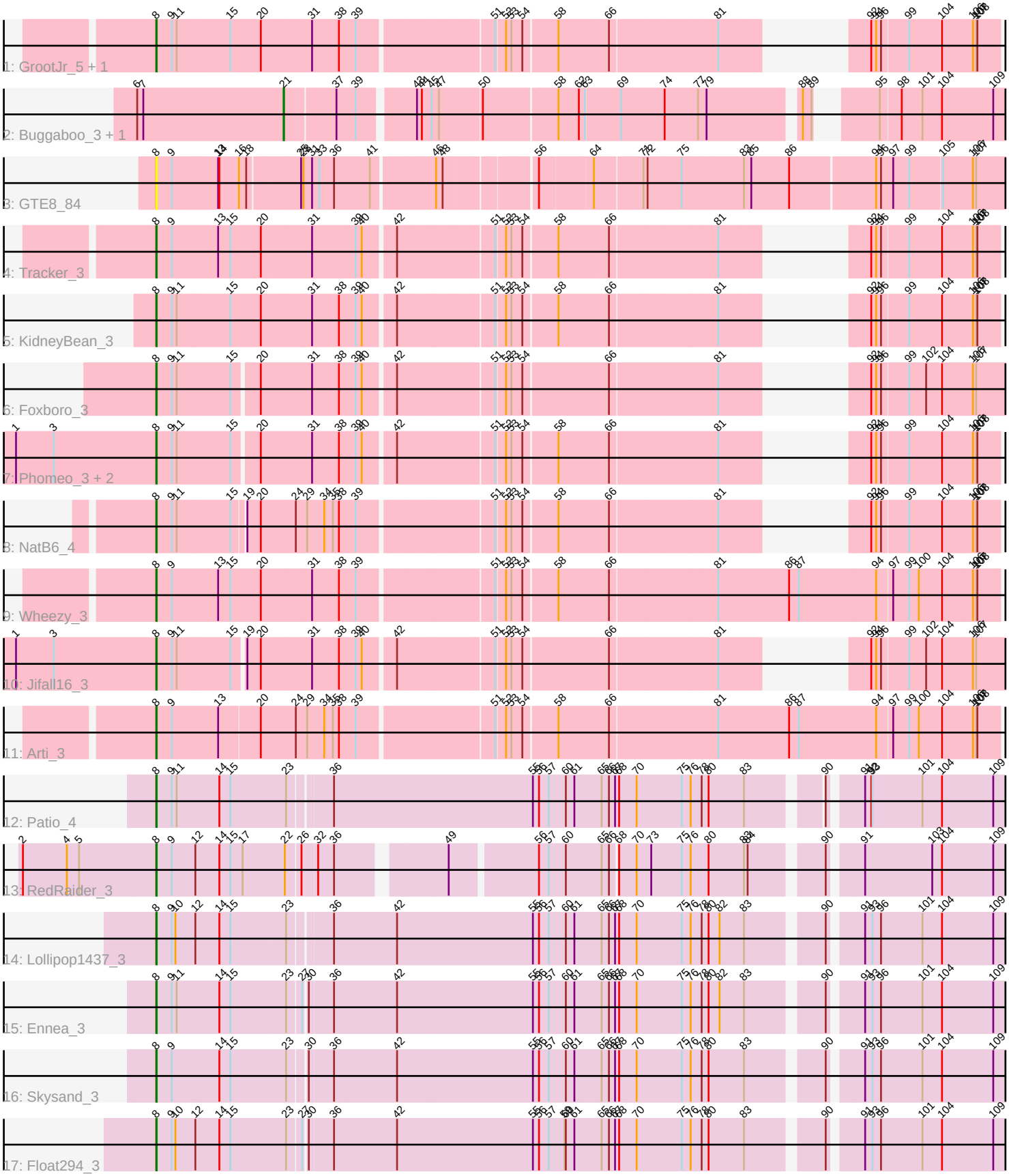
Pham 291538


1: GrootJr_5 + 1
2: Buggaboo_3 + 1
3: GTE8_84
4: Tracker_3
5: KidneyBean_3
6: Foxboro_3
7: Phomeo_3 + 2
8: NatB6_4
9: Wheezy_3
10: Jifall16_3
11: Arti_3
12: Patio_4
13: RedRaider_3
14: Lollipop1437_3
15: Ennea_3
16: Skysand_3
17: Float294_3

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 291538 Report

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

Pham number 291538 has 21 members, 1 are drafts.

