

OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

Area OAKDALE Machine Id Mighty giant Component

Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

🔺 Wear

The aluminum level is abnormal. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

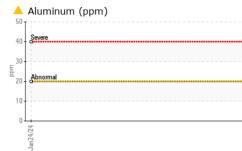
Fluid Condition

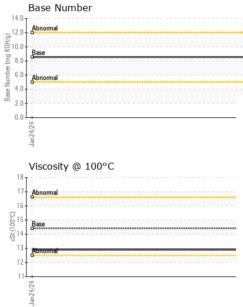
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

				Jan2024		
SAMPLE INFORM	/ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0105135		
Sample Date		Client Info		24 Jan 2024		
Machine Age	hrs	Client Info		6656		
Oil Age	hrs	Client Info		1000		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS	0	method	limit/base	ourropt	historyd	history
				current	history1	history2
lron	ppm	ASTM D5185m	>100	59		
Chromium	ppm	ASTM D5185m	>20	6		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	<u> </u>		
Lead	ppm	ASTM D5185m	>40	12		
Copper	ppm	ASTM D5185m	>330	23		
Tin	ppm	ASTM D5185m	>15	6		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	8		
Barium	ppm	ASTM D5185m	10	0		
Molybdenum	ppm	ASTM D5185m	100	63		
Manganese	ppm	ASTM D5185m		3		
Magnesium	ppm	ASTM D5185m	450	836		
Calcium	ppm	ASTM D5185m	3000	1823		
Phosphorus	ppm	ASTM D5185m	1150	1215		
Zinc	ppm	ASTM D5185m	1350	1413		
Sulfur	ppm	ASTM D5185m	4250	3575		
				3575		
CONTAMINAN	TS	method	limit/base	current	history1	history2
	TS ppm	method ASTM D5185m	limit/base >25			history2
CONTAMINAN [®] Silicon Sodium				current	history1	
Silicon Sodium	ppm	ASTM D5185m	>25	current 18	history1	
Silicon Sodium	ppm ppm	ASTM D5185m ASTM D5185m	>25 >158	current 18 19	history1 	
Silicon Sodium Potassium INFRA-RED	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	>25 >158 >20	current 18 19 7	history1 	
Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method	>25 >158 >20 limit/base	current 18 19 7 current	history1 history1	 history2
Silicon Sodium Potassium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844	>25 >158 >20 limit/base >3	current 18 19 7 current 0.4	history1 history1 	 history2
Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415	>25 >158 >20 limit/base >3 >20	current 18 19 7 current 0.4 13.2	history1 history1	 history2
Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415	>25 >158 >20 limit/base >3 >20 >30	current 18 19 7 current 0.4 13.2 26.2	history1 history1	 history2



OIL ANALYSIS REPORT





	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	Precipitate	scalar	*Visual	NONE	NONE		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
Jan 24/24	Appearance	scalar	*Visual	NORML	NORML		
د مر	0001	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
	Free Water	scalar	*Visual		NEG		
	FLUID PROPE	RTIES	method	limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D445	14.4	12.9		
	GRAPHS						
	Iron (ppm)				Lead (ppm)		
	250 Severe			10	Severe		
	200						
	150 - Abnormal			Ľ	0 Abnormal		
	50				0 -		
	0				0		
	an 24/24						
	Jan 2.			Jan 24/24	Jan 24/24		
	🔺 Aluminum (ppm)				Chromium (pp	om)	
	50 T			5	Severe		
	40 - Severe						
	a 20 - Abnormal			udd 2	0 - Abnormal		
					1		
	10-				0		
	04+ 10				24- 124- 124-		
	Jan 24/24			Jan 24/24	Jan24/24		
	Copper (ppm)			,	Silicon (ppm)		
	400 Severe			8	⁰ T Severe		
	300			e	0		
	톱 200 -			E.4	0		
					Abnormal		
	100 -			2	0		
	0			54	04		
	Jan 24/24			Jan 24/24	Jan 24/24		
	Viscosity @ 100°C			7	⊸ Base Number		
	Abnormal			(^b /H	Abnormal		
	10 7			Base Number (mg KOH/g)	0 Base		
	Base Habnormal			ther (n	Abnormal		
	3 12			Na			
	10				0		
	Jan 24,24			Jan24/24	Jan 24/24		
	Jan2			Jan2	Jan2		
Laboratory Sample No. Lab Number	: 06072303	01 Madis Recieved Diagnose Diagnost	d : 26 . ed : 30 .	ry, NC 2751 Jan 2024 Jan 2024 In Felton	3	5707	L VALLEY A LANGWOR ^T OAKDALE, (US 953
ificate L2367 Unique Number	• : MOB 2					Contact	: S MCHENF