



# MOBILE OIL ANALYSIS REPORT

CONTAMINATION	<b>NORMAL</b>
OIL CONDITION	<b>NORMAL</b>
WEAR	<b>NORMAL</b>

## OCEAN QUEST - Left Diesel Engine

Unit Make : LUGGER  
 Unit Model : 6140 Serial No : L6140AL23M14013203 Date Rec'd : Feb 14, 2012  
 Comp Make : PORT Cust. Ref No. : {n/a} Sample Date : Jan 28, 2012  
 Comp Model : {n/a} Stub No. : KL-M2216361 Diagnostician : Doug Bogart

### RECOMMENDATION

Resample at the next service interval to monitor.

Sample Date	08/21/11	10/24/11	12/04/11	Current	UOM
Time on Unit	7820	8100	8361	8670	hrs
Time on Oil	250	250	300	1000	hrs
Time on Fltr	250	250	300	300	hrs
Oil Maint.	n/a	n/a	not chg	not chg	---
Filter Maint.	not chg	not chg	changed	changed	---

### CONTAMINATION

There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable.

Sample Date	08/21/11	10/24/11	12/04/11	Current	Abn
Silicon	6.6	8.2	12	10	15
Fuel (%)	<2.0	<2.0	<2.0	<2.0	---
Glycol	---	---	---	---	0.02
Water (%)	<0.1	<0.1	<0.1	<0.1	0.1
Soot (%)	0.2	0.3	0.5	0.6	---
>4µm(c)	743	1384	782	705	---
>6µm(c)	405	754	426	384	---
>14µm(c)	69	128	72	65	---
>21µm(c)	23	43	24	22	---
>38µm(c)	3	6	3	3	---
>70µm(c)	0	0	0	0	---
ISO 4406(c)	16/13	17/14	16/13	16/13	---

### OIL CONDITION

Oil Type: 9 GAL of CHEVRON DELO 400 MULTIGRADE 15W40

The condition of oil is suitable for further service.

Sample Date	08/21/11	10/24/11	12/04/11	Current	Base
Potassium	1.9	0.0	6.6	3.1	
Boron	319	295	185	106	
Barium	0.0	0.0	0.0	0.0	
Calcium	1470	1391	1960	1653	
Magnesium	357	338	500	423	
Molybdenum	81	77	106	93	
Sodium	3.9	3.2	5.1	6.2	
Phosphorus	1061	972	1338	1164	
Sulfur	3178	2806	3720	3280	
Zinc	1162	1184	1494	1302	
Visc@100°C	13.29	14.36	14.45	14.78	14.4
TBN	8.95	7.41	5.82	6.63	

### WEAR

All component wear rates are normal.

Sample Date	08/21/11	10/24/11	12/04/11	Current	Abn
PQ	---	---	---	---	---
Iron	17	23	41	44	---
Nickel	0.0	0.0	0.0	0.0	---
Chromium	0.6	0.8	1.6	1.6	---
Titanium	0.0	0.2	0.3	0.2	---
Copper	2.7	3.4	4.6	4.5	---
Aluminum	3.9	3.6	4.8	4.1	---
Tin	0.6	0.0	0.0	0.0	---
Lead	13	14	25	26	---