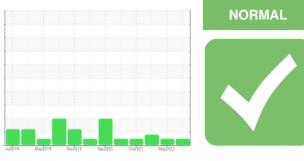


OIL ANALYSIS REPORT

SAMPLE INFORMATION method

Sample Rating Trend



Machine Id

441826

Component Diesel Engine

Fluid MOBIL DELVAC 1300 SUPER15W40 (22 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

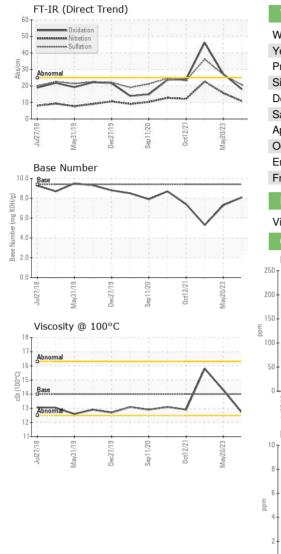
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM		method	limit/base	current	nistory i	nistory2
Sample Number		Client Info		IL0034917	IL0031156	IL0028199
Sample Date		Client Info		12 Dec 2023	20 May 2023	04 Oct 2022
Machine Age	mls	Client Info		193757	169330	151405
Oil Age	mls	Client Info		11057	17925	34581
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL
CONTAMINATION	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	19	89	A 235
Chromium	ppm	ASTM D5185m	>20	0	1	3
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	3	7	14
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	0	2	4
Tin	ppm	ASTM D5185m	>15	۰ <1	<1	<1
Antimony	ppm	ASTM D5185m	210			
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
	ррш					
ADDITIVES	ppin	method	limit/base	current	history1	history2
	ppm		limit/base 0			
ADDITIVES		method ASTM D5185m		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	0	current 8	history1 7	history2 25
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	0	current 8 0	history1 7 0	history2 25 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	0	current 8 0 66	history1 7 0 66	history2 25 0 48
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 8 0 66 <1	history1 7 0 66 1	history2 25 0 48 2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 8 0 66 <1 938	history1 7 0 66 1 1005	history2 25 0 48 2 501
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 8 0 66 <1 938 1084	history1 7 0 66 1 1005 1311	history2 25 0 48 2 501 1946
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	Current 8 0 66 <1 938 1084 1078	history1 7 0 66 1 1005 1311 1104	history2 25 0 48 2 501 1946 784
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 8 0 66 <1 938 1084 1078 1240	history1 7 0 66 1 1005 1311 1104 1360	history2 25 0 48 2 501 1946 784 972
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 Imit/base	Current 8 0 66 <1 938 1084 1078 1240 3503	history1 7 0 66 1 1005 1311 1104 1360 3675	history2 25 0 48 2 501 1946 784 972 2552
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 Imit/base	current 8 0 66 <1 938 1084 1078 1240 3503 current	history1 7 0 66 1 1005 1311 1104 1360 3675 history1	history2 25 0 48 2 501 1946 784 972 2552 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	methodASTM D5185mASTM D5185m	0 0 0 0 limit/base >25	current 8 0 66 <1 938 1084 1078 1240 3503 current 4	history1 7 0 66 1 1005 1311 1104 1360 3675 history1 6	history2 25 0 48 2 501 1946 784 972 2552 history2 11
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 limit/base >25	current 8 0 66 <1 938 1084 1078 1240 3503 current 4 1	history1 7 0 66 1 1005 1311 1104 1360 3675 history1 6 2	history2 25 0 48 2 501 1946 784 972 2552 history2 11 1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 1 1 1 1 1 1 1 1 1 1 2 5 2 5 2 0	current 8 0 66 <1 938 1084 1078 1240 3503 current 4 1 <1 current	history1 7 0 66 1 1005 1311 1104 1360 3675 history1 6 2 6 2 6	history2 25 0 48 2 501 1946 784 972 2552 history2 11 1 11
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Calcium Phosphorus Zinc Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm	method ASTM D5185m	0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	current 8 0 66 <1 938 1084 1078 1240 3503 current 4 1 <1 current 0.6	history1 7 0 66 1 1005 1311 1104 1360 3675 history1 6 2 6 1 history1 1	history2 25 0 48 2 501 1946 784 972 2552 history2 11 1 11 1 12 13 14 15 15 15 15 16 17
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	current 8 0 66 <1 938 1084 1078 1240 3503 current 4 1 <1 current	history1 7 0 66 1 1005 1311 1104 1360 3675 history1 6 2 6 2 6 2 6 history1	history2 25 0 48 2 501 1946 784 972 2552 history2 11 1 11 11 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 imit/base >25 >20 imit/base >3 >20	current 8 0 66 <1 938 1084 1078 1240 3503 current 4 1 <1 current 0.6 10.8	history1 7 0 66 1 1005 1311 1104 1360 3675 history1 6 2 6 1 15.7	history2 25 0 48 2 501 1946 784 972 2552 history2 11 1 11 11 11 12 13 14 15 17 22.7
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D7185M ASTM D7844 *ASTM D7624 *ASTM D7415 method	0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	current 8 0 66 <1 938 1084 1078 1240 3503 current 4 1 <1 current 0.6 10.8 20.6 current	history1 7 0 66 1 1005 1311 1104 1360 3675 history1 6 2 6 1 15.7 26.9 history1	history2 25 0 48 2 501 1946 784 972 2552 history2 11 1 11 11 12 13 14 15 16 17 22.7 36.2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7414	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	current 8 0 66 <1 938 1084 1078 1240 3503 current 4 1 <1 current 0.6 10.8 20.6	history1 7 0 66 1 1005 1311 1104 1360 3675 history1 6 2 6 1 15.7 26.9	history2 25 0 48 2 501 1946 784 972 2552 history2 11 1 11 11 11 12 13 14 15 16 17 22.7 36.2

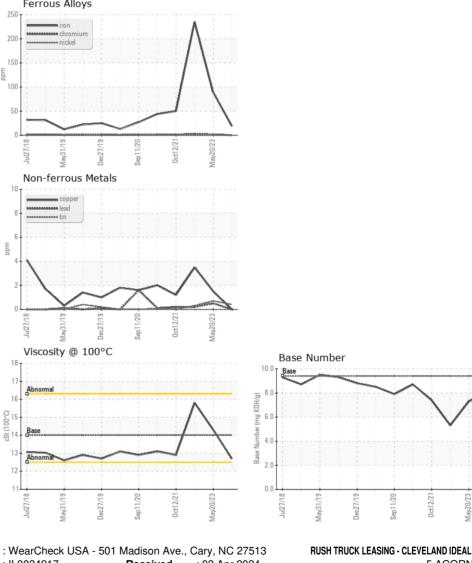
Submitted By: TECHNICIAN ACCOUNT

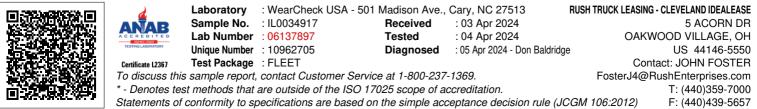


OIL ANALYSIS REPORT



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14	12.7	14.3	15.8
GRAPHS						
Ferrous Alloys						





Report Id: IDECLE [WUSCAR] 06137897 (Generated: 04/05/2024 19:08:00) Rev: 1

Submitted By: TECHNICIAN ACCOUNT

Page 2 of 2