



Weather Routing Inc.
(WRI, Ltd.)

"Oceans of Experience"

Vessel Performance Report

Prepared For:

Sample Company

M/V Sample Ship

ROTTERDAM to GIBRALTAR

ATD: 07/13/18 06:12z

Reference ID: 1807963

Date: July 19, 2018

Good Weather Definition

Wind of Beaufort Force 4, Significant Wave Height of 1.25 Meters. No Adverse Currents.

Report Summary - Normal Speed Conditions (Laden)

	Original Warranted Values	Calculation Results
Speed	<i>about 13.50 Knots</i>	3.76 Hours Lost
Fuel Consumption	<i>about 29.00 MT/Day</i>	Within Guaranteed Limits
Diesel Consumption	<i>about 0.20 MT/Day</i>	0.08 MT - OverConsumed

Additional performance data/charts can be generated via WRI's Fleet Monitoring Dashboard on Dolphin (www.wriDolphin.com)



Overall Performance Analysis

Reference: 1807963

M/V Sample Ship

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Sample Company

Departure Port: ROTTERDAM	ATD: 07/13/2018 06:12 GMT
Destination Port: GIBRALTAR	ATA: 07/18/2018 02:00 GMT

Laden / Normal Conditions	Overall Performance	"Good Weather" Performance	
		Winds: Beaufort 4/Less	Sig. Wave: 1.25 Meters/Less
Transit Distance:	1430.26 NM	959.79 NM	
Transit Time:	115.80 Hours	75.80 Hours	
Average Speed:	12.35 Knots	12.66 Knots	<i>(Distance/Time)</i>
Weather Factor:	-0.01 Knots		Vessel UnderPerformed with Adverse Currents Excluded, therefore ALL Currents are being Included
Current Factor:	0.06 Knots	0.09 Knots	
Performance Speed:	12.30 Knots	12.57 Knots	<i>(Speeds Adjusted for the above Factors)</i>
Allowable Charter Speed:	13.00 Knots	13.00 Knots	
Performance Time:	116.28 Hours	113.78 Hours	<i>(Times are calculated Distance divided by Respected Speeds)</i>
Allowable Charter Time:	110.02 Hours	110.02 Hours	
Overall INCLUDES ALL Hours. NOT Adjusted for Charter Party Limits.	6.26 Hours Lost	Adjusted for Charter Party Limits.	3.76 Hours Lost

Laden / Normal Conditions	Fuel Oil		Diesel Oil/Gas	
	For About Clause 5% Has Been Applied		For About Clause 5% Has Been Applied	
Departure BROB :	645.12 MT		79.50 MT	
Destination BROB :	544.36 MT		37.50 MT	
Warranted Daily Consumption:	30.45 MT (about)		0.21 MT (about)	
Actual Daily Consumption:	29.37 MT		0.22 MT	
Warranted Total Consumption:	142.00 MT (about)		0.98 MT (about)	
Actual Total Consumption:	141.70 MT	includes 40.94MT LSMGO in ECA	1.06 MT	excludes 40.94MT LSMGO in ECA
Overall Fuel Oil Consumption WITHIN Guaranteed Limits (28.9% MGO from ECA)				
OverConsumed - Overall Diesel Oil Consumption 0.08 MT MORE than Guaranteed Limits				
<i>Allowable Charter Time with Adjusted "Good Weather" Current Factor Has Been Applied to Calculate Warranted Total Consumption.</i>				



Voyage Summary

Reference: 1807963

M/V Sample Ship

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Departure Port: **ROTTERDAM** ATD: **07/13/2018 06:12 GMT**
 Destination Port: **GIBRALTAR** ATA: **07/18/2018 02:00 GMT**

