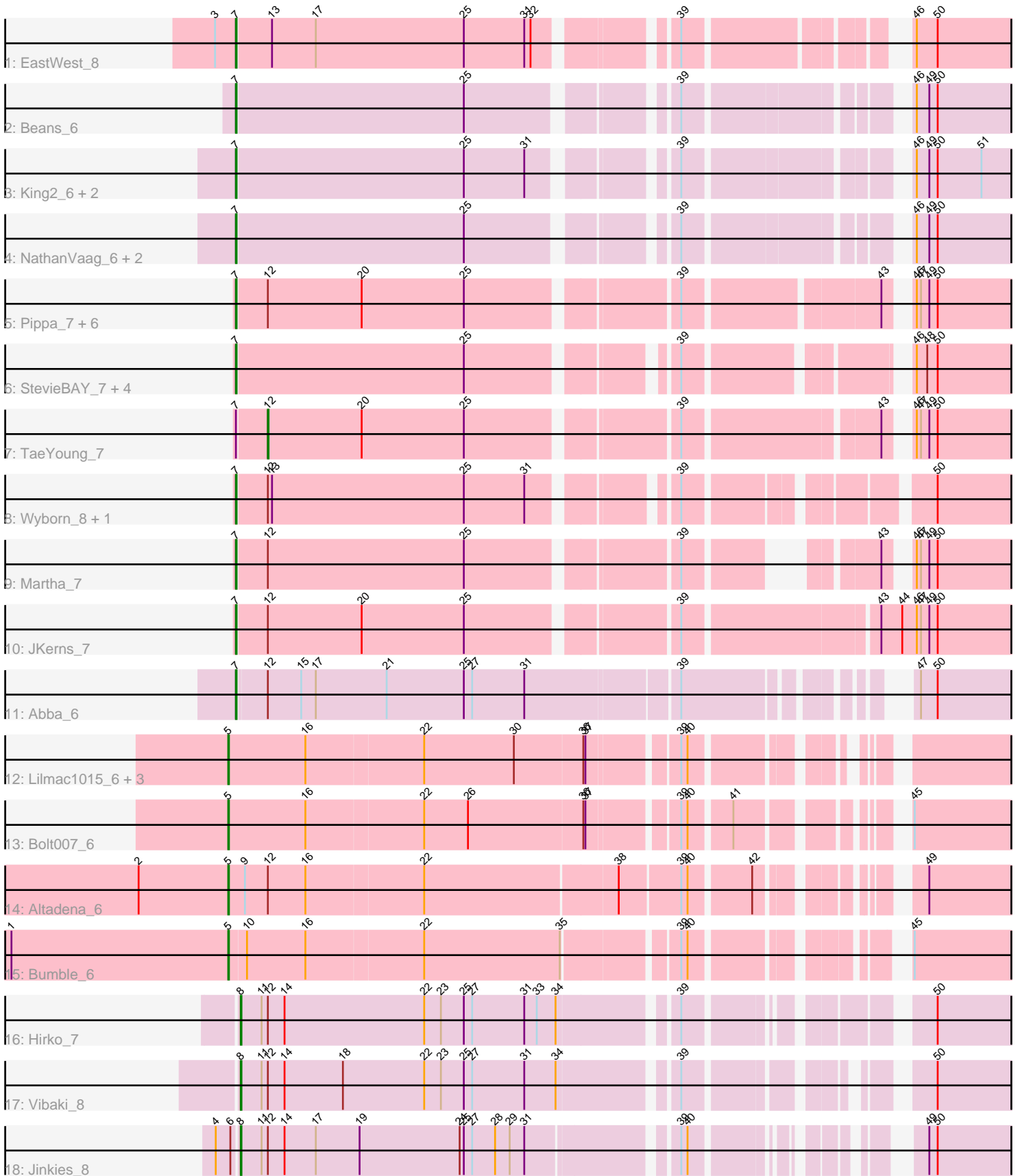


# Zoomed Pham 163785



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 163785 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163785 has 36 members, 2 are drafts.

