

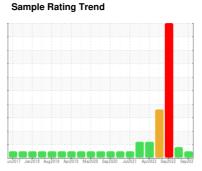
# **OIL ANALYSIS REPORT**



KANSAS/44/EG - OTHER SERVICE 53.130L [KANSAS^44^EG - OTHER SERVICE] Component

**Diesel Engine** 

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)





## DIAGNOSIS

## Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

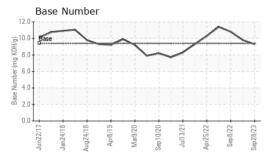
# **Fluid Condition**

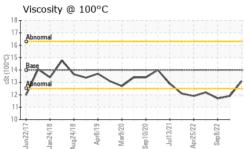
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0833807	WC0741702	WC0697767
Sample Date		Client Info		28 Sep 2023	08 Mar 2023	08 Sep 2022
Machine Age	hrs	Client Info		4741	4401	4145
Oil Age	hrs	Client Info		340	4216	4011
Oil Changed		Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	MARGINAL	SEVERE
CONTAMINATION	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<b>▲</b> 3.7	<b>△</b> 5.2
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	13	11	<b>5</b> 30
Chromium	ppm	ASTM D5185m	>20	<1	<1	<u> </u>
Nickel	ppm	ASTM D5185m	>2	0	0	2
Titanium	ppm	ASTM D5185m	>2	0	0	4
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>25	2	2	<u> </u>
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	4	9	68
Tin	ppm	ASTM D5185m	>15	<1	0	<u> </u>
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
Oddillalli	ppiii	AO INI DO IOSIII		U	U	O
ADDITIVES	ppiii	method	limit/base	current	history1	history2
	ppm		limit/base			
ADDITIVES		method ASTM D5185m		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	0	current 47	history1	history2
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	0	current 47 0	history1 38 2	history2 32 0
ADDITIVES Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	0	current 47 0 42	history1 38 2 35	history2 32 0 40
ADDITIVES  Boron  Barium  Molybdenum  Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 47 0 42 2	history1  38  2  35  3	history2 32 0 40 6
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 47 0 42 2 633	history1  38  2  35  3  454	history2 32 0 40 6 517
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 47 0 42 2 633 2063	history1  38  2  35  3  454  1866	history2 32 0 40 6 517 1629
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus	ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	0 0 0	current 47 0 42 2 633 2063 879	history1  38  2  35  3  454  1866  699	history2 32 0 40 6 517 1629 725
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0	current 47 0 42 2 633 2063 879 1114	history1  38  2  35  3  454  1866 699  908	history2  32  0  40  6  517  1629  725  846
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0	current 47 0 42 2 633 2063 879 1114 2695	history1  38  2  35  3  454  1866  699  908  3463	history2  32  0  40  6  517  1629  725  846  2313
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0	current  47  0  42  2  633  2063  879  1114  2695  current	history1  38  2  35  3  454  1866 699  908 3463  history1	history2  32  0 40 6 517 1629 725 846 2313 history2
ADDITIVES  Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 	current 47 0 42 2 633 2063 879 1114 2695 current 7	history1  38  2  35  3  454  1866 699  908 3463  history1  10	history2  32  0  40  6  517  1629  725  846  2313  history2
ADDITIVES  Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	0 0 0 0 	current  47  0  42  2  633  2063  879  1114  2695  current  7  5	history1  38  2  35  3  454  1866  699  908  3463  history1  10  <1	history2  32 0 40 6 517 1629 725 846 2313 history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 	current 47 0 42 2 633 2063 879 1114 2695 current 7 5	history1  38  2  35  3  454  1866 699  908 3463  history1  10  <1  0	history2  32  0 40 6 517 1629 725 846 2313 history2  267 20 20
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	0 0 0 0 0 limit/base >25 >20 limit/base >3	current  47  0  42  2  633  2063  879  1114  2695  current  7  5  2  current	history1  38  2  35  3  454  1866 699  908 3463  history1  10  <1 0  history1	history2  32  0  40  6  517  1629  725  846  2313  history2  267  20  history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  INFRA-RED  Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 limit/base >25 >20 limit/base >3	current 47 0 42 2 633 2063 879 1114 2695 current 7 5 2 current	history1  38  2  35  3  454  1866 699  908 3463  history1  10  <1  0  history1  0.1	history2  32  0  40  6  517  1629  725  846  2313  history2  267  20  20  history2  0.3
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  INFRA-RED  Soot %  Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m  method  ASTM D5185m ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m	0 0 0 0 0 limit/base >25 >20 limit/base >3 >20	current 47 0 42 2 633 2063 879 1114 2695 current 7 5 2 current 0.2 9.6	history1  38  2  35  3  454  1866 699  908 3463  history1  10  <1  0  history1  0.1  7.2	history2  32 0 40 6 517 1629 725 846 2313 history2  267 20 20 history2 0.3 8.4
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m  method  *ASTM D5185m  *ASTM D5185m  *ASTM D5185m  *ASTM D5185m  *ASTM D5185m  *ASTM D5185m  *ASTM D7844  *ASTM D7624  *ASTM D76185m	0 0 0 0 0 limit/base >25 >20 limit/base >3 >20 >30	current  47  0  42  2  633  2063  879  1114  2695  current  7  5  2  current  0.2  9.6  22.8	history1  38  2  35  3  454  1866 699  908 3463  history1  10  <1  0  history1  0.1  7.2  21.4	history2  32 0 40 6 517 1629 725 846 2313 history2  267 20 20 history2 0.3 8.4 25.3



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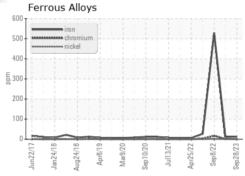


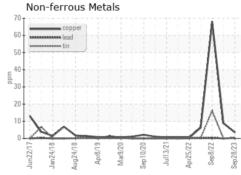


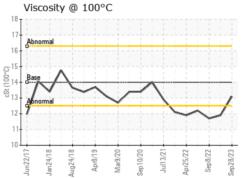
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

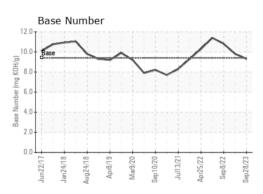
FLUID FNOFENTIES		memou			HISTORY	HISTORYZ	
Visc @ 100°C	cSt	ASTM D445	14	13.1	11.9	<u> </u>	

## **GRAPHS**













Laboratory Sample No. Lab Number

Unique Number : 10675104

: WC0833807 : 05968553

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

: 04 Oct 2023 : 04 Oct 2023 Diagnostician : Wes Davis

Test Package : CONST ( Additional Tests: TBN )

To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - 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)

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