MV Voutakos

Prepared Basis : CP Speed

madras to cbe

Dep.Date: 06-01-2024 12:00 UTC

Arrival.Date: 15-01-2024 07:00 UTC

Condition : Ballast

Report Date : 13-Feb-24

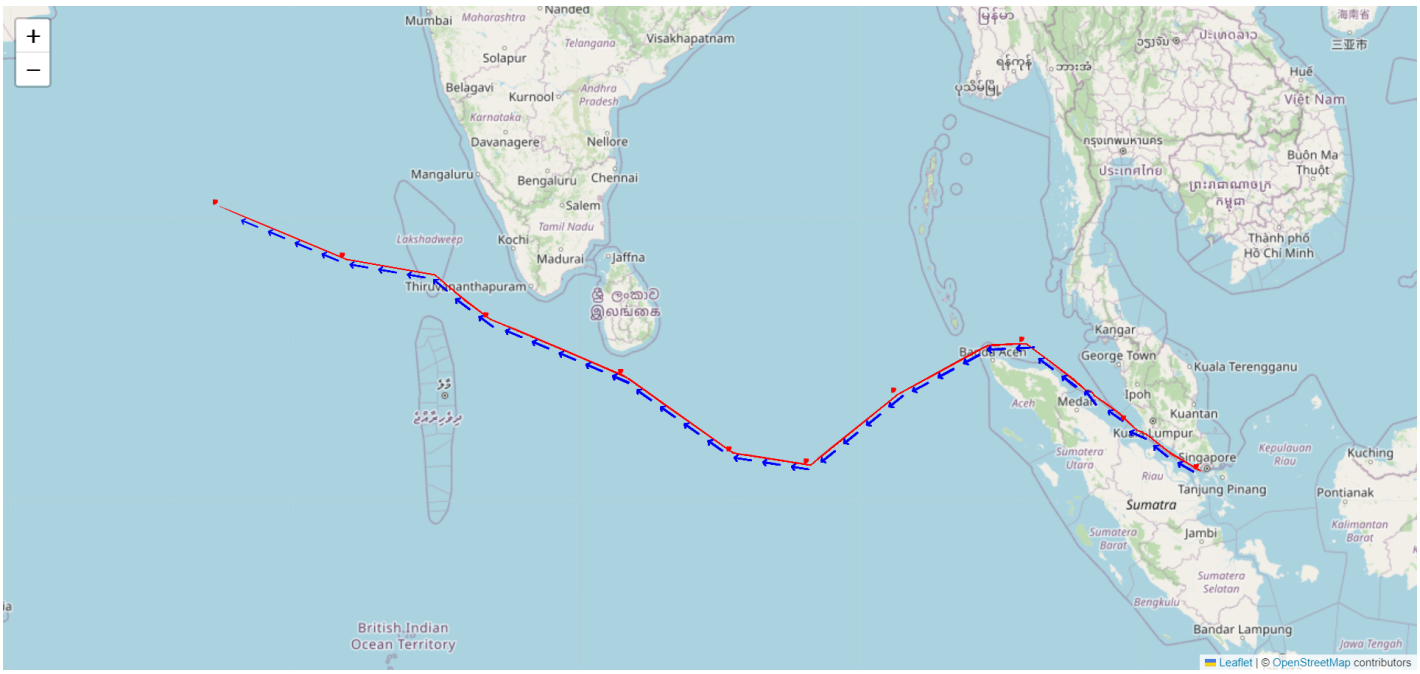
Reference No. :

VOYAGE MAP

Itinerary : madras - cbe

Voyage Leg Date(UTC) : 06-01-2024 12:00 - 15-01-2024 07:00

CP Warranties : About 13.68 Kts on About 47.18 Mts Fuel



Report Analysis Summary

Itinerary : madras - cbe

Voyage Leg Date(UTC) : 06-01-2024 12:00 - 15-01-2024 07:00

ATD(Z)	Time gain/loss	V/U/L SFO gain/loss	HSFO gain/loss	MGO gain/loss	MDO gain/loss
madras - cbe 06-01-2024 12:00	5446.8 hours(Loss)	Nil	301.92 mt(Loss)	Nil	NA