Phages represented in each track:

- Track 1 : EastWest\_8
- Track 2 : Beans\_6
- Track 3 : King2\_6, Franzy\_6, Brent\_6
- Track 4 : NathanVaag\_6, Piccoletto\_6, Jawnski\_6
- Track 5 : Pippa\_7, Grekaycon\_7, Sonny\_7, Shade\_7, BossLady\_7, Zartrosa\_7, Jordan\_7
- Track 6 : StevieBAY\_7, GravityBall\_7, Timinator\_7, BarretLemon\_7, LeeroyJ\_7
- Track 7 : TaeYoung\_7
- Track 8 : Wyborn\_8, Sicarius2\_8
- Track 9 : Martha\_7
- Track 10 : JKerns\_7
- Track 11 : Abba\_6
- Track 12 : Lilmac1015\_6, CalWood4100\_6, Prairie\_6, Klevey\_6
- Track 13 : Bolt007\_6
- Track 14 : Altadena\_6
- Track 15 : Bumble\_6
- Track 16 : Hirko\_7
- Track 17 : Vibaki\_8
- Track 18 : Jinkies\_8

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

The start number called the most often in the published annotations is 7, it was called in 24 of the 34 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abba\_6, BarretLemon\_7, Beans\_6, BossLady\_7, Brent\_6, EastWest\_8, Franzy\_6, GravityBall\_7, Grekaycon\_7, JKerns\_7, Jawnski\_6, Jordan\_7, King2\_6, LeeroyJ\_7, Martha\_7, NathanVaag\_6, Piccoletto\_6, Pippa\_7, Shade\_7, Sicarius2\_8, Sonny\_7, StevieBAY\_7, Timinator\_7, Wyborn\_8, Zartrosa\_7,

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

- TaeYoung\_7,

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

- Altadena\_6, Bolt007\_6, Bumble\_6, CalWood4100\_6, Hirko\_7, Jinkies\_8, Klevey\_6, Lilmac1015\_6, Prairie\_6, Vibaki\_8,

### Summary by start number:

Start 5:

- Found in 7 of 36 ( 19.4% ) of genes in pham
- Manual Annotations of this start: 6 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Altadena\_6 (FH), Bolt007\_6 (FH), Bumble\_6 (FH), CalWood4100\_6 (FH), Klevey\_6 (FH), Lilmac1015\_6 (FH), Prairie\_6 (FH),

Start 7:

- Found in 26 of 36 ( 72.2% ) of genes in pham
- Manual Annotations of this start: 24 of 34
- Called 96.2% of time when present
- Phage (with cluster) where this start called: Abba\_6 (AO3), BarretLemon\_7 (AO2), Beans\_6 (AO1), BossLady\_7 (AO2), Brent\_6 (AO1), EastWest\_8 (AO), Franzy\_6 (AO1), GravityBall\_7 (AO2), Grekaycon\_7 (AO2), JKerns\_7 (AO2), Jawnski\_6 (AO1), Jordan\_7 (AO2), King2\_6 (AO1), LeeroyJ\_7 (AO2), Martha\_7 (AO2), NathanVaag\_6 (AO1), Piccoletto\_6 (AO1), Pippa\_7 (AO2), Shade\_7 (AO2), Sicarius2\_8 (AO2), Sonny\_7 (AO2), StevieBAY\_7 (AO2), Timinator\_7 (AO2), Wyborn\_8 (AO2), Zartrosa\_7 (AO2),

Start 8:

- Found in 3 of 36 ( 8.3% ) of genes in pham
- Manual Annotations of this start: 3 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hirko\_7 (FL), Jinkies\_8 (FL), Vibaki\_8 (FL),

Start 12:

- Found in 17 of 36 ( 47.2% ) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 5.9% of time when present
- Phage (with cluster) where this start called: TaeYoung\_7 (AO2),

### Summary by clusters:

There are 6 clusters represented in this pham: AO, AO3, AO2, AO1, FH, FL,

Info for manual annotations of cluster AO:

- Start number 7 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AO1:

- Start number 7 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 7 was manually annotated 15 times for cluster AO2.
- Start number 12 was manually annotated 1 time for cluster AO2.

Info for manual annotations of cluster AO3:

- Start number 7 was manually annotated 1 time for cluster AO3.