Date/Time	Latitude	Longitude	Posn Type	Load/Speed Conditions (Laden)	Steaming		Speed		Engine		Wind - Beaufort			Seas			Current		
					Time (hrs)	Dist (nm)	Avg	Charter	RPM	Slip	Dir	Spd (kts)	Scale	Wave (mtrs)	Dir	Hght (mtrs)	Dir	Speed (kts)	Factor (kts)
07/13/18 06:12	ROTTERDAM		ATD	Norm/Laden	---	---	---	13.50	---	---	N	9	3	0.5	N	0.50	NNE	0.0	0.00
07/13/18 10:00	51.88 N	2.58 E	A	Norm/Laden	3.8	51.9	13.65	13.50	110.4	2.6	NNE	10	3	0.5	N	0.50	ENE	0.1	0.01
07/14/18 10:00	49.58 N	4.03 W	A	Norm/Laden	24.0	305.1	12.71	13.50	114.1	12.2	NE	8	3	0.3	N	0.25	ENE	0.2	0.16
07/15/18 10:00	45.65 N	8.37 W	A	Norm/Laden	24.0	302.0	12.58	13.50	112.2	11.0	NNE	6	2	0.4	WNW	0.75	SE	0.0	-0.03
07/16/18 10:00	40.93 N	10.10 W	A	Norm/Laden	24.0	300.8	12.53	13.50	114.2	13.7	NW	7	3	0.5	WNW	1.25	NNE	0.2	0.14
07/17/18 10:00	36.45 N	8.72 W	A	Norm/Laden	24.0	301.6	12.57	13.50	112.2	11.7	NNW	14	4	0.9	WNW	1.75	E	0.3	-0.07
07/18/18 02:00	GIBRALTAR		ATA	Norm/Laden	16.0	168.9	10.56	13.50	---	---	NNE	13	4	0.9	WNW	1.50	W	0.4	0.16

"A" = Actual Reported Ship Position
 "LN" = Local Noon Calculated Position

"ATD" = Actual Time of Departure
 "ATA" = Actual Time of Arrival

"ETD" = Estimated Time of Departure
 "ETA" = Estimated Time of Arrival

"S/B" = Stoppage Begins
 "S/E" = Stoppage Ends

Defined Good Weather Period

Vessel within ECA Limits

Stoppage Period

Exclusion Period

Speed and Weather Summary	Overall Voyage			Good Weather Periods			Maximum / Heavy Weather *				ECA Zone	
	Dist	Time	Spd	Dist	Time	Spd	Wind	Sea	Total	Overall	Dist	Time
	(nm)	(hrs)	(kts)	(nm)	(hrs)	(kts)	(kts)	(m)	(hrs)	Current	(nm)	(hrs)
ROTTERDAM to GIBRALTAR	1430.26	115.80	12.35	959.79	75.80	12.66	14	1.75	0.0	Favorable	397.90	31.00
Voyage(s) Total	1430.26	115.80	12.35	959.79	75.80	12.66	14	1.75	0.0	Favorable	397.90	31.00

Heavy Weather Total (hrs) is amount of time Winds Greater/Equal to: 40kts and Seas Greater/Equal to: 4mtrs.

Values in above table reflect the entire transit, and are not adjusted for any stoppages/exclusions or for weather/currents. Please consult overall performance analysis page for detailed performance calculations adjusted for any exclusions and weather/current factors.



Voyage Summary

Reference: 1807963

M/V Sample Ship

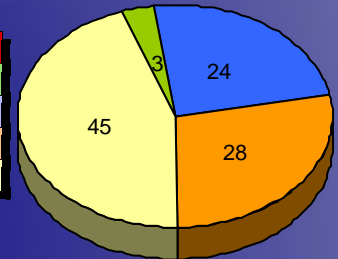
Prepared for
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Departure Port: ROTTERDAM	ATD: 07/13/2018 06:12 GMT
Destination Port: GIBRALTAR	ATA: 07/18/2018 02:00 GMT

Duration of Winds (Beaufort Force) Direction Relative to Vessel

	<=1	2	3	4	5	6	7	8	9	10	11=>	Total
Head												
Head Qtr				3.7								3.7
Beam			15.7	12.3								28.0
Aft Qtr		4.1	23.5	4.6								32.2
Follow		19.9	12.6	19.4								51.8
Total		24.0	51.8	40.0								115.8

