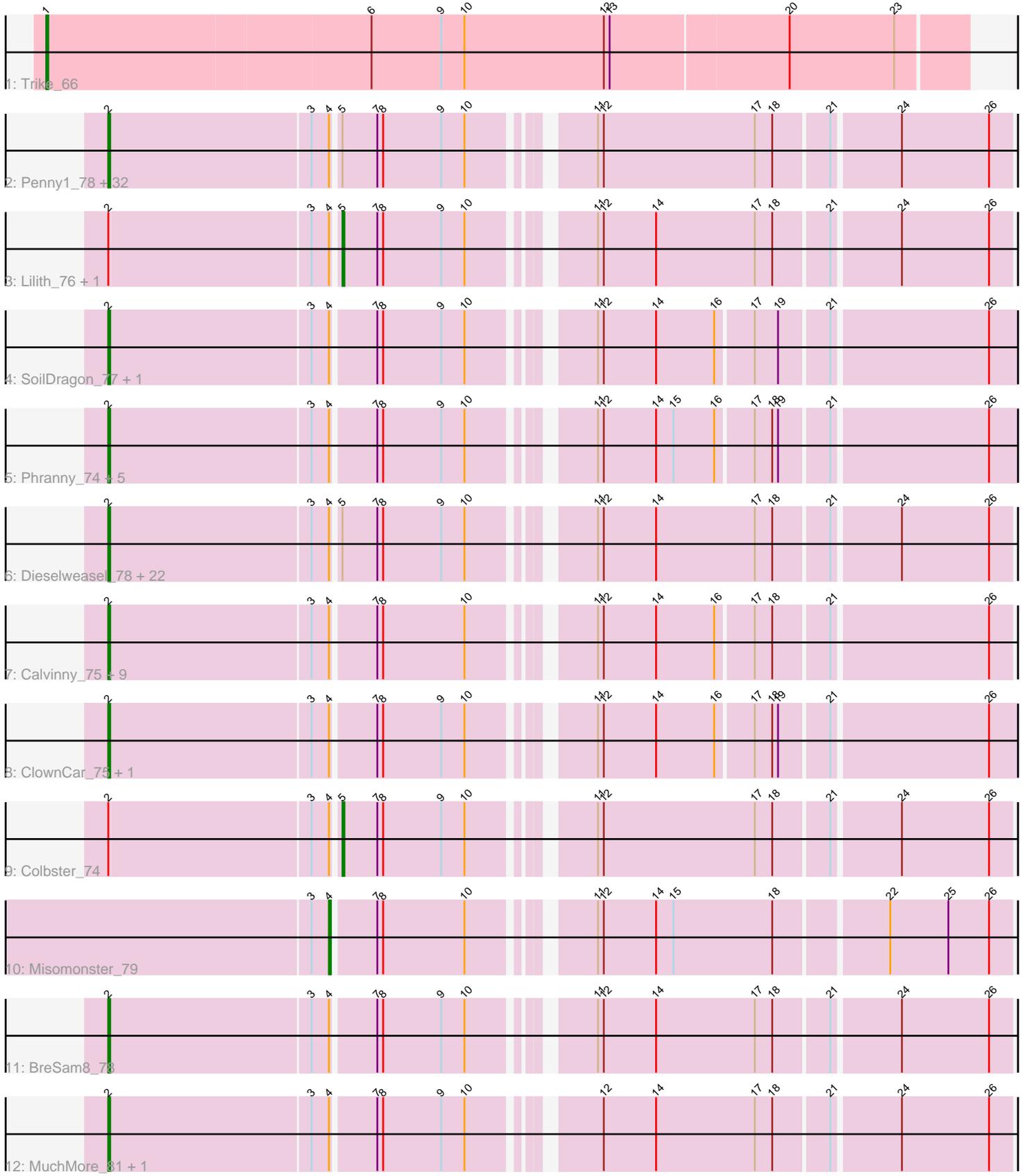


Pham 291071



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 291071 Report

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

Pham number 291071 has 84 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Trike_66
- Track 2 : Penny1_78, HashRod_79, Soshari_80, EpicPhail_79, Farber_78, GingkoMaracino_78, Beauxregard13_77, Phoxy_78, MoneyMay_77, Tiffany_77, Hercules11_78, Anubis_81, JenCasNa_79, Marie_76, Taurus_79, Grif_76, SoYo_75, Methuselah_71, Rummer_77, Sabinator_76, Fernando_78, Spike509_78, Croquant_75, Phoebe_79, P28Green_78, PotatoSplit_79, LugYA_81, Cullens_78, Grum1_77, Bxz2_73, AgronaGT15_75, Gwennie_73, Ollie_78
- Track 3 : Lilith_76, MadMarie_76
- Track 4 : SoilDragon_77, Jobu08_74
- Track 5 : Phranny_74, Gemma_75, PhishRPhriends_74, HaveUMetTed_78, Manu_77, Reba_73
- Track 6 : Dieselweasel_78, GtownJaz_78, Aglet_79, Bigflo_75, Microwolf_74, Vix_74, Watson_77, DaHudson_77, LarryKay_78, LBerry_79, StepMih_77, Malinsilva_80, Grub_76, PGHhamlin_80, Snickers_78, Mainiac_77, Stagni_75, MarQuardt_78, Montavir_73, Sabia_76, Daishi_77, Lowa_75, Pembroke_78
- Track 7 : Calvinny_75, ACFishhook_75, Kalnoky_78, Kalb97_78, Pawn_76, PurpleHaze_77, JeppNRM_78, Marius_78, Heliosoles_75, Groupthink_78
- Track 8 : ClownCar_75, OlanP_76
- Track 9 : Colbster_74
- Track 10 : Misomonster_79
- Track 11 : BreSam8_78
- Track 12 : MuchMore_81, AugsMagnumOpus_81

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

The start number called the most often in the published annotations is 2, it was called in 72 of the 77 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ACFishhook_75, Aglet_79, AgronaGT15_75, Anubis_81, AugsMagnumOpus_81, Beauxregard13_77, Bigflo_75, BreSam8_78, Bxz2_73, Calvinny_75, ClownCar_75, Croquant_75, Cullens_78, DaHudson_77, Daishi_77, Dieselweasel_78, EpicPhail_79, Farber_78, Fernando_78, Gemma_75, GingkoMaracino_78, Grif_76, Groupthink_78, Grub_76, Grum1_77, GtownJaz_78, Gwennie_73, HashRod_79,