Voyage Details

Leg Details	ATD(Z)	ETA(Z)	Good Weather				Performance		Overall Weather			
			Distance	Steaming Hours	Speed	Total Cons	Distance (Exc currents)	Speed	Distance	Steaming Hours	Speed	Total Cons.
madras to cbe	2024-01-06	2024-01-15	209	16.0	13.06	22.8299999999999	209	13.06	2764	211.0	13.1	386.86
			209	16.0	13.06	22.8299999999999	209	13.06	2764	211.0	13.1	386.86

Warranted Consumption

Leg Details	CP Speed	Total Cons.
madras to cbe	About 13.68 kts	About 47.18 MT

Report Analysis Summary

Interpretation of good weather criteria as per CP:

Weather Definition:

A noon report is counted as fair weather if majority of the noon period is good weather basis analyzed weather

- Wind Force <= 3 Bf
- Adverse Currents are excluded

Noon Report excluded from evaluation :

Weather Source : Analyzed

Speed used for Analysis : Performed speed

All comparisons are done against CP Speed

"About" Tolerance:

- For speed : -0.5 / +0.5 Kts
- For consumption : -5.0 / +5.0 %

Good weather performance is extrapolated to overall voyage

***Note: The calculations for the report are done on the performed speed by adjusting the effect of currents (If applicable).

Speed Summary

Itinerary : madras - cbe

Voyage Leg Date(UTC) : 06-01-2024 12:00 - 15-01-2024 07:00

CP Warranties : About 13.68 Kts on About 47.18 Mts Fuel

Overall

Total Distance Sailed	2764 NM
Time at Sea	211.0 hrs
Average Speed	13.1 kts

Good Weather

Total Distance Sailed	209 NM
Time at Sea	16.0 hrs
Average Speed	13.06 kts
C/P Min.Allowable Time	395.86 hrs
C/P Max.Allowable Time	-395.86 hrs
Track Time Loss	411.86 hrs
Applied to Overall Track Time Loss	5446.8 hrs

Fuel Consumption Summary

Itinerary : madras - cbe

Voyage Leg Date(UTC) : 06-01-2024 12:00 - 15-01-2024 07:00

CP Warranties : About 13.68 Kts on About 47.18 Mts Fuel

Overall

Average Daily Consumption	44.0 mts
Total Bunkers Consumed at Sea	386.86 mts
Gradewise Distribution of Bunkers consumed at sea	
HSFO	382.81 mts
IFO	0.0 mts
GO	4.05 mts

Good Weather

Actual Usage in Good Weather	22.83 mts
Average Daily Consumption	34.24 mts
Min.Allowable Usage	0.0 mts
Max Allowable Usage	0.0 mts
Fuel Loss	22.83 mts
Fuel Loss applied to overall track	301.92 mts

