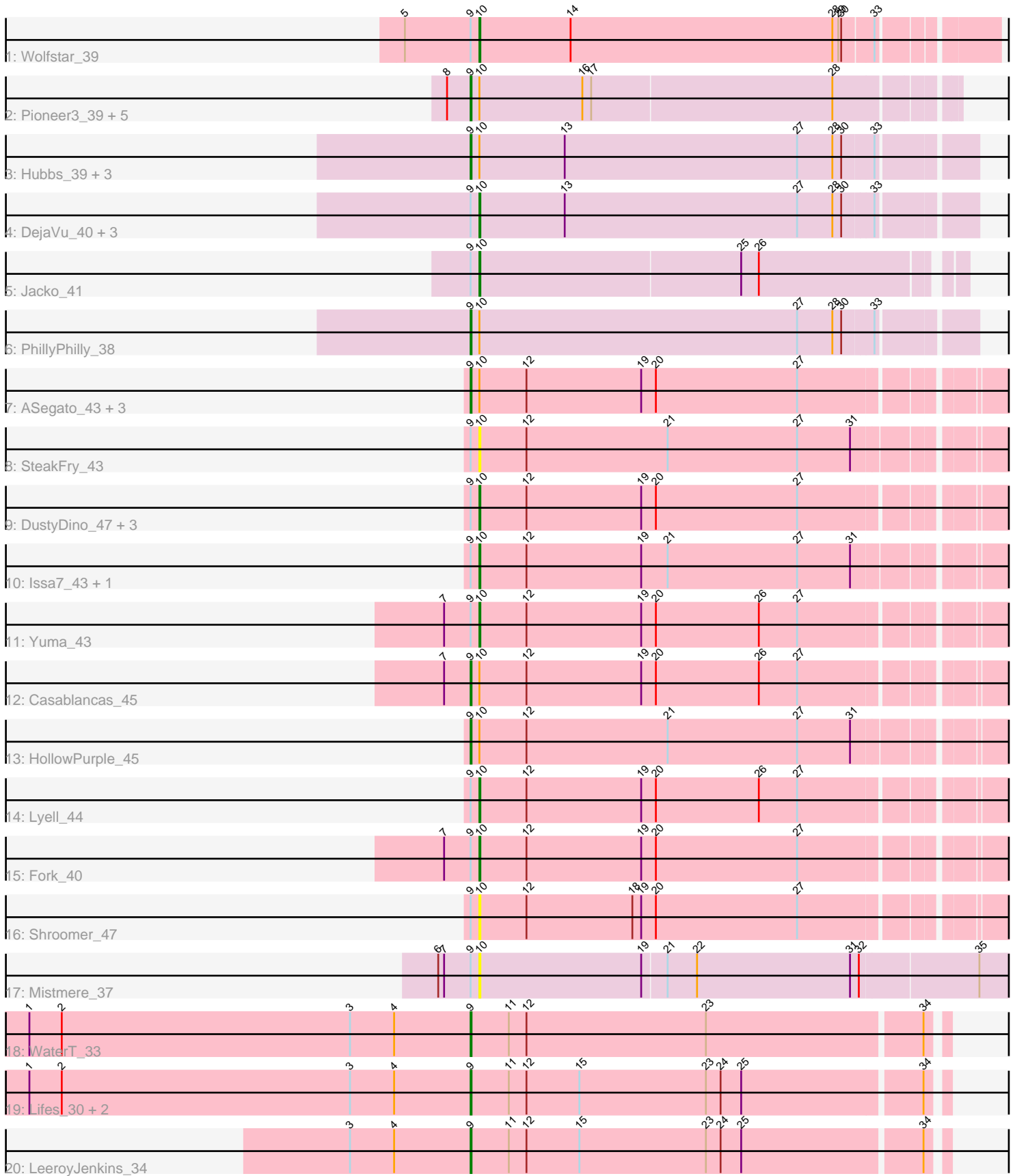


# Pham 305134



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 305134 Report

This analysis was run 06/08/26 on database version 649.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 305134 has 40 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Wolfstar\_39
- Track 2 : Pioneer3\_39, Hortus1\_39, OlinDD\_39, Platte\_39, Tandem\_39, Alleb\_40
- Track 3 : Hubbs\_39, Roman\_39, Lupine\_37, Pavlo\_37
- Track 4 : DejaVu\_40, Solimine\_39, Saradis\_39, Uterion\_41
- Track 5 : Jacko\_41
- Track 6 : PhillyPhilly\_38
- Track 7 : ASegato\_43, RunningBrook\_45, Erenyeager\_44, StevieWelch\_44
- Track 8 : SteakFry\_43
- Track 9 : DustyDino\_47, Deschain\_45, Welcome\_45, Necrophoxinus\_46
- Track 10 : Issa7\_43, Musetta\_44
- Track 11 : Yuma\_43
- Track 12 : Casablanacas\_45
- Track 13 : HollowPurple\_45
- Track 14 : Lyell\_44
- Track 15 : Fork\_40
- Track 16 : Shroomer\_47
- Track 17 : Mistmere\_37
- Track 18 : WaterT\_33
- Track 19 : Lifes\_30, BarnCat\_28, Cassita\_34
- Track 20 : LeeroyJenkins\_34

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

The start number called the most often in the published annotations is 9, it was called in 22 of the 32 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASegato\_43, Alleb\_40, BarnCat\_28, Casablanacas\_45, Cassita\_34, Erenyeager\_44, HollowPurple\_45, Hortus1\_39, Hubbs\_39, LeeroyJenkins\_34, Lifes\_30, Lupine\_37, OlinDD\_39, Pavlo\_37, PhillyPhilly\_38, Pioneer3\_39, Platte\_39, Roman\_39,

RunningBrook\_45, StevieWelch\_44, Tandem\_39, WaterT\_33,

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

- DejaVu\_40, Deschain\_45, DustyDino\_47, Fork\_40, Issa7\_43, Jacko\_41, Lyell\_44, Mistmere\_37, Musetta\_44, Necrophoxinus\_46, Saradis\_39, Shroomer\_47, Solimine\_39, SteakFry\_43, Uterion\_41, Welcome\_45, Wolfstar\_39, Yuma\_43,