HaveUMetTed_78, Heliosoles_75, Hercules11_78, JenCasNa_79, JeppNRM_78, Jobu08_74, Kalb97_78, Kalnoky_78, LBerry_79, LarryKay_78, Lowa_75, LugYA_81, Mainiac_77, Malinsilva_80, Manu_77, MarQuardt_78, Marie_76, Marius_78, Methuselah_71, Microwolf_74, MoneyMay_77, Montavir_73, MuchMore_81, OlanP_76, Ollie_78, P28Green_78, PGHhamlin_80, Pawn_76, Pembroke_78, Penny1_78, PhishRPhriends_74, Phoebe_79, Phoxy_78, Phranny_74, PotatoSplit_79, PurpleHaze_77, Reba_73, Rummer_77, Sabia_76, Sabinator_76, Snickers_78, SoYo_75, SoilDragon_77, Soshari_80, Spike509_78, Stagni_75, StepMih_77, Taurus_79, Tiffany_77, Vix_74, Watson_77,

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

- Colbster_74, Lilith_76, MadMarie_76,

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

- Misomonster_79, Trike_66,

Summary by start number:

Start 1:

- Found in 1 of 84 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 77
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trike_66 (A10),

Start 2:

- Found in 82 of 84 (97.6%) of genes in pham
- Manual Annotations of this start: 72 of 77
- Called 96.3% of time when present
- Phage (with cluster) where this start called: ACFishhook_75 (A3), Aglet_79 (A3), AgronaGT15_75 (A3), Anubis_81 (A3), AugsMagnumOpus_81 (A3), Beauxregard13_77 (A3), Bigflo_75 (A3), BreSam8_78 (A3), Bxz2_73 (A3), Calvinny_75 (A3), ClownCar_75 (A3), Croquant_75 (A3), Cullens_78 (A3), DaHudson_77 (A3), Daishi_77 (A3), Dieselweasel_78 (A3), EpicPhail_79 (A3), Farber_78 (A3), Fernando_78 (A3), Gemma_75 (A3), GingkoMaracino_78 (A3), Grif_76 (A3), Groupthink_78 (A3), Grub_76 (A3), Grum1_77 (A3), GtownJaz_78 (A3), Gwennie_73 (A3), HashRod_79 (A3), HaveUMetTed_78 (A3), Heliosoles_75 (A3), Hercules11_78 (A3), JenCasNa_79 (A3), JeppNRM_78 (A3), Jobu08_74 (A3), Kalb97_78 (A3), Kalnoky_78 (A3), LBerry_79 (A3), LarryKay_78 (A3), Lowa_75 (A3), LugYA_81 (A3), Mainiac_77 (A3), Malinsilva_80 (A3), Manu_77 (A3), MarQuardt_78 (A3), Marie_76 (A3), Marius_78 (A3), Methuselah_71 (A3), Microwolf_74 (A3), MoneyMay_77 (A3), Montavir_73 (A3), MuchMore_81 (A3), OlanP_76 (A3), Ollie_78 (A3), P28Green_78 (A3), PGHhamlin_80 (A3), Pawn_76 (A3), Pembroke_78 (A3), Penny1_78 (A3), PhishRPhriends_74 (A3), Phoebe_79 (A3), Phoxy_78 (A3), Phranny_74 (A3), PotatoSplit_79 (A3), PurpleHaze_77 (A3), Reba_73 (A3), Rummer_77 (A3), Sabia_76 (A3), Sabinator_76 (A3), Snickers_78 (A3), SoYo_75 (A3), SoilDragon_77 (A3), Soshari_80 (A3), Spike509_78 (A3), Stagni_75 (A3), StepMih_77 (A3), Taurus_79 (A3), Tiffany_77 (A3), Vix_74 (A3), Watson_77 (A3),

Start 4:

- Found in 83 of 84 (98.8%) of genes in pham
- Manual Annotations of this start: 1 of 77
- Called 1.2% of time when present
- Phage (with cluster) where this start called: Misomonster_79 (A3),

Start 5:

- Found in 59 of 84 (70.2%) of genes in pham
- Manual Annotations of this start: 3 of 77
- Called 5.1% of time when present
- Phage (with cluster) where this start called: Colbster_74 (A3), Lilith_76 (A3), MadMarie_76 (A3),

Summary by clusters:

There are 2 clusters represented in this pham: A3, A10,

Info for manual annotations of cluster A10:

- Start number 1 was manually annotated 1 time for cluster A10.

Info for manual annotations of cluster A3:

- Start number 2 was manually annotated 72 times for cluster A3.
- Start number 4 was manually annotated 1 time for cluster A3.
- Start number 5 was manually annotated 3 times for cluster A3.

Gene Information:

Gene: ACFishhook_75 Start: 44366, Stop: 43935, Start Num: 2

Candidate Starts for ACFishhook_75:

(Start: 2 @44366 has 72 MA's), (3, 44264), (Start: 4 @44255 has 1 MA's), (7, 44234), (8, 44231), (10, 44189), (11, 44138), (12, 44135), (14, 44108), (16, 44078), (17, 44060), (18, 44051), (21, 44024), (26, 43946),

Gene: Aglet_79 Start: 44481, Stop: 44047, Start Num: 2

Candidate Starts for Aglet_79:

(Start: 2 @44481 has 72 MA's), (3, 44379), (Start: 4 @44370 has 1 MA's), (Start: 5 @44367 has 3 MA's), (7, 44349), (8, 44346), (9, 44316), (10, 44304), (11, 44253), (12, 44250), (14, 44223), (17, 44172), (18, 44163), (21, 44136), (24, 44103), (26, 44058),

Gene: AgronaGT15_75 Start: 44329, Stop: 43895, Start Num: 2

Candidate Starts for AgronaGT15_75:

(Start: 2 @44329 has 72 MA's), (3, 44227), (Start: 4 @44218 has 1 MA's), (Start: 5 @44215 has 3 MA's), (7, 44197), (8, 44194), (9, 44164), (10, 44152), (11, 44101), (12, 44098), (17, 44020), (18, 44011), (21, 43984), (24, 43951), (26, 43906),

Gene: Anubis_81 Start: 44367, Stop: 43933, Start Num: 2

Candidate Starts for Anubis_81:

(Start: 2 @44367 has 72 MA's), (3, 44265), (Start: 4 @44256 has 1 MA's), (Start: 5 @44253 has 3 MA's), (7, 44235), (8, 44232), (9, 44202), (10, 44190), (11, 44139), (12, 44136), (17, 44058), (18, 44049), (21, 44022), (24, 43989), (26, 43944),

Gene: AugsMagnumOpus_81 Start: 44472, Stop: 44038, Start Num: 2

Candidate Starts for AugsMagnumOpus_81:

(Start: 2 @44472 has 72 MA's), (3, 44370), (Start: 4 @44361 has 1 MA's), (7, 44340), (8, 44337), (9, 44307), (10, 44295), (12, 44241), (14, 44214), (17, 44163), (18, 44154), (21, 44127), (24, 44094), (26, 44049),

Gene: Beauxregard13_77 Start: 44484, Stop: 44050, Start Num: 2

Candidate Starts for Beauxregard13_77:

(Start: 2 @44484 has 72 MA's), (3, 44382), (Start: 4 @44373 has 1 MA's), (Start: 5 @44370 has 3 MA's), (7, 44352), (8, 44349), (9, 44319), (10, 44307), (11, 44256), (12, 44253), (17, 44175), (18, 44166), (21, 44139), (24, 44106), (26, 44061),

Gene: Bigflo_75 Start: 44480, Stop: 44046, Start Num: 2

Candidate Starts for Bigflo_75:

(Start: 2 @44480 has 72 MA's), (3, 44378), (Start: 4 @44369 has 1 MA's), (Start: 5 @44366 has 3 MA's), (7, 44348), (8, 44345), (9, 44315), (10, 44303), (11, 44252), (12, 44249), (14, 44222), (17, 44171), (18, 44162), (21, 44135), (24, 44102), (26, 44057),

Gene: BreSam8_78 Start: 44474, Stop: 44040, Start Num: 2

Candidate Starts for BreSam8_78:

(Start: 2 @44474 has 72 MA's), (3, 44372), (Start: 4 @44363 has 1 MA's), (7, 44342), (8, 44339), (9, 44309), (10, 44297), (11, 44246), (12, 44243), (14, 44216), (17, 44165), (18, 44156), (21, 44129), (24, 44096), (26, 44051),

Gene: Bxz2_73 Start: 44515, Stop: 44081, Start Num: 2

Candidate Starts for Bxz2_73:

(Start: 2 @44515 has 72 MA's), (3, 44413), (Start: 4 @44404 has 1 MA's), (Start: 5 @44401 has 3 MA's), (7, 44383), (8, 44380), (9, 44350), (10, 44338), (11, 44287), (12, 44284), (17, 44206), (18, 44197), (21, 44170), (24, 44137), (26, 44092),

Gene: Calvinny_75 Start: 44294, Stop: 43863, Start Num: 2

Candidate Starts for Calvinny_75:

(Start: 2 @44294 has 72 MA's), (3, 44192), (Start: 4 @44183 has 1 MA's), (7, 44162), (8, 44159), (10, 44117), (11, 44066), (12, 44063), (14, 44036), (16, 44006), (17, 43988), (18, 43979), (21, 43952), (26, 43874),

Gene: ClownCar_75 Start: 44290, Stop: 43856, Start Num: 2

Candidate Starts for ClownCar_75:

(Start: 2 @44290 has 72 MA's), (3, 44188), (Start: 4 @44179 has 1 MA's), (7, 44158), (8, 44155), (9, 44125), (10, 44113), (11, 44062), (12, 44059), (14, 44032), (16, 44002), (17, 43984), (18, 43975), (19, 43972), (21, 43948), (26, 43870),

Gene: Colbster_74 Start: 44370, Stop: 44050, Start Num: 5

Candidate Starts for Colbster_74:

(Start: 2 @44484 has 72 MA's), (3, 44382), (Start: 4 @44373 has 1 MA's), (Start: 5 @44370 has 3 MA's), (7, 44352), (8, 44349), (9, 44319), (10, 44307), (11, 44256), (12, 44253), (17, 44175), (18, 44166), (21, 44139), (24, 44106), (26, 44061),

Gene: Croquant_75 Start: 44481, Stop: 44044, Start Num: 2

Candidate Starts for Croquant_75:

(Start: 2 @44481 has 72 MA's), (3, 44379), (Start: 4 @44370 has 1 MA's), (Start: 5 @44367 has 3 MA's), (7, 44349), (8, 44346), (9, 44316), (10, 44304), (11, 44250), (12, 44247), (17, 44169), (18, 44160), (21, 44133), (24, 44100), (26, 44055),

Gene: Cullens_78 Start: 44483, Stop: 44046, Start Num: 2

Candidate Starts for Cullens_78:

(Start: 2 @44483 has 72 MA's), (3, 44381), (Start: 4 @44372 has 1 MA's), (Start: 5 @44369 has 3 MA's), (7, 44351), (8, 44348), (9, 44318), (10, 44306), (11, 44252), (12, 44249), (17, 44171), (18,

44162), (21, 44135), (24, 44102), (26, 44057),

Gene: DaHudson_77 Start: 44473, Stop: 44039, Start Num: 2

Candidate Starts for DaHudson_77:

(Start: 2 @44473 has 72 MA's), (3, 44371), (Start: 4 @44362 has 1 MA's), (Start: 5 @44359 has 3 MA's), (7, 44341), (8, 44338), (9, 44308), (10, 44296), (11, 44245), (12, 44242), (14, 44215), (17, 44164), (18, 44155), (21, 44128), (24, 44095), (26, 44050),

Gene: Daishi_77 Start: 43348, Stop: 42914, Start Num: 2

Candidate Starts for Daishi_77:

(Start: 2 @43348 has 72 MA's), (3, 43246), (Start: 4 @43237 has 1 MA's), (Start: 5 @43234 has 3 MA's), (7, 43216), (8, 43213), (9, 43183), (10, 43171), (11, 43120), (12, 43117), (14, 43090), (17, 43039), (18, 43030), (21, 43003), (24, 42970), (26, 42925),

Gene: Dieselweasel_78 Start: 44482, Stop: 44048, Start Num: 2

Candidate Starts for Dieselweasel_78:

(Start: 2 @44482 has 72 MA's), (3, 44380), (Start: 4 @44371 has 1 MA's), (Start: 5 @44368 has 3 MA's), (7, 44350), (8, 44347), (9, 44317), (10, 44305), (11, 44254), (12, 44251), (14, 44224), (17, 44173), (18, 44164), (21, 44137), (24, 44104), (26, 44059),