CO2 Emissions Summary

Overall

Total CO2 produced at sea (MT)	1205.05 mts

Detailed Weather Analysis

Itinerary : madras - cbe

Voyage Leg Date(UTC) : 06-01-2024 12:00 - 15-01-2024 07:00

CP Warranties : About 13.68 Kts on About 47.18 Mts Fuel

Date/Time	Lat	Lon	Wind		SWH	Wind Wave	Swell		Current factor	Bad Weather Details	Report Data by Ship								
			BFT	Dir.(rel.)	Hgt(m)	(m)	Hgt (m)	Dir. (rel.)	Kts		Steaming Hours	Distance (NM)	Wind (Bft)	Current Factor (Kts)	Ordered Speed (Kts)	Avg. Speed (Kts)	RPM	Slip (%)	Course
06th Jan 2024 12:00	**1.20**	**103.57**	**3**	**78.63**	**0.07**	**0.07**	**0.07**	**318.65**	**-0.87**		**0.00**	**0.00**	**3.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**286.00**
06th Jan 2024 15:00			3	30.14	0.34	0.34	0.07	325.4	0.79										
06th Jan 2024 18:00			3	12.66	0.34	0.34	0.15	114.89	0.52										
06th Jan 2024 21:00			1	22.12	0.12	0.12	0.12	304.47	0.66										
07th Jan 2024 00:00			2	321.7	0.15	0.17	0.08	278.09	0.68										
07th Jan 2024 04:00	**3.10**	**100.69**	**2**	**238.41**	**0.31**	**0.13**	**0.15**	**323.05**	**0.78**		**16.00**	**209.00**	**3.00**	**0.00**	**13.68**	**13.06**	**51.62**	**0.00**	**311.00**
07th Jan 2024 07:00			4	237.09	0.40	0.35	0.19	343.64	0.41	WI									
07th Jan 2024 10:00			4	228.61	0.55	0.42	0.35	353.16	-0.01	WI,CU									
07th Jan 2024 13:00			3	267.4	0.69	0.41	0.55	6.4	-0.49	CU									
07th Jan 2024 16:00			3	272.11	0.68	0.22	0.66	27.2	-0.07	CU									
07th Jan 2024 19:00			3	210.92	0.67	0.21	0.64	40.58	-0.49	CU									
07th Jan 2024 22:00			3	142.89	0.93	0.77	0.86	53.35	-0.50	CU									
08th Jan 2024 01:00			5	76.32	1.22	1.22	0.91	56.85	-0.11	WI,CU									
08th Jan 2024 04:00	**6.23**	**96.65**	**4**	**82.9**	**1.11**	**1.11**	**0.08**	**240.59**	**0.18**		**24.00**	**309.00**	**4.00**	**0.00**	**13.58**	**12.88**	**53.83**	**0.00**	**273.00**
08th Jan 2024 07:00			4	79.5	1.14	1.13	0.16	228.99	1.12	WI									
08th Jan 2024 10:00			5	77.69	1.31	1.17	0.57	217.79	1.13	WI									
08th Jan 2024 13:00			5	72.64	1.70	1.30	0.71	209.55	0.02	WI									
08th Jan 2024 16:00			5	61.6	1.81	1.36	1.10	206.12	-0.61	WI,CU									
08th Jan 2024 19:00			4	44.51	1.79	1.28	1.13	206.42	-0.69	WI,CU									
08th Jan 2024 22:00			4	48.92	1.65	1.19	0.97	193.41	-1.27	WI,CU									
09th Jan 2024 01:00			3	64.73	1.53	1.14	0.65	162.7	-2.07	CU									
