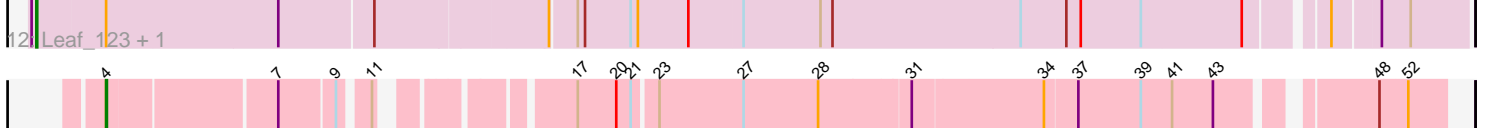
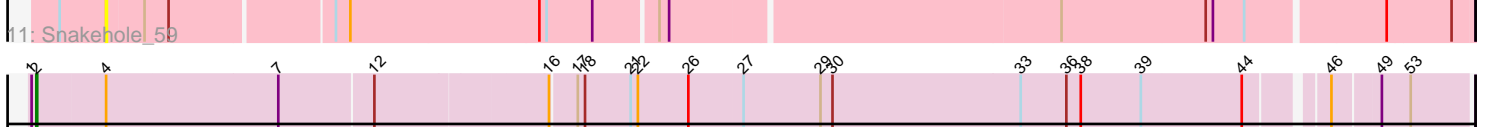
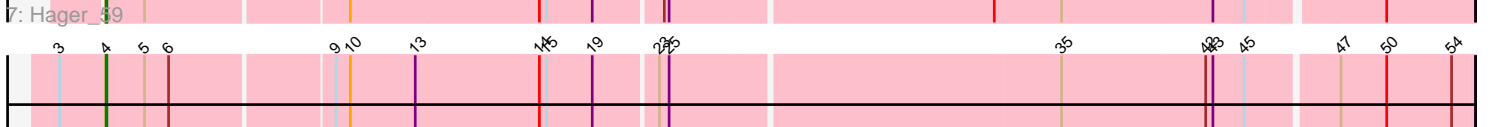
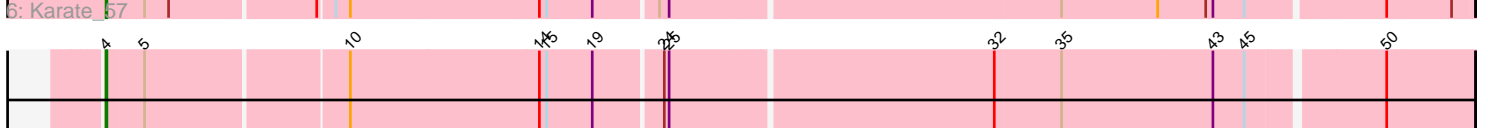
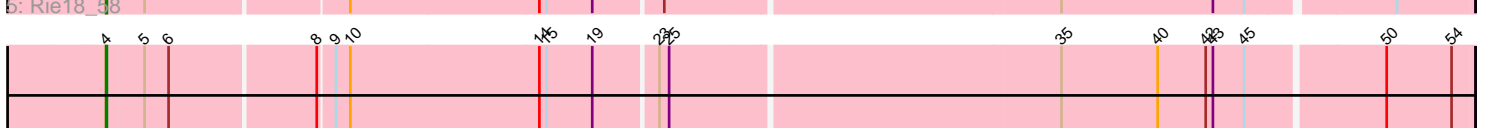