Gene: EpicPhail_79 Start: 44484, Stop: 44050, Start Num: 2

Candidate Starts for EpicPhail_79:

(Start: 2 @44484 has 72 MA's), (3, 44382), (Start: 4 @44373 has 1 MA's), (Start: 5 @44370 has 3 MA's), (7, 44352), (8, 44349), (9, 44319), (10, 44307), (11, 44256), (12, 44253), (17, 44175), (18, 44166), (21, 44139), (24, 44106), (26, 44061),

Gene: Farber_78 Start: 44470, Stop: 44036, Start Num: 2

Candidate Starts for Farber_78:

(Start: 2 @44470 has 72 MA's), (3, 44368), (Start: 4 @44359 has 1 MA's), (Start: 5 @44356 has 3 MA's), (7, 44338), (8, 44335), (9, 44305), (10, 44293), (11, 44242), (12, 44239), (17, 44161), (18, 44152), (21, 44125), (24, 44092), (26, 44047),

Gene: Fernando_78 Start: 44483, Stop: 44046, Start Num: 2

Candidate Starts for Fernando_78:

(Start: 2 @44483 has 72 MA's), (3, 44381), (Start: 4 @44372 has 1 MA's), (Start: 5 @44369 has 3 MA's), (7, 44351), (8, 44348), (9, 44318), (10, 44306), (11, 44252), (12, 44249), (17, 44171), (18, 44162), (21, 44135), (24, 44102), (26, 44057),

Gene: Gemma_75 Start: 44293, Stop: 43859, Start Num: 2

Candidate Starts for Gemma_75:

(Start: 2 @44293 has 72 MA's), (3, 44191), (Start: 4 @44182 has 1 MA's), (7, 44161), (8, 44158), (9, 44128), (10, 44116), (11, 44065), (12, 44062), (14, 44035), (15, 44026), (16, 44005), (17, 43987), (18, 43978), (19, 43975), (21, 43951), (26, 43873),

Gene: GingkoMaracino_78 Start: 44366, Stop: 43932, Start Num: 2

Candidate Starts for GingkoMaracino_78:

(Start: 2 @44366 has 72 MA's), (3, 44264), (Start: 4 @44255 has 1 MA's), (Start: 5 @44252 has 3 MA's), (7, 44234), (8, 44231), (9, 44201), (10, 44189), (11, 44138), (12, 44135), (17, 44057), (18, 44048), (21, 44021), (24, 43988), (26, 43943),

Gene: Grif_76 Start: 44557, Stop: 44120, Start Num: 2

Candidate Starts for Grif_76:

(Start: 2 @44557 has 72 MA's), (3, 44455), (Start: 4 @44446 has 1 MA's), (Start: 5 @44443 has 3 MA's), (7, 44425), (8, 44422), (9, 44392), (10, 44380), (11, 44326), (12, 44323), (17, 44245), (18, 44236), (21, 44209), (24, 44176), (26, 44131),

Gene: Groupthink_78 Start: 44294, Stop: 43863, Start Num: 2

Candidate Starts for Groupthink_78:

(Start: 2 @44294 has 72 MA's), (3, 44192), (Start: 4 @44183 has 1 MA's), (7, 44162), (8, 44159), (10, 44117), (11, 44066), (12, 44063), (14, 44036), (16, 44006), (17, 43988), (18, 43979), (21, 43952), (26, 43874),

Gene: Grub_76 Start: 44472, Stop: 44038, Start Num: 2

Candidate Starts for Grub_76:

(Start: 2 @44472 has 72 MA's), (3, 44370), (Start: 4 @44361 has 1 MA's), (Start: 5 @44358 has 3 MA's), (7, 44340), (8, 44337), (9, 44307), (10, 44295), (11, 44244), (12, 44241), (14, 44214), (17, 44163), (18, 44154), (21, 44127), (24, 44094), (26, 44049),

Gene: Grum1_77 Start: 44483, Stop: 44046, Start Num: 2

Candidate Starts for Grum1_77:

(Start: 2 @44483 has 72 MA's), (3, 44381), (Start: 4 @44372 has 1 MA's), (Start: 5 @44369 has 3 MA's), (7, 44351), (8, 44348), (9, 44318), (10, 44306), (11, 44252), (12, 44249), (17, 44171), (18, 44162), (21, 44135), (24, 44102), (26, 44057),

Gene: GtownJaz_78 Start: 44481, Stop: 44047, Start Num: 2

Candidate Starts for GtownJaz_78:

(Start: 2 @44481 has 72 MA's), (3, 44379), (Start: 4 @44370 has 1 MA's), (Start: 5 @44367 has 3 MA's), (7, 44349), (8, 44346), (9, 44316), (10, 44304), (11, 44253), (12, 44250), (14, 44223), (17, 44172), (18, 44163), (21, 44136), (24, 44103), (26, 44058),

Gene: Gwennie_73 Start: 44484, Stop: 44050, Start Num: 2

Candidate Starts for Gwennie_73:

(Start: 2 @44484 has 72 MA's), (3, 44382), (Start: 4 @44373 has 1 MA's), (Start: 5 @44370 has 3 MA's), (7, 44352), (8, 44349), (9, 44319), (10, 44307), (11, 44256), (12, 44253), (17, 44175), (18, 44166), (21, 44139), (24, 44106), (26, 44061),

Gene: HashRod_79 Start: 44508, Stop: 44074, Start Num: 2

Candidate Starts for HashRod_79:

(Start: 2 @44508 has 72 MA's), (3, 44406), (Start: 4 @44397 has 1 MA's), (Start: 5 @44394 has 3 MA's), (7, 44376), (8, 44373), (9, 44343), (10, 44331), (11, 44280), (12, 44277), (17, 44199), (18, 44190), (21, 44163), (24, 44130), (26, 44085),

Gene: HaveUMetTed_78 Start: 44282, Stop: 43848, Start Num: 2

Candidate Starts for HaveUMetTed_78:

(Start: 2 @44282 has 72 MA's), (3, 44180), (Start: 4 @44171 has 1 MA's), (7, 44150), (8, 44147), (9, 44117), (10, 44105), (11, 44054), (12, 44051), (14, 44024), (15, 44015), (16, 43994), (17, 43976), (18, 43967), (19, 43964), (21, 43940), (26, 43862),

