



# Managing Bunker Fuel Losses to Make Money in a Tough Market

5<sup>th</sup> 'Tanker Operator' Singapore Conference  
16<sup>th</sup> October 2014

*Building relationships....maritime & beyond*



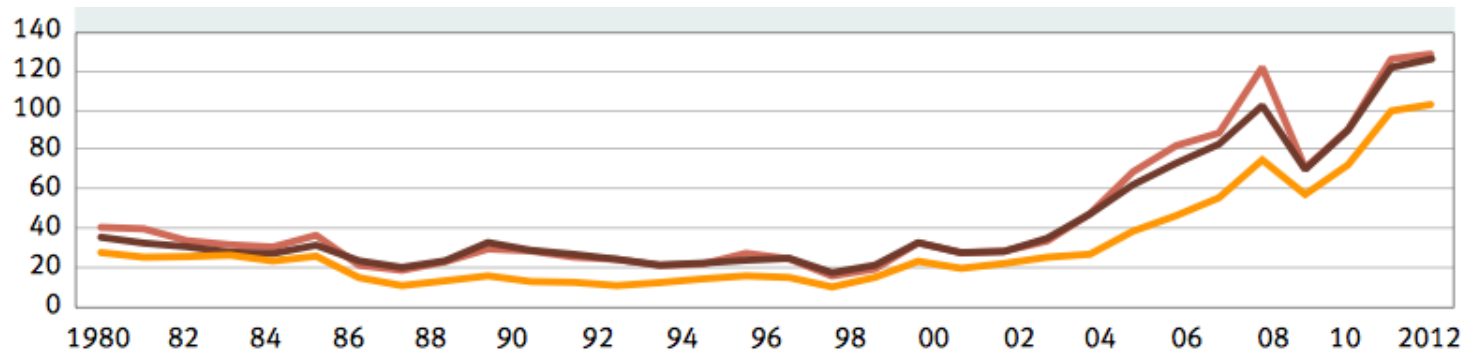
Safety  
Management



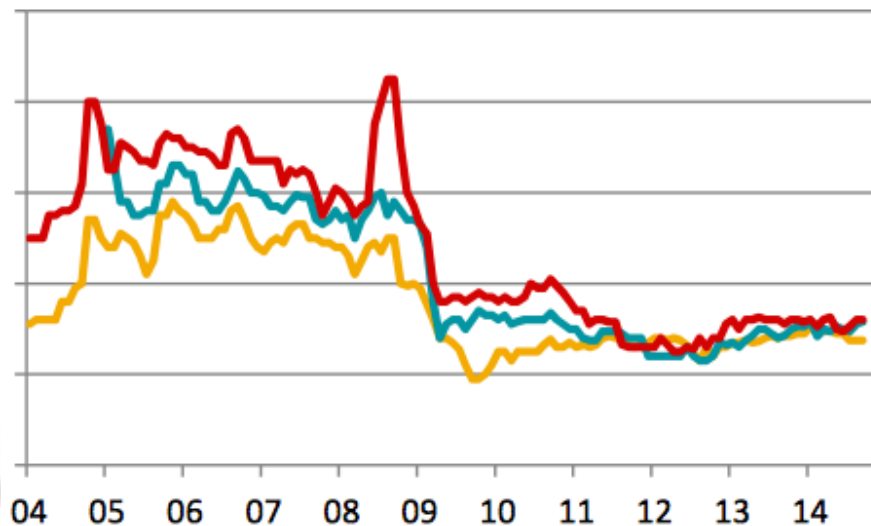


# The Ship Owner's "Wish"...

## *Freight - the "Wish" curve*



## *Bunker prices - the "Wish" curve*

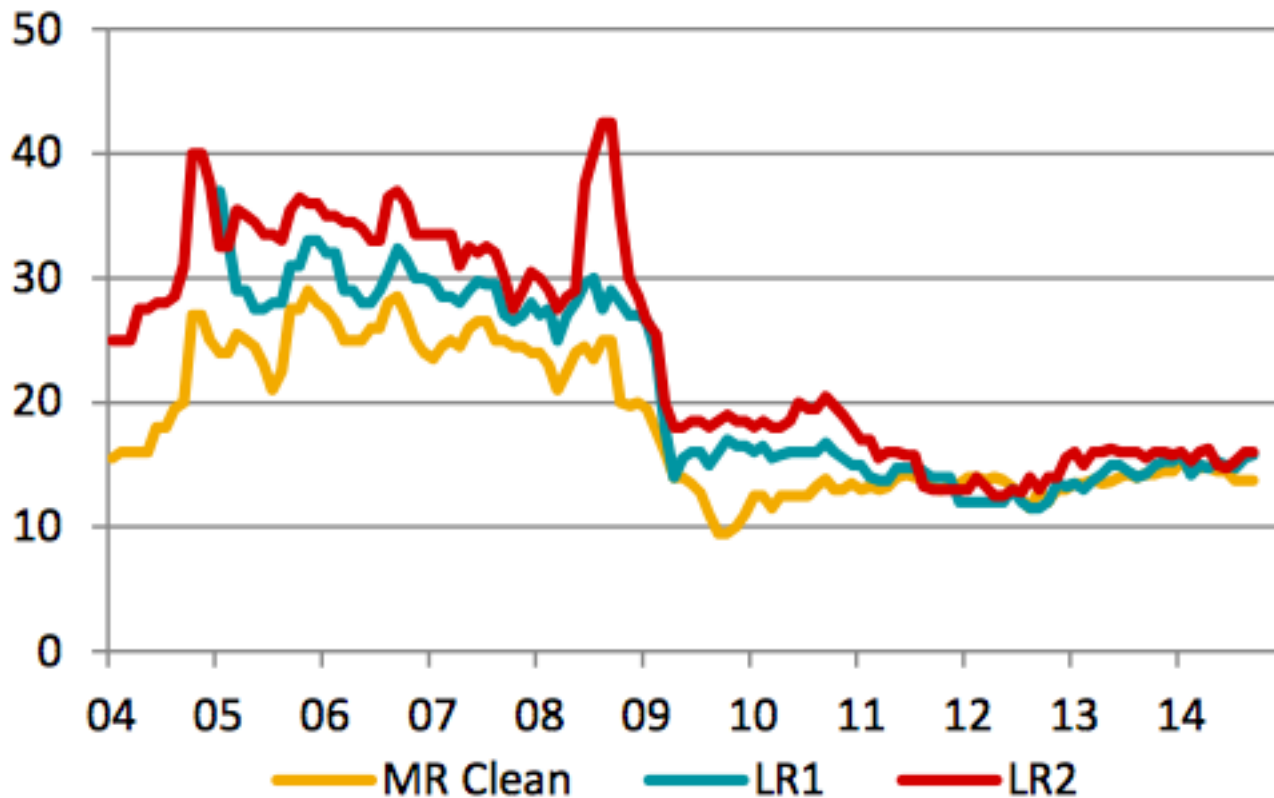




# But what he's seeing... (Tanker freights)

## Tanker Time Charter Rates

12 month T/C rates 1,000 USD/day



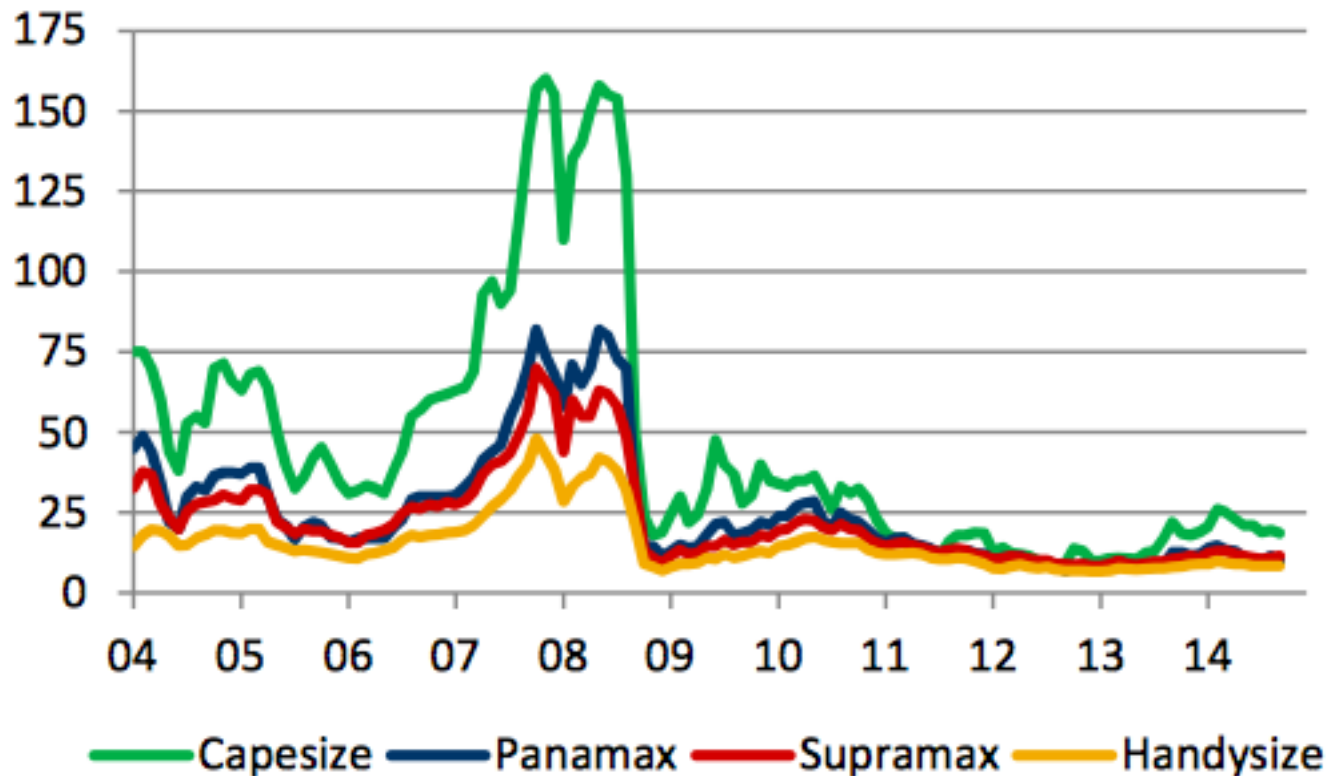
Source: R S Platou - Sep 2014 Report



