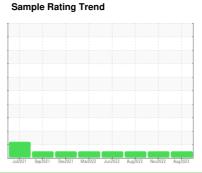


## **OIL ANALYSIS REPORT**

# OKLAHOMA/102/EG - SKID STEER 53.152L [OKLAHOMA^102^EG - SKID STEER]

**Diesel Engine** 

MOBIL DELVAC 1300 SUPER15W40 (4 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

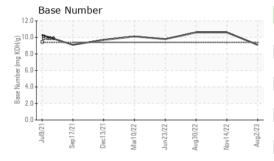
## **Fluid Condition**

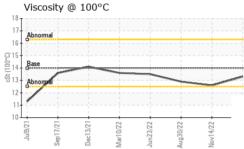
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	/ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0808065	WC0746338	WC0702109
Sample Date		Client Info		02 Aug 2023	14 Nov 2022	30 Aug 2022
Machine Age	hrs	Client Info		2295	1979	1706
Oil Age	hrs	Client Info		325	273	292
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	V	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	11	9	7
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	1	2	2
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	1	<1	<1
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
Gauriiuiii	ррпп	AOTNI DOTOSIII		U	U	U
ADDITIVES	ррш	method	limit/base	current	history1	history2
	ppm		limit/base			
ADDITIVES		method		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	0	current 45	history1	history2 27
ADDITIVES Boron Barium	ppm	method ASTM D5185m ASTM D5185m	0	current 45	history1 36 2 41 <1	history2 27 <1
ADDITIVES Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	0	current 45 2 47	history1 36 2 41	history2 27 <1 40
ADDITIVES  Boron  Barium  Molybdenum  Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	current 45 2 47 <1	history1 36 2 41 <1	history2 27 <1 40 <1
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 45 2 47 <1 521 1835 775	history1  36  2  41  <1  463	history2 27 <1 40 <1 486
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc	ppm ppm ppm ppm ppm	method  ASTM D5185m	0 0 0	current 45 2 47 <1 521 1835	history1  36 2 41 <1 463 1693 714 911	history2  27  <1  40  <1  486  1692  719  919
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	0 0 0	current 45 2 47 <1 521 1835 775	history1  36 2 41 <1 463 1693 714	history2 27 <1 40 <1 486 1692 719
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  45 2 47 <1 521 1835 775 976 2649 current	history1  36 2 41 <1 463 1693 714 911 2630 history1	history2  27  <1  40  <1  486  1692  719  919  2414  history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0	current  45 2 47 <1 521 1835 775 976 2649  current 4	history1  36  2  41  <1  463  1693  714  911  2630  history1  4	history2 27 <1 40 <1 486 1692 719 919 2414 history2 4
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 Iimit/base	current  45 2 47 <1 521 1835 775 976 2649  current  4	history1  36 2 41 <1 463 1693 714 911 2630 history1 4 <1	history2  27  <1  40  <1  486  1692  719  919  2414  history2  4  <1
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 0 Iimit/base	current  45 2 47 <1 521 1835 775 976 2649  current 4	history1  36  2  41  <1  463  1693  714  911  2630  history1  4	history2  27  <1  40  <1  486  1692  719  919  2414  history2  4
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 Iimit/base	current  45 2 47 <1 521 1835 775 976 2649  current  4	history1  36 2 41 <1 463 1693 714 911 2630 history1 4 <1	history2  27  <1  40  <1  486  1692  719  919  2414  history2  4  <1
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 limit/base >25 >20	current  45 2 47 <1 521 1835 775 976 2649  current  4 0 1	history1  36  2  41  <1  463  1693  714  911  2630  history1  4  <1  1	history2 27 <1 40 <1 486 1692 719 919 2414 history2 4 <1 0
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  method	0 0 0 0 0 limit/base >25 >20 limit/base >3	current  45 2 47 <1 521 1835 775 976 2649  current  4 0 1	history1  36 2 41 <1 463 1693 714 911 2630 history1 4 <1 1	history2  27  <1  40  <1  486  1692  719  919  2414  history2  4  <1  0  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	0 0 0 0 0 limit/base >25 >20 limit/base >3	current  45 2 47 <1 521 1835 775 976 2649 current 4 0 1 current 0.3	history1  36  2  41  <1  463  1693  714  911  2630  history1  4  <1  1  history1  0.3	history2  27  <1  40  <1  486  1692  719  919  2414  history2  4  <1  0  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	0 0 0 0 limit/base >25 >20 limit/base >3 >20	current  45 2 47 <1 521 1835 775 976 2649  current 4 0 1  current 0.3 9.1	history1  36  2  41  <1  463  1693  714  911  2630  history1  4  <1  1  history1  0.3  9.0	history2 27 <1 40 <1 486 1692 719 919 2414 history2 4 <1 0 history2 0.3 8.0
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 D5185m  *ASTM D5185m  *ASTM D7844  *ASTM D7624  *ASTM D7415	0 0 0 0 0 limit/base >25 >20 limit/base >3 >20 >30	current  45 2 47 <1 521 1835 775 976 2649 current 4 0 1 current 0.3 9.1 23.1	history1  36  2  41  <1  463  1693  714  911  2630  history1  4  <1  1  history1  0.3  9.0  24.4	history2  27  <1  40  <1  486  1692  719  919  2414  history2  4  <1  0  history2  0.3  8.0  24.4



## **OIL ANALYSIS REPORT**

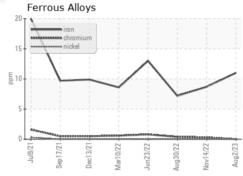


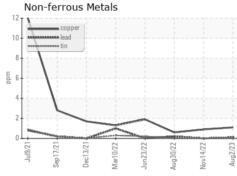


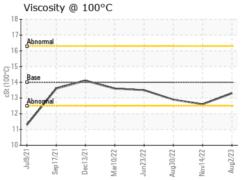
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

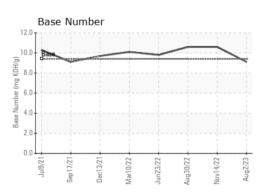
FLUID PROPERT	IES	method			history1	history2
Visc @ 100°C	cSt	ASTM D445	14	13.3	12.6	12.9

### **GRAPHS**













Laboratory Sample No. Lab Number Unique Number : 10603198

: 05923251

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0808065 Received Diagnosed

Diagnostician : Wes Davis

: 15 Aug 2023

: 14 Aug 2023

3219 WEST MAY ST WICHITA, KS US 67213 Contact: DOUG KING

SHERWOOD CONSTRUCTION CO INC

doug.king@sherwood.net T: (316)617-3161 F: x:

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)