbs_121:
(Start: 22 @63600 has 45 MA's), (24, 63561), (27, 63528), (29, 63522), (30, 63510), (32, 63498), (33, 63489),

Gene: Hubbs_7 Start: 3201, Stop: 3046, Start Num: 22
Candidate Starts for Hubbs_7:
(Start: 22 @3201 has 45 MA's), (24, 3162), (27, 3129), (29, 3123), (30, 3111), (32, 3099), (33, 3090),

Gene: Issa7_122 Start: 62253, Stop: 62098, Start Num: 22
Candidate Starts for Issa7_122:
(Start: 22 @62253 has 45 MA's), (25, 62205), (26, 62190), (29, 62175),

Gene: Issa7_8 Start: 3095, Stop: 2940, Start Num: 22
Candidate Starts for Issa7_8:
(Start: 22 @3095 has 45 MA's), (25, 3047), (26, 3032), (29, 3017),

Gene: Jacko_8 Start: 2762, Stop: 2610, Start Num: 22
Candidate Starts for Jacko_8:
(14, 2828), (Start: 22 @2762 has 45 MA's), (24, 2723), (26, 2699), (29, 2684), (30, 2672), (31, 2666), (34, 2645),

Gene: Jacko_117 Start: 61155, Stop: 61003, Start Num: 22
Candidate Starts for Jacko_117:
(14, 61221), (Start: 22 @61155 has 45 MA's), (24, 61116), (26, 61092), (29, 61077), (30, 61065), (31, 61059), (34, 61038),

Gene: Lupine_117 Start: 62271, Stop: 62116, Start Num: 22
Candidate Starts for Lupine_117:

(Start: 22 @62271 has 45 MA's), (24, 62232), (27, 62199), (29, 62193), (30, 62181), (32, 62169), (33, 62160),

Gene: Lupine_7 Start: 2998, Stop: 2843, Start Num: 22
Candidate Starts for Lupine_7:
(Start: 22 @2998 has 45 MA's), (24, 2959), (27, 2926), (29, 2920), (30, 2908), (32, 2896), (33, 2887),

Gene: Lyell_125 Start: 62460, Stop: 62305, Start Num: 22
Candidate Starts for Lyell_125:
(Start: 22 @62460 has 45 MA's), (25, 62412), (26, 62397), (29, 62382), (34, 62343), (35, 62340),

Gene: Lyell_10 Start: 3293, Stop: 3138, Start Num: 22
Candidate Starts for Lyell_10:
(Start: 22 @3293 has 45 MA's), (25, 3245), (26, 3230), (29, 3215), (34, 3176), (35, 3173),

Gene: Musetta_10 Start: 3554, Stop: 3399, Start Num: 22
Candidate Starts for Musetta_10:
(Start: 22 @3554 has 45 MA's), (25, 3506), (26, 3491), (29, 3476), (34, 3437), (35, 3434),

Gene: Musetta_123 Start: 63349, Stop: 63194, Start Num: 22
Candidate Starts for Musetta_123:
(Start: 22 @63349 has 45 MA's), (25, 63301), (26, 63286), (29, 63271), (34, 63232), (35, 63229),

Gene: Necrophoxinus_125 Start: 63328, Stop: 63170, Start Num: 22
Candidate Starts for Necrophoxinus_125:
(12, 63412), (16, 63385), (20, 63343), (Start: 22 @63328 has 45 MA's), (24, 63289), (26, 63265), (30, 63238), (32, 63226), (36, 63187),

Gene: Necrophoxinus_9 Start: 3085, Stop: 2927, Start Num: 22
Candidate Starts for Necrophoxinus_9:
(12, 3169), (16, 3142), (20, 3100), (Start: 22 @3085 has 45 MA's), (24, 3046), (26, 3022), (30, 2995), (32, 2983), (36, 2944),

Gene: OlinDD_118 Start: 62866, Stop: 62708, Start Num: 22
Candidate Starts for OlinDD_118:
(8, 63088), (10, 62983), (11, 62977), (Start: 17 @62926 has 5 MA's), (Start: 22 @62866 has 45 MA's), (24, 62827), (28, 62791), (29, 62788), (30, 62776), (32, 62764), (35, 62743),

Gene: OlinDD_7 Start: 2961, Stop: 2743, Start Num: 17
Candidate Starts for OlinDD_7:
(7, 3189), (8, 3123), (10, 3018), (11, 3012), (Start: 17 @2961 has 5 MA's), (Start: 22 @2901 has 45 MA's), (24, 2862), (28, 2826), (29, 2823), (30, 2811), (32, 2799), (35, 2778),

Gene: Pavlo_119 Start: 63348, Stop: 63193, Start Num: 22
Candidate Starts for Pavlo_119:
(Start: 22 @63348 has 45 MA's), (24, 63309), (27, 63276), (29, 63270), (30, 63258), (32, 63246), (33, 63237),

Gene: Pavlo_7 Start: 3092, Stop: 2937, Start Num: 22
Candidate Starts for Pavlo_7:
(Start: 22 @3092 has 45 MA's), (24, 3053), (27, 3020), (29, 3014), (30, 3002), (32, 2990), (33, 2981),

Gene: PhillyPhilly_118 Start: 62607, Stop: 62452, Start Num: 22

Candidate Starts for PhillyPhilly_118:
(Start: 22 @62607 has 45 MA's), (24, 62568), (27, 62535), (29, 62529), (30, 62517), (32, 62505), (33, 62496),

Gene: PhillyPhilly_8 Start: 3118, Stop: 2963, Start Num: 22
Candidate Starts for PhillyPhilly_8:
(Start: 22 @3118 has 45 MA's), (24, 3079), (27, 3046), (29, 3040), (30, 3028), (32, 3016), (33, 3007),