# and... (Bulk carrier Freights)

## Bulk Carrier Time Charter Rates

12 months T/C rates 1,000 USD/day



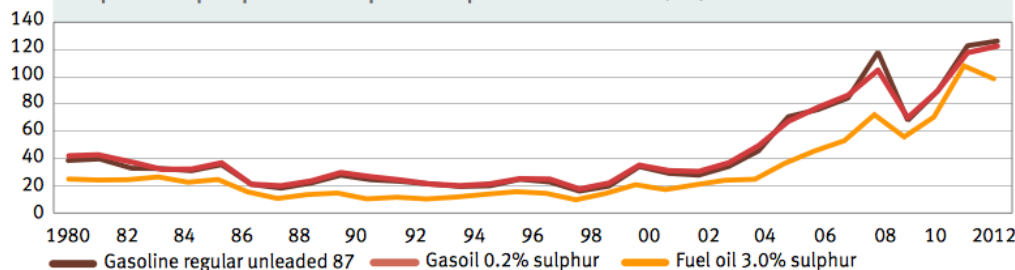
Source: R S Platou - Sep 2014 Report



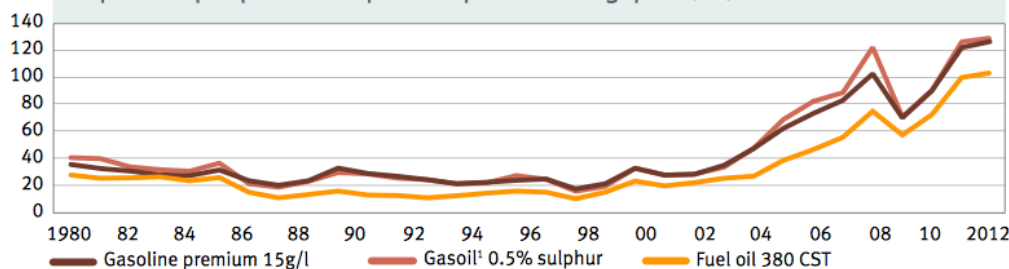
# And for Bunker Fuel Prices...

## Bunker Fuel Prices

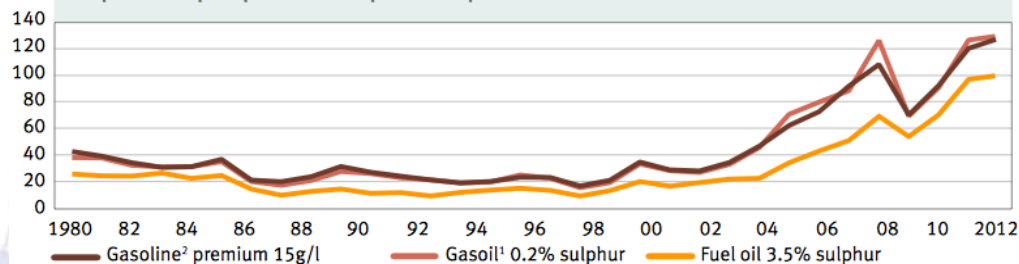
Graph 5.7: Spot petroleum product prices — US Gulf (\$/b)



Graph 5.8: Spot petroleum product prices — Singapore (\$/b)



Graph 5.9: Spot petroleum product prices — Rotterdam (\$/b)



Source: OPEC Annual Statistical Bulletin - 2013



# The end result

- **Very thin margins - no scope for error.**
- **A few tons of bunkers are enough to set the odds against the Owners and Operators**