09th Jan 2024 05:00	**4.20**	**91.53**	**3**	**67.45**	**1.55**	**1.01**	**0.79**	**182.45**	**-1.96**		**25.00**	**344.00**	**4.00**	**0.00**	**12.32**	**13.76**	**56.05**	**0.00**	**231.00**
09th Jan 2024 08:00			2	318.71	1.60	0.96	0.63	197.29	-1.28	CU									
09th Jan 2024 11:00			2	195.34	1.67	1.17	0.71	84.27	-1.11	CU									
09th Jan 2024 14:00			3	306.56	1.79	1.19	0.69	24.75	-1.03	CU									
09th Jan 2024 17:00			3	277.01	1.79	0.67	0.55	33.81	-1.63	CU									
09th Jan 2024 20:00			3	299.42	1.79	1.61	0.63	153.38	-1.92	CU									
09th Jan 2024 23:00			4	246.85	1.84	1.36	0.55	98.26	-1.91	WI,CU									
10th Jan 2024 02:00			4	250.08	1.94	1.23	0.49	43.52	-1.82	WI,CU									
10th Jan 2024 05:00	**1.42**	**88.06**	**4**	**263.58**	**1.84**	**0.97**	**0.65**	**187.84**	**-1.86**		**24.00**	**265.00**	**4.00**	**0.00**	**11.59**	**11.04**	**55.80**	**0.00**	**231.00**
10th Jan 2024 08:00			4	277.15	1.73	1.04	0.58	332.77	-1.96	WI,CU									
10th Jan 2024 11:00			3	296.37	1.63	0.70	0.62	2.78	-1.92	CU									
10th Jan 2024 14:00			3	310.23	1.56	1.05	0.60	200.22	-1.57	CU									
10th Jan 2024 17:00			3	326.6	1.54	0.86	0.64	212.01	-1.36	CU									
10th Jan 2024 20:00			3	340.82	1.51	0.75	0.55	173.73	-1.83	CU									
10th Jan 2024 23:00			3	355.99	1.46	0.68	0.48	151.82	-1.73	CU									
11th Jan 2024 02:00			3	349.78	1.46	0.64	0.49	155.02	-1.86	CU									
11th Jan 2024 06:00	**1.90**	**84.97**	**4**	**19.36**	**1.53**	**0.09**	**0.49**	**157.38**	**-1.62**		**25.00**	**275.00**	**4.00**	**0.00**	**10.98**	**11.00**	**55.69**	**0.00**	**225.00**
11th Jan 2024 09:00			3	33.46	1.57	1.17	0.47	155.39	-0.97	CU									
11th Jan 2024 12:00			4	50.46	1.61	1.17	0.45	153.24	-0.38	WI,CU									
11th Jan 2024 15:00			4	38.39	1.67	1.37	0.85	210.42	-0.41	WI,CU									
11th Jan 2024 18:00			4	35.82	1.86	1.64	0.79	209.1	-0.27	WI,CU									
11th Jan 2024 21:00			5	49.18	1.89	1.70	0.10	175.88	-0.11	WI,CU									
12th Jan 2024 00:00			4	45.18	1.84	1.66	0.12	197.75	0.46	WI									
12th Jan 2024 03:00			5	43.57	1.84	1.67	0.71	203.98	0.75	WI									
12th Jan 2024 06:00	**4.94**	**80.66**	**5**	**46.63**	**1.70**	**1.52**	**0.24**	**327.77**	**1.47**		**24.00**	**323.00**	**4.00**	**0.00**	**12.04**	**13.46**	**56.27**	**0.00**	**248.00**
12th Jan 2024 09:00			5	62.56	1.57	1.30	0.28	144.11	2.58	WI									
12th Jan 2024 12:00			1	268.56	1.47	0.60	0.60	199.12	2.44										
12th Jan 2024 15:00			4	17.12	1.49	1.42	0.56	153.2	1.74	WI									
12th Jan 2024 18:00			5	26.56	1.62	1.44	0.31	146.53	1.98	WI									