Info for manual annotations of cluster FH:

- Start number 5 was manually annotated 6 times for cluster FH.

Info for manual annotations of cluster FL:

- Start number 8 was manually annotated 3 times for cluster FL.

**Gene Information:**

Gene: Abba\_6 Start: 5801, Stop: 6952, Start Num: 7

Candidate Starts for Abba\_6:

(Start: 7 @5801 has 24 MA's), (Start: 12 @5840 has 1 MA's), (15, 5888), (17, 5909), (21, 6011), (25, 6122), (27, 6134), (31, 6209), (39, 6416), (47, 6656), (50, 6680),

Gene: Altadena\_6 Start: 5581, Stop: 6747, Start Num: 5

Candidate Starts for Altadena\_6:

(2, 5452), (Start: 5 @5581 has 6 MA's), (9, 5605), (Start: 12 @5638 has 1 MA's), (16, 5692), (22, 5857), (38, 6127), (39, 6211), (40, 6220), (42, 6301), (49, 6463),

Gene: BarretLemon\_7 Start: 5958, Stop: 7103, Start Num: 7

Candidate Starts for BarretLemon\_7:

(Start: 7 @5958 has 24 MA's), (25, 6282), (39, 6534), (46, 6798), (48, 6813), (50, 6828), (53, 6981),

Gene: Beans\_6 Start: 5622, Stop: 6770, Start Num: 7

Candidate Starts for Beans\_6:

(Start: 7 @5622 has 24 MA's), (25, 5946), (39, 6198), (46, 6462), (49, 6480), (50, 6492),

Gene: Bolt007\_6 Start: 5542, Stop: 6699, Start Num: 5

Candidate Starts for Bolt007\_6:

(Start: 5 @5542 has 6 MA's), (16, 5653), (22, 5818), (26, 5881), (36, 6043), (37, 6046), (39, 6160), (40, 6169), (41, 6223), (45, 6394),

Gene: BossLady\_7 Start: 5943, Stop: 7118, Start Num: 7

Candidate Starts for BossLady\_7:

(Start: 7 @5943 has 24 MA's), (Start: 12 @5985 has 1 MA's), (20, 6120), (25, 6267), (39, 6540), (43, 6789), (46, 6810), (47, 6816), (49, 6828), (50, 6840),

Gene: Brent\_6 Start: 5617, Stop: 6768, Start Num: 7

Candidate Starts for Brent\_6:

(Start: 7 @5617 has 24 MA's), (25, 5941), (31, 6028), (39, 6193), (46, 6460), (49, 6478), (50, 6490), (51, 6553),

Gene: Bumble\_6 Start: 5596, Stop: 6753, Start Num: 5

Candidate Starts for Bumble\_6:

(1, 5284), (Start: 5 @5596 has 6 MA's), (10, 5620), (16, 5704), (22, 5869), (35, 6064), (39, 6211), (40, 6220), (45, 6448), (52, 6628),

Gene: CalWood4100\_6 Start: 5536, Stop: 6678, Start Num: 5

Candidate Starts for CalWood4100\_6:

(Start: 5 @5536 has 6 MA's), (16, 5647), (22, 5812), (30, 5941), (36, 6037), (37, 6040), (39, 6154), (40, 6163),

Gene: EastWest\_8 Start: 6051, Stop: 7193, Start Num: 7

Candidate Starts for EastWest\_8:

(3, 6021), (Start: 7 @6051 has 24 MA's), (13, 6099), (17, 6162), (25, 6375), (31, 6462), (32, 6471), (39, 6633), (46, 6891), (50, 6921),

Gene: Franzy\_6 Start: 5617, Stop: 6768, Start Num: 7

Candidate Starts for Franzy\_6:

(Start: 7 @5617 has 24 MA's), (25, 5941), (31, 6028), (39, 6193), (46, 6460), (49, 6478), (50, 6490), (51, 6553),

Gene: GravityBall\_7 Start: 5958, Stop: 7103, Start Num: 7

Candidate Starts for GravityBall\_7:

(Start: 7 @5958 has 24 MA's), (25, 6282), (39, 6534), (46, 6798), (48, 6813), (50, 6828), (53, 6981),