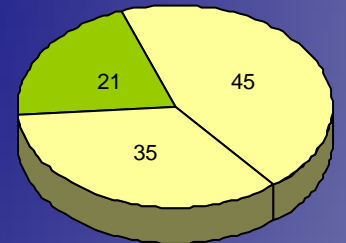
0%
3%
24%
28%
45%



Duration of Seas (meters) Direction Relative to Vessel

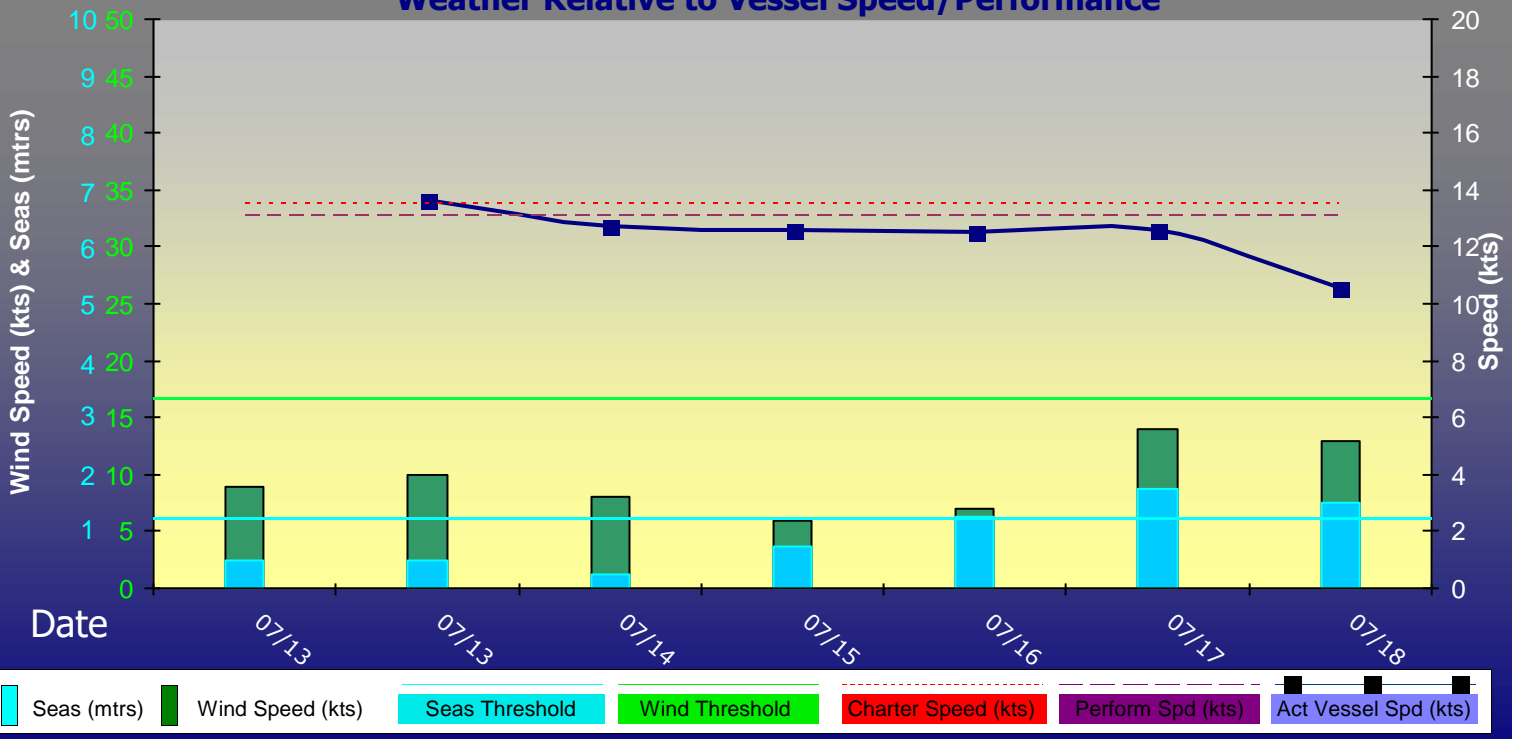
	<1	1 ->	2 ->	3 ->	4 ->	5 ->	6 ->	7 ->	8 ->	9 ->	10=>	Total
Head												
Head Qtr	4.1											4.1
Beam	33.4	13.7										47.1
Aft Qtr	14.3	14.1	19.4									47.7
Follow		12.3	4.6									16.9
Total	51.8	40.0	24.0									115.8