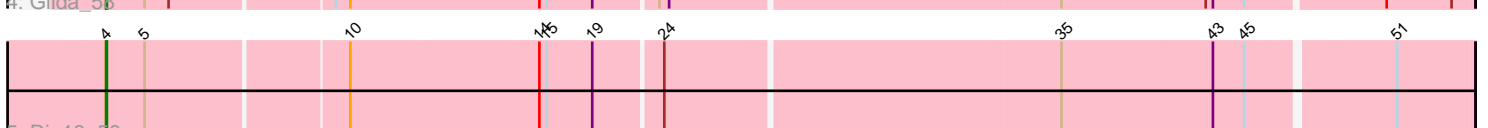
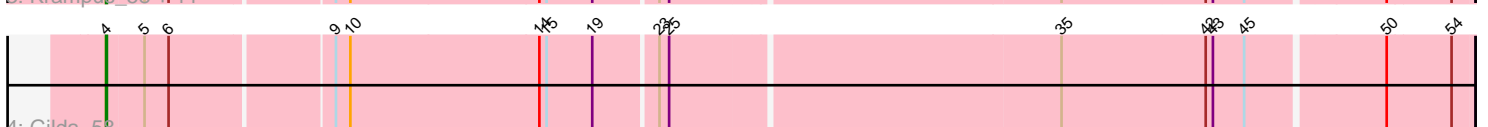
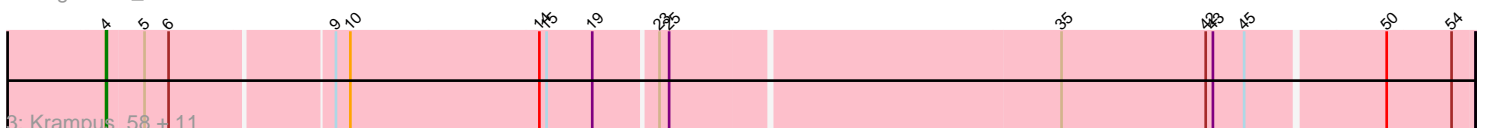
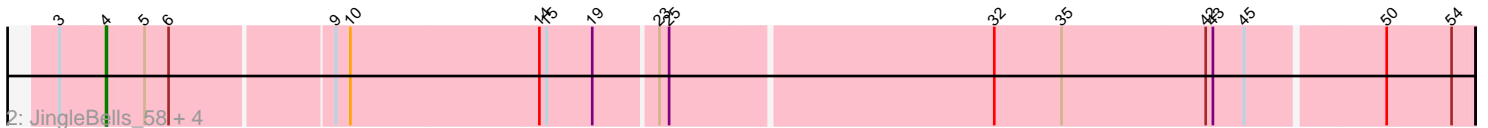
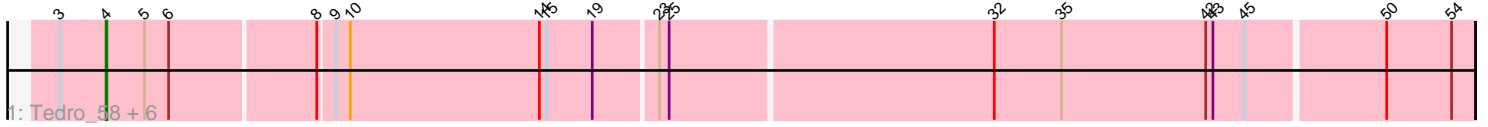