Date/Time	Lat	Lon	Wind		SWH	Wind Wave	Swell		Current factor	Bad Weather Details	Report Data by Ship								
			BFT	Dir.(rel.)	Hgt(m)	(m)	Hgt (m)	Dir. (rel.)	Kts		Steaming Hours	Distance (NM)	Wind (Bft)	Current Factor (Kts)	Ordered Speed (Kts)	Avg. Speed (Kts)	RPM	Slip (%)	Course
12th Jan 2024 21:00			6	42.09	1.79	1.68	0.15	324.75	0.47	WI									
13th Jan 2024 00:00			5	52.52	1.90	1.80	0.23	326.36	0.56	WI									
13th Jan 2024 03:00			5	60.37	1.67	1.56	0.28	343.12	0.49	WI									
13th Jan 2024 06:00	**7.19**	**75.34**	**3**	**64.21**	**1.32**	**0.43**	**0.29**	**149.22**	**0.08**		**24.00**	**349.00**	**4.00**	**0.00**	**13.69**	**14.54**	**56.75**	**0.00**	**248.00**
13th Jan 2024 09:00			4	15.63	1.18	0.58	0.26	336.3	-0.58	WI,CU									
13th Jan 2024 12:00			4	37.97	1.16	0.22	0.23	176.34	-0.38	WI,CU									
13th Jan 2024 15:00			4	61.21	1.05	0.18	0.22	177.41	0.07	WI									
13th Jan 2024 18:00			3	55.14	1.02	0.80	0.25	334.34	-0.26	CU									
13th Jan 2024 21:00			2	91.09	1.06	1.01	0.40	191.29	-0.40	CU									
14th Jan 2024 00:00			3	109.27	1.10	0.76	0.42	262.7	-0.00	CU									
14th Jan 2024 03:00			3	96.37	1.11	1.24	0.45	167.12	-0.01	CU									
14th Jan 2024 07:00	**9.53**	**69.62**	**3**	**76.08**	**1.13**	**1.01**	**0.48**	**163.45**	**-0.14**		**25.00**	**363.00**	**3.00**	**0.00**	**13.98**	**14.52**	**57.06**	**0.00**	**248.00**
14th Jan 2024 10:00			3	67.6	1.15	0.66	0.47	116.33	-0.12	CU									
14th Jan 2024 13:00			4	68.85	1.21	0.87	0.37	1.49	0.08	WI									
14th Jan 2024 16:00			4	66.2	1.21	0.96	0.23	200.71	0.00	WI									
14th Jan 2024 19:00			4	62.42	1.20	0.92	0.23	194.33	-0.04	WI,CU									
14th Jan 2024 22:00			4	60.62	1.22	0.86	0.32	175.24	0.41	WI									
15th Jan 2024 01:00			4	64.43	1.26	0.81	0.26	116.77	0.56	WI									
15th Jan 2024 04:00			4	59.8	1.27	0.88	0.21	145.55	0.30	WI									
15th Jan 2024 07:00	**11.60**	**64.54**	**4**	**53.6**	**1.30**	**0.95**	**0.17**	**193.75**	**0.18**		**24.00**	**327.00**	**3.00**	**0.00**	**13.75**	**13.62**	**57.06**	**0.00**	**248.00**