79%	21%	0%	0%	0%	0%
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Percentages are rounded

Weather Relative to Vessel Speed/Performance





Engine Summary

Reference: 1807963

M/V Sample Ship

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Departure Port: ROTTERDAM	ATD: 07/13/2018 06:12 GMT
Destination Port: GIBRALTAR	ATA: 07/18/2018 02:00 GMT

Date/Time	Latitude	Longitude	Posn Type	Load/Speed Conditions (Laden)	Steaming		Speed (kts)		Engine		BROB (MT)		Consumption (MT)			Wind/Sea/Current			
					Time (hrs)	Dist (nm)	Avg	Charter	RPM	Slip	IFO	DO/GO	Warrant (MT/Day)	IFO	DO/GO Rate (nm/MT)	Scale (BF)	Hght (mtrs)	Factor (kts)	
07/13/18 06:12	ROTTERDAM		ATD	Norm/Laden	---	---	---	13.50	---	---	645.12	79.50	29.00	---	---	---	3	0.50	0.00
07/13/18 10:00	51.88 N	2.58 E	A	Norm/Laden	3.8	51.9	13.65	13.50	110.4	2.6	645.12	74.90	29.00	0.00	4.60	11.3	3	0.50	0.01
07/14/18 10:00	49.58 N	4.03 W	A	Norm/Laden	24.0	305.1	12.71	13.50	114.1	12.2	645.12	45.00	29.00	0.00	29.90	10.2	3	0.25	0.16
07/15/18 10:00	45.65 N	8.37 W	A	Norm/Laden	24.0	302.0	12.58	13.50	112.2	11.0	622.45	38.10	29.00	22.67	6.90	10.2	2	0.75	-0.03
07/16/18 10:00	40.93 N	10.10 W	A	Norm/Laden	24.0	300.8	12.53	13.50	114.2	13.7	591.40	37.90	29.00	31.05	0.20	9.6	3	1.25	0.14
07/17/18 10:00	36.45 N	8.72 W	A	Norm/Laden	24.0	301.6	12.57	13.50	112.2	11.7	561.98	37.70	29.00	29.42	0.20	10.2	4	1.75	-0.07
07/18/18 02:00	GIBRALTAR		ATA	Norm/Laden	16.0	168.9	10.56	13.50	---	---	544.36	37.50	29.00	17.62	0.20	9.5	4	1.50	0.16

"A" = Actual Reported Ship Position
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Defined Good Weather Period

Vessel within ECA Limits

Stoppage Period

Exclusion Period

Engine Consumption Summary	Reported Fuel Values (MT)					Calculated Total Consumption (MT)					
	Departure BROB		Arrival BROB			Main Engine		Aux Engine		Supplemental	
	IFO	DO/GO	IFO	DO/GO	IFO	MGO	DO/GO	IFO	IFO	DO/GO	
ROTTERDAM to GIBRALTAR	645.12	79.50	544.36	37.50	96.23	38.50	3.50	4.53	0.00	0.00	
	Avg RPM 112.6	Avg Slip 10.2	(NM/MT) 10.0	10.0	134.73	28.57%	8.03	56.40%	ECA Hours: 31.0		
Voyage(s) Total					96.23	38.50	3.50	4.53	0.00	0.00	
	Avg RPM 112.6	Avg Slip 10.2	(NM/MT) 10.0	10.0	134.73	28.57%	8.03	56.40%	ECA Hours: 31.0		
Values used in bunker calculations are adjusted for supplemental consumption and are subject to exclusions. (Main Engine % is MGO) (Aux Engine % is IFO)											
Consumption rates in table are provided directly by the vessel, and are not adjusted for exclusions. Missing values indicate that complete data was not received.											