# When the Mathematics go WRONG!!!





# Reported short supply: 40 MT - Cappuccino ??



**Photos – 6 Hrs After Departure**



**Post Bunkering - Before Departure**



# Hunt for the Missing quantity

## VESSEL TANK ROB, LOG BOOK AND CONSUMPTION ANALYSIS

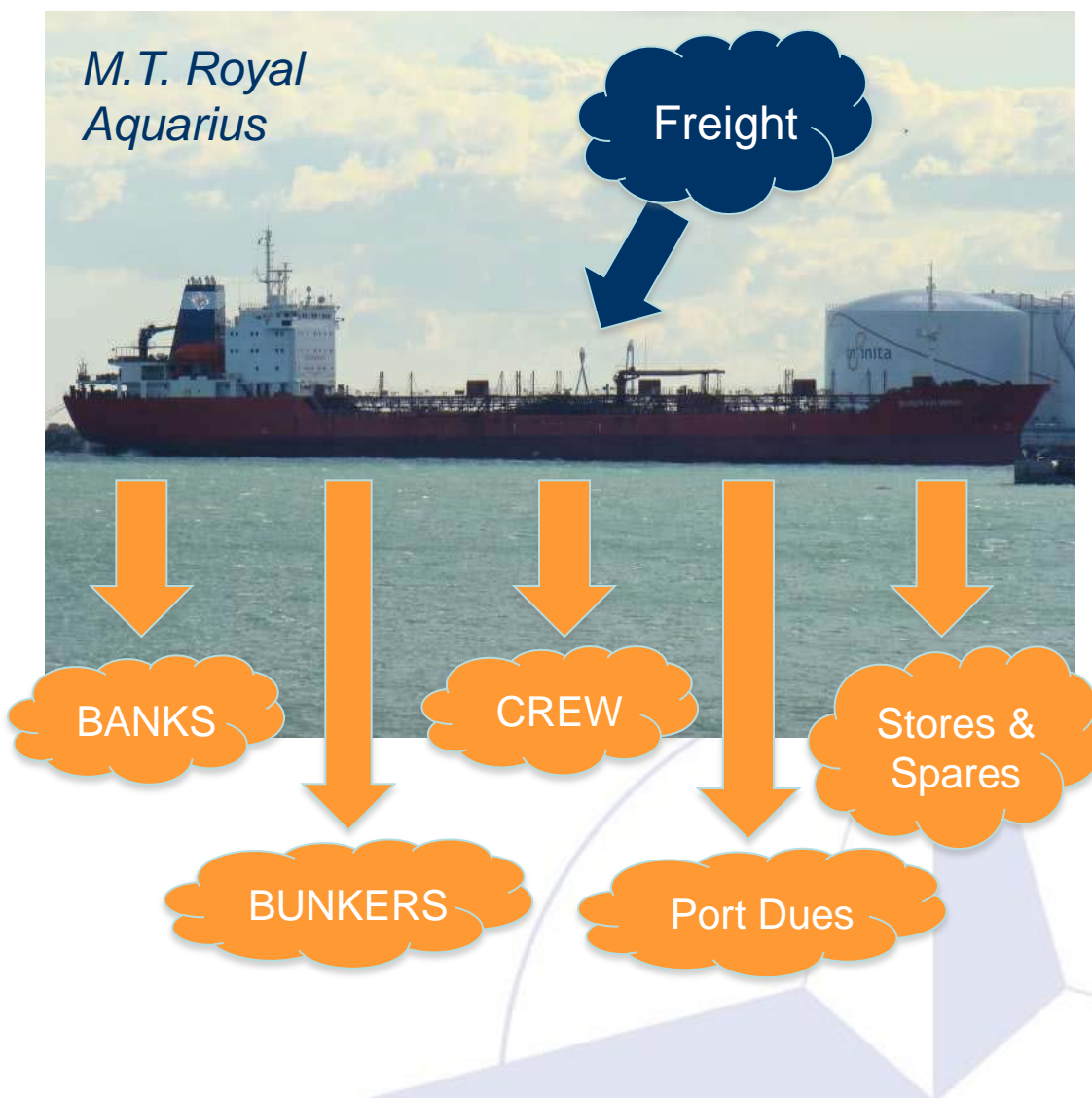
Date	HSFO - Tank ROB							HSFO TOTAL	Log Book	Log Book - Tnk ROB Diff	Consumptions Fm Log Book	LSFO	REMARKS
	1S	1P	2S	2P	FO Sett	FO Serv	Ovr Flw						
8-Mar	584.748	656.030	940.789	282.505	71.877	84.558	0.000	2620.507	2567.800	52.707		382.152	DISCREPANCY: 52.7 MT between Log Book & Tank ROB Report
9-Mar	575.050	650.460	907.628	271.484	69.040	85.498	3.951	2563.111	2544.200	18.911	23.600	384.192	DISCREPANCY: 18.9 MT between Log Book & Tank ROB Report; Cargo Pumps used
10-Mar	No Tank ROB Report							0.000	2517.100	No Tank Rep	27.100		Consumption of 27.1 MT is rather high - Vessel DID NOT use COPs. Duration for which Main Engine was used has not been indicated
11-Mar	No Tank ROB Report							0.000	2507.700	No Tank Rep	9.400		Consumption is in agreement with the figure indicated for vessel at anchor
12-Mar	No Tank ROB Report							0.000	2496.900	No Tank Rep	10.800		Consumption is in agreement with the figure indicated for vessel at anchor
13-Mar	No Tank ROB Report							0.000	2437.200	No Tank Rep	59.700		ME Running hours not indicated. Consumption exceeds that for vessel in laden condition. This can be due to Maneuvering during departure.
14-Mar	No Tank ROB Report							0.000	2381.000	No Tank Rep	56.200		Consumption is in agreement with the figure indicated for vessel in Ballast condition
15-Mar	No Tank ROB Report							0.000	2327.900	No Tank Rep	53.100		Consumption is Less than the figure indicated for vessel in Ballast condition
16-Mar	575.379	650.074	904.716	14.083	67.600	81.270	0.000	2293.122	No Log	No Log Bk Rep	34.778	379.990	Consumption is calculated using Log Book Fig for 15/Mar and Tank ROB for 16/Mar - Cons = 34.8 MT: what operation was the vessel doing?
17-Mar	575.379	650.074	874.919	3.869	68.695	81.270	0.000	2254.206	No Log	No Log Bk Rep	38.916	379.990	Consumption is calculated using Tank ROB Figs - Cons = 38.9 MT: what operation was the vessel doing?
18-Mar	575.379	650.074	834.630	3.869	67.981	81.270	0.000	2213.203	No Log	No Log Bk Rep	41.003	379.990	Consumption is calculated using Tank ROB Figs - Cons = 41.0 MT: what operation was the vessel doing?

