

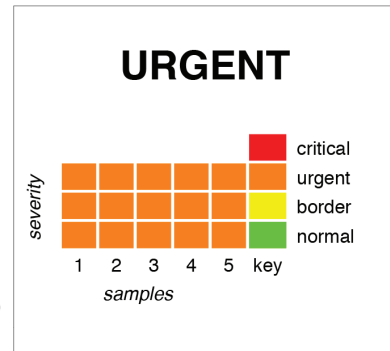
Report Example

Advanced Turbine Oil Analysis



TURBINE

PROBLEM SEVERITY



KWAZULU-NATAL:
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WESTMEAD 3608
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GAUTENG:
P.O. BOX 284
ISANDO 1600
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Machine:
Alt. ID:
Model: UNIT 5 FRF CONTROL FLUID
Component: FRF ADVANCED
Model:

Code:
Job No.:
Site: TURBINE & GENERATOR
Oil: CASTROL ANVOL PHOSPHATE ESTER 46XE
Queries:

DIAGNOSIS

5.) Sample Number WM02279 on 19.12.2018 smr - HRS
Wear rates are normal. Debris analysis normal. Demulsification number by IP 19 is 180 seconds. Air release value is unacceptable, recommend vacuum distillation to remove dissolved gases from the system. Foaming tendency unacceptable, recommend vacuum distillation to remove gases from the system. The Total Acid Number (TAN) of this oil is unacceptably high, recommend the use of a clay based filter to reduce the TAN. Water content is high, recommend vacuum dehydration to remove the water from the system. Please return feedback. REPEAT PROBLEM oil-u/sx12. REPEAT PROBLEM waterx2.

PREVIOUS HISTORY

DIAGNOSES

2.) Sample Number WM02119 on 28.09.2018 smr - HRS
Wear rates are normal. Debris analysis normal. Demulsification number by IP 19 is 120 seconds. Air release value is unacceptable, recommend vacuum distillation to remove dissolved gases from the system. Particle count is greater than the limit specified, recommend filtering/purifying the oil. The Total Acid Number (TAN) of this oil is unacceptably high, recommend the use of a clay based filter to reduce the TAN. Please return feedback. REPEAT PROBLEM oil-u/sx9. REPEAT PROBLEM particle-countx3.

3.) Sample Number WM02184 on 31.10.2018 smr - HRS
Wear rates are normal. Debris analysis normal. Demulsification number by IP 19 is 130 seconds. Particle count is greater than the limit specified, recommend filtering/purifying the oil. Foaming tendency unacceptable, recommend vacuum distillation to remove gases from the system. Air release value is unacceptable, recommend vacuum distillation to remove dissolved gases from the system. The Total Acid Number (TAN) of this oil is unacceptably high. Recommend the use of a clay based filter to reduce the TAN. Please return feedback. REPEAT PROBLEM particle-countx4. REPEAT PROBLEM oil-u/sx10.

4.) Sample Number WM02166 on 27.11.2018 smr - HRS
Wear rates are normal. Debris analysis normal. Demulsification number by IP 19 is 145 seconds. Air release value is unacceptable, recommend vacuum distillation to remove dissolved gases from the system. Foaming tendency unacceptable, recommend vacuum distillation to remove gases from the system. Particle count is greater than the limit specified, recommend filtering/purifying the oil. The Total Acid Number (TAN) of this oil is unacceptably high, recommend the use of a clay based filter to reduce the TAN. Water content is high, recommend vacuum dehydration to remove the water from the system. Please return feedback. REPEAT PROBLEM oil-u/sx11. REPEAT PROBLEM particle-countx5.

FEEDBACK

WEARCHECK IS AN ISO 9001 AND ISO 14001 REGISTERED COMPANY



Report Example

Advanced Turbine Oil Analysis

Machine: 50MAX01BB01 - FRF ADVANCED - Alt. ID: - -

SAMPLE NUMBER	DATE SAMPLED	LAB DATE	OIL CONSUMPTION	SMR	UNITS	OIL IN SERVICE	FILTER CHANGE	OIL DRAIN	RRI	
1	WM02108	30.08.18	03.09.18	-	-	HRS	-	No	No	500
2	WM02119	28.09.18	03.10.18	-	-	HRS	-	No	No	500
3	WM02184	31.10.18	02.11.18	-	-	HRS	-	No	No	500
4	WM02166	27.11.18	29.11.18	-	-	HRS	-	No	No	500
5	WM02279	19.12.18	24.12.18	-	-	HRS	-	No	No	500

WEAR METALS

Sample	Iron	Chromium	Nickel	Aluminium	Copper	Tin	Lead	Bismuth	PQ Index
1	0	0	0	0	0	0	0	0	16
2	0	0	0	0	3	0	0	0	5
3	1	0	0	0	0	0	0	0	5
4	0	0	0	0	0	0	0	0	5
5	0	0	0	0	0	0	0	0	5

Special Tests

Sample	Foaming Characteristics	Air Release	VPR/MPC
1	570/10 30/0 550/10	7.4	11
2	440/0 30/0 480/0	6.1	11
3	480/0 20/0 440/0	6.7	12
4	530/30 30/0 550/50	6.2	10
5	470/0 20/0 450/0	6.5	13

30 spectrometric analyses are carried out on all samples but only relevant results are reported in parts per million.

CONTAMINANTS

Sample	Silicon	Sodium	Water By Karl Fisher
1	0	1	247
2	0	0	495
3	0	2	316
4	0	0	566
5	0	0	541

PARTICLE COUNT /ML

4 micron	6 micron	14 micron	20 micron	25 micron	50 micron	75 micron	100 micron	Cleanliness
3661	2318	315	36	7	4	0	0	20/19/16
1365	391	12	2	1	1	0	0	18/16/11
1868	1205	106	13	6	8	0	0	19/18/14
3084	1900	227	30	27	1	0	0	20/18/15
2416	486	11	2	1	3	0	0	19/16/11

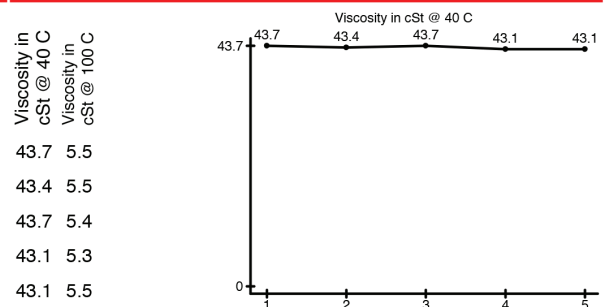
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ADDITIVES & LUBRICANT CONDITION

Sample	Magnesium	Calcium	Molybdenum	Zinc	Phosphorous	Boron	Sulphur	TAN
1	0	5	0	4	79820	0	16	0.70
2	0	3	0	4	72600	0	25	0.70
3	0	2	0	5	83480	0	17	0.70
4	2	2	0	2	70160	0	33	0.70
5	1	5	0	3	64180	0	19	0.70

30 spectrometric analyses are carried out on all samples but only relevant results are reported in parts per million.

VISCOSITY

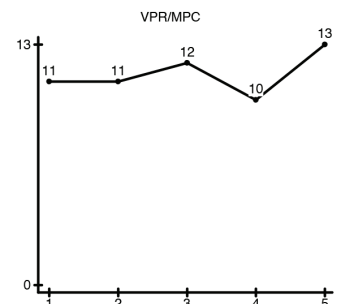


GRAPHICAL REPRESENTATION OF KEY DATA

Too few values to plot RULER Total %

Too few values to plot RULER Phenol %

Too few values to plot RULER Amine %



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