

UNIT ID
VW09 E
SECOND ID
BIO DIESEL
UNIT TYPE
DIESEL ENGINE
APPLICATION
UNKNOWN

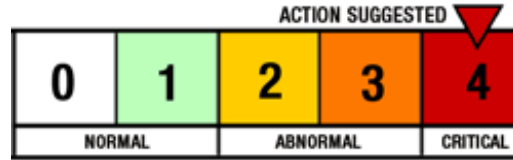


COMPANY INFORMATION
RODNEY HILL
503-931-8462
865 E COLLEGE ST.
MT. ANGEL , OR 97362

ACCOUNT NUMBER POLARI03000595
DATE SAMPLED 10/15/08
DATE RECEIVED 12/08/08
DATE COMPLETED 12/10/08

TRACKING # 08316D01794
MANUFACTURER/MODEL
LUBE MFR
LUBE TYPE - GRADE
MICRON RATING 15
FILTER TYPE FULLFLOW
SUMP CAPACITY 0.00
HYD SYSTEM PRESSURE 0
FLUID ADDED

OVERALL SEVERITY OF REPORT
based on comments, not individual flags



LAB # 317156 **LOCATION** S **ANALYST** RNF

FLUID ANALYSIS REPORT - 877-808-3750

COMMENTS FLAGGED values are much higher than expected for new/overhauled unit; Suggest unit's vital signs and fluid levels be observed close between sample intervals; Aluminum is at a SEVERE LEVEL; Possible piston metal; Infrared results indicate OXIDATION is SEVERELY HIGH; POTASSIUM in new engines may be from protective coatings from bearings or heads, and/or SOLDER FLUX from oil cooler; Silicon/Dirt may be present due to new unit contamination; Suspect most of the copper may be coming from the lube cooler (as applicable); Sample information has been added or tests have been rerun or additional testing was added and the report has been regenerated;

SAMP #	WEAR METALS PPM										CONTAMINANT METALS - PPM				MULTI-SOURCE METALS - PPM				ADDITIVE METALS PPM					
	IRON	CHROMIUM	NICKEL	ALUMINUM	COPPER	LEAD	TIN	CADMIUM	SILVER	TITANIUM	VANADIUM	SILICON	SODIUM	POTASSIUM	MOLYBDENUM	ANTIMONY	MANGANESE	LITHIUM	BORON	MAGNESIUM	CALCIUM	BARIUM	PHOSPHORUS	ZINC
1	54	6	1	131	45	1	2	0	0	1	0	27	6	222	2	0	5	2	1	6	1182	0	618	768

SAMP #	DATE SAMPLED	UNIT TIME	LUBE CHG	FILTER CHG	FUEL Vol.	SOOT Vol.	WATER Infrared	VIS 40C CS	VIS 100C CS	TAN Total Acid	TBN Total Base	I-R OXID A	I-R NITRA	ISO CODE	MICRON 4	MICRON 6	MICRON 10	MICRON 14	MICRON 21	MICRON 38	MICRON 70	MICRON 100	
	DATE RECEIVED	LUBE TIME																					
1	10/15/08 12/08/08	4300 4300	N	N	1.5%	<.1%	<.1		9.3			30	16										

SAMP #																							
1																							

Comments are advisory only and are based on the assumption that the sample and data submitted are valid. Missing lube or unit time limits the evaluation. No warranty is expressed or implied.