Good Weather Summary

Itinerary : madras - cbe

Voyage Leg Date(UTC) : 06-01-2024 12:00 - 15-01-2024 07:00

CP Warranties : About 13.68 Kts on About 47.18 Mts Fuel

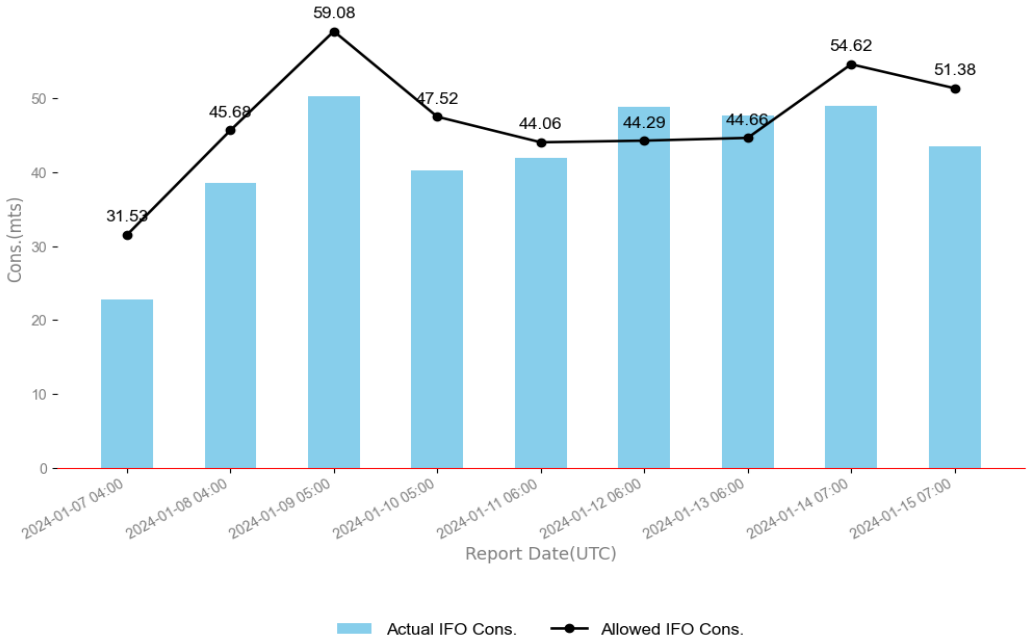
Date	Lat	Log	Steaming Hours	Allowed Steaming Hours	Distance (NM)	Avg - RPM	Slip (%)	Course	Bunker ROB (MT)				Bunker Cons. (MT)				Allowed Cons. MT	Good Weather
									HSFO	VULSFO	MGO	MDO	HSFO	VULSFO	MGO	MDO		
06th Jan 2024 12:00	COSP	madras	0.00	-0.00	0	0.00	0	286	3288.79	0.00	245.81	0.00	0.00	0.00	0.00	0.00	-	NO
07th Jan 2024 04:00	3.10	100.69	16.00	15.86	209	51.62	0	311	3265.96	0.00	245.41	0.00	22.83	0.00	0.40	0.00	31.53	YES
08th Jan 2024 04:00	6.23	96.65	24.00	23.63	309	53.83	0	273	3227.46	0.00	245.01	0.00	38.50	0.00	0.40	0.00	45.68	NO
09th Jan 2024 05:00	4.20	91.53	25.00	29.10	344	56.05	0	231	3177.16	0.00	244.41	0.00	50.30	0.00	0.60	0.00	59.08	NO
10th Jan 2024 05:00	1.42	88.06	24.00	23.89	265	55.80	0	231	3136.96	0.00	243.91	0.00	40.20	0.00	0.50	0.00	47.52	NO
11th Jan 2024 06:00	1.90	84.97	25.00	26.25	275	55.69	0	225	3095.06	0.00	243.46	0.00	41.90	0.00	0.45	0.00	44.06	NO
12th Jan 2024 06:00	4.94	80.66	24.00	27.98	323	56.27	0	248	3046.26	0.00	243.11	0.00	48.80	0.00	0.35	0.00	44.29	NO
13th Jan 2024 06:00	7.19	75.34	24.00	26.46	349	56.75	0	248	2998.56	0.00	242.73	0.00	47.70	0.00	0.38	0.00	44.66	NO
14th Jan 2024 07:00	9.53	69.62	25.00	26.93	363	57.06	0	248	2949.56	0.00	242.26	0.00	49.00	0.00	0.47	0.00	54.62	NO
15th Jan 2024 07:00	EOSP	cbe	24.00	24.68	327	57.06	0	248	2905.98	0.00	241.76	0.00	43.58	0.00	0.50	0.00	51.38	NO