Phages represented in each track:
• Track 1 : GrootJr_5, NovumRegina_4
• Track 2 : Buggaboo_3, SuperSulley_3
• Track 3 : GTE8_84
• Track 4 : Tracker_3
• Track 5 : KidneyBean_3
• Track 6 : Foxboro_3
• Track 7 : Phomeo_3, Emianna_3, Kurt_3
• Track 8 : NatB6_4
• Track 9 : Wheezy_3
• Track 10 : Jifall16_3
• Track 11 : Arti_3
• Track 12 : Patio_4
• Track 13 : RedRaider_3
• Track 14 : Lollipop1437_3
• Track 15 : Ennea_3
• Track 16 : Skysand_3
• Track 17 : Float294_3

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

The start number called the most often in the published annotations is 8, it was called in 18 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arti_3, Emianna_3, Ennea_3, Float294_3, Foxboro_3, GTE8_84, GrootJr_5, Jifall16_3, KidneyBean_3, Kurt_3, Lollipop1437_3, NatB6_4, NovumRegina_4, Patio_4, Phomeo_3, RedRaider_3, Skysand_3, Tracker_3, Wheezy_3,

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

Genes that do not have the "Most Annotated" start:
• Buggaboo_3, SuperSulley_3,

Summary by start number:

Start 8:
• Found in 19 of 21 (90.5%) of genes in pham
• Manual Annotations of this start: 18 of 20
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arti_3 (CR2), Emianna_3 (CR2), Ennea_3 (CR3), Float294_3 (CR3), Foxboro_3 (CR2), GTE8_84 (CR2), GrootJr_5 (CR2), Jifall16_3 (CR2), KidneyBean_3 (CR2), Kurt_3 (CR2), Lollipop1437_3 (CR3), NatB6_4 (CR2), NovumRegina_4 (CR2), Patio_4 (CR3), Phomeo_3 (CR2), RedRaider_3 (CR3), Skysand_3 (CR3), Tracker_3 (CR2), Wheezy_3 (CR2),

Start 21:
• Found in 2 of 21 (9.5%) of genes in pham
• Manual Annotations of this start: 2 of 20
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Buggaboo_3 (CR2), SuperSulley_3 (CR2),

Summary by clusters:

There are 2 clusters represented in this pham: CR2, CR3,

Info for manual annotations of cluster CR2:
•Start number 8 was manually annotated 12 times for cluster CR2.
•Start number 21 was manually annotated 2 times for cluster CR2.

Info for manual annotations of cluster CR3:
•Start number 8 was manually annotated 6 times for cluster CR3.

Gene Information:

Gene: Arti_3 Start: 1717, Stop: 3651, Start Num: 8
Candidate Starts for Arti_3:
(Start: 8 @1717 has 18 MA's), (9, 1753), (13, 1867), (20, 1960), (24, 2041), (29, 2068), (34, 2110), (35, 2131), (38, 2146), (39, 2185), (51, 2488), (52, 2509), (53, 2521), (54, 2548), (58, 2626), (66, 2743), (81, 2998), (86, 3163), (87, 3187), (94, 3373), (97, 3409), (99, 3448), (100, 3472), (104, 3523), (106, 3592), (107, 3598), (108, 3601),

Gene: Buggaboo_3 Start: 1859, Stop: 3445, Start Num: 21
Candidate Starts for Buggaboo_3:
(6, 1499), (7, 1514), (Start: 21 @1859 has 2 MA's), (37, 1976), (39, 2021), (43, 2144), (44, 2156), (45, 2180), (47, 2198), (50, 2300), (58, 2474), (62, 2522), (63, 2537), (69, 2621), (74, 2726), (77, 2807), (79, 2828), (88, 3023), (89, 3044), (95, 3134), (98, 3182), (101, 3230), (104, 3278), (109, 3401),