Gene: Pioneer3_7 Start: 2994, Stop: 2776, Start Num: 17
Candidate Starts for Pioneer3_7:
(6, 3249), (7, 3222), (8, 3156), (10, 3051), (11, 3045), (Start: 17 @2994 has 5 MA's), (Start: 22 @2934 has 45 MA's), (24, 2895), (28, 2859), (29, 2856), (30, 2844), (32, 2832), (35, 2811),

Gene: Pioneer3_118 Start: 62697, Stop: 62539, Start Num: 22
Candidate Starts for Pioneer3_118:
(8, 62919), (10, 62814), (11, 62808), (Start: 17 @62757 has 5 MA's), (Start: 22 @62697 has 45 MA's), (24, 62658), (28, 62622), (29, 62619), (30, 62607), (32, 62595), (35, 62574),

Gene: Platte_7 Start: 2923, Stop: 2765, Start Num: 22
Candidate Starts for Platte_7:
(7, 3211), (8, 3145), (10, 3040), (11, 3034), (Start: 17 @2983 has 5 MA's), (Start: 22 @2923 has 45 MA's), (24, 2884), (28, 2848), (29, 2845), (30, 2833), (32, 2821), (35, 2800),

Gene: Platte_117 Start: 62471, Stop: 62313, Start Num: 22
Candidate Starts for Platte_117:
(8, 62693), (10, 62588), (11, 62582), (Start: 17 @62531 has 5 MA's), (Start: 22 @62471 has 45 MA's), (24, 62432), (28, 62396), (29, 62393), (30, 62381), (32, 62369), (35, 62348),

Gene: Roman_123 Start: 63997, Stop: 63842, Start Num: 22
Candidate Starts for Roman_123:
(Start: 22 @63997 has 45 MA's), (24, 63958), (27, 63925), (29, 63919), (30, 63907), (32, 63895), (33, 63886),

Gene: Roman_7 Start: 2910, Stop: 2755, Start Num: 22
Candidate Starts for Roman_7:
(Start: 22 @2910 has 45 MA's), (24, 2871), (27, 2838), (29, 2832), (30, 2820), (32, 2808), (33, 2799),

Gene: RunningBrook_9 Start: 3578, Stop: 3423, Start Num: 22
Candidate Starts for RunningBrook_9:
(Start: 22 @3578 has 45 MA's), (26, 3515), (29, 3500), (33, 3467), (34, 3461),

Gene: RunningBrook_125 Start: 63668, Stop: 63513, Start Num: 22
Candidate Starts for RunningBrook_125:
(Start: 22 @63668 has 45 MA's), (26, 63605), (29, 63590), (33, 63557), (34, 63551),

Gene: StevieWelch_10 Start: 3469, Stop: 3314, Start Num: 22
Candidate Starts for StevieWelch_10:
(Start: 22 @3469 has 45 MA's), (26, 3406), (29, 3391), (32, 3367), (34, 3352), (35, 3349),

Gene: StevieWelch_128 Start: 63715, Stop: 63560, Start Num: 22
Candidate Starts for StevieWelch_128:
(Start: 22 @63715 has 45 MA's), (26, 63652), (29, 63637), (32, 63613), (34, 63598), (35, 63595),

Gene: Tandem_118 Start: 62871, Stop: 62713, Start Num: 22
Candidate Starts for Tandem_118:
(8, 63093), (10, 62988), (Start: 17 @62931 has 5 MA's), (Start: 22 @62871 has 45 MA's), (24, 62832), (28, 62796), (29, 62793), (30, 62781), (32, 62769), (35, 62748),

Gene: Tandem_7 Start: 3088, Stop: 2870, Start Num: 17
Candidate Starts for Tandem_7:
(7, 3316), (8, 3250), (10, 3145), (Start: 17 @3088 has 5 MA's), (Start: 22 @3028 has 45 MA's), (24, 2989), (28, 2953), (29, 2950), (30, 2938), (32, 2926), (35, 2905),

Gene: Welcome_127 Start: 63695, Stop: 63540, Start Num: 22
Candidate Starts for Welcome_127:
(Start: 22 @63695 has 45 MA's), (26, 63632), (29, 63617), (32, 63593), (34, 63578),

Gene: Welcome_10 Start: 3551, Stop: 3396, Start Num: 22
Candidate Starts for Welcome_10:
(Start: 22 @3551 has 45 MA's), (26, 3488), (29, 3473), (32, 3449), (34, 3434),

Gene: Wolfstar_8 Start: 3487, Stop: 3335, Start Num: 22
Candidate Starts for Wolfstar_8:
(15, 3553), (18, 3541), (19, 3526), (21, 3490), (Start: 22 @3487 has 45 MA's), (23, 3469), (26, 3424), (29, 3409), (32, 3385),

Gene: Wolfstar_124 Start: 64628, Stop: 64476, Start Num: 22
Candidate Starts for Wolfstar_124:
(15, 64694), (18, 64682), (19, 64667), (21, 64631), (Start: 22 @64628 has 45 MA's), (23, 64610), (26, 64565), (29, 64550), (32, 64526),

Gene: Yuma_123 Start: 62501, Stop: 62346, Start Num: 22
Candidate Starts for Yuma_123:
(Start: 22 @62501 has 45 MA's), (26, 62438), (29, 62423), (33, 62390), (34, 62384), (35, 62381),

Gene: Yuma_10 Start: 3450, Stop: 3295, Start Num: 22
Candidate Starts for Yuma_10:
(Start: 22 @3450 has 45 MA's), (26, 3387), (29, 3372), (33, 3339), (34, 3333), (35, 3330),