Message Traffic

Report Type	Position		Date/ Time (GMT)	Since last report								DTG (NM)	ETA (LT)	BROB(MT)				Remarks
	Lat	Log		Avg Wind (Dir. x Bft)	Avg Sea (Dir. x Height)	Ordered Speed (Kts)	Avg. Speed (Kts)	Course	RPM	Slip (%)	Distance Sailed (NM)			HSFO	V/ULSFO	MGO	MDO	
Departure-madras	1.20	103.57	06th Jan 2024 12:00	337.5 x 3	337.5 x 1.0	0.00	0.00	286	0.00	0	0	0	0	3288.79	0	245.81	0	
Noon	3.10	100.69	07th Jan 2024 04:00	270.0 x 3	270.0 x 0.5	13.68	13.06	311	51.62	0	209	0	0	3265.96	0	245.41	0	
Noon	6.23	96.65	08th Jan 2024 04:00	157.5 x 4	157.5 x 1.0	13.58	12.88	273	53.83	0	309	0	0	3227.46	0	245.01	0	
Noon	4.20	91.53	09th Jan 2024 05:00	202.5 x 4	202.5 x 1.0	12.32	13.76	231	56.05	0	344	0	0	3177.16	0	244.41	0	
Noon	1.42	88.06	10th Jan 2024 05:00	225.0 x 4	225.0 x 1.0	11.59	11.04	231	55.80	0	265	0	0	3136.96	0	243.91	0	
Noon	1.90	84.97	11th Jan 2024 06:00	315.0 x 4	315.0 x 1.0	10.98	11.00	225	55.69	0	275	0	0	3095.06	0	243.46	0	
Noon	4.94	80.66	12th Jan 2024 06:00	337.5 x 4	337.5 x 1.0	12.04	13.46	248	56.27	0	323	0	0	3046.26	0	243.11	0	
Noon	7.19	75.34	13th Jan 2024 06:00	112.5 x 4	112.5 x 1.0	13.69	14.54	248	56.75	0	349	0	0	2998.56	0	242.73	0	
Noon	9.53	69.62	14th Jan 2024 07:00	112.5 x 3	112.5 x 1.0	13.98	14.52	248	57.06	0	363	0	0	2949.56	0	242.26	0	
Arrival-cbe	11.60	64.54	15th Jan 2024 07:00	130.0 x 3	130.0 x 1.0	13.75	13.62	248	57.06	0	327	0	0	2905.98	0	241.76	0	

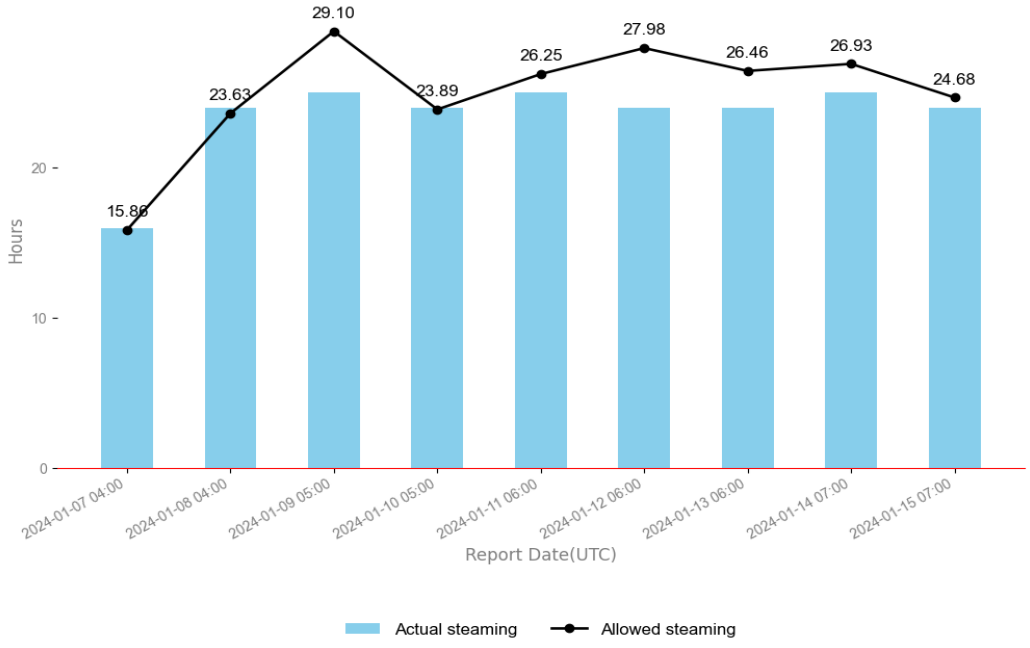
Fuel Graph

Comparison between Actual vs Allowed IFO Cons.



