

OIL CONDITION MONITORING REPORT SLNS SAYURA

ENGINE PARTICULARS (Information provided by the customer)	
	Stbd Main Engine (No.01)
Make :	SEMT PIELSTICK
Model :	16 PA 6V 280
Sr.No's:	8291
Sampling Date	20 Dec 24
Sampling point :	Lube oil sump
Sampling Method :	Extraction
Type of Lubricant :	Shell Gadinia S3 40
System Capacity :	1400 Ltrs

RUNNING HRS DETAILS(Information provided by the customer)	
	Stbd Main Engine
Sample ID	M009277
Oil Running Hours	500.00
Total Running Hours of the Machinery	47494.40

ANALYSIS RESULTS

Basic Properties

	ASTM Method	Fresh Oil (As per OEM data sheet)	Uncertainty	Stbd Main Engine (S/I- M009277)
Viscosity @ 40°C (cSt)	ASTM D 445	128.00	0.018 Cst	124.71
Viscosity @ 100°C (cSt)		13.70	0.018 Cst	13.76
Viscosity Index	ASTM D2270	103	N/A	107.16

Elemental Concentration as per ASTMD 5185 (ppm)

Element	Maximum Permissible Limit	Fresh Oil Sample	Uncertainty	Stbd Main Engine (S/I- M009277)
Fe	80	< 1.000	2.191	9.483
Cr	10	< 1.000	1.810	< 1.000
Si	15	< 1.000	1.021	< 1.000
Al	20	< 1.000	1.107	< 1.000
Pb	20	< 1.000	2.918	< 1.000
Cu	25	< 1.000	1.064	1.065
Sn	10	< 1.000	0.131	< 1.000
Ni	10	< 1.000	0.090	< 1.000

TREND ANALYSIS WITH PREVIOUS REPORTS

	Fresh Oil Sample	Stbd Main Engine														
		S/I-M000084	S/I-M000781	S/I-M001119	S/I-M002380	S/I-M002850	S/I-M003888	S/I-M004959	S/I-M005945	S/I-M006265	S/I-M007040	S/I-M007876	S/I-M008132	S/I-M009277		
Oil Running Hrs	-	1450.25	630.30	1002.20	524.35	1000.00	1500.00	999.05	720.05	1429.35	500.00	1000.00	1500.00	500.00		
T/R/H of Machinery	-	40867.20	41499.25	41871.15	43089.40	43565.05	44065.05	44565.05	45065.05	45494.40	45994.40	46494.40	46994.40	47994.00		
Basic Properties																
Viscosity @ 40°C (cSt)	139.00	N/A	122.55	130.54	131.88	125.81	107.10	122.76	119.23	118.56	124.59	118.54	116.80	124.71		
Viscosity @ 100°C (cSt)	14.40	N/A	13.95	13.74	13.85	13.58	13.60	13.21	12.85	13.16	13.32	13.40	13.21	13.76		
Viscosity Index	103	N/A	112.04	101.14	101.31	102.80	125.82	101.64	100.22	105.39	101.25	108.82	108.03	107.16		
Elemental Concentration as per ASTMD 5185 (ppm)																
Element	Max. Per. Limit															
Fe	80	< 1.000	2.742	4.751	6.215	5.783	9.747	9.883	7.687	6.972	7.326	4.453	6.137	5.892	9.483	
Cr	10	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	
Si	15	< 1.000	2.631	8.385	2.708	4.244	3.266	4.245	7.195	6.002	2.857	5.550	6.577	3.218	< 1.000	
Al	20	< 1.000	3.441	1.839	1.454	< 1.000	< 1.000	19.904	< 1.000	1.021	2.318	< 1.000	< 1.000	< 1.000	< 1.000	
Pb	20	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	3.256	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	
Cu	25	< 1.000	1.900	1.162	1.686	1.605	1.934	4.097	5.557	2.432	4.446	1.592	1.524	< 1.000	1.065	
Sn	10	< 1.000	1.970	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	
Ni	10	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	< 1.000	1.219	N/C	N/C	< 1.000	< 1.000	N/C	< 1.000

N/C-Not Conducted

Wear Metals
Stbd Main Engine

