

## OIL CONDITION MONITORING REPORT SLNS SHAKTHI

### **GEAR BOX PARTICULARS (Information provided by the customer)**

	<b>Stbd Gear Box</b>
<b>Make :</b>	SHICHUAN
<b>Model :</b>	GWC 3235
<b>Sr.No's:</b>	N/A
<b>Date sampling :</b>	12 May 25
<b>Sampling point :</b>	Lube Oil Sump
<b>Sampling Method :</b>	Extraction
<b>Type of Lubricant :</b>	Caltex Lanka Super 15 W 40
<b>System Capacity :</b>	45 Ltrs

### **RUNNING HRS DETAILS(Information provided by the customer)**

	<b>Stbd Gear Box</b>
<b>Sample ID</b>	M010154
<b>Oil Running Hours</b>	959.35
<b>Total Running Hours of the Machinery</b>	37647.55

### **ANALYSIS RESULTS**

<b>Description</b>	<b>METHOD</b>	<b>Fresh Oil (As per OEM data sheet)</b>	<b>Uncertainty (K=2)</b>	<b>Stbd Gear Box</b>
				<b>S/I- M010154</b>
Viscosity @ 40°C (cSt)	ASTM D 445	109.4	0.006	<b>84.62</b>
Viscosity @ 100°C (cSt)		14.4	0.005	<b>11.65</b>
Viscosity Index	ASTM D 2270	134	N/A	128.99
Water contain %	ASTM D 95	<0.2	0.082	<0.1

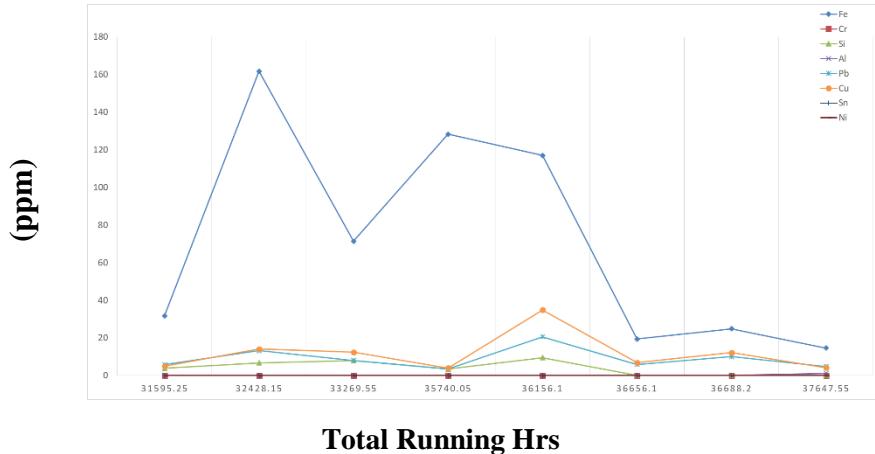
### **Elemental Concentration as per ASTM D5185 (ppm)**

<b>Element</b>	<b>Maximum Permissible Limit</b>	<b>Fresh Oil Sample</b>	<b>Uncertainty (K=2)</b>	<b>Stbd Gear Box</b>
				<b>S/I- M010154</b>
Fe	300	< 1.000	0.15	14.591
Cr	15	< 1.000	0.18	< 1.000
Si	50	< 1.000	0.17	< 1.000
Al	30	< 1.000	0.28	1.185
Pb	1500	< 1.000	0.13	4.788
Cu	250	< 1.000	0.17	4.214
Sn	50	< 1.000	0.20	< 1.000
Ni	30	< 1.000	0.08	< 1.000