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

- 

### Summary by start number:

Start 9:

- Found in 40 of 40 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 22 of 32
- Called 55.0% of time when present
- Phage (with cluster) where this start called: ASegato\_43 (ED2), Alleb\_40 (ED1), BarnCat\_28 (GB), Casablanacas\_45 (ED2), Cassita\_34 (GB), Erenyeager\_44 (ED2), HollowPurple\_45 (ED2), Hortus1\_39 (ED1), Hubbs\_39 (ED1), LeeroyJenkins\_34 (GB), Lifes\_30 (GB), Lupine\_37 (ED1), OlinDD\_39 (ED1), Pavlo\_37 (ED1), PhillyPhilly\_38 (ED1), Pioneer3\_39 (ED1), Platte\_39 (ED1), Roman\_39 (ED1), RunningBrook\_45 (ED2), StevieWelch\_44 (ED2), Tandem\_39 (ED1), WaterT\_33 (GB),

Start 10:

- Found in 35 of 40 ( 87.5% ) of genes in pham
- Manual Annotations of this start: 10 of 32
- Called 51.4% of time when present
- Phage (with cluster) where this start called: DejaVu\_40 (ED1), Deschain\_45 (ED2), DustyDino\_47 (ED2), Fork\_40 (ED2), Issa7\_43 (ED2), Jacko\_41 (ED1), Lyell\_44 (ED2), Mistmere\_37 (ED3), Musetta\_44 (ED2), Necrophoxinus\_46 (ED2), Saradis\_39 (ED1), Shroomer\_47 (ED2), Solimine\_39 (ED1), SteakFry\_43 (ED2), Uterion\_41 (ED1), Welcome\_45 (ED2), Wolfstar\_39 (ED), Yuma\_43 (ED2),

### Summary by clusters:

There are 5 clusters represented in this pham: ED2, ED, ED1, GB, ED3,

Info for manual annotations of cluster ED:

- Start number 10 was manually annotated 1 time for cluster ED.

Info for manual annotations of cluster ED1:

- Start number 9 was manually annotated 11 times for cluster ED1.
- Start number 10 was manually annotated 2 times for cluster ED1.

Info for manual annotations of cluster ED2:

- Start number 9 was manually annotated 6 times for cluster ED2.
- Start number 10 was manually annotated 7 times for cluster ED2.

Info for manual annotations of cluster GB:

- Start number 9 was manually annotated 5 times for cluster GB.

