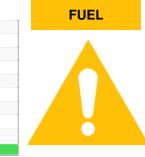


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id **53**

Component **Diesel Engine**

MOBIL DELVAC 1300 SUPER15W40 (--- GAL

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected 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 INFORMATION method limit/base current history1 history2							
SAMPLE INFORMATION method limit/base current history1 history2							
Cample Number Client Info PCA0099445	L)				Feb2024		
Client Info	SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Machine Age mls	Sample Number		Client Info		PCA0099445		
Dil Age	Sample Date		Client Info		15 Feb 2024		
Client Info Changed Client Info Changed MARGINAL CONTAMINATION method limit/base current history1 history2 Mater WC Method NEG Client MEG Client MEG Client MEG Current history1 history2 MEG Client MEG Current history1 history2 MEG Current MEG Cur	Machine Age	mls	Client Info		175954		
MARGINAL	Oil Age	mls	Client Info		0		
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.2 NEG Silycol WC Method NEG WEAR METALS method limit/base current history1 history2 ron ppm ASTM D5185m >100 11 Chromium ppm ASTM D5185m >20 <1 Vickel ppm ASTM D5185m >4 0 Silver ppm ASTM D5185m >3 0 Aluminum ppm ASTM D5185m >30 Lead ppm ASTM D5185m >20 2 Lead ppm ASTM D5185m >330 <1 Capper ppm ASTM D5185m >330 <1 Valandium ppm ASTM D5185	Oil Changed		Client Info		Changed		
Water WC Method >0.2 NEG Glycol WC Method NEG WEAR METALS method limit/base current history1 history2 Voor ASTM D5185m >100 11 Chromium ppm ASTM D5185m >20 <1 Vickel ppm ASTM D5185m >4 0 Silver ppm ASTM D5185m >3 0 Lead ppm ASTM D5185m >20 2 Lead ppm ASTM D5185m >40 2 Lead ppm ASTM D5185m >33.0 <1 Copper ppm ASTM D5185m >15 0 Cadmium ppm ASTM D5185m 0 73 ADITIV	Sample Status				MARGINAL		
WEAR METALS	CONTAMINA	TION	method	limit/base	current	history1	history2
WEAR METALS method limit/base current history1 history2 ron ppm ASTM D5185m >100 11 Chromium ppm ASTM D5185m >20 <1	Water		WC Method	>0.2	NEG		
ASTM D5185m >100	Glycol		WC Method		NEG		
Description	WEAR METAI	LS	method	limit/base	current	history1	history2
ASTM D5185m SO	ron	ppm	ASTM D5185m	>100	11		
Solickel	-			>20	<1		
Description	Nickel		ASTM D5185m	>4			
ASTM D5185m >3	Γitanium		ASTM D5185m		0		
Lead ppm ASTM D5185m >40 2 Copper ppm ASTM D5185m >330 <1	Silver	ppm	ASTM D5185m	>3	0		
Description	Aluminum		ASTM D5185m	>20	2		
Tin	_ead	ppm	ASTM D5185m	>40	2		
Anadium ppm ASTM D5185m <1 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 73 Barium ppm ASTM D5185m 0 0 Manganese ppm ASTM D5185m 0 23 Manganese ppm ASTM D5185m 0 902 Manganesium ppm ASTM D5185m 1246 Calcium ppm ASTM D5185m 919 Phosphorus ppm ASTM D5185m 1059 Zinc ppm ASTM D5185m 3147 CONTAMINANTS method limit/base current history1 history2 Silicon <	Copper	ppm	ASTM D5185m	>330	<1		
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 73 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 23 Manganese ppm ASTM D5185m 0 902 Magnesium ppm ASTM D5185m 0 902 Phosphorus ppm ASTM D5185m 1246 Phosphorus ppm ASTM D5185m 919 Zinc ppm ASTM D5185m 1059 Zinc ppm ASTM D5185m 3147 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5	Γin	ppm	ASTM D5185m	>15	0		
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 73 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 23 Manganese ppm ASTM D5185m 0 902 Magnesium ppm ASTM D5185m 0 902 Calcium ppm ASTM D5185m 919 Phosphorus ppm ASTM D5185m 1059 Zinc ppm ASTM D5185m 3147 Zilicum ppm ASTM D5185m 3147 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 3	/anadium	ppm	ASTM D5185m		<1		
Soron ppm ASTM D5185m 0 73	Cadmium	ppm	ASTM D5185m		0		
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 23 Manganese ppm ASTM D5185m <1	Boron	ppm	ASTM D5185m	0	73		
Manganese ppm ASTM D5185m <1 Magnesium ppm ASTM D5185m 0 902 Calcium ppm ASTM D5185m 1246 Phosphorus ppm ASTM D5185m 919 Zinc ppm ASTM D5185m 1059 Sulfur ppm ASTM D5185m 3147 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >25 5 Solicon ppm ASTM D5185m >20 3 Potassium ppm ASTM D5185m >20 3 Fuel % ASTM D3524 >5 ▲ 2.8 Soot % % *ASTM D7844 >3 0.3 S	Barium	ppm	ASTM D5185m	0	0		
Magnesium ppm ASTM D5185m 0 902 Phosphorus ppm ASTM D5185m 919 Zinc ppm ASTM D5185m 1059 Sulfur ppm ASTM D5185m 3147 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 6 Potassium ppm ASTM D5185m >20 3 Fuel % ASTM D3524 >5 2.8 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Soot % % *ASTM D7624 >20 9.2	Molybdenum	ppm	ASTM D5185m	0	23		
Calcium ppm ASTM D5185m 1246 Phosphorus ppm ASTM D5185m 919 Zinc ppm ASTM D5185m 1059 Sulfur ppm ASTM D5185m 3147 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m >20 3 Potassium ppm ASTM D5185m >20 3 Fuel % ASTM D3524 >5 ▲ 2.8 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Soot % % *ASTM D7624 >20 9.2	Manganese	ppm	ASTM D5185m		<1		
Phosphorus ppm ASTM D5185m 919 Zinc ppm ASTM D5185m 1059 Sulfur ppm ASTM D5185m 3147 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 6 Potassium ppm ASTM D5185m >20 3 Fuel % ASTM D3524 >5 ▲ 2.8 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Silicon Abs/.mm *ASTM D7624 >20 9.2	Magnesium	ppm	ASTM D5185m	0	902		
Time	Calcium	ppm	ASTM D5185m		1246		
Sulfur ppm ASTM D5185m 3147 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 6 Potassium ppm ASTM D5185m >20 3 Fuel % ASTM D3524 >5 ▲ 2.8 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Vitration Abs/cm *ASTM D7624 >20 9.2 Sulfation Abs/.1mm *ASTM D7415 >30 21.5	Phosphorus	ppm	ASTM D5185m		919		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 6 Potassium ppm ASTM D5185m >20 3 Fuel % ASTM D3524 >5 ▲ 2.8 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Vitration Abs/cm *ASTM D7624 >20 9.2 Sulfation Abs/.1mm *ASTM D7415 >30 21.5	Zinc	ppm	ASTM D5185m		1059		
Sollicon ppm ASTM D5185m >25 5 Sodium ppm ASTM D5185m 6 Potassium ppm ASTM D5185m >20 3 Fuel % ASTM D3524 >5 ▲ 2.8 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 9.2 Sulfation Abs/.1mm *ASTM D7415 >30 21.5	Sulfur	ppm	ASTM D5185m		3147		
Sodium ppm ASTM D5185m 6 Potassium ppm ASTM D5185m >20 3 Fuel % ASTM D3524 >5 ▲ 2.8 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 9.2 Sulfation Abs/.1mm *ASTM D7415 >30 21.5	CONTAMINA	NTS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 3 Fuel % ASTM D3524 >5 ▲ 2.8 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 9.2 Sulfation Abs/.1mm *ASTM D7415 >30 21.5	Silicon	ppm	ASTM D5185m	>25	5		
Fuel % ASTM D3524 >5		ppm	ASTM D5185m		6		
INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 9.2 Sulfation Abs/.1mm *ASTM D7415 >30 21.5	Potassium	ppm		>20	3		
Soot % % *ASTM D7844 >3 0.3 Nitration Abs/cm *ASTM D7624 >20 9.2 Sulfation Abs/.1mm *ASTM D7415 >30 21.5	-uel	%	ASTM D3524	>5	<u> </u>		
Nitration Abs/cm *ASTM D7624 >20 9.2 Sulfation Abs/.1mm *ASTM D7415 >30 21.5	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 21.5	Soot %	%	*ASTM D7844	>3	0.3		
	Vitration	Abs/cm	*ASTM D7624	>20	9.2		
FLUID DEGRADATION method limit/base current history1 history2	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5		
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2