## TREND ANALYSIS WITH PREVIOUS REPORTS

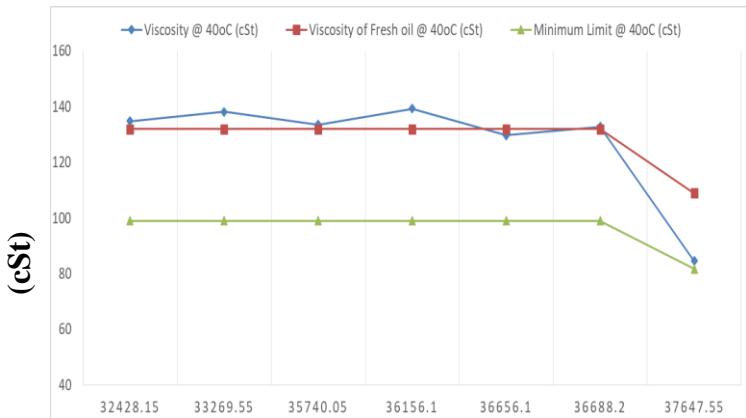
	Fresh oil sample	Stbd Gear Box								Fresh oil sample	S/I-M010154
		S/I-M000389	S/I-M000926	S/I-M002463	S/I-M004167	S/I-M006104	S/I-M007847	S/I-M008005			
Oil Running Hrs	-	995.40	832.50	1030.05	867.35	283.20	500.00	531.45	-	959.35	
T/R/H of Machinery	-	31595.25	32428.15	33269.55	35740.05	36156.10	36656.10	36688.20	-	37647.55	
<b>Basic Properties</b>											
Viscosity @ 40°C (cSt)	132.31	N/C	134.81	138.18	133.59	139.35	129.71	132.88	109.4	<b>84.62</b>	
Viscosity @ 100°C (cSt)	14.4	N/C	14.16	14.30	14.23	14.81	14.07	13.60	14.4	<b>11.65</b>	
Viscosity Index	97	N/C	102.54	101.24	104.56	106.46	106.24	97.45	134	128.99	
Water contain %	<0.2	N/C	N/C	N/C	N/C	N/C	N/C	N/C	<0.2	<0.1	
<b>Elemental Concentration as per ASTM D5185 (ppm)</b>											
Element	Maximum Permissible Limit										
Fe	300	31.764	<b>161.723</b>	71.401	<b>128.269</b>	<b>116.947</b>	19.390	24.846	< 1.000	14.591	
Cr	15	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	
Si	50	3.844	6.724	7.926	3.414	9.536	< 1.000	< 1.000	< 1.000	< 1.000	
Al	30	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	1.185	
Pb	1500	5.801	13.258	7.984	3.432	20.619	5.855	10.033	< 1.000	4.788	
Cu	250	4.954	14.061	12.373	3.948	34.856	6.879	12.181	< 1.000	4.214	
Sn	50	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	
Ni	30	< 1.000	< 1.000	< 1.000	< 1.000	N/A	< 1.000	< 1.000	< 1.000	< 1.000	

### Wear Metals



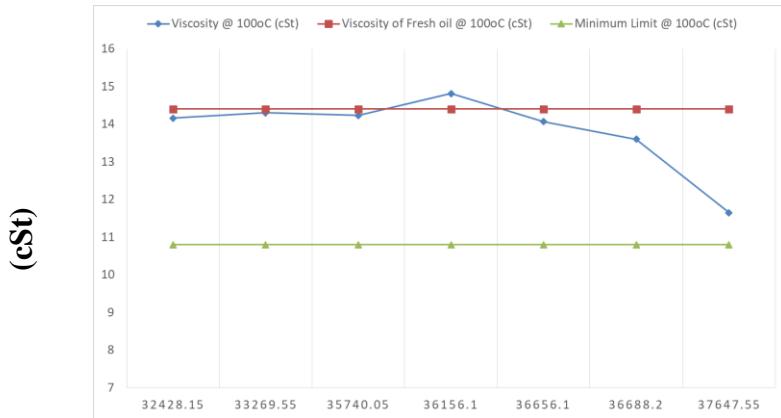
Total Running Hrs

### Viscosity 40°C



Total Running Hrs

### 100°C



Total Running Hrs