Gene: Emianna_3 Start: 1726, Stop: 3432, Start Num: 8
Candidate Starts for Emianna_3:
(1, 1384), (3, 1477), (Start: 8 @1726 has 18 MA's), (9, 1762), (11, 1774), (15, 1903), (20, 1960), (31, 2080), (38, 2146), (39, 2185), (40, 2200), (42, 2269), (51, 2485), (52, 2506), (53, 2518), (54, 2545), (58, 2623), (66, 2740), (81, 2995), (92, 3142), (94, 3154), (96, 3166), (99, 3229), (104, 3304), (106, 3373), (107, 3379), (108, 3382),

Gene: Ennea_3 Start: 1758, Stop: 3788, Start Num: 8
Candidate Starts for Ennea_3:
(Start: 8 @1758 has 18 MA's), (9, 1794), (11, 1806), (14, 1908), (15, 1935), (23, 2067), (27, 2100), (30, 2106), (36, 2163), (42, 2316), (55, 2640), (56, 2655), (57, 2679), (60, 2721), (61, 2742), (65, 2805), (66, 2823), (67, 2838), (68, 2847), (70, 2889), (75, 3000), (76, 3021), (78, 3045), (80, 3060), (82, 3087), (83, 3144), (90, 3312), (91, 3381), (93, 3399), (96, 3420), (101, 3519), (104, 3567), (109, 3693),

Gene: Float294_3 Start: 1747, Stop: 3774, Start Num: 8
Candidate Starts for Float294_3:
(Start: 8 @1747 has 18 MA's), (9, 1783), (10, 1792), (12, 1840), (14, 1897), (15, 1924), (23, 2053), (27, 2086), (30, 2092), (36, 2149), (42, 2302), (55, 2626), (56, 2641), (57, 2665), (59, 2704), (60, 2707), (61, 2728), (65, 2791), (66, 2809), (67, 2824), (68, 2833), (70, 2875), (75, 2986), (76, 3007), (78, 3031), (80, 3046), (83, 3130), (90, 3298), (91, 3367), (93, 3385), (96, 3406), (101, 3505), (104, 3553), (109, 3679),

Gene: Foxboro_3 Start: 1726, Stop: 3447, Start Num: 8
Candidate Starts for Foxboro_3:
(Start: 8 @1726 has 18 MA's), (9, 1762), (11, 1774), (15, 1903), (20, 1960), (31, 2080), (38, 2146), (39, 2185), (40, 2200), (42, 2269), (51, 2485), (52, 2506), (53, 2518), (54, 2545), (66, 2740), (81, 2995), (92, 3142), (94, 3154), (96, 3166), (99, 3229), (102, 3271), (104, 3304), (106, 3373), (107, 3379),

Gene: GTE8_84 Start: 61935, Stop: 63851, Start Num: 8
Candidate Starts for GTE8_84:
(Start: 8 @61935 has 18 MA's), (9, 61968), (13, 62079), (14, 62082), (16, 62130), (18, 62145), (25, 62262), (28, 62268), (31, 62289), (33, 62307), (36, 62340), (41, 62427), (46, 62571), (48, 62586), (56, 62784), (64, 62904), (71, 63006), (72, 63015), (75, 63093), (83, 63240), (85, 63258), (86, 63351), (94, 63555), (96, 63564), (97, 63594), (99, 63633), (105, 63711), (106, 63777), (107, 63783),

Gene: GrootJr_5 Start: 2318, Stop: 4045, Start Num: 8
Candidate Starts for GrootJr_5:
(Start: 8 @2318 has 18 MA's), (9, 2354), (11, 2366), (15, 2495), (20, 2570), (31, 2690), (38, 2756), (39, 2795), (51, 3098), (52, 3119), (53, 3131), (54, 3158), (58, 3236), (66, 3353), (81, 3608), (92, 3755), (94, 3767), (96, 3779), (99, 3842), (104, 3917), (106, 3986), (107, 3992), (108, 3995),