	382.152	DISCREPANCY: 52.7 MT between Log Book & Tank ROB Report
23.600	384.192	DISCREPANCY: 18.9 MT between Log Book & Tank ROB Report; Cargo Pumps used
27.100		Consumption of 27.1 MT is rather high - Vessel DID NOT use COPs. Duration for which Main Engine was used has not been indicated
9.400		Consumption is in agreement with the figure indicated for vessel at anchor
10.800		Consumption is in agreement with the figure indicated for vessel at anchor
59.700		ME Running hours not indicated. Consumption exceeds that for vessel in laden condition. This can be due to Maneuvering during departure.
56.200		Consumption is in agreement with the figure indicated for vessel in Ballast condition
53.100		Consumption is Less than the figure indicated for vessel in Ballast condition
34.778	379.990	Consumption is calculated using Log Book Fig for 15/Mar and Tank ROB for 16/Mar - Cons = 34.8 MT: what operation was the vessel doing?
38.916	379.990	Consumption is calculated using Tank ROB Figs - Cons = 38.9 MT: what operation was the vessel doing?
41.003	379.990	Consumption is calculated using Tank ROB Figs - Cons = 41.0 MT: what operation was the vessel doing?

The reported missing quantity was actually found in the vessel's tanks



# From an Owner's Perspective



- **HFO 100 MT**  
**Missing**
- **Price**  
**USD 450 / MT**
- **USD 45,000**  
**LOST**



# The Royal Pride



*M.T. Royal Pride*

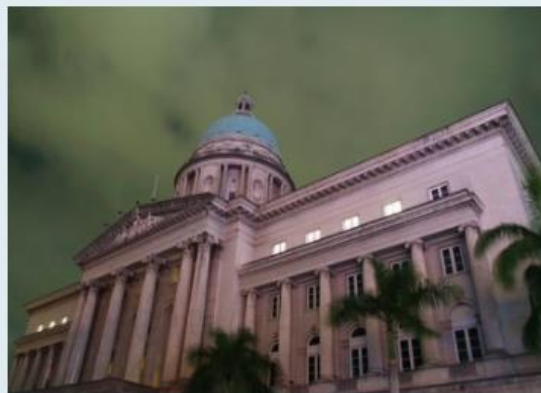


## Bunker boatman gets jail sentence for bunker scam in Singapore

*By Lee Hong Liang from Singapore*

A bunker scam in Singapore has seen a boatman with a bunkering firm received six weeks in prison and fined SGD250 (\$200) for shortchanging fuel delivered to a receiving vessel.

The boatman [REDACTED] had conspired with cargo officer and colleague [REDACTED] to falsely over-declare the amount of fuel pumped into the ship, with the excess amount 'sold back' to the bunker supplier, local media reported.



Out of the officially agreed 2,700 metric tonnes of fuel to be supplied to vessel [REDACTED] by supplier [REDACTED] on 20 January 2013, only 2,542 metric tonnes were actually delivered.

[REDACTED] together with marine surveyor [REDACTED] falsified documents to declare that 2,662 metric tonnes were delivered instead.

[REDACTED], the receiving vessel's chief engineer, was bribed and paid \$8,400 out of a \$18,000 sum which he agreed to so-called 'sell back' the excess fuel for. [REDACTED] was jailed for two weeks, fined SGD30,000 and ordered to pay a SGD8,434 penalty.

Marine surveyor [REDACTED] was jailed two weeks and fined SGD25,000. [REDACTED] was jailed for eight weeks.

[REDACTED] had denied three counts of corruption before he was convicted by a Singapore district court last Wednesday.

In a separate case, another chief engineer [REDACTED] was found guilty last month for shortchanging his oil tanker of 200 metric tonnes of bunker fuel using similar scam tactics.

Published in [Asia, Ship Operations](#)

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📅 Tuesday, 20 May 2014 02:04



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In a separate case, another chief engineer [REDACTED] was found guilty last month for shortchanging his oil tanker of 200 metric tonnes of bunker fuel using similar scam tactics.

*Published in: Asia, Ship Operations  
Tuesday, 20th May 2014*



# Bunker Loss Investigation

## 08<sup>th</sup> Oct 2013 - Initial Gauging - SGP

Actual ROB = 232.949 MT

Log Book = 202.534 MT

Difference = + 30.415 MT (Excess Onboard)

## 10<sup>th</sup> Dec 2013 - Initial Gauging - SGP

Actual ROB = 414.551 MT

Log Book = 438.980 MT

Difference = - **24.429 MT** (Short)

## 20<sup>th</sup> Dec 2013 - Initial Gauging - Vizag

Actual ROB = 1,734.572 MT

Log Book = 1709.540 MT

Difference = + 25.032 MT (Excess Onboard)

	Date	Actual	Log Book	Difference
Initial ROB, SGP	10-Dec-13	414.551	438.98	-24.429
Final ROB, SGP	10-Dec-13	1854.299	1878.728	-24.429
Initial ROB, Vizag	20-Dec-14	1734.572	1709.54	25.032
Consumption during voyage: SGP - Vizag:		119.727	169.188	

Actual GAIN in 10 Days (10th Dec '13 to 20th Dec '13)

= 49.461 MT ( **-24.429 MT** to +25.032 MT)



# Bunker Loss Investigation - Detailed Analysis

Date	Time	Position	Stmg Time	WX	Dist. Stmd	Spd	LOG BOOK FIGS			ACTUAL ESTIMATED FIGS		
							ROB	Consmpt.		Consmpt.	ROB	
10-Dec	22:00	Singapore			0						1854.30	1854.30
11-Dec	02:30	Dep Singapore			0		1851.31	3.00		1.60	1852.70	
11-Dec	Noon	At Sea	9.5	NW - 3	114	12	1842.21	9.10	Voyage Consmpt. Basis C/P: 23 T/Day	7.68	1845.02	Voyage Consmpt. Basis C/P: 19.40 T/Day
12-Dec	Noon	At Sea	24	NW - 3	288	12	1819.21	23.00		19.40	1825.62	
13-Dec	Noon	At Sea	25	ESE - 5	300	12	1795.25	23.96		20.21	1805.41	
14-Dec	Noon	At Sea	25	E - 4	300	12	1771.29	23.96		20.21	1785.20	
15-Dec	Noon	At Sea	24.5	NE - 4	294	12	1747.81	23.48		19.80	1765.40	
16-Dec	11:30	Vizag Anchor	23.5		282	12	1725.29	22.52	126.02	19.00	1746.40	106.30
16-Dec	14:30	Vizag Berth-1					1725.19	0.10	Port Consmpt. Basis C/P: 3.5 T/Day	1.35	1745.05	Port Consmpt. Basis C/P: 2.5 T/Day
17-Dec	17:30	Vizag Berth-1					1721.33	3.86		2.80	1742.25	
17-Dec	19:30	Vizag Berth-2					1718.94	2.39		1.00	1741.25	
18-Dec	Noon	Vizag Berth-2					1716.54	2.40		1.70	1739.55	
19-Dec	Noon	Vizag Berth-2					1713.04	3.50		2.50	1737.05	11.85
20-Dec	Noon	Vizag Berth-2					1709.54	3.50	15.75	2.50	1734.55	1734.57
21-Dec	Noon	Vizag Berth-2					1731.072	-21.53		Est. Actual Voy Consmpt.		19.40 MT/Day
22-Dec	00:45	DLOSP Vizag					1727.34	3.73		Est. Actual Port Consmpt:		2.50 MT/Day
TOTALS			131.5		1578	12		144.77		119.75		119.73

Consumption being Declared:

At Sea = 23.0 MT / Day

In Port = 3.5 MT / Day

ACTUAL CONSUMPTION:

At Sea = 19.4 MT / Day

In Port = 2.5 MT / Day



# Bunker Loss Investigation

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Difference = + 30.415 MT (Excess Onboard)

10<sup>th</sup> Dec 2013 - Initial Gauging - SGP

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Log Book = 438.980 MT

Difference = - 24.429 MT (Short)

Using LADEN Voyage Consumption of 19.4 MT / Day at Sea and 2.5 MT / Day in Port

**In 63 Days**

**190.4 MT HSFO 380 cst - Missing**

**@ USD 612 / MT = USD 116,525**



# What kind of exposure to loss are we looking at...

SN	Date	Grade	Vsl Initial ROB	Log Book Figure	Undeclared Quantity
1	1-Jul-14	MFO	381.974 MT	362.460 MT	19.514 MT
15	2-Jul-14	MGO	21.328 MT	8.420 MT	12.908 MT
33	4-Jul-14	MFO	163.081 MT	130.080 MT	33.001 MT
41	6-Jul-14	MFO	23.605 MT	10.720 MT	12.885 MT
47	7-Jul-14	MFO	145.207 MT	128.031 MT	17.176 MT
48	7-Jul-14	MFO	265.737 MT	242.600 MT	23.137 MT
71	10-Jul-14	MFO	149.299 MT	134.132 MT	15.167 MT
76	11-Jul-14	MFO	243.212 MT	208.674 MT	34.538 MT
100	15-Jul-14	MFO	187.287 MT	174.262 MT	13.025 MT
105	16-Jul-14	MFO	1,151.130 MT	1,129.500 MT	21.630 MT
110	17-Jul-14	HSFO	64.400 MT	43.700 MT	20.700 MT
114	17-Jul-14	MFO	380.385 MT	365.900 MT	14.485 MT
123	19-Jul-14	MFO	216.811 MT	205.650 MT	11.161 MT
132	21-Jul-14	MFO	333.231 MT	319.100 MT	14.131 MT
138	22-Jul-14	MFO	327.130 MT	286.640 MT	40.490 MT
150	23-Jul-14	MFO	421.475 MT	252.021 MT	169.454 MT
151	23-Jul-14	LSFO	268.403 MT	199.456 MT	68.947 MT

11.161 MT	Date	Grade	Vsl Initial ROB	Log Book Figure	Undeclared Quantity
14.131 MT	Aug-14	MFO	594.911 MT	572.600 MT	22.311 MT
40.490 MT	Aug-14	MFO	1,310.949 MT	1,300.500 MT	10.449 MT
169.454 MT	Aug-14	MFO	277.032 MT	243.200 MT	33.832 MT
68.947 MT	Aug-14	MFO	238.244 MT	208.600 MT	29.644 MT
40	7-Aug-14	MFO	82.804 MT	68.910 MT	13.894 MT
43	7-Aug-14	MFO	127.098 MT	110.060 MT	17.038 MT
47	8-Aug-14	MFO	201.355 MT	184.090 MT	17.265 MT
51	9-Aug-14	MFO	277.781 MT	258.030 MT	19.751 MT
52	9-Aug-14	MFO	316.664 MT	304.000 MT	12.664 MT
54	10-Aug-14	MFO	2,536.091 MT	2,526.400 MT	9.691 MT
61	11-Aug-14	MFO	131.040 MT	108.010 MT	23.030 MT
71	12-Aug-14	MGO	90.033 MT	75.400 MT	14.633 MT
72	12-Aug-14	MFO	338.528 MT	317.000 MT	21.528 MT
74	13-Aug-14	MFO	683.228 MT	643.260 MT	39.968 MT
99	17-Aug-14	MFO	289.707 MT	277.300 MT	12.407 MT
105	18-Aug-14	MFO	274.453 MT	262.000 MT	12.453 MT
132	22-Aug-14	MFO	566.625 MT	528.470 MT	38.155 MT
138	22-Aug-14	MFO	666.041 MT	632.820 MT	33.221 MT
144	23-Aug-14	MFO	261.339 MT	239.640 MT	21.699 MT
155	25-Aug-14	MFO	71.709 MT	52.000 MT	19.709 MT
175	29-Aug-14	MFO	299.149 MT	257.980 MT	41.169 MT
188	31-Aug-14	MFO	195.242 MT	174.390 MT	20.852 MT

SN	Date	Grade	Vsl Initial ROB	Log Book Figure	Undeclared Quantity
21	3-Sep-14	LSMFO	333.326 MT	322.280 MT	11.046 MT
36	6-Sep-14	MFO	1,297.601 MT	1,287.600 MT	10.001 MT
43	7-Sep-14	MFO	44.652 MT	28.807 MT	15.845 MT
45	8-Sep-14	MFO	220.960 MT	208.630 MT	12.330 MT
47	8-Sep-14	MFO	167.160 MT	147.900 MT	19.260 MT
60	9-Sep-14	MFO	311.243 MT	273.342 MT	37.901 MT
66	10-Sep-14	MFO	1,757.360 MT	1,709.500 MT	47.860 MT
96	15-Sep-14	MFO	147.566 MT	112.190 MT	35.376 MT
101	17-Sep-14	MFO	716.520 MT	606.000 MT	110.520 MT
113	18-Sep-14	MFO	378.390 MT	367.480 MT	10.910 MT
119	20-Sep-14	MFO	312.988 MT	289.500 MT	23.488 MT
148	24-Sep-14	MFO	559.721 MT	516.650 MT	43.071 MT
152	24-Sep-14	MFO	294.731 MT	277.000 MT	17.731 MT
Undeclared Quantity	4-Sep-14	MFO	94.006 MT	84.000 MT	10.006 MT
	4-Sep-14	MFO	120.597 MT	91.200 MT	29.397 MT
	5-Sep-14	MFO	431.442 MT	410.900 MT	20.542 MT
	0-Sep-14	MFO	133.412 MT	119.500 MT	13.912 MT



# Excess UNDECLARED Bunkers onboard

SN	Date	Grade	Undeclared Quantity
1	1-Jul-14	MFO	19.514 MT
15	2-Jul-14	MGO	12.908 MT
33	4-Jul-14	MFO	33.001 MT
41	6-Jul-14	MFO	12.885 MT
47	7-Jul-14	MFO	17.176 MT
48	7-Jul-14	MFO	23.137 MT
71	10-Jul-14	MFO	15.167 MT
76	11-Jul-14	MFO	34.538 MT
100	15-Jul-14	MFO	13.025 MT
105	16-Jul-14	MFO	21.630 MT
110	17-Jul-14	HSFO	20.700 MT
114	17-Jul-14	MFO	14.485 MT
123	19-Jul-14	MFO	11.161 MT
132	21-Jul-14	MFO	14.131 MT
138	22-Jul-14	MFO	40.490 MT
150	23-Jul-14	MFO	169.454 MT
151	23-Jul-14	LSFO	68.947 MT

