

OIL ANALYSIS REPORT

Base Number (BN) mg KOH/g ASTM D2896 10.5

Area **CONSTRUCTORS, INC** 100503

Gasoline Engine Fluid MOBIL DELVAC 1300 SUPER 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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.

AL)			Jul2020	Apr2024		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0005763	SBP17107039	
Sample Date		Client Info		11 Apr 2024	31 Jul 2020	
Machine Age	hrs	Client Info		389	224	
Oil Age	hrs	Client Info		165	50	
Oil Changed		Client Info		Changed NORMAL	Changed	
Sample Status				-	NORMAL	
CONTAMINATION	J	method	limit/base		history1	history2
Fuel		WC Method		<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	0.0	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	41	12	
Chromium	ppm	ASTM D5185m	>20	6	1	
Nickel	ppm	ASTM D5185m	>5	<1	0	
Titanium Silver	ppm	ASTM D5185m ASTM D5185m	>2	4	0	
Aluminum	ppm ppm	ASTM D5185m	>2	10	3	
Lead	ppm	ASTM D5185m	>50	<1	0	
Copper	ppm	ASTM D5185m	>155	3	2	
Tin	ppm	ASTM D5185m	>10	3	1	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		<1	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		61	60	
Barium	ppm	ASTM D5185m		<1	0	
Molybdenum	ppm	ASTM D5185m		57	33	
Manganese	ppm	ASTM D5185m		<1	0	
Magnesium	ppm	ASTM D5185m		557	422	
Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m		1521 634	1539 649	
Zinc	ppm	ASTM D5185m		874	763	
Sulfur	ppm	ASTM D5185m		2371		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	33	11	
Sodium	ppm	ASTM D5185m	>400	6	3	
Potassium	ppm	ASTM D5185m	>20	4	2	
Chlorine	ppm	ASTM D5185m			0	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0.1		
Nitration	Abs/cm	*ASTM D7624	>20	9.9		
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.1		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.7	8	
Deee Number (DNI)			10 5	0.0		

9.0

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Sample Rating Trend

NORMAL

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FT-IR (Direct Trend)		VISUAL		method	limit/base	current	history1	history2
30 - Oxidation		White Metal	scalar	*Visual	NONE	NONE		
25 - Fortominan Sulfation		Yellow Metal	scalar	*Visual	NONE	NONE		
5% 20-		Precipitate	scalar	*Visual	NONE	NONE		
		Silt	scalar	*Visual	NONE	NONE		
15		Debris	scalar	*Visual	NONE	NONE		
10		Sand/Dirt	scalar	*Visual	NONE	NONE		
54 82	24		scalar	*Visual	NORML	NORML		
102/161n	Apr11/24	Appearance						
7	4	Odor	scalar	*Visual	NORML	NORML		
Base Number		Emulsified Water	scalar	*Visual	>0.2	NEG		
12.0 Base		Free Water	scalar	*Visual		NEG		
(P10.0 (P00.0		FLUID PROPER	TIES	method	limit/base	current	history1	history2
E 6.0-		Visc @ 100°C	cSt	ASTM D445	11.9	10.5	10.1	
4.0		GRAPHS						
2.0-		Ferrous Alloys						
0.0		45 T						
Jul31/20	VC/ 1	40 - iron		/				
Jul3	A1	35 nickel						
		30-						
Viscosity @ 100°C	000	25 20						
14 Abnormal		15						
13		10						
	0000	5-	and the state base base base base base base base bas					
0 12 Base 11 1								
10		Jul31/20			Apr11/24			
Abnormal 9 -		lul			Apr			
8		Non-ferrous Meta	ls					
Jul31/20	11.04	10 copper 1						
Ta P	V	8 announcement lead						
		annen tin						
		6-						
		Edd						
		4+						
		2						
		2 -						
		2 - 0						
		2 0 0 0 0 0 0 0			ri 1,24 			
		2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			Apri 1/24			
		Viscosity @ 100°	C		4	Base Number		
		Viscosity @ 100%	C		421 pub	Τ		
		Viscosity @ 100°	C		⊲ 12.0	Base		
		Viscosity @ 100°	C		⊲ 12.0	Base		
	1980	Viscosity @ 100°	C		⊲ 12.0	Base		
	1,410,011,42	Viscosity @ 100°	C		⊲ 12.0	Base		
		Viscosity @ 100° 4 Abnormal 3 12 8 8 8 8 10 10 10 10 10 10 10 10 10 10	C		در (P) (P) (P) (P) (P) (P) (P) (P) (P) (P)	Base		
		Viscosity @ 100° Abnormal Abnormal Base 11 Base	C		⊲ 12.0	Base		
	Namu I ve	Viscosity @ 100° 4 Abnormal 3 12 8 8 8 8 10 10 10 10 10 10 10 10 10 10	C		مر 12.0 10.0 (0) 4.0 2.0	Base		
	1.4710/J / 107	Viscosity @ 100° Abnormal Base Abnormal Abnormal	C		<	Base		24
	Namby U.S. Wa	Viscosity @ 100° 4 Abnormal 3 12 8 8 8 8 10 10 10 10 10 10 10 10 10 10	C		مر 12.0 10.0 (0) 4.0 2.0	Base		April1/24
TESTING LABORATORY Unique N	atory : e No. : umber : Number : nckage : report, c	Viscosity @ 100°0	01 Madiso Recei Teste Diagr	ived : 22 id : 23 nosed : 23 800-237-1368	r, NC 27513 2 Apr 2024 3 Apr 2024 - Wo	Base 02/1000 es Davis	Constructors Contact: renM@construct	i Inc 60365 1815 Y Stree Lincoln, NE US 68508 Loren Michae

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