Gene: Jifall16_3 Start: 1726, Stop: 3447, Start Num: 8
Candidate Starts for Jifall16_3:
(1, 1384), (3, 1477), (Start: 8 @1726 has 18 MA's), (9, 1762), (11, 1774), (15, 1903), (19, 1930), (20, 1960), (31, 2080), (38, 2146), (39, 2185), (40, 2200), (42, 2269), (51, 2485), (52, 2506), (53, 2518), (54, 2545), (66, 2740), (81, 2995), (92, 3142), (94, 3154), (96, 3166), (99, 3229), (102, 3271), (104, 3304), (106, 3373), (107, 3379),

Gene: KidneyBean_3 Start: 1717, Stop: 3441, Start Num: 8
Candidate Starts for KidneyBean_3:
(Start: 8 @1717 has 18 MA's), (9, 1753), (11, 1765), (15, 1894), (20, 1969), (31, 2089), (38, 2155), (39, 2194), (40, 2209), (42, 2278), (51, 2494), (52, 2515), (53, 2527), (54, 2554), (58, 2632), (66, 2749), (81, 3004), (92, 3151), (94, 3163), (96, 3175), (99, 3238), (104, 3313), (106, 3382), (107, 3388), (108, 3391),

Gene: Kurt_3 Start: 1726, Stop: 3432, Start Num: 8
Candidate Starts for Kurt_3:
(1, 1384), (3, 1477), (Start: 8 @1726 has 18 MA's), (9, 1762), (11, 1774), (15, 1903), (20, 1960), (31, 2080), (38, 2146), (39, 2185), (40, 2200), (42, 2269), (51, 2485), (52, 2506), (53, 2518), (54, 2545), (58, 2623), (66, 2740), (81, 2995), (92, 3142), (94, 3154), (96, 3166), (99, 3229), (104, 3304), (106, 3373),

(107, 3379), (108, 3382),

Gene: Lollipop1437_3 Start: 1746, Stop: 3776, Start Num: 8
Candidate Starts for Lollipop1437_3:
(Start: 8 @1746 has 18 MA's), (9, 1782), (10, 1791), (12, 1839), (14, 1896), (15, 1923), (23, 2055), (36, 2151), (42, 2304), (55, 2628), (56, 2643), (57, 2667), (60, 2709), (61, 2730), (65, 2793), (66, 2811), (67, 2826), (68, 2835), (70, 2877), (75, 2988), (76, 3009), (78, 3033), (80, 3048), (82, 3075), (83, 3132), (90, 3300), (91, 3369), (93, 3387), (96, 3408), (101, 3507), (104, 3555), (109, 3681),

Gene: NatB6_4 Start: 2341, Stop: 4050, Start Num: 8
Candidate Starts for NatB6_4:
(Start: 8 @2341 has 18 MA's), (9, 2377), (11, 2389), (15, 2518), (19, 2545), (20, 2575), (24, 2656), (29, 2683), (34, 2725), (35, 2746), (38, 2761), (39, 2800), (51, 3103), (52, 3124), (53, 3136), (54, 3163), (58, 3241), (66, 3358), (81, 3613), (92, 3760), (94, 3772), (96, 3784), (99, 3847), (104, 3922), (106, 3991), (107, 3997), (108, 4000),

Gene: NovumRegina_4 Start: 2318, Stop: 4045, Start Num: 8
Candidate Starts for NovumRegina_4:
(Start: 8 @2318 has 18 MA's), (9, 2354), (11, 2366), (15, 2495), (20, 2570), (31, 2690), (38, 2756), (39, 2795), (51, 3098), (52, 3119), (53, 3131), (54, 3158), (58, 3236), (66, 3353), (81, 3608), (92, 3755), (94, 3767), (96, 3779), (99, 3842), (104, 3917), (106, 3986), (107, 3992), (108, 3995),

Gene: Patio_4 Start: 2429, Stop: 4447, Start Num: 8
Candidate Starts for Patio_4:
(Start: 8 @2429 has 18 MA's), (9, 2465), (11, 2477), (14, 2579), (15, 2606), (23, 2738), (36, 2834), (55, 3308), (56, 3323), (57, 3347), (60, 3389), (61, 3410), (65, 3473), (66, 3491), (67, 3506), (68, 3515), (70, 3557), (75, 3668), (76, 3689), (78, 3713), (80, 3728), (83, 3812), (90, 3971), (91, 4040), (92, 4055), (93, 4058), (101, 4178), (104, 4226), (109, 4352),