Gene: Grekaycon\_7 Start: 5943, Stop: 7127, Start Num: 7

Candidate Starts for Grekaycon\_7:

(Start: 7 @5943 has 24 MA's), (Start: 12 @5985 has 1 MA's), (20, 6120), (25, 6267), (39, 6540), (43, 6798), (46, 6819), (47, 6825), (49, 6837), (50, 6849),

Gene: Hirko\_7 Start: 7143, Stop: 8291, Start Num: 8

Candidate Starts for Hirko\_7:

(Start: 8 @7143 has 3 MA's), (11, 7173), (Start: 12 @7182 has 1 MA's), (14, 7206), (22, 7407), (23, 7431), (25, 7464), (27, 7476), (31, 7551), (33, 7569), (34, 7596), (39, 7746), (50, 8019), (54, 8202), (55, 8259),

Gene: JKerns\_7 Start: 5940, Stop: 7157, Start Num: 7

Candidate Starts for JKerns\_7:

(Start: 7 @5940 has 24 MA's), (Start: 12 @5982 has 1 MA's), (20, 6117), (25, 6264), (39, 6537), (43, 6798), (44, 6828), (46, 6849), (47, 6855), (49, 6867), (50, 6879),

Gene: Jawnski\_6 Start: 5617, Stop: 6765, Start Num: 7

Candidate Starts for Jawnski\_6:

(Start: 7 @5617 has 24 MA's), (25, 5941), (39, 6193), (46, 6457), (49, 6475), (50, 6487),

Gene: Jinkies\_8 Start: 6526, Stop: 7632, Start Num: 8

Candidate Starts for Jinkies\_8:

(4, 6496), (6, 6517), (Start: 8 @6526 has 3 MA's), (11, 6556), (Start: 12 @6565 has 1 MA's), (14, 6589), (17, 6634), (19, 6697), (24, 6841), (25, 6847), (27, 6859), (28, 6892), (29, 6913), (31, 6934), (39, 7123), (40, 7132), (49, 7351), (50, 7363), (54, 7546),

Gene: Jordan\_7 Start: 5940, Stop: 7127, Start Num: 7

Candidate Starts for Jordan\_7:

(Start: 7 @5940 has 24 MA's), (Start: 12 @5982 has 1 MA's), (20, 6117), (25, 6264), (39, 6537), (43, 6798), (46, 6819), (47, 6825), (49, 6837), (50, 6849),

Gene: King2\_6 Start: 5619, Stop: 6770, Start Num: 7

Candidate Starts for King2\_6:

(Start: 7 @5619 has 24 MA's), (25, 5943), (31, 6030), (39, 6195), (46, 6462), (49, 6480), (50, 6492), (51, 6555),

Gene: Klevey\_6 Start: 5536, Stop: 6687, Start Num: 5

Candidate Starts for Klevey\_6:

(Start: 5 @5536 has 6 MA's), (16, 5647), (22, 5812), (30, 5941), (36, 6037), (37, 6040), (39, 6154), (40, 6163),

Gene: LeeroyJ\_7 Start: 5957, Stop: 7102, Start Num: 7

Candidate Starts for LeeroyJ\_7:

(Start: 7 @5957 has 24 MA's), (25, 6281), (39, 6533), (46, 6797), (48, 6812), (50, 6827), (53, 6980),

Gene: Lilmac1015\_6 Start: 5536, Stop: 6678, Start Num: 5

Candidate Starts for Lilmac1015\_6:

(Start: 5 @5536 has 6 MA's), (16, 5647), (22, 5812), (30, 5941), (36, 6037), (37, 6040), (39, 6154), (40, 6163),

Gene: Martha\_7 Start: 5943, Stop: 7064, Start Num: 7

Candidate Starts for Martha\_7:

(Start: 7 @5943 has 24 MA's), (Start: 12 @5985 has 1 MA's), (25, 6267), (39, 6540), (43, 6735), (46, 6756), (47, 6762), (49, 6774), (50, 6786),

Gene: NathanVaag\_6 Start: 5622, Stop: 6770, Start Num: 7

Candidate Starts for NathanVaag\_6:

(Start: 7 @5622 has 24 MA's), (25, 5946), (39, 6198), (46, 6462), (49, 6480), (50, 6492),