**Gene Information:**

Gene: ASegato\_43 Start: 19037, Stop: 19561, Start Num: 9

Candidate Starts for ASegato\_43:

(Start: 9 @19037 has 22 MA's), (Start: 10 @19046 has 10 MA's), (12, 19094), (19, 19211), (20, 19226), (27, 19370),

Gene: Alleb\_40 Start: 20983, Stop: 21459, Start Num: 9

Candidate Starts for Alleb\_40:

(8, 20959), (Start: 9 @20983 has 22 MA's), (Start: 10 @20992 has 10 MA's), (16, 21097), (17, 21106), (28, 21349),

Gene: BarnCat\_28 Start: 15320, Stop: 15790, Start Num: 9

Candidate Starts for BarnCat\_28:

(1, 14870), (2, 14903), (3, 15197), (4, 15242), (Start: 9 @15320 has 22 MA's), (11, 15359), (12, 15377), (15, 15431), (23, 15560), (24, 15575), (25, 15596), (34, 15773),

Gene: Casablancas\_45 Start: 19121, Stop: 19645, Start Num: 9

Candidate Starts for Casablancas\_45:

(7, 19094), (Start: 9 @19121 has 22 MA's), (Start: 10 @19130 has 10 MA's), (12, 19178), (19, 19295), (20, 19310), (26, 19415), (27, 19454),

Gene: Cassita\_34 Start: 17696, Stop: 18166, Start Num: 9

Candidate Starts for Cassita\_34:

(1, 17246), (2, 17279), (3, 17573), (4, 17618), (Start: 9 @17696 has 22 MA's), (11, 17735), (12, 17753), (15, 17807), (23, 17936), (24, 17951), (25, 17972), (34, 18149),

Gene: DejaVu\_40 Start: 18319, Stop: 18810, Start Num: 10

Candidate Starts for DejaVu\_40:

(Start: 9 @18310 has 22 MA's), (Start: 10 @18319 has 10 MA's), (13, 18406), (27, 18643), (28, 18679), (30, 18688), (33, 18718),

Gene: Deschain\_45 Start: 19794, Stop: 20309, Start Num: 10

Candidate Starts for Deschain\_45:

(Start: 9 @19785 has 22 MA's), (Start: 10 @19794 has 10 MA's), (12, 19842), (19, 19959), (20, 19974), (27, 20118),

Gene: DustyDino\_47 Start: 19985, Stop: 20500, Start Num: 10

Candidate Starts for DustyDino\_47:

(Start: 9 @19976 has 22 MA's), (Start: 10 @19985 has 10 MA's), (12, 20033), (19, 20150), (20, 20165), (27, 20309),

Gene: Erenyeager\_44 Start: 19371, Stop: 19895, Start Num: 9

Candidate Starts for Erenyeager\_44:

(Start: 9 @19371 has 22 MA's), (Start: 10 @19380 has 10 MA's), (12, 19428), (19, 19545), (20, 19560), (27, 19704),

Gene: Fork\_40 Start: 18695, Stop: 19210, Start Num: 10

Candidate Starts for Fork\_40:

(7, 18659), (Start: 9 @18686 has 22 MA's), (Start: 10 @18695 has 10 MA's), (12, 18743), (19, 18860), (20, 18875), (27, 19019),

Gene: HollowPurple\_45 Start: 19236, Stop: 19763, Start Num: 9  
Candidate Starts for HollowPurple\_45:  
(Start: 9 @19236 has 22 MA's), (Start: 10 @19245 has 10 MA's), (12, 19293), (21, 19437), (27, 19569),  
(31, 19623),

Gene: Hortus1\_39 Start: 20973, Stop: 21449, Start Num: 9  
Candidate Starts for Hortus1\_39:  
(8, 20949), (Start: 9 @20973 has 22 MA's), (Start: 10 @20982 has 10 MA's), (16, 21087), (17, 21096),  
(28, 21339),

Gene: Hubbs\_39 Start: 18522, Stop: 19022, Start Num: 9  
Candidate Starts for Hubbs\_39:  
(Start: 9 @18522 has 22 MA's), (Start: 10 @18531 has 10 MA's), (13, 18618), (27, 18855), (28, 18891),  
(30, 18900), (33, 18930),