Pham 194202



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 194202 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194202 has 35 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Tedro\_58, Erudite\_57, Aesir\_57, JDawG\_57, MortySmith\_56, Haunter\_58, Dauntless\_57
- Track 2 : JingleBells\_58, FreddieHg\_59, Hiddenleaf\_59, Chivey\_59, DannyDe\_59
- Track 3 : Krampus\_58, PhunaPhoke\_58, NarutoRun\_58, Kate\_58, Cybele\_58, AnnaSerena\_58, Pharpay\_57, Anakin\_58, Neptune\_58, Potty\_57, Poultruss\_57, Rachella\_58
- Track 4 : Gilda\_58
- Track 5 : Rie18\_58
- Track 6 : Karate\_57
- Track 7 : Hager\_59
- Track 8 : OverHedge\_57
- Track 9 : CoolCookie\_57
- Track 10 : Crestdrop\_58
- Track 11 : Snakehole\_59
- Track 12 : Leaf\_123, Dewdrop\_123
- Track 13 : FuzzBuster\_74

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

The start number called the most often in the published annotations is 4, it was called in 32 of the 34 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aesir\_57, Anakin\_58, AnnaSerena\_58, Chivey\_59, CoolCookie\_57, Crestdrop\_58, Cybele\_58, DannyDe\_59, Dauntless\_57, Erudite\_57, FreddieHg\_59, FuzzBuster\_74, Gilda\_58, Hager\_59, Haunter\_58, Hiddenleaf\_59, JDawG\_57, JingleBells\_58, Karate\_57, Kate\_58, Krampus\_58, MortySmith\_56, NarutoRun\_58, Neptune\_58, OverHedge\_57, Pharpay\_57, PhunaPhoke\_58, Potty\_57, Poultruss\_57, Rachella\_58, Rie18\_58, Snakehole\_59, Tedro\_58,

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

- Dewdrop\_123, Leaf\_123,

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

- 

### Summary by start number:

#### Start 2:

- Found in 2 of 35 ( 5.7% ) of genes in pham
- Manual Annotations of this start: 2 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dewdrop\_123 (GC), Leaf\_123 (GC),

#### Start 4:

- Found in 35 of 35 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 32 of 34
- Called 94.3% of time when present
- Phage (with cluster) where this start called: Aesir\_57 (EF), Anakin\_58 (EF), AnnaSerena\_58 (EF), Chivey\_59 (EF), CoolCookie\_57 (EF), Crestdrop\_58 (EF), Cybele\_58 (EF), DannyDe\_59 (EF), Dauntless\_57 (EF), Erudite\_57 (EF), FreddieHg\_59 (EF), FuzzBuster\_74 (singleton), Gilda\_58 (EF), Hager\_59 (EF), Haunter\_58 (EF), Hiddenleaf\_59 (EF), JDawG\_57 (EF), JingleBells\_58 (EF), Karate\_57 (EF), Kate\_58 (EF), Krampus\_58 (EF), MortySmith\_56 (EF), NarutoRun\_58 (EF), Neptune\_58 (EF), OverHedge\_57 (EF), Pharpay\_57 (EF), PhunaPhoke\_58 (EF), Potty\_57 (EF), Poultruss\_57 (EF), Rachella\_58 (EF), Rie18\_58 (EF), Snakehole\_59 (EF), Tedro\_58 (EF),

### Summary by clusters:

There are 3 clusters represented in this pham: singleton, EF, GC,

#### Info for manual annotations of cluster EF:

- Start number 4 was manually annotated 31 times for cluster EF.

#### Info for manual annotations of cluster GC:

- Start number 2 was manually annotated 2 times for cluster GC.

### Gene Information:

Gene: Aesir\_57 Start: 43316, Stop: 44947, Start Num: 4

Candidate Starts for Aesir\_57:

(3, 43265), (Start: 4 @43316 has 32 MA's), (5, 43361), (6, 43391), (8, 43565), (9, 43583), (10, 43601), (14, 43835), (15, 43844), (19, 43901), (23, 43976), (25, 43988), (32, 44375), (35, 44456), (42, 44633), (43, 44642), (45, 44681), (50, 44843), (54, 44921),

Gene: Anakin\_58 Start: 43655, Stop: 45286, Start Num: 4

Candidate Starts for Anakin\_58:

(Start: 4 @43655 has 32 MA's), (5, 43700), (6, 43730), (9, 43922), (10, 43940), (14, 44174), (15, 44183), (19, 44240), (23, 44315), (25, 44327), (35, 44795), (42, 44972), (43, 44981), (45, 45020), (50, 45182), (54, 45260),

Gene: AnnaSerena\_58 Start: 43689, Stop: 45320, Start Num: 4

Candidate Starts for AnnaSerena\_58:

(Start: 4 @43689 has 32 MA's), (5, 43734), (6, 43764), (9, 43956), (10, 43974), (14, 44208), (15, 44217), (19, 44274), (23, 44349), (25, 44361), (35, 44829), (42, 45006), (43, 45015), (45, 45054), (50, 45216), (54, 45294),

Gene: Chivey\_59 Start: 43119, Stop: 44750, Start Num: 4

Candidate Starts for Chivey\_59:

(3, 43068), (Start: 4 @43119 has 32 MA's), (5, 43164), (6, 43194), (9, 43386), (10, 43404), (14, 43638), (15, 43647), (19, 43704), (23, 43779), (25, 43791), (32, 44178), (35, 44259), (42, 44436), (43, 44445), (45, 44484), (50, 44646), (54, 44724),

Gene: CoolCookie\_57 Start: 43699, Stop: 45330, Start Num: 4

Candidate Starts for CoolCookie\_57:

(3, 43648), (Start: 4 @43699 has 32 MA's), (5, 43744), (6, 43774), (8, 43948), (9, 43966), (14, 44218), (15, 44227), (19, 44284), (23, 44359), (25, 44371), (32, 44758), (35, 44839), (42, 45016), (43, 45025), (45, 45064), (50, 45226), (54, 45304),

Gene: Crestdrop\_58 Start: 43390, Stop: 45021, Start Num: 4

Candidate Starts for Crestdrop\_58:

(3, 43339), (Start: 4 @43390 has 32 MA's), (5, 43435), (8, 43639), (9, 43657), (10, 43675), (14, 43909), (15, 43918), (19, 43975), (23, 44050), (25, 44062), (32, 44449), (35, 44530), (42, 44707), (43, 44716), (45, 44755), (50, 44917), (51, 44929), (54, 44995),

Gene: Cybele\_58 Start: 43673, Stop: 45316, Start Num: 4

Candidate Starts for Cybele\_58:

(Start: 4 @43673 has 32 MA's), (5, 43718), (6, 43748), (9, 43940), (10, 43958), (14, 44192), (15, 44201), (19, 44258), (23, 44333), (25, 44345), (35, 44813), (42, 44990), (43, 44999), (45, 45038), (50, 45212), (54, 45290),

Gene: DannyDe\_59 Start: 43120, Stop: 44751, Start Num: 4

Candidate Starts for DannyDe\_59:

(3, 43069), (Start: 4 @43120 has 32 MA's), (5, 43165), (6, 43195), (9, 43387), (10, 43405), (14, 43639), (15, 43648), (19, 43705), (23, 43780), (25, 43792), (32, 44179), (35, 44260), (42, 44437), (43, 44446), (45, 44485), (50, 44647), (54, 44725),

Gene: Dauntless\_57 Start: 43251, Stop: 44882, Start Num: 4

Candidate Starts for Dauntless\_57:

(3, 43200), (Start: 4 @43251 has 32 MA's), (5, 43296), (6, 43326), (8, 43500), (9, 43518), (10, 43536), (14, 43770), (15, 43779), (19, 43836), (23, 43911), (25, 43923), (32, 44310), (35, 44391), (42, 44568), (43, 44577), (45, 44616), (50, 44778), (54, 44856),

Gene: Dewdrop\_123 Start: 75555, Stop: 77261, Start Num: 2

Candidate Starts for Dewdrop\_123:

(1, 75549), (Start: 2 @75555 has 2 MA's), (Start: 4 @75639 has 32 MA's), (7, 75849), (12, 75960), (16, 76164), (17, 76194), (18, 76203), (21, 76260), (22, 76269), (26, 76332), (27, 76398), (29, 76494), (30, 76509), (33, 76743), (36, 76800), (38, 76818), (39, 76893), (44, 77016), (46, 77100), (49, 77154), (53, 77190),

Gene: Erudite\_57 Start: 43251, Stop: 44882, Start Num: 4

Candidate Starts for Erudite\_57:

(3, 43200), (Start: 4 @43251 has 32 MA's), (5, 43296), (6, 43326), (8, 43500), (9, 43518), (10, 43536), (14, 43770), (15, 43779), (19, 43836), (23, 43911), (25, 43923), (32, 44310), (35, 44391), (42, 44568), (43, 44577), (45, 44616), (50, 44778), (54, 44856),

Gene: FreddieHg\_59 Start: 43136, Stop: 44767, Start Num: 4

Candidate Starts for FreddieHg\_59:

(3, 43085), (Start: 4 @43136 has 32 MA's), (5, 43181), (6, 43211), (9, 43403), (10, 43421), (14, 43655), (15, 43664), (19, 43721), (23, 43796), (25, 43808), (32, 44195), (35, 44276), (42, 44453), (43, 44462), (45, 44501), (50, 44663), (54, 44741),

Gene: FuzzBuster\_74 Start: 44531, Stop: 43062, Start Num: 4

Candidate Starts for FuzzBuster\_74:

(Start: 4 @44531 has 32 MA's), (7, 44333), (9, 44267), (11, 44237), (17, 44054), (20, 44006), (21, 43988), (23, 43961), (27, 43856), (28, 43766), (31, 43661), (34, 43505), (37, 43466), (39, 43388), (41, 43349), (43, 43298), (48, 43139), (52, 43109),

Gene: Gilda\_58 Start: 43677, Stop: 45308, Start Num: 4

Candidate Starts for Gilda\_58:

(Start: 4 @43677 has 32 MA's), (5, 43722), (6, 43752), (9, 43944), (10, 43962), (14, 44196), (15, 44205), (19, 44262), (23, 44337), (25, 44349), (35, 44817), (42, 44994), (43, 45003), (45, 45042), (50, 45204), (54, 45282),

Gene: Hager\_59 Start: 43064, Stop: 44692, Start Num: 4

Candidate Starts for Hager\_59:

(Start: 4 @43064 has 32 MA's), (5, 43109), (10, 43349), (14, 43583), (15, 43592), (19, 43649), (24, 43730), (25, 43736), (32, 44123), (35, 44204), (43, 44390), (45, 44429), (50, 44585),

Gene: Haunter\_58 Start: 42889, Stop: 44520, Start Num: 4

Candidate Starts for Haunter\_58:

(3, 42838), (Start: 4 @42889 has 32 MA's), (5, 42934), (6, 42964), (8, 43138), (9, 43156), (10, 43174), (14, 43408), (15, 43417), (19, 43474), (23, 43549), (25, 43561), (32, 43948), (35, 44029), (42, 44206), (43, 44215), (45, 44254), (50, 44416), (54, 44494),

Gene: Hiddenleaf\_59 Start: 43119, Stop: 44750, Start Num: 4

Candidate Starts for Hiddenleaf\_59:

(3, 43068), (Start: 4 @43119 has 32 MA's), (5, 43164), (6, 43194), (9, 43386), (10, 43404), (14, 43638), (15, 43647), (19, 43704), (23, 43779), (25, 43791), (32, 44178), (35, 44259), (42, 44436), (43, 44445), (45, 44484), (50, 44646), (54, 44724),

Gene: JDawG\_57 Start: 43311, Stop: 44942, Start Num: 4

Candidate Starts for JDawG\_57:

(3, 43260), (Start: 4 @43311 has 32 MA's), (5, 43356), (6, 43386), (8, 43560), (9, 43578), (10, 43596), (14, 43830), (15, 43839), (19, 43896), (23, 43971), (25, 43983), (32, 44370), (35, 44451), (42, 44628), (43, 44637), (45, 44676), (50, 44838), (54, 44916),

Gene: JingleBells\_58 Start: 43225, Stop: 44856, Start Num: 4

Candidate Starts for JingleBells\_58:

(3, 43174), (Start: 4 @43225 has 32 MA's), (5, 43270), (6, 43300), (9, 43492), (10, 43510), (14, 43744), (15, 43753), (19, 43810), (23, 43885), (25, 43897), (32, 44284), (35, 44365), (42, 44542), (43, 44551), (45, 44590), (50, 44752), (54, 44830),

Gene: Karate\_57 Start: 43493, Stop: 45124, Start Num: 4

Candidate Starts for Karate\_57:

(Start: 4 @43493 has 32 MA's), (5, 43538), (6, 43568), (8, 43742), (9, 43760), (10, 43778), (14, 44012), (15, 44021), (19, 44078), (23, 44153), (25, 44165), (35, 44633), (40, 44753), (42, 44810), (43, 44819), (45, 44858), (50, 45020), (54, 45098),

Gene: Kate\_58 Start: 43594, Stop: 45225, Start Num: 4

Candidate Starts for Kate\_58:

(Start: 4 @43594 has 32 MA's), (5, 43639), (6, 43669), (9, 43861), (10, 43879), (14, 44113), (15, 44122), (19, 44179), (23, 44254), (25, 44266), (35, 44734), (42, 44911), (43, 44920), (45, 44959), (50, 45121), (54, 45199),

Gene: Krampus\_58 Start: 43690, Stop: 45321, Start Num: 4

Candidate Starts for Krampus\_58:

(Start: 4 @43690 has 32 MA's), (5, 43735), (6, 43765), (9, 43957), (10, 43975), (14, 44209), (15, 44218), (19, 44275), (23, 44350), (25, 44362), (35, 44830), (42, 45007), (43, 45016), (45, 45055), (50, 45217), (54, 45295),

Gene: Leaf\_123 Start: 75555, Stop: 77261, Start Num: 2

Candidate Starts for Leaf\_123:

(1, 75549), (Start: 2 @75555 has 2 MA's), (Start: 4 @75639 has 32 MA's), (7, 75849), (12, 75960), (16, 76164), (17, 76194), (18, 76203), (21, 76260), (22, 76269), (26, 76332), (27, 76398), (29, 76494), (30, 76509), (33, 76743), (36, 76800), (38, 76818), (39, 76893), (44, 77016), (46, 77100), (49, 77154), (53, 77190),

Gene: MortySmith\_56 Start: 42725, Stop: 44356, Start Num: 4

Candidate Starts for MortySmith\_56:

(3, 42674), (Start: 4 @42725 has 32 MA's), (5, 42770), (6, 42800), (8, 42974), (9, 42992), (10, 43010), (14, 43244), (15, 43253), (19, 43310), (23, 43385), (25, 43397), (32, 43784), (35, 43865), (42, 44042), (43, 44051), (45, 44090), (50, 44252), (54, 44330),

Gene: NarutoRun\_58 Start: 43655, Stop: 45286, Start Num: 4

Candidate Starts for NarutoRun\_58:

(Start: 4 @43655 has 32 MA's), (5, 43700), (6, 43730), (9, 43922), (10, 43940), (14, 44174), (15, 44183), (19, 44240), (23, 44315), (25, 44327), (35, 44795), (42, 44972), (43, 44981), (45, 45020), (50, 45182), (54, 45260),

Gene: Neptune\_58 Start: 43673, Stop: 45316, Start Num: 4

Candidate Starts for Neptune\_58:

(Start: 4 @43673 has 32 MA's), (5, 43718), (6, 43748), (9, 43940), (10, 43958), (14, 44192), (15, 44201), (19, 44258), (23, 44333), (25, 44345), (35, 44813), (42, 44990), (43, 44999), (45, 45038), (50, 45212), (54, 45290),

Gene: OverHedge\_57 Start: 43551, Stop: 45182, Start Num: 4

Candidate Starts for OverHedge\_57:

(3, 43500), (Start: 4 @43551 has 32 MA's), (5, 43596), (6, 43626), (9, 43818), (10, 43836), (13, 43917), (14, 44070), (15, 44079), (19, 44136), (23, 44211), (25, 44223), (35, 44691), (42, 44868), (43, 44877), (45, 44916), (47, 45021), (50, 45078), (54, 45156),

Gene: Pharpay\_57 Start: 43700, Stop: 45331, Start Num: 4

Candidate Starts for Pharpay\_57:

(Start: 4 @43700 has 32 MA's), (5, 43745), (6, 43775), (9, 43967), (10, 43985), (14, 44219), (15, 44228), (19, 44285), (23, 44360), (25, 44372), (35, 44840), (42, 45017), (43, 45026), (45, 45065), (50, 45227), (54, 45305),

Gene: PhunaPhoke\_58 Start: 43670, Stop: 45301, Start Num: 4

Candidate Starts for PhunaPhoke\_58:

(Start: 4 @43670 has 32 MA's), (5, 43715), (6, 43745), (9, 43937), (10, 43955), (14, 44189), (15, 44198), (19, 44255), (23, 44330), (25, 44342), (35, 44810), (42, 44987), (43, 44996), (45, 45035), (50,

45197), (54, 45275),

Gene: Potty\_57 Start: 43600, Stop: 45231, Start Num: 4

Candidate Starts for Potty\_57:

(Start: 4 @43600 has 32 MA's), (5, 43645), (6, 43675), (9, 43867), (10, 43885), (14, 44119), (15, 44128), (19, 44185), (23, 44260), (25, 44272), (35, 44740), (42, 44917), (43, 44926), (45, 44965), (50, 45127), (54, 45205),

Gene: Poultress\_57 Start: 43897, Stop: 45528, Start Num: 4

Candidate Starts for Poultress\_57:

(Start: 4 @43897 has 32 MA's), (5, 43942), (6, 43972), (9, 44164), (10, 44182), (14, 44416), (15, 44425), (19, 44482), (23, 44557), (25, 44569), (35, 45037), (42, 45214), (43, 45223), (45, 45262), (50, 45424), (54, 45502),

Gene: Rachella\_58 Start: 43681, Stop: 45312, Start Num: 4

Candidate Starts for Rachella\_58:

(Start: 4 @43681 has 32 MA's), (5, 43726), (6, 43756), (9, 43948), (10, 43966), (14, 44200), (15, 44209), (19, 44266), (23, 44341), (25, 44353), (35, 44821), (42, 44998), (43, 45007), (45, 45046), (50, 45208), (54, 45286),

Gene: Rie18\_58 Start: 43470, Stop: 45098, Start Num: 4

Candidate Starts for Rie18\_58:

(Start: 4 @43470 has 32 MA's), (5, 43515), (10, 43755), (14, 43989), (15, 43998), (19, 44055), (24, 44136), (35, 44610), (43, 44796), (45, 44835), (51, 45006),

Gene: Snakehole\_59 Start: 43097, Stop: 44728, Start Num: 4

Candidate Starts for Snakehole\_59:

(3, 43046), (Start: 4 @43097 has 32 MA's), (5, 43142), (6, 43172), (9, 43364), (10, 43382), (14, 43616), (15, 43625), (19, 43682), (23, 43757), (25, 43769), (35, 44237), (42, 44414), (43, 44423), (45, 44462), (50, 44624), (54, 44702),

Gene: Tedro\_58 Start: 43107, Stop: 44738, Start Num: 4

Candidate Starts for Tedro\_58:

(3, 43056), (Start: 4 @43107 has 32 MA's), (5, 43152), (6, 43182), (8, 43356), (9, 43374), (10, 43392), (14, 43626), (15, 43635), (19, 43692), (23, 43767), (25, 43779), (32, 44166), (35, 44247), (42, 44424), (43, 44433), (45, 44472), (50, 44634), (54, 44712),