Gene: Piccoletto\_6 Start: 5623, Stop: 6771, Start Num: 7

Candidate Starts for Piccoletto\_6:

(Start: 7 @5623 has 24 MA's), (25, 5947), (39, 6199), (46, 6463), (49, 6481), (50, 6493),

Gene: Pippa\_7 Start: 5973, Stop: 7157, Start Num: 7

Candidate Starts for Pippa\_7:

(Start: 7 @5973 has 24 MA's), (Start: 12 @6015 has 1 MA's), (20, 6150), (25, 6297), (39, 6570), (43, 6828), (46, 6849), (47, 6855), (49, 6867), (50, 6879),

Gene: Prairie\_6 Start: 5536, Stop: 6687, Start Num: 5

Candidate Starts for Prairie\_6:

(Start: 5 @5536 has 6 MA's), (16, 5647), (22, 5812), (30, 5941), (36, 6037), (37, 6040), (39, 6154), (40, 6163),

Gene: Shade\_7 Start: 5940, Stop: 7106, Start Num: 7

Candidate Starts for Shade\_7:

(Start: 7 @5940 has 24 MA's), (Start: 12 @5982 has 1 MA's), (20, 6117), (25, 6264), (39, 6537), (43, 6777), (46, 6798), (47, 6804), (49, 6816), (50, 6828),

Gene: Sicarius2\_8 Start: 6515, Stop: 7660, Start Num: 7

Candidate Starts for Sicarius2\_8:

(Start: 7 @6515 has 24 MA's), (Start: 12 @6557 has 1 MA's), (13, 6563), (25, 6839), (31, 6926), (39, 7094), (50, 7388),

Gene: Sonny\_7 Start: 5940, Stop: 7127, Start Num: 7

Candidate Starts for Sonny\_7:

(Start: 7 @5940 has 24 MA's), (Start: 12 @5982 has 1 MA's), (20, 6117), (25, 6264), (39, 6537), (43, 6798), (46, 6819), (47, 6825), (49, 6837), (50, 6849),

Gene: StevieBAY\_7 Start: 5958, Stop: 7103, Start Num: 7

Candidate Starts for StevieBAY\_7:

(Start: 7 @5958 has 24 MA's), (25, 6282), (39, 6534), (46, 6798), (48, 6813), (50, 6828), (53, 6981),

Gene: TaeYoung\_7 Start: 5985, Stop: 7127, Start Num: 12

Candidate Starts for TaeYoung\_7:

(Start: 7 @5943 has 24 MA's), (Start: 12 @5985 has 1 MA's), (20, 6120), (25, 6267), (39, 6540), (43, 6798), (46, 6819), (47, 6825), (49, 6837), (50, 6849),

Gene: Timinator\_7 Start: 5957, Stop: 7102, Start Num: 7

Candidate Starts for Timinator\_7:

(Start: 7 @5957 has 24 MA's), (25, 6281), (39, 6533), (46, 6797), (48, 6812), (50, 6827), (53, 6980),

Gene: Vibaki\_8 Start: 7645, Stop: 8781, Start Num: 8

Candidate Starts for Vibaki\_8:

(Start: 8 @7645 has 3 MA's), (11, 7675), (Start: 12 @7684 has 1 MA's), (14, 7708), (18, 7792), (22, 7909), (23, 7933), (25, 7966), (27, 7978), (31, 8053), (34, 8098), (39, 8248), (50, 8509),

Gene: Wyborn\_8 Start: 6376, Stop: 7521, Start Num: 7

Candidate Starts for Wyborn\_8:

(Start: 7 @6376 has 24 MA's), (Start: 12 @6418 has 1 MA's), (13, 6424), (25, 6700), (31, 6787), (39, 6955), (50, 7249),

Gene: Zartrosa\_7 Start: 5940, Stop: 7127, Start Num: 7

Candidate Starts for Zartrosa\_7:

(Start: 7 @5940 has 24 MA's), (Start: 12 @5982 has 1 MA's), (20, 6117), (25, 6264), (39, 6537), (43, 6798), (46, 6819), (47, 6825), (49, 6837), (50, 6849),