Gene: Issa7\_43 Start: 18698, Stop: 19216, Start Num: 10  
Candidate Starts for Issa7\_43:  
(Start: 9 @18689 has 22 MA's), (Start: 10 @18698 has 10 MA's), (12, 18746), (19, 18863), (21, 18890),  
(27, 19022), (31, 19076),

Gene: Jacko\_41 Start: 19168, Stop: 19641, Start Num: 10  
Candidate Starts for Jacko\_41:  
(Start: 9 @19159 has 22 MA's), (Start: 10 @19168 has 10 MA's), (25, 19432), (26, 19450),

Gene: LeeroyJenkins\_34 Start: 17627, Stop: 18097, Start Num: 9  
Candidate Starts for LeeroyJenkins\_34:  
(3, 17504), (4, 17549), (Start: 9 @17627 has 22 MA's), (11, 17666), (12, 17684), (15, 17738), (23,  
17867), (24, 17882), (25, 17903), (34, 18080),

Gene: Lifes\_30 Start: 15351, Stop: 15821, Start Num: 9  
Candidate Starts for Lifes\_30:  
(1, 14901), (2, 14934), (3, 15228), (4, 15273), (Start: 9 @15351 has 22 MA's), (11, 15390), (12, 15408),  
(15, 15462), (23, 15591), (24, 15606), (25, 15627), (34, 15804),

Gene: Lupine\_37 Start: 17723, Stop: 18223, Start Num: 9  
Candidate Starts for Lupine\_37:  
(Start: 9 @17723 has 22 MA's), (Start: 10 @17732 has 10 MA's), (13, 17819), (27, 18056), (28, 18092),  
(30, 18101), (33, 18131),

Gene: Lyell\_44 Start: 19299, Stop: 19814, Start Num: 10  
Candidate Starts for Lyell\_44:  
(Start: 9 @19290 has 22 MA's), (Start: 10 @19299 has 10 MA's), (12, 19347), (19, 19464), (20, 19479),  
(26, 19584), (27, 19623),

Gene: Mistmere\_37 Start: 17840, Stop: 18376, Start Num: 10  
Candidate Starts for Mistmere\_37:  
(6, 17798), (7, 17804), (Start: 9 @17831 has 22 MA's), (Start: 10 @17840 has 10 MA's), (19, 18005),  
(21, 18029), (22, 18059), (31, 18215), (32, 18224), (35, 18341),

Gene: Musetta\_44 Start: 19414, Stop: 19932, Start Num: 10  
Candidate Starts for Musetta\_44:

(Start: 9 @19405 has 22 MA's), (Start: 10 @19414 has 10 MA's), (12, 19462), (19, 19579), (21, 19606), (27, 19738), (31, 19792),

Gene: Necrophoxinus\_46 Start: 19993, Stop: 20508, Start Num: 10

Candidate Starts for Necrophoxinus\_46:

(Start: 9 @19984 has 22 MA's), (Start: 10 @19993 has 10 MA's), (12, 20041), (19, 20158), (20, 20173), (27, 20317),

Gene: OlinDD\_39 Start: 20972, Stop: 21448, Start Num: 9

Candidate Starts for OlinDD\_39:

(8, 20948), (Start: 9 @20972 has 22 MA's), (Start: 10 @20981 has 10 MA's), (16, 21086), (17, 21095), (28, 21338),

Gene: Pavlo\_37 Start: 18001, Stop: 18501, Start Num: 9

Candidate Starts for Pavlo\_37:

(Start: 9 @18001 has 22 MA's), (Start: 10 @18010 has 10 MA's), (13, 18097), (27, 18334), (28, 18370), (30, 18379), (33, 18409),

Gene: PhillyPhilly\_38 Start: 17903, Stop: 18403, Start Num: 9

Candidate Starts for PhillyPhilly\_38:

(Start: 9 @17903 has 22 MA's), (Start: 10 @17912 has 10 MA's), (27, 18236), (28, 18272), (30, 18281), (33, 18311),

Gene: Pioneer3\_39 Start: 20980, Stop: 21456, Start Num: 9

Candidate Starts for Pioneer3\_39:

(8, 20956), (Start: 9 @20980 has 22 MA's), (Start: 10 @20989 has 10 MA's), (16, 21094), (17, 21103), (28, 21346),

Gene: Platte\_39 Start: 20765, Stop: 21241, Start Num: 9

Candidate Starts for Platte\_39:

(8, 20741), (Start: 9 @20765 has 22 MA's), (Start: 10 @20774 has 10 MA's), (16, 20879), (17, 20888), (28, 21131),

Gene: Roman\_39 Start: 18369, Stop: 18869, Start Num: 9

Candidate Starts for Roman\_39:

(Start: 9 @18369 has 22 MA's), (Start: 10 @18378 has 10 MA's), (13, 18465), (27, 18702), (28, 18738), (30, 18747), (33, 18777),

Gene: RunningBrook\_45 Start: 19976, Stop: 20500, Start Num: 9

Candidate Starts for RunningBrook\_45:

(Start: 9 @19976 has 22 MA's), (Start: 10 @19985 has 10 MA's), (12, 20033), (19, 20150), (20, 20165), (27, 20309),

Gene: Saradis\_39 Start: 17970, Stop: 18461, Start Num: 10

Candidate Starts for Saradis\_39:

(Start: 9 @17961 has 22 MA's), (Start: 10 @17970 has 10 MA's), (13, 18057), (27, 18294), (28, 18330), (30, 18339), (33, 18369),

Gene: Shroomer\_47 Start: 19525, Stop: 20040, Start Num: 10

Candidate Starts for Shroomer\_47:

(Start: 9 @19516 has 22 MA's), (Start: 10 @19525 has 10 MA's), (12, 19573), (18, 19681), (19, 19690), (20, 19705), (27, 19849),

Gene: Solimine\_39 Start: 18385, Stop: 18876, Start Num: 10

Candidate Starts for Solimine\_39:

(Start: 9 @18376 has 22 MA's), (Start: 10 @18385 has 10 MA's), (13, 18472), (27, 18709), (28, 18745), (30, 18754), (33, 18784),

Gene: SteakFry\_43 Start: 19245, Stop: 19763, Start Num: 10

Candidate Starts for SteakFry\_43:

(Start: 9 @19236 has 22 MA's), (Start: 10 @19245 has 10 MA's), (12, 19293), (21, 19437), (27, 19569), (31, 19623),

Gene: StevieWelch\_44 Start: 19376, Stop: 19900, Start Num: 9

Candidate Starts for StevieWelch\_44:

(Start: 9 @19376 has 22 MA's), (Start: 10 @19385 has 10 MA's), (12, 19433), (19, 19550), (20, 19565), (27, 19709),

Gene: Tandem\_39 Start: 20919, Stop: 21395, Start Num: 9

Candidate Starts for Tandem\_39:

(8, 20895), (Start: 9 @20919 has 22 MA's), (Start: 10 @20928 has 10 MA's), (16, 21033), (17, 21042), (28, 21285),

Gene: Uterion\_41 Start: 18480, Stop: 18971, Start Num: 10

Candidate Starts for Uterion\_41:

(Start: 9 @18471 has 22 MA's), (Start: 10 @18480 has 10 MA's), (13, 18567), (27, 18804), (28, 18840), (30, 18849), (33, 18879),

Gene: WaterT\_33 Start: 17440, Stop: 17910, Start Num: 9

Candidate Starts for WaterT\_33:

(1, 16990), (2, 17023), (3, 17317), (4, 17362), (Start: 9 @17440 has 22 MA's), (11, 17479), (12, 17497), (23, 17680), (34, 17893),

Gene: Welcome\_45 Start: 19402, Stop: 19917, Start Num: 10

Candidate Starts for Welcome\_45:

(Start: 9 @19393 has 22 MA's), (Start: 10 @19402 has 10 MA's), (12, 19450), (19, 19567), (20, 19582), (27, 19726),

Gene: Wolfstar\_39 Start: 18320, Stop: 18826, Start Num: 10

Candidate Starts for Wolfstar\_39:

(5, 18245), (Start: 9 @18311 has 22 MA's), (Start: 10 @18320 has 10 MA's), (14, 18413), (28, 18680), (29, 18686), (30, 18689), (33, 18719),

Gene: Yuma\_43 Start: 19313, Stop: 19828, Start Num: 10

Candidate Starts for Yuma\_43:

(7, 19277), (Start: 9 @19304 has 22 MA's), (Start: 10 @19313 has 10 MA's), (12, 19361), (19, 19478), (20, 19493), (26, 19598), (27, 19637),