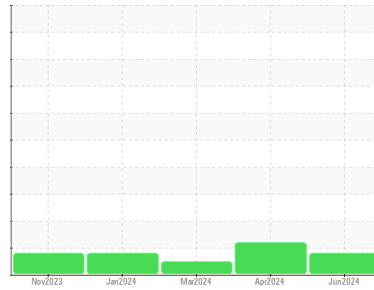


# OIL ANALYSIS REPORT



Machine Id  
**CATERPILLAR 775F HAUL TRUCK 6151 (S/N DLS00524)**  
Component  
**Diesel Engine**  
Fluid  
**TULCO LUBSOIL CK-4 15W40 (--- GAL)**

Sample Rating Trend



**FUEL**



## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Light fuel dilution occurring. No other contaminants were detected 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.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>TO10002115</b>	TO10003022	TO10003136
Sample Date	Client Info		<b>01 Jun 2024</b>	20 Apr 2024	08 Mar 2024
Machine Age	hrs	Client Info	<b>1911</b>	1657	1351
Oil Age	hrs	Client Info	<b>254</b>	584	278
Oil Changed	Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status			<b>MARGINAL</b>	ABNORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>10</b>	18	9
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m >2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m >2	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	3	2
Lead	ppm	ASTM D5185m >40	<b>0</b>	2	1
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	2	2
Tin	ppm	ASTM D5185m >15	<b>0</b>	2	1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>&lt;1</b>	6	7
Barium	ppm	ASTM D5185m	<b>0</b>	0	1
Molybdenum	ppm	ASTM D5185m 65	<b>63</b>	63	60
Manganese	ppm	ASTM D5185m	<b>0</b>	0	1
Magnesium	ppm	ASTM D5185m 1060	<b>1093</b>	1000	908
Calcium	ppm	ASTM D5185m 1140	<b>1265</b>	1171	1090
Phosphorus	ppm	ASTM D5185m 1170	<b>1224</b>	1203	1021
Zinc	ppm	ASTM D5185m 1230	<b>1436</b>	1323	1211
Sulfur	ppm	ASTM D5185m 3130	<b>4562</b>	3772	3640

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>3</b>	6	5
Sodium	ppm	ASTM D5185m	<b>1</b>	2	<1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	3	2
Fuel	%	ASTM D3524 >5	<b>▲ 4.0</b>	▲ 5.0	<1.0

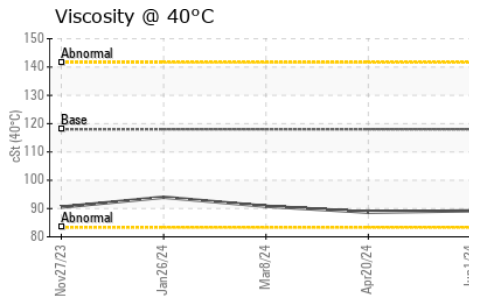
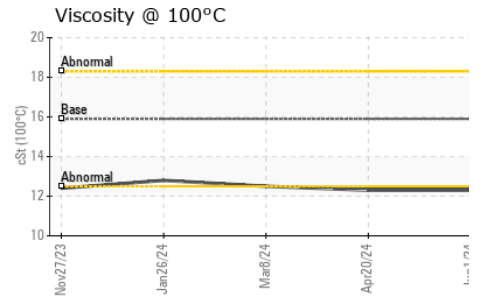
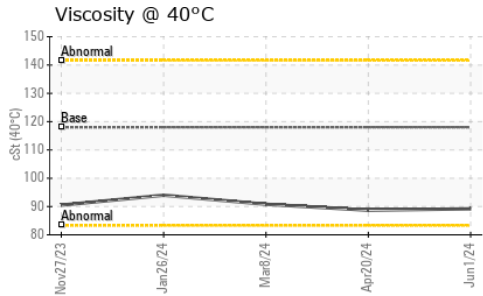
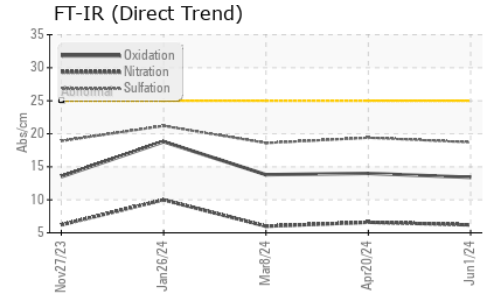
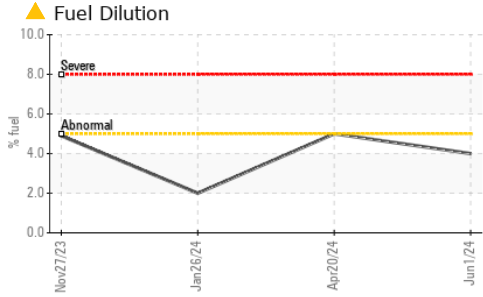
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.5</b>	0.7	0.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.2</b>	6.6	6.0
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.7</b>	19.4	18.6

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.4</b>	14.0	13.8
Base Number (BN)	mg KOH/g	ASTM D2896 10.8	<b>10.28</b>	10.51	10.34

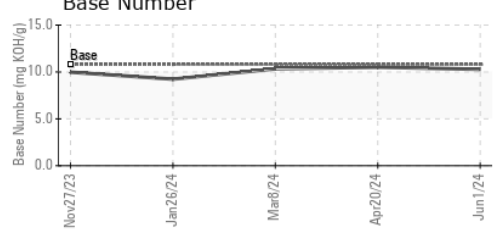
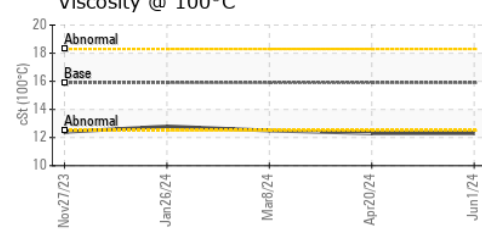
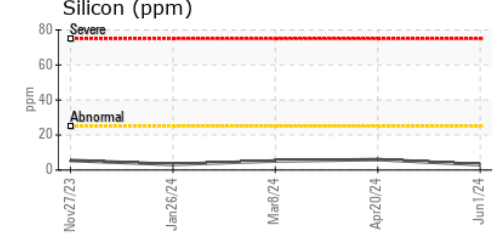
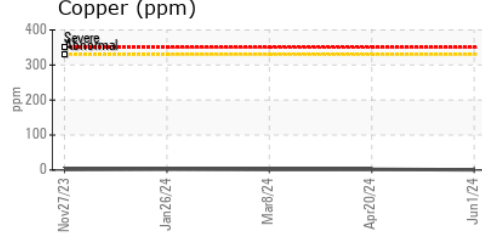
