

OKLAHOMA/102/EG - EXCAVATOR 20.77L [OKLAHOMA^102^EG - EXCAVATOR] Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

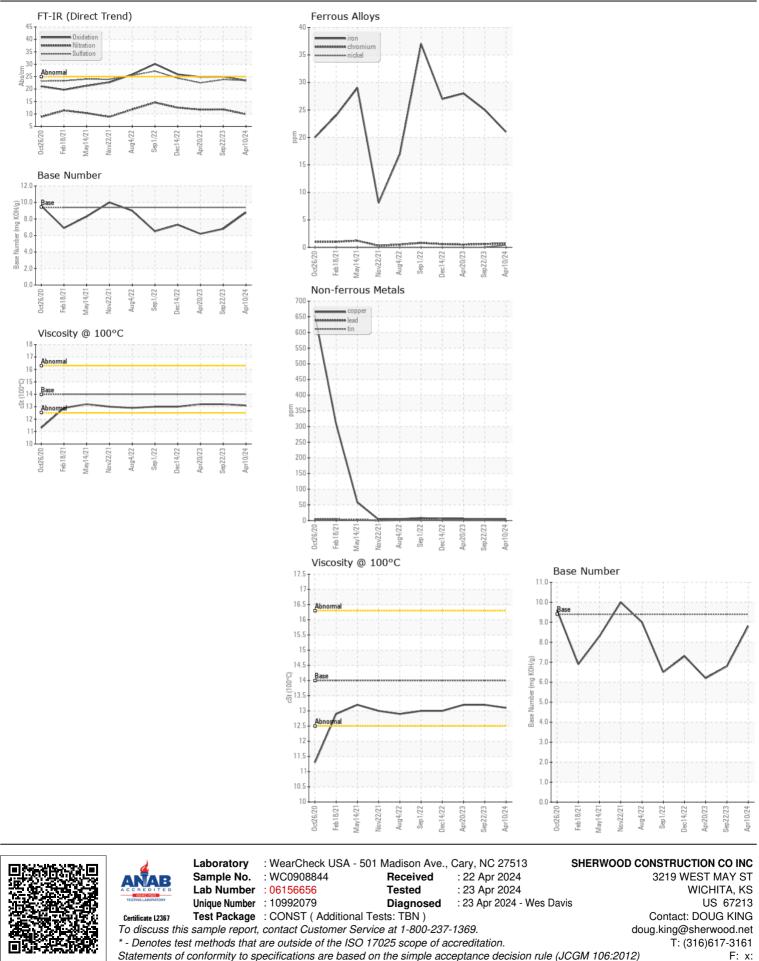
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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0908844	WC0857380	WC0800878
	Sample Date		Client Info		10 Apr 2024	22 Sep 2023	20 Apr 2023
	Machine Age	hrs	Client Info		5545	5181	4599
	Oil Age	hrs	Client Info		364	582	644
	Filter Age	hrs	Client Info		364	582	644
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>100	21	25	28
	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
	Nickel	ppm	ASTM D5185m		<1	0	0
	Titanium	ppm	ASTM D5185m	>2	<1	0	0
	Silver	ppm	ASTM D5185m	>2	<1	0	0
	Aluminum	ppm	ASTM D5185m	>25	2	2	0
	Lead	ppm	ASTM D5185m	>40	<1	1	1
	Copper	ppm	ASTM D5185m	>330	5	4	5
	Tin	ppm	ASTM D5185m	>15	<1	<1	<1
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	<u>_</u> 25	6	7	7
CONTAIMINATION	Potassium	ppm	ASTM D5185m		2	<1	1
There is no indication of any contamination in the oil.	Fuel	ρριιι	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	20.L	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.3	0.5	0.5
	Nitration	Abs/cm	*ASTM D7624	>20	9.9	11.8	11.7
	Sulfation	Abs/.1mm	*ASTM D7415		23.4	23.8	22.5
	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
FLUID CONDITION	Sodium	ppm	ASTM D5185m		4	4	1
	Boron	ppm	ASTM D5185m	0	33	24	31
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		<1	2	0
	Molybdenum	ppm	ASTM D5185m		41	44	50
	Manganese	ppm	ASTM D5185m	U	<1	<1	<1
	Magnesium	ppm	ASTM D5185m	0	494	504	555
	Calcium	ppm	ASTM D5185m	U III	1678	1717	2004
	Phosphorus	ppm	ASTM D5185m		753	744	848
	Zinc	ppm	ASTM D5185m		940	944	1051
	Sulfur	ppm	ASTM D5185m		2648	2690	2946
	Oxidation	Abs/.1mm	*ASTM D7414	>25	23.4	25.0	24.9
	Base Number (BN)		ASTM D2896		8.8	6.8	6.2
				4.4	10.1	10.0	10.0

Visc @ 100°C cSt ASTM D445 14

13.2

13.2

13.1



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)