Oxidation

Abs/.1mm *ASTM D7414 >25

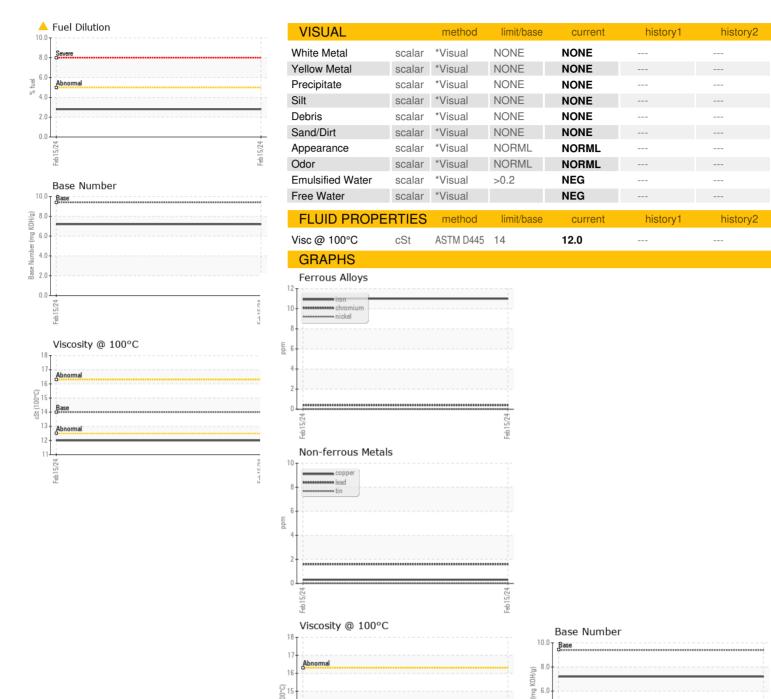
Base Number (BN) mg KOH/g ASTM D2896 9.4

17.9

7.2



OIL ANALYSIS REPORT







Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0099445

Lab Number : 06100756

St (1

Unique Number : 10898986

Test Package: FLEET (Additional Tests: FuelDilution, PercentFuel) To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received

Diagnosed

Tested

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

PETROSTAR INC - FAIRBANKS

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T: (907)452-0671

Contact: PHIL SWAFFORD pswafford@petrostar.com

F:

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: 26 Feb 2024

: 29 Feb 2024

: 29 Feb 2024 - Wes Davis

Report Id: PETFAI [WUSCAR] 06100756 (Generated: 02/29/2024 08:59:09) Rev: 1