**238.4 MT Excess!!!  
ON ONE VESSEL**

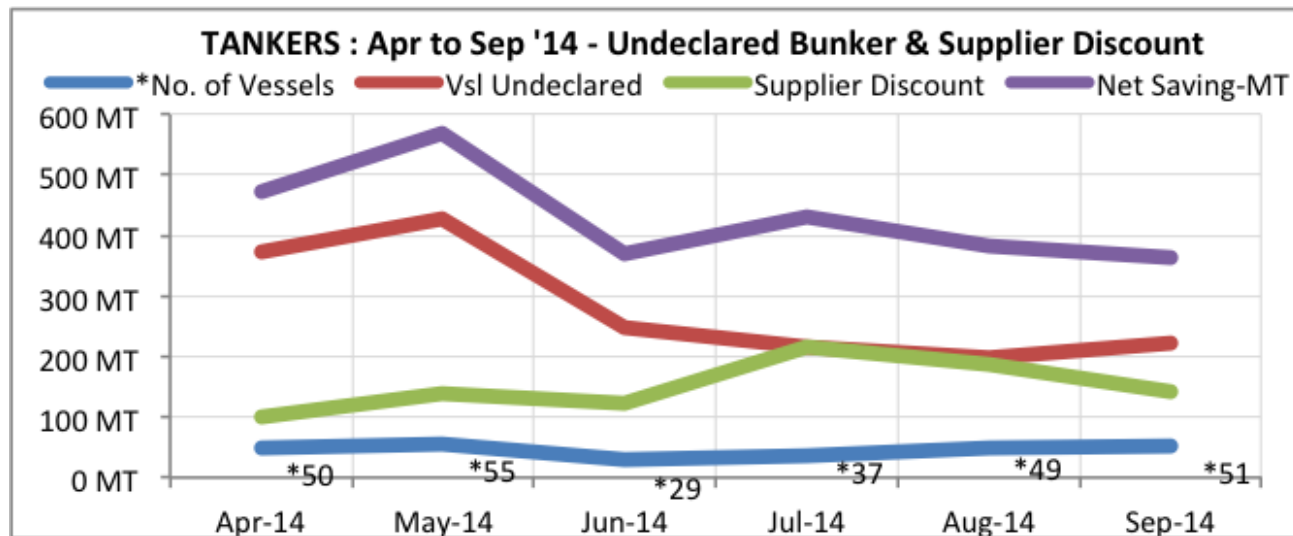
SN	Date	Grade	Undeclared Quantity
6	1-Aug-14	MFO	22.311 MT
10	2-Aug-14	MFO	10.449 MT
25	5-Aug-14	MFO	33.832 MT
26	5-Aug-14	MFO	29.644 MT
40	7-Aug-14	MFO	13.894 MT
43	7-Aug-14	MFO	17.038 MT
47	8-Aug-14	MFO	17.265 MT
51	9-Aug-14	MFO	19.751 MT
52	9-Aug-14	MFO	12.664 MT
54	10-Aug-14	MFO	9.691 MT
61	11-Aug-14	MFO	23.030 MT
71	12-Aug-14	MGO	14.633 MT
72	12-Aug-14	MFO	21.528 MT
74	13-Aug-14	MFO	39.968 MT
99	17-Aug-14	MFO	12.407 MT
105	18-Aug-14	MFO	12.453 MT
132	22-Aug-14	MFO	38.155 MT
138	22-Aug-14	MFO	33.221 MT
144	23-Aug-14	MFO	21.699 MT
155	25-Aug-14	MFO	19.709 MT
175	29-Aug-14	MFO	41.169 MT
188	31-Aug-14	MFO	20.852 MT

SN	Date	Grade	Undeclared Quantity
21	3-Sep-14	LSMFO	11.046 MT
36	6-Sep-14	MFO	10.001 MT
43	7-Sep-14	MFO	15.845 MT
45	8-Sep-14	MFO	12.330 MT
47	8-Sep-14	MFO	19.260 MT
60	9-Sep-14	MFO	37.901 MT
66	10-Sep-14	MFO	47.860 MT
96	15-Sep-14	MFO	35.376 MT
101	17-Sep-14	MFO	110.520 MT
113	18-Sep-14	MFO	10.910 MT
119	20-Sep-14	MFO	23.488 MT
148	24-Sep-14	MFO	43.071 MT
152	24-Sep-14	MFO	17.731 MT
154	24-Sep-14	MFO	10.006 MT
156	24-Sep-14	MFO	29.397 MT
160	25-Sep-14	MFO	20.542 MT
188	30-Sep-14	MFO	13.912 MT

**110.5 MT Excess!!!  
ON ONE VESSEL**



# Past 6 Month Analysis

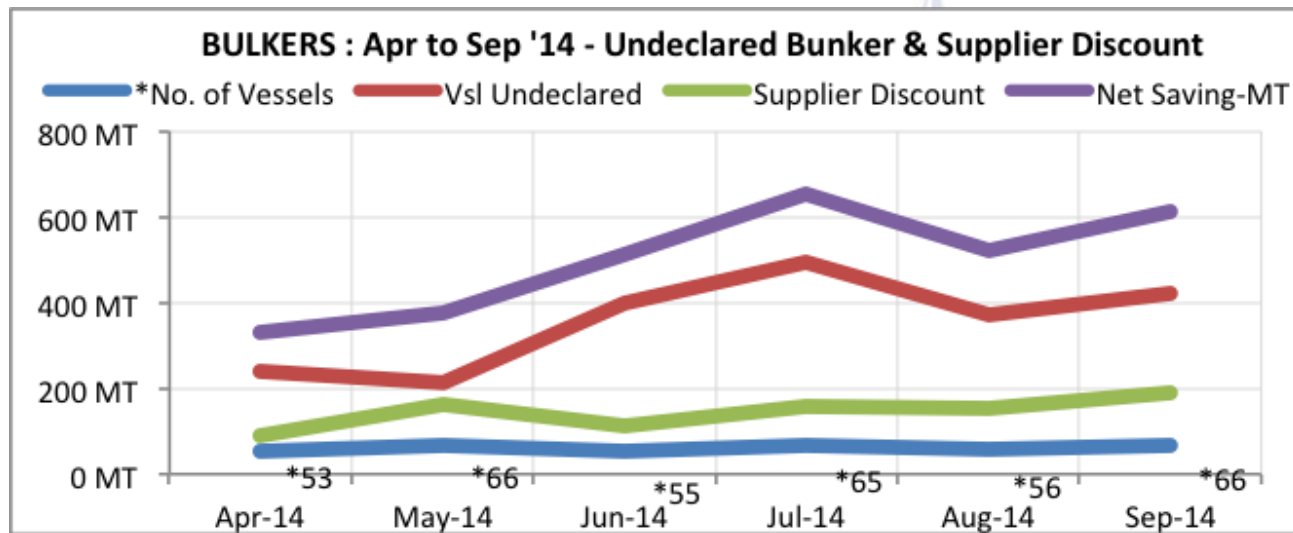


## TANKERS

TOTAL EXCESS  
in 6 Months =

**1,686 MT**

Monthly Avg. = **281 MT**



## BULKERS

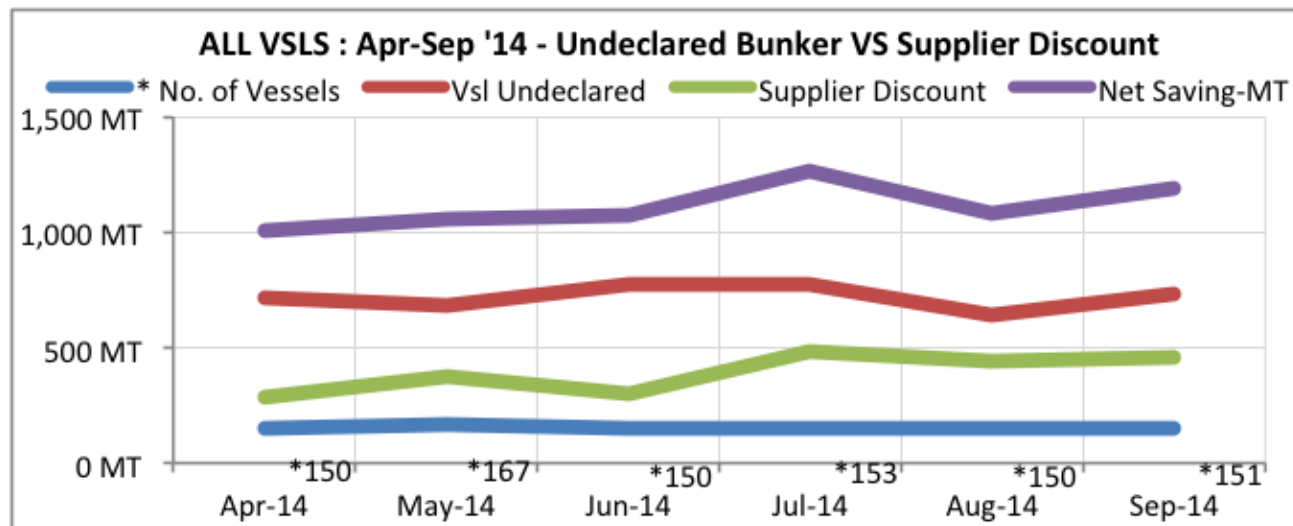
TOTAL EXCESS  
in 6 Months =

**2,137 MT**

Monthly Avg. = **356 MT**

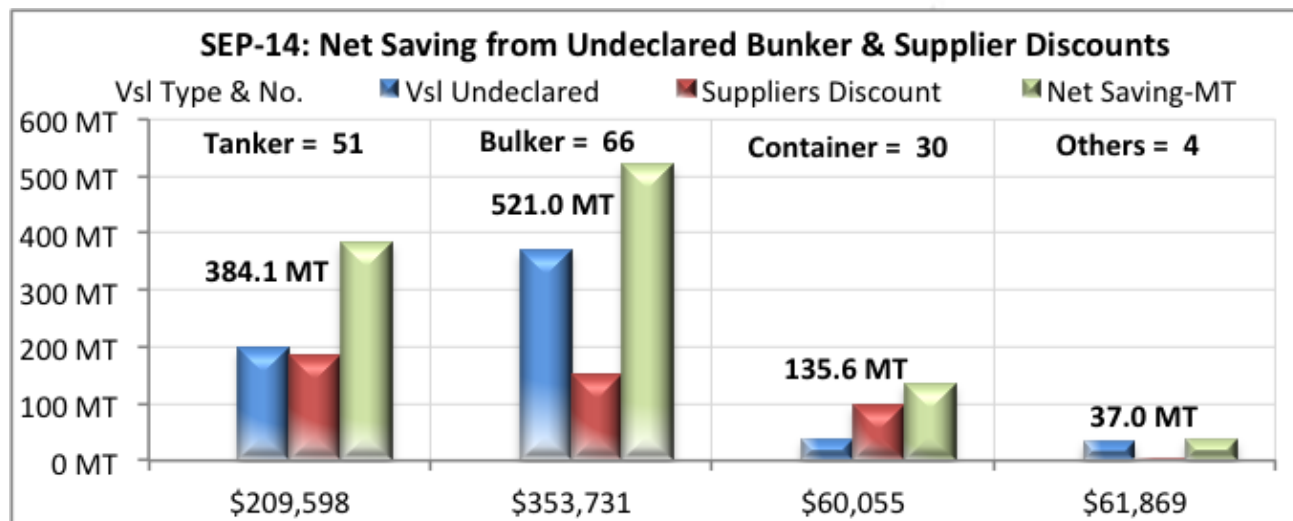


# Past 6 Month Analysis



ALL VESSELS  
TOTAL 6M EXCESS=  
**4,320 MT**  
Monthly Avg. = **720 MT**

Excess Fuel Saving  
in past 6 Months  
**USD 2,565,864**



Overall Saving (USD)  
ALL VESSELS  
in past 6 Months  
**USD 3,952,143**

**Sep '14 = USD 685,253**



# What about bunkers that's already lost...

SN	Date	Grade	Vsl Initial ROB	Log Book Figure	Undeclared Quantity
19	2-Jul-14	MFO	141.149 MT	171.850 MT	-30.701 MT
55	7-Jul-14	MFO	245.194 MT	251.900 MT	-6.706 MT
59	8-Jul-14	MFO	796.728 MT	829.780 MT	-33.052 MT
61	9-Jul-14	MFO	648.031 MT	660.400 MT	-12.369 MT
80	12-Jul-14	MGO	140.927 MT	147.900 MT	-6.973 MT
102	15-Jul-14	HSFO	312.726 MT	332.400 MT	-19.674 MT
103	15-Jul-14	HSFO	805.890 MT	813.348 MT	-7.458 MT
106	16-Jul-14	MFO	613.722 MT	621.700 MT	-7.978 MT
131	20-Jul-14	MFO	534.870 MT	558.000 MT	-23.130 MT
139	22-Jul-14	MFO	700.009 MT	732.040 MT	-32.031 MT
173	28-Jul-14	MFO	548.133 MT	600.030 MT	-51.897 MT

SN	Date	Grade	Vsl Initial ROB	Log Book Figure	Undeclared Quantity
63	11-Aug-14	MFO	408.751 MT	431.300 MT	-22.549 MT
83	15-Aug-14	MFO	282.203 MT	325.700 MT	-43.497 MT
87	15-Aug-14	MFO	735.433 MT	773.200 MT	-37.767 MT
89	16-Aug-14	MFO	774.939 MT	790.390 MT	-15.451 MT
114	19-Aug-14	MFO	255.114 MT	263.450 MT	-8.336 MT
124	21-Aug-14	MFO	987.236 MT	1,001.100 MT	-13.864 MT
				9.270 MT	-7.279 MT
				3.929 MT	-12.338 MT
				8.600 MT	-25.657 MT

