

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

OKLAHOMA/105 08.507 [OKLAHOMA^105] Component

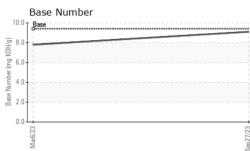
Diesel Engine

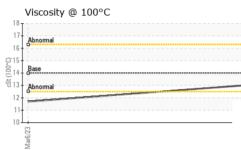
Fluid ~ ~ . . .

MOBIL DELVAC 130	0 SUPER15W40 (GAL)		Mar2023	Sep2023		
DIAGNOSIS	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
ecommendation	Sample Number		Client Info		WC0857229	WC0792524	
esample at the next service interval to monitor.	Sample Date		Client Info		27 Sep 2023	06 Mar 2023	
ear	Machine Age	hrs	Client Info		1396	518	
component wear rates are normal.	Oil Age	hrs	Client Info		878	518	
ntamination	Oil Changed		Client Info		Changed	Changed	
ere is no indication of any contamination in the	Sample Status				NORMAL	ATTENTION	
	CONTAMINATIO	N	method	limit/base	current	history1	history2
Fluid Condition The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the bil is suitable for further service.	Fuel		WC Method	>5	<1.0	0.9	
	Glycol		WC Method		NEG	NEG	
	WEAR METALS		method	limit/base	current	history1	history2
	Iron	ppm	ASTM D5185m	>100	24	53	
	Chromium	ppm	ASTM D5185m	>20	<1	1	
	Nickel	ppm	ASTM D5185m	>4	<1	<1	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m	>20	2	2	
	Lead	ppm	ASTM D5185m	>40	0	0	
	Copper	ppm	ASTM D5185m	>330	2	6	
	Tin	ppm	ASTM D5185m	>15	<1	<1	
	Vanadium	ppm	ASTM D5185m		0	0	
	Cadmium	ppm	ASTM D5185m		0	0	
	ADDITIVES		method	limit/base	current	history1	history2
	Boron	ppm	ASTM D5185m	0	31	70	
	Barium	ppm	ASTM D5185m	0	0	5	
	Molybdenum	ppm	ASTM D5185m	0	39	8	
	Manganese	ppm	ASTM D5185m		<1	2	
	Magnesium	ppm	ASTM D5185m	0	501	661	
	Calcium	ppm	ASTM D5185m		1597	1232	
	Phosphorus	ppm	ASTM D5185m		739	637	
	Zinc	ppm	ASTM D5185m		925	762	
	Sulfur	ppm	ASTM D5185m		2578	3241	
	CONTAMINANTS	5	method	limit/base	current	history1	history2
	Silicon	ppm	ASTM D5185m	>25	5	12	
	Sodium	ppm	ASTM D5185m		1	4	
	Potassium	ppm	ASTM D5185m	>20	2	8	
	INFRA-RED		method	limit/base	current	history1	history2
	Soot %	%	*ASTM D7844	>3	0.5	0.4	
	Nitration	Abs/cm	*ASTM D7624	>20	9.2	9.3	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	18.6	
	FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
	FLUID DEGRAD		method *ASTM D7414		current 21.2	history1 13.7	history2



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	VIOUNE		methou	in in base	Guirent	matory	riistor y z
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	Precipitate		*Visual	NONE	NONE	NONE	
	Silt		*Visual	NONE	NONE	NONE	
	Debris		*Visual	NONE	NONE	NONE	
	Sand/Dirt		*Visual	NONE	NONE	NONE	
	Appearance		*Visual	NORML	NORML	NORML	
	Cuch		*Visual	NORML	NORML	NORML	
°C	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
	Free Water	scalar	*Visual		NEG	NEG	
	FLUID PROPER	TIES	method	limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D445	14	13.0	▲ 11.7	
	GRAPHS						
	Ferrous Alloys						
	60 iron						
	50 - chromium						
	40 -						
	<u></u> 30 -						
	20						
	10						
	10-						
	0						
	Mar6/23			Sep 27/23			
	N			Set			
	Non-ferrous Meta	ls					
	10 copper						
	8 - lead						
	energeneere UIU						
	6						
	mqq						
	*		_				
	2						
	0 L						
	Mar6,23			Sep 27/23			
		-		Se			
	Viscosity @ 100°	C			Base Numbe	r	
	17-			10.0	Base		
	Abnormal			~ 8.0			
	16			B/HO			
	G 15 Base			g 6.0 ·			
	(2) 15 - 00 14 - Base <i>ts</i>			.0.9 g. 			
	ت 15 - <u>6</u> 14 - Base ق 14 - Base ق 13 - Abnormal			y Bul) Jag Min Jag Min Min Min Min Min Min Min Min Min Min			
	63 13 63 13 12 - Abnormal			iber (n			
	Abnormai Q			M 6.0-			
	12 11 10			0.0	m		
	12 11 10			0.0	ar6/23		27/23
	12+ 11+			2.0	Ma6/23		Sep 27/23
Laborat Sample Lab Nu Unique N Test Pas	tory : WearCheck USA - No. : WC0857229 mber : 05966037 Jumber : 10672588	Received Diagnose Diagnosti	:020 d:020 cian:Wes	0.0 52/23			ICTION CO INC WEST MAY ST WICHITA, KS US 67213
Certificate L2367 Sample	tory : WearCheck USA - No. : WC0857229 mber : 05966037 Jumber : 10672588 ickage : CONST (Additional	Received Diagnose Diagnostic	:020 d:020 cian:Wes N)	ry, NC 27513 Det 2023 Det 2023 S Davis		3219 V Contac	ICTION CO INC WEST MAY ST WICHITA, KS US 67213 t: DOUG KING
Certificate 12367 To discuss this sample	tory : WearCheck USA - No. : WC0857229 mber : 05966037 Jumber : 10672588	Received Diagnose Diagnostic I Tests: TB vice at 1-80	:02 (d :02 (cian :Wes N) 00-237-1369	ry, NC 27513 Det 2023 Det 2023 S Davis		3219 V Contac doug.king@	ICTION CO INC WEST MAY ST WICHITA, KS US 67213

Submitted By: SHAWN SOUTH

Page 2 of 2