Gene: Heliosoles_75 Start: 44297, Stop: 43866, Start Num: 2

Candidate Starts for Heliosoles_75:

(Start: 2 @44297 has 72 MA's), (3, 44195), (Start: 4 @44186 has 1 MA's), (7, 44165), (8, 44162), (10, 44120), (11, 44069), (12, 44066), (14, 44039), (16, 44009), (17, 43991), (18, 43982), (21, 43955), (26, 43877),

Gene: Hercules11_78 Start: 44492, Stop: 44055, Start Num: 2

Candidate Starts for Hercules11_78:

(Start: 2 @44492 has 72 MA's), (3, 44390), (Start: 4 @44381 has 1 MA's), (Start: 5 @44378 has 3 MA's), (7, 44360), (8, 44357), (9, 44327), (10, 44315), (11, 44261), (12, 44258), (17, 44180), (18, 44171), (21, 44144), (24, 44111), (26, 44066),

Gene: JenCasNa_79 Start: 44483, Stop: 44046, Start Num: 2

Candidate Starts for JenCasNa_79:

(Start: 2 @44483 has 72 MA's), (3, 44381), (Start: 4 @44372 has 1 MA's), (Start: 5 @44369 has 3 MA's), (7, 44351), (8, 44348), (9, 44318), (10, 44306), (11, 44252), (12, 44249), (17, 44171), (18, 44162), (21, 44135), (24, 44102), (26, 44057),

Gene: JeppNRM_78 Start: 44295, Stop: 43864, Start Num: 2

Candidate Starts for JeppNRM_78:

(Start: 2 @44295 has 72 MA's), (3, 44193), (Start: 4 @44184 has 1 MA's), (7, 44163), (8, 44160), (10, 44118), (11, 44067), (12, 44064), (14, 44037), (16, 44007), (17, 43989), (18, 43980), (21, 43953), (26, 43875),

Gene: Jobu08_74 Start: 44311, Stop: 43877, Start Num: 2

Candidate Starts for Jobu08_74:

(Start: 2 @44311 has 72 MA's), (3, 44209), (Start: 4 @44200 has 1 MA's), (7, 44179), (8, 44176), (9, 44146), (10, 44134), (11, 44083), (12, 44080), (14, 44053), (16, 44023), (17, 44005), (19, 43993), (21, 43969), (26, 43891),

Gene: Kalb97_78 Start: 44293, Stop: 43862, Start Num: 2

Candidate Starts for Kalb97_78:

(Start: 2 @44293 has 72 MA's), (3, 44191), (Start: 4 @44182 has 1 MA's), (7, 44161), (8, 44158), (10, 44116), (11, 44065), (12, 44062), (14, 44035), (16, 44005), (17, 43987), (18, 43978), (21, 43951), (26, 43873),

Gene: Kalnoky_78 Start: 44291, Stop: 43860, Start Num: 2

Candidate Starts for Kalnoky_78:

(Start: 2 @44291 has 72 MA's), (3, 44189), (Start: 4 @44180 has 1 MA's), (7, 44159), (8, 44156), (10, 44114), (11, 44063), (12, 44060), (14, 44033), (16, 44003), (17, 43985), (18, 43976), (21, 43949), (26, 43871),

Gene: LBerry_79 Start: 44484, Stop: 44050, Start Num: 2

Candidate Starts for LBerry_79:

(Start: 2 @44484 has 72 MA's), (3, 44382), (Start: 4 @44373 has 1 MA's), (Start: 5 @44370 has 3 MA's), (7, 44352), (8, 44349), (9, 44319), (10, 44307), (11, 44256), (12, 44253), (14, 44226), (17, 44175), (18, 44166), (21, 44139), (24, 44106), (26, 44061),

Gene: LarryKay_78 Start: 44512, Stop: 44075, Start Num: 2

Candidate Starts for LarryKay_78:

(Start: 2 @44512 has 72 MA's), (3, 44410), (Start: 4 @44401 has 1 MA's), (Start: 5 @44398 has 3 MA's), (7, 44380), (8, 44377), (9, 44347), (10, 44335), (11, 44284), (12, 44281), (14, 44254), (17, 44203), (18, 44194), (21, 44164), (24, 44131), (26, 44086),

Gene: Lilith_76 Start: 44359, Stop: 44039, Start Num: 5

Candidate Starts for Lilith_76:

(Start: 2 @44473 has 72 MA's), (3, 44371), (Start: 4 @44362 has 1 MA's), (Start: 5 @44359 has 3 MA's), (7, 44341), (8, 44338), (9, 44308), (10, 44296), (11, 44245), (12, 44242), (14, 44215), (17, 44164), (18, 44155), (21, 44128), (24, 44095), (26, 44050),

Gene: Lowa_75 Start: 44472, Stop: 44038, Start Num: 2

Candidate Starts for Lowa_75:

(Start: 2 @44472 has 72 MA's), (3, 44370), (Start: 4 @44361 has 1 MA's), (Start: 5 @44358 has 3 MA's), (7, 44340), (8, 44337), (9, 44307), (10, 44295), (11, 44244), (12, 44241), (14, 44214), (17, 44163), (18, 44154), (21, 44127), (24, 44094), (26, 44049),

Gene: LugYA_81 Start: 44484, Stop: 44047, Start Num: 2

Candidate Starts for LugYA_81:

(Start: 2 @44484 has 72 MA's), (3, 44382), (Start: 4 @44373 has 1 MA's), (Start: 5 @44370 has 3 MA's), (7, 44352), (8, 44349), (9, 44319), (10, 44307), (11, 44253), (12, 44250), (17, 44172), (18, 44163), (21, 44136), (24, 44103), (26, 44058),

Gene: MadMarie_76 Start: 44367, Stop: 44047, Start Num: 5

Candidate Starts for MadMarie_76:

(Start: 2 @44481 has 72 MA's), (3, 44379), (Start: 4 @44370 has 1 MA's), (Start: 5 @44367 has 3 MA's), (7, 44349), (8, 44346), (9, 44316), (10, 44304), (11, 44253), (12, 44250), (14, 44223), (17, 44172), (18, 44163), (21, 44136), (24, 44103), (26, 44058),

Gene: Mainiac_77 Start: 44473, Stop: 44039, Start Num: 2

Candidate Starts for Mainiac_77:

(Start: 2 @44473 has 72 MA's), (3, 44371), (Start: 4 @44362 has 1 MA's), (Start: 5 @44359 has 3 MA's), (7, 44341), (8, 44338), (9, 44308), (10, 44296), (11, 44245), (12, 44242), (14, 44215), (17, 44164), (18, 44155), (21, 44128), (24, 44095), (26, 44050),

Gene: Malinsilva_80 Start: 44472, Stop: 44038, Start Num: 2

Candidate Starts for Malinsilva_80:

(Start: 2 @44472 has 72 MA's), (3, 44370), (Start: 4 @44361 has 1 MA's), (Start: 5 @44358 has 3 MA's), (7, 44340), (8, 44337), (9, 44307), (10, 44295), (11, 44244), (12, 44241), (14, 44214), (17, 44163), (18, 44154), (21, 44127), (24, 44094), (26, 44049),

Gene: Manu_77 Start: 44297, Stop: 43863, Start Num: 2

Candidate Starts for Manu_77:

(Start: 2 @44297 has 72 MA's), (3, 44195), (Start: 4 @44186 has 1 MA's), (7, 44165), (8, 44162), (9, 44132), (10, 44120), (11, 44069), (12, 44066), (14, 44039), (15, 44030), (16, 44009), (17, 43991), (18, 43982), (19, 43979), (21, 43955), (26, 43877),

Gene: MarQuardt_78 Start: 44482, Stop: 44048, Start Num: 2

Candidate Starts for MarQuardt_78:

(Start: 2 @44482 has 72 MA's), (3, 44380), (Start: 4 @44371 has 1 MA's), (Start: 5 @44368 has 3 MA's), (7, 44350), (8, 44347), (9, 44317), (10, 44305), (11, 44254), (12, 44251), (14, 44224), (17, 44173), (18, 44164), (21, 44137), (24, 44104), (26, 44059),

Gene: Marie_76 Start: 44483, Stop: 44046, Start Num: 2

Candidate Starts for Marie_76:

(Start: 2 @44483 has 72 MA's), (3, 44381), (Start: 4 @44372 has 1 MA's), (Start: 5 @44369 has 3 MA's), (7, 44351), (8, 44348), (9, 44318), (10, 44306), (11, 44252), (12, 44249), (17, 44171), (18, 44162), (21, 44135), (24, 44102), (26, 44057),

Gene: Marius_78 Start: 44291, Stop: 43860, Start Num: 2

Candidate Starts for Marius_78:

(Start: 2 @44291 has 72 MA's), (3, 44189), (Start: 4 @44180 has 1 MA's), (7, 44159), (8, 44156), (10, 44114), (11, 44063), (12, 44060), (14, 44033), (16, 44003), (17, 43985), (18, 43976), (21, 43949), (26, 43871),

Gene: Methuselah_71 Start: 44504, Stop: 44070, Start Num: 2

Candidate Starts for Methuselah_71:

(Start: 2 @44504 has 72 MA's), (3, 44402), (Start: 4 @44393 has 1 MA's), (Start: 5 @44390 has 3 MA's), (7, 44372), (8, 44369), (9, 44339), (10, 44327), (11, 44276), (12, 44273), (17, 44195), (18, 44186), (21, 44159), (24, 44126), (26, 44081),

Gene: Microwolf_74 Start: 44496, Stop: 44062, Start Num: 2

Candidate Starts for Microwolf_74:

(Start: 2 @44496 has 72 MA's), (3, 44394), (Start: 4 @44385 has 1 MA's), (Start: 5 @44382 has 3 MA's), (7, 44364), (8, 44361), (9, 44331), (10, 44319), (11, 44268), (12, 44265), (14, 44238), (17, 44187), (18, 44178), (21, 44151), (24, 44118), (26, 44073),

Gene: Misomonster_79 Start: 44396, Stop: 44073, Start Num: 4

Candidate Starts for Misomonster_79:

(3, 44405), (Start: 4 @44396 has 1 MA's), (7, 44375), (8, 44372), (10, 44330), (11, 44279), (12, 44276), (14, 44249), (15, 44240), (18, 44189), (22, 44135), (25, 44105), (26, 44084),

Gene: MoneyMay_77 Start: 44483, Stop: 44046, Start Num: 2

Candidate Starts for MoneyMay_77:

(Start: 2 @44483 has 72 MA's), (3, 44381), (Start: 4 @44372 has 1 MA's), (Start: 5 @44369 has 3 MA's), (7, 44351), (8, 44348), (9, 44318), (10, 44306), (11, 44252), (12, 44249), (17, 44171), (18, 44162), (21, 44135), (24, 44102), (26, 44057),

Gene: Montavir_73 Start: 44480, Stop: 44046, Start Num: 2

Candidate Starts for Montavir_73:

(Start: 2 @44480 has 72 MA's), (3, 44378), (Start: 4 @44369 has 1 MA's), (Start: 5 @44366 has 3 MA's), (7, 44348), (8, 44345), (9, 44315), (10, 44303), (11, 44252), (12, 44249), (14, 44222), (17, 44171), (18, 44162), (21, 44135), (24, 44102), (26, 44057),

Gene: MuchMore_81 Start: 44472, Stop: 44038, Start Num: 2

Candidate Starts for MuchMore_81:

(Start: 2 @44472 has 72 MA's), (3, 44370), (Start: 4 @44361 has 1 MA's), (7, 44340), (8, 44337), (9, 44307), (10, 44295), (12, 44241), (14, 44214), (17, 44163), (18, 44154), (21, 44127), (24, 44094), (26, 44049),

Gene: OlanP_76 Start: 44470, Stop: 44036, Start Num: 2

Candidate Starts for OlanP_76:

(Start: 2 @44470 has 72 MA's), (3, 44368), (Start: 4 @44359 has 1 MA's), (7, 44338), (8, 44335), (9, 44305), (10, 44293), (11, 44242), (12, 44239), (14, 44212), (16, 44182), (17, 44164), (18, 44155), (19, 44152), (21, 44128), (26, 44050),

Gene: Ollie_78 Start: 44351, Stop: 43917, Start Num: 2

Candidate Starts for Ollie_78:

(Start: 2 @44351 has 72 MA's), (3, 44249), (Start: 4 @44240 has 1 MA's), (Start: 5 @44237 has 3 MA's), (7, 44219), (8, 44216), (9, 44186), (10, 44174), (11, 44123), (12, 44120), (17, 44042), (18, 44033), (21, 44006), (24, 43973), (26, 43928),