Steaming Graph

Comparison between Actual vs Allowed Steaming



Annex A - Speed Calculation Detail

1 Min. C/P allowable time (hrs)

$$= \frac{\text{Distance in Good Weather(NM) - (+/- Current Factor} \times \text{Actual Time in Good Weather)(NM)}}{\text{(Warranted Speed (kts) + Min. Speed Tolerance (kts))}}$$

2 Max. C/P allowable Time (hrs)

$$= \frac{\text{Distance in Good Weather(NM) -(+/- Current Factor} \times \text{Actual Time in Good Weather)(NM)}}{\text{(Warranted Speed (kts) - Max. Speed Tolerance (kts))}}$$

3 Track Time Gain = Min. C/P allowable time (hrs) - Actual Time in Good Weather (hrs)

4 Track Time Loss = Max. C/P allowable time(hrs) - Actual Time in Good Weather (hrs)

5 Track Time is applied to Overall Track Time

$$= \left[\frac{\text{Good Weather gain/Loss track time(hrs)}}{\text{Good Weather Distance (NM)}} \right] \times \text{Total Voyage Distance (NM)}$$

Annex B - Fuel Consumption Calculation Detail

Distance adjusted for current (NM)

= Distance in Good Weather (NM) - (+/- Current Factor × Actual Time in Good Weather)(NM)

1 Min. Allowable Usage (mts)

$$= \left[\frac{\text{Distance adjusted for current (NM)}}{\text{(C/P Speed - Min. Speed Tolerance(kts) *24}} \right] \times \text{Daily C/P allowable Consumption} \times (1\text{-About \%})$$

2 Max Allowable Usage (mts)

$$= \left[\frac{\text{Distance adjusted for current (NM)}}{\text{(C/P Speed - Min. Speed Tolerance(kts) *24}} \right] \times \text{Daily C/P allowable Consumption} \times (1\text{+About \%})$$

3 Good Weather Fuel Gain

= Min. Allowable Usage (mts) - Actual Usage in Good Weather (mts)

4 Good Weather Fuel Loss

= Max. Allowable Usage (mts) - Actual Usage in Good Weather (mts)

5 Good Weather Fuel Gain/Loss Consumption applied to overall track

$$= \left[\frac{\text{Good Weather Fuel gain/Loss Consumption (mts)}}{\text{Good Weather Distance (NM)}} \right] \times \text{Total Voyage Distance (NM)}$$

Annex C - CO2 Emission Calculation Detail

Total CO2 produced at sea (MT) = Σ(bunker consumed x CO2 factor for particular grade)

*all CO2 factors are considered as mentioned in IMO GHG Study 2020 (pg.74; Table 21)

Weather DataSources

Our weather forecast is based on data from several sources including NOAA server along with two other agencies.The weather projection model consist of 05 days accurate weather forecast along with 09 days extended forecast. For subsequent days,information from historical weather database is used.

WAVEWATCH III for Wind/Waves/Swell

WAVEWATCH III is a third generation multi-grid wave model at NOAA/NCEP in the spirit of WAM model.

Update Interval : 6 Hours
Average Resolution Time : 3 Hours
Time Period : 5 Days
Provider : NOAA (National Oceanic & Atmospheric Administration

GEFS (Global Ensemble Forecast System) for Wind/Waves/Swell

The Global Ensemble Forecast System (GEFS) is a weather forecast model made up of 21 separate forecast or ensemble members.

Update Interval : 6 Hours
Average Resolution Time : 3 Hours
Time Period : 16 Days
Provider : NOAA (National Oceanic & Atmospheric Administration

Copernicus Marine Environment Monitoring Service- for Sea Currents

The Copernicus Marine Environment Monitoring Service is part of the Copernicus Pro- gramme, which is an EU Programme managed by the European Commission (EC) and implemented in partnership with the Member States, the European Space Agency (ESA), the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), the European Centre for medium-range Weather Forecasts (ECMWF), EU Agencies and Mercator Ocean. The Programme is aimed at developing a set of European information services based on satellite Earth Observation and in-situ (non-space) data.

Spatial Resolution : 0.08 degree (Lat) x 0.08 degree (Lon)
Temporal Resolution : Hourly mean
Time Period : 7 Days
Provider : Copernicus