Gene: Phomeo_3 Start: 1726, Stop: 3432, Start Num: 8
Candidate Starts for Phomeo_3:
(1, 1384), (3, 1477), (Start: 8 @1726 has 18 MA's), (9, 1762), (11, 1774), (15, 1903), (20, 1960), (31, 2080), (38, 2146), (39, 2185), (40, 2200), (42, 2269), (51, 2485), (52, 2506), (53, 2518), (54, 2545), (58, 2623), (66, 2740), (81, 2995), (92, 3142), (94, 3154), (96, 3166), (99, 3229), (104, 3304), (106, 3373), (107, 3379), (108, 3382),

Gene: RedRaider_3 Start: 1781, Stop: 3715, Start Num: 8
Candidate Starts for RedRaider_3:
(2, 1454), (4, 1562), (5, 1592), (Start: 8 @1781 has 18 MA's), (9, 1817), (12, 1874), (14, 1931), (15, 1958), (17, 1988), (22, 2084), (26, 2117), (32, 2150), (36, 2189), (49, 2417), (56, 2612), (57, 2636), (60, 2678), (65, 2762), (66, 2780), (68, 2795), (70, 2837), (73, 2873), (75, 2945), (76, 2966), (80, 3005), (83, 3089), (84, 3098), (90, 3257), (91, 3326), (103, 3485), (104, 3509), (109, 3635),

Gene: Skysand_3 Start: 1746, Stop: 3776, Start Num: 8
Candidate Starts for Skysand_3:
(Start: 8 @1746 has 18 MA's), (9, 1782), (14, 1896), (15, 1923), (23, 2055), (30, 2094), (36, 2151), (42, 2304), (55, 2628), (56, 2643), (57, 2667), (60, 2709), (61, 2730), (65, 2793), (66, 2811), (67, 2826), (68, 2835), (70, 2877), (75, 2988), (76, 3009), (78, 3033), (80, 3048), (83, 3132), (90, 3300), (91, 3369), (93, 3387), (96, 3408), (101, 3507), (104, 3555), (109, 3681),

Gene: SuperSulley_3 Start: 1859, Stop: 3445, Start Num: 21
Candidate Starts for SuperSulley_3:

(6, 1499), (7, 1514), (Start: 21 @1859 has 2 MA's), (37, 1976), (39, 2021), (43, 2144), (44, 2156), (45, 2180), (47, 2198), (50, 2300), (58, 2474), (62, 2522), (63, 2537), (69, 2621), (74, 2726), (77, 2807), (79, 2828), (88, 3023), (89, 3044), (95, 3134), (98, 3182), (101, 3230), (104, 3278), (109, 3401),

Gene: Tracker_3 Start: 1689, Stop: 3416, Start Num: 8
Candidate Starts for Tracker_3:
(Start: 8 @1689 has 18 MA's), (9, 1725), (13, 1839), (15, 1869), (20, 1944), (31, 2064), (39, 2169), (40, 2184), (42, 2253), (51, 2469), (52, 2490), (53, 2502), (54, 2529), (58, 2607), (66, 2724), (81, 2979), (92, 3126), (94, 3138), (96, 3150), (99, 3213), (104, 3288), (106, 3357), (107, 3363), (108, 3366),

Gene: Wheezy_3 Start: 1717, Stop: 3663, Start Num: 8
Candidate Starts for Wheezy_3:
(Start: 8 @1717 has 18 MA's), (9, 1753), (13, 1867), (15, 1897), (20, 1972), (31, 2092), (38, 2158), (39, 2197), (51, 2500), (52, 2521), (53, 2533), (54, 2560), (58, 2638), (66, 2755), (81, 3010), (86, 3175), (87, 3199), (94, 3385), (97, 3421), (99, 3460), (100, 3484), (104, 3535), (106, 3604), (107, 3610), (108, 3613),