Gene: P28Green_78 Start: 44486, Stop: 44049, Start Num: 2

Candidate Starts for P28Green_78:

(Start: 2 @44486 has 72 MA's), (3, 44384), (Start: 4 @44375 has 1 MA's), (Start: 5 @44372 has 3 MA's), (7, 44354), (8, 44351), (9, 44321), (10, 44309), (11, 44255), (12, 44252), (17, 44174), (18, 44165), (21, 44138), (24, 44105), (26, 44060),

Gene: PGHhamlin_80 Start: 44472, Stop: 44038, Start Num: 2

Candidate Starts for PGHhamlin_80:

(Start: 2 @44472 has 72 MA's), (3, 44370), (Start: 4 @44361 has 1 MA's), (Start: 5 @44358 has 3 MA's), (7, 44340), (8, 44337), (9, 44307), (10, 44295), (11, 44244), (12, 44241), (14, 44214), (17, 44163), (18, 44154), (21, 44127), (24, 44094), (26, 44049),

Gene: Pawn_76 Start: 44298, Stop: 43867, Start Num: 2

Candidate Starts for Pawn_76:

(Start: 2 @44298 has 72 MA's), (3, 44196), (Start: 4 @44187 has 1 MA's), (7, 44166), (8, 44163), (10, 44121), (11, 44070), (12, 44067), (14, 44040), (16, 44010), (17, 43992), (18, 43983), (21, 43956), (26, 43878),

Gene: Pembroke_78 Start: 44481, Stop: 44047, Start Num: 2

Candidate Starts for Pembroke_78:

(Start: 2 @44481 has 72 MA's), (3, 44379), (Start: 4 @44370 has 1 MA's), (Start: 5 @44367 has 3 MA's), (7, 44349), (8, 44346), (9, 44316), (10, 44304), (11, 44253), (12, 44250), (14, 44223), (17, 44172), (18, 44163), (21, 44136), (24, 44103), (26, 44058),

Gene: Penny1_78 Start: 44484, Stop: 44050, Start Num: 2

Candidate Starts for Penny1_78:

(Start: 2 @44484 has 72 MA's), (3, 44382), (Start: 4 @44373 has 1 MA's), (Start: 5 @44370 has 3 MA's), (7, 44352), (8, 44349), (9, 44319), (10, 44307), (11, 44256), (12, 44253), (17, 44175), (18, 44166), (21, 44139), (24, 44106), (26, 44061),

Gene: PhishRPhriends_74 Start: 43478, Stop: 43044, Start Num: 2

Candidate Starts for PhishRPhriends_74:

(Start: 2 @43478 has 72 MA's), (3, 43376), (Start: 4 @43367 has 1 MA's), (7, 43346), (8, 43343), (9, 43313), (10, 43301), (11, 43250), (12, 43247), (14, 43220), (15, 43211), (16, 43190), (17, 43172), (18, 43163), (19, 43160), (21, 43136), (26, 43058),

Gene: Phoebe_79 Start: 44476, Stop: 44039, Start Num: 2

Candidate Starts for Phoebe_79:

(Start: 2 @44476 has 72 MA's), (3, 44374), (Start: 4 @44365 has 1 MA's), (Start: 5 @44362 has 3 MA's), (7, 44344), (8, 44341), (9, 44311), (10, 44299), (11, 44245), (12, 44242), (17, 44164), (18, 44155), (21, 44128), (24, 44095), (26, 44050),

Gene: Phoxy_78 Start: 44505, Stop: 44071, Start Num: 2

Candidate Starts for Phoxy_78:

(Start: 2 @44505 has 72 MA's), (3, 44403), (Start: 4 @44394 has 1 MA's), (Start: 5 @44391 has 3 MA's), (7, 44373), (8, 44370), (9, 44340), (10, 44328), (11, 44277), (12, 44274), (17, 44196), (18, 44187), (21, 44160), (24, 44127), (26, 44082),

Gene: Phranny_74 Start: 43461, Stop: 43027, Start Num: 2

Candidate Starts for Phranny_74:

(Start: 2 @43461 has 72 MA's), (3, 43359), (Start: 4 @43350 has 1 MA's), (7, 43329), (8, 43326), (9, 43296), (10, 43284), (11, 43233), (12, 43230), (14, 43203), (15, 43194), (16, 43173), (17, 43155), (18, 43146), (19, 43143), (21, 43119), (26, 43041),

Gene: PotatoSplit_79 Start: 44484, Stop: 44050, Start Num: 2

Candidate Starts for PotatoSplit_79:

(Start: 2 @44484 has 72 MA's), (3, 44382), (Start: 4 @44373 has 1 MA's), (Start: 5 @44370 has 3 MA's), (7, 44352), (8, 44349), (9, 44319), (10, 44307), (11, 44256), (12, 44253), (17, 44175), (18,

44166), (21, 44139), (24, 44106), (26, 44061),

Gene: PurpleHaze_77 Start: 44293, Stop: 43862, Start Num: 2

Candidate Starts for PurpleHaze_77:

(Start: 2 @44293 has 72 MA's), (3, 44191), (Start: 4 @44182 has 1 MA's), (7, 44161), (8, 44158), (10, 44116), (11, 44065), (12, 44062), (14, 44035), (16, 44005), (17, 43987), (18, 43978), (21, 43951), (26, 43873),

Gene: Reba_73 Start: 43134, Stop: 42700, Start Num: 2

Candidate Starts for Reba_73:

(Start: 2 @43134 has 72 MA's), (3, 43032), (Start: 4 @43023 has 1 MA's), (7, 43002), (8, 42999), (9, 42969), (10, 42957), (11, 42906), (12, 42903), (14, 42876), (15, 42867), (16, 42846), (17, 42828), (18, 42819), (19, 42816), (21, 42792), (26, 42714),

Gene: Rummer_77 Start: 44508, Stop: 44074, Start Num: 2

Candidate Starts for Rummer_77:

(Start: 2 @44508 has 72 MA's), (3, 44406), (Start: 4 @44397 has 1 MA's), (Start: 5 @44394 has 3 MA's), (7, 44376), (8, 44373), (9, 44343), (10, 44331), (11, 44280), (12, 44277), (17, 44199), (18, 44190), (21, 44163), (24, 44130), (26, 44085),

Gene: Sabia_76 Start: 44488, Stop: 44054, Start Num: 2

Candidate Starts for Sabia_76:

(Start: 2 @44488 has 72 MA's), (3, 44386), (Start: 4 @44377 has 1 MA's), (Start: 5 @44374 has 3 MA's), (7, 44356), (8, 44353), (9, 44323), (10, 44311), (11, 44260), (12, 44257), (14, 44230), (17, 44179), (18, 44170), (21, 44143), (24, 44110), (26, 44065),

Gene: Sabinator_76 Start: 44482, Stop: 44045, Start Num: 2

Candidate Starts for Sabinator_76:

(Start: 2 @44482 has 72 MA's), (3, 44380), (Start: 4 @44371 has 1 MA's), (Start: 5 @44368 has 3 MA's), (7, 44350), (8, 44347), (9, 44317), (10, 44305), (11, 44251), (12, 44248), (17, 44170), (18, 44161), (21, 44134), (24, 44101), (26, 44056),

Gene: Snickers_78 Start: 44453, Stop: 44019, Start Num: 2

Candidate Starts for Snickers_78:

(Start: 2 @44453 has 72 MA's), (3, 44351), (Start: 4 @44342 has 1 MA's), (Start: 5 @44339 has 3 MA's), (7, 44321), (8, 44318), (9, 44288), (10, 44276), (11, 44225), (12, 44222), (14, 44195), (17, 44144), (18, 44135), (21, 44108), (24, 44075), (26, 44030),

Gene: SoYo_75 Start: 44395, Stop: 43958, Start Num: 2

Candidate Starts for SoYo_75:

(Start: 2 @44395 has 72 MA's), (3, 44293), (Start: 4 @44284 has 1 MA's), (Start: 5 @44281 has 3 MA's), (7, 44263), (8, 44260), (9, 44230), (10, 44218), (11, 44164), (12, 44161), (17, 44083), (18, 44074), (21, 44047), (24, 44014), (26, 43969),

Gene: SoilDragon_77 Start: 43927, Stop: 43493, Start Num: 2

Candidate Starts for SoilDragon_77:

(Start: 2 @43927 has 72 MA's), (3, 43825), (Start: 4 @43816 has 1 MA's), (7, 43795), (8, 43792), (9, 43762), (10, 43750), (11, 43699), (12, 43696), (14, 43669), (16, 43639), (17, 43621), (19, 43609), (21, 43585), (26, 43507),

Gene: Soshari_80 Start: 44504, Stop: 44070, Start Num: 2

Candidate Starts for Soshari_80:

(Start: 2 @44504 has 72 MA's), (3, 44402), (Start: 4 @44393 has 1 MA's), (Start: 5 @44390 has 3 MA's), (7, 44372), (8, 44369), (9, 44339), (10, 44327), (11, 44276), (12, 44273), (17, 44195), (18, 44186), (21, 44159), (24, 44126), (26, 44081),

Gene: Spike509_78 Start: 44505, Stop: 44071, Start Num: 2

Candidate Starts for Spike509_78:

(Start: 2 @44505 has 72 MA's), (3, 44403), (Start: 4 @44394 has 1 MA's), (Start: 5 @44391 has 3 MA's), (7, 44373), (8, 44370), (9, 44340), (10, 44328), (11, 44277), (12, 44274), (17, 44196), (18, 44187), (21, 44160), (24, 44127), (26, 44082),

Gene: Stagni_75 Start: 44483, Stop: 44049, Start Num: 2

Candidate Starts for Stagni_75:

(Start: 2 @44483 has 72 MA's), (3, 44381), (Start: 4 @44372 has 1 MA's), (Start: 5 @44369 has 3 MA's), (7, 44351), (8, 44348), (9, 44318), (10, 44306), (11, 44255), (12, 44252), (14, 44225), (17, 44174), (18, 44165), (21, 44138), (24, 44105), (26, 44060),

Gene: StepMih_77 Start: 44474, Stop: 44040, Start Num: 2

Candidate Starts for StepMih_77:

(Start: 2 @44474 has 72 MA's), (3, 44372), (Start: 4 @44363 has 1 MA's), (Start: 5 @44360 has 3 MA's), (7, 44342), (8, 44339), (9, 44309), (10, 44297), (11, 44246), (12, 44243), (14, 44216), (17, 44165), (18, 44156), (21, 44129), (24, 44096), (26, 44051),

Gene: Taurus_79 Start: 44483, Stop: 44046, Start Num: 2

Candidate Starts for Taurus_79:

(Start: 2 @44483 has 72 MA's), (3, 44381), (Start: 4 @44372 has 1 MA's), (Start: 5 @44369 has 3 MA's), (7, 44351), (8, 44348), (9, 44318), (10, 44306), (11, 44252), (12, 44249), (17, 44171), (18, 44162), (21, 44135), (24, 44102), (26, 44057),

Gene: Tiffany_77 Start: 44368, Stop: 43931, Start Num: 2

Candidate Starts for Tiffany_77:

(Start: 2 @44368 has 72 MA's), (3, 44266), (Start: 4 @44257 has 1 MA's), (Start: 5 @44254 has 3 MA's), (7, 44236), (8, 44233), (9, 44203), (10, 44191), (11, 44137), (12, 44134), (17, 44056), (18, 44047), (21, 44020), (24, 43987), (26, 43942),

Gene: Trike_66 Start: 42557, Stop: 42090, Start Num: 1

Candidate Starts for Trike_66:

(Start: 1 @42557 has 1 MA's), (6, 42392), (9, 42356), (10, 42344), (12, 42272), (13, 42269), (20, 42179), (23, 42125),

Gene: Vix_74 Start: 44563, Stop: 44129, Start Num: 2

Candidate Starts for Vix_74:

(Start: 2 @44563 has 72 MA's), (3, 44461), (Start: 4 @44452 has 1 MA's), (Start: 5 @44449 has 3 MA's), (7, 44431), (8, 44428), (9, 44398), (10, 44386), (11, 44335), (12, 44332), (14, 44305), (17, 44254), (18, 44245), (21, 44218), (24, 44185), (26, 44140),

Gene: Watson_77 Start: 44472, Stop: 44038, Start Num: 2

Candidate Starts for Watson_77:

(Start: 2 @44472 has 72 MA's), (3, 44370), (Start: 4 @44361 has 1 MA's), (Start: 5 @44358 has 3 MA's), (7, 44340), (8, 44337), (9, 44307), (10, 44295), (11, 44244), (12, 44241), (14, 44214), (17, 44163), (18, 44154), (21, 44127), (24, 44094), (26, 44049),