Vsl Initial ROB	Log Book Figure	Undeclared Quantity
115.346 MT	131.200 MT	-15.854 MT
254.300 MT	264.927 MT	-10.627 MT
559.552 MT	599.050 MT	-39.498 MT
135.285 MT	226.800 MT	-91.515 MT
91.613 MT	100.540 MT	-8.927 MT
1,162.961 MT	1,185.080 MT	-22.119 MT
162.400 MT	174.380 MT	-11.980 MT
583.014 MT	618.278 MT	-35.264 MT
57.301 MT	119.268 MT	-61.967 MT
417.034 MT	426.150 MT	-9.116 MT
568.530 MT	587.399 MT	-18.869 MT
270.644 MT	482.536 MT	-211.892 MT
280.331 MT	292.704 MT	-12.373 MT
950.090 MT	970.990 MT	-20.900 MT

56	8-Sep-14	MFO	559.552 MT	599.050 MT	-39.498 MT
58	9-Sep-14	MFO	135.285 MT	226.800 MT	-91.515 MT
82	13-Sep-14	MFO	91.613 MT	100.540 MT	-8.927 MT
114	19-Sep-14	MFO	1,162.961 MT	1,185.080 MT	-22.119 MT
115	19-Sep-14	MFO	162.400 MT	174.380 MT	-11.980 MT
125	21-Sep-14	MFO	583.014 MT	618.278 MT	-35.264 MT
127	21-Sep-14	MFO	57.301 MT	119.268 MT	-61.967 MT
128	21-Sep-14	MFO	417.034 MT	426.150 MT	-9.116 MT
137	23-Sep-14	MFO	568.530 MT	587.399 MT	-18.869 MT
179	28-Sep-14	MFO	270.644 MT	482.536 MT	-211.892 MT
192	30-Sep-14	MFO	280.331 MT	292.704 MT	-12.373 MT
198	30-Sep-14	MFO	950.090 MT	970.990 MT	-20.900 MT



# The already lost bunkers...

SN	Date	Grade	Undeclared Quantity
19	2-Jul-14	MFO	-30.701 MT
55	7-Jul-14	MFO	-6.706 MT
59	8-Jul-14	MFO	-33.052 MT
61	9-Jul-14	MFO	-12.369 MT
80	12-Jul-14	MGO	-6.973 MT
102	15-Jul-14	HSFO	-19.674 MT
103	15-Jul-14	HSFO	-7.458 MT
106	16-Jul-14	MFO	-7.978 MT
131	20-Jul-14	MFO	-23.130 MT
139	22-Jul-14	MFO	-32.031 MT
173	28-Jul-14	MFO	-51.897 MT

SN	Date	Grade	Undeclared Quantity
63	11-Aug-14	MFO	-22.549 MT
83	15-Aug-14	MFO	-43.497 MT
87	15-Aug-14	MFO	-37.767 MT
89	16-Aug-14	MFO	-15.451 MT
114	19-Aug-14	MFO	-8.336 MT
124	21-Aug-14	MFO	-13.864 MT
149	24-Aug-14	MFO	-7.279 MT
178	29-Aug-14	MFO	-12.338 MT
179	30-Aug-14	HSFO	-25.657 MT

SN	Date	Grade	Undeclared Quantity
3	1-Sep-14	LSFO	-15.854 MT
18	3-Sep-14	MFO	-10.627 MT
56	8-Sep-14	MFO	-39.498 MT
58	9-Sep-14	MFO	-91.515 MT
82	13-Sep-14	MFO	-8.927 MT
114	19-Sep-14	MFO	-22.119 MT
115	19-Sep-14	MFO	-11.980 MT
125	21-Sep-14	MFO	-35.264 MT
127	21-Sep-14	MFO	-61.967 MT
128	21-Sep-14	MFO	-9.116 MT
137	23-Sep-14	MFO	-18.869 MT
179	28-Sep-14	MFO	-211.892 MT
192	30-Sep-14	MFO	-12.373 MT
198	30-Sep-14	MFO	-20.900 MT

Where has this

**GONE >>>**

**- 51.9 MT**

**- 62.0 MT**

**- 91.5 MT**

**- 211.9 MT**



**We have to know the  
TRUE Fuel Consumptions  
in order to**





# Conclusion

- **TRAINING**

- Increase Commercial Understanding.
- Technical Aspect - Fuel efficiency etc.
- Morals & Ethics

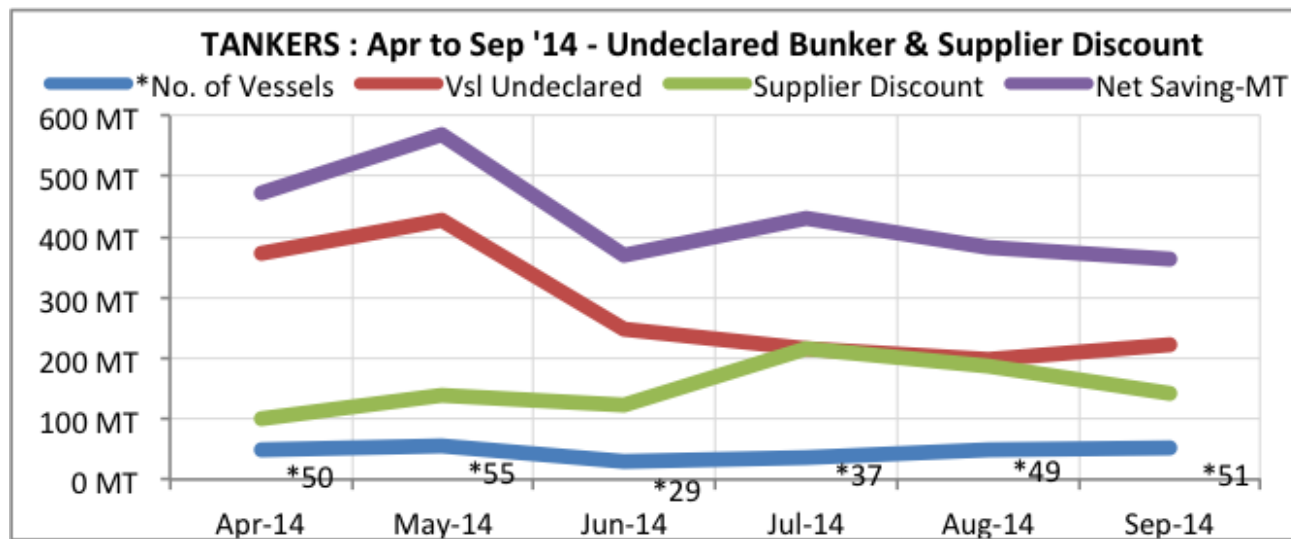


- **INTENSIVE BUNKER SPOT CHECKS**





# Past 6 Month Analysis



TANKERS



# Conclusion

- **TRAINING**

- Increase Commercial Understanding.
- Technical Aspect - Fuel efficiency etc.
- Morals & Ethics



- **INTENSIVE BUNKER SPOT CHECKS**



- **BUNKRE LOSS INVESTIGATIONS**





## Our Goal

Through a proactive approach, we aim to exceed our customers' safety, environmental and performance goals, thereby increasing profits by minimizing their exposure to loss.

*Building **relationships**....maritime & beyond*

**Thank you**

**Royal Marine, Singapore.**

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