Emissions and Efficiency Summary	Emission Values (MT)							Efficiency Savings	
	Time	Weight	SOx	CH4	CO2(Sea)	Fuel / Dist	Fuel / Work	Time	Cost Savings
	Distance	Fuel	NOx	TSP	CO2(Port)	CO2 / Dist	CO2 / Work	Fuel	Carbon Savings
ROTTERDAM to GIBRALTAR	115.8	33254.7	7.18	0.44	448.46	0.0998	3.00E-06		
	1430.3	142.76	12.35	0.94	0.00	0.3136	9.43E-06		
Voyage(s) Total	115.8		7.18	0.44	448.46	0.0998	3.00E-06		
	1430.3	142.76	12.35	0.94	0	0.3136	9.43E-06		

* Transport Work = Weight multiplied by Distance Time (hr) and Distance (nm) = Actual steaming time and distance (seabuoy/seabuoy)
Fuel/Work and CO2/Work are labeled MT/Transport Work and labeled as exponential (xx E-06)



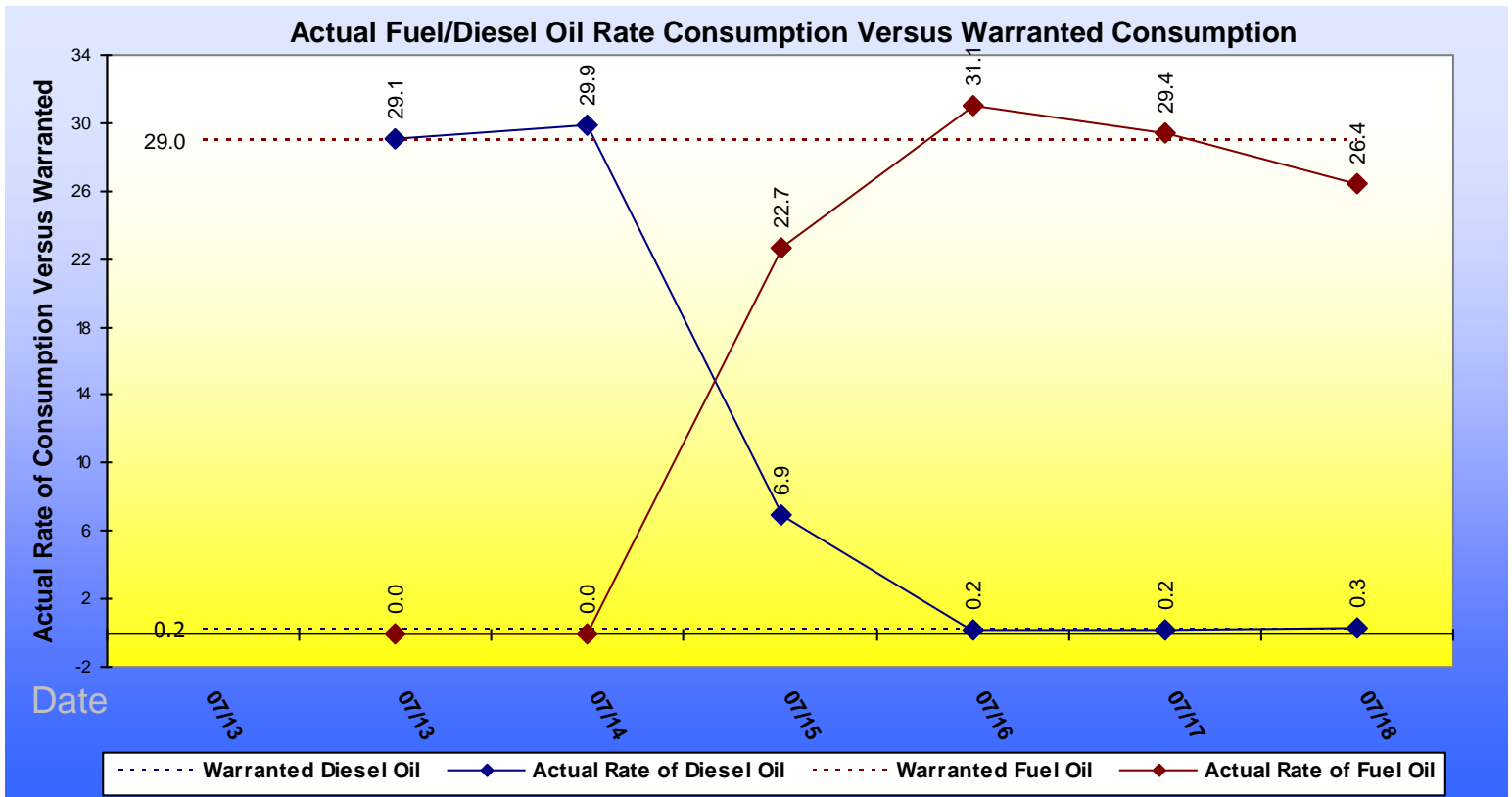
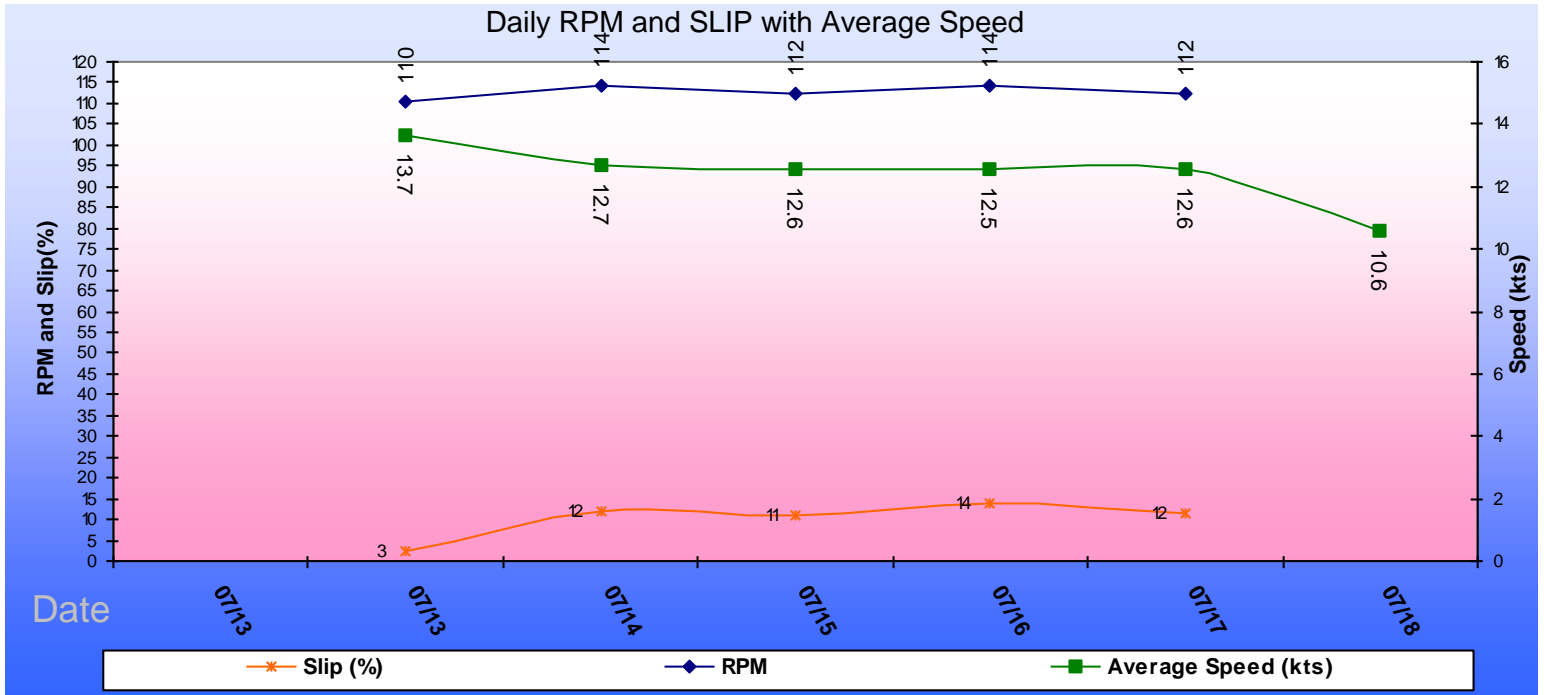
Bunker Consumption Analysis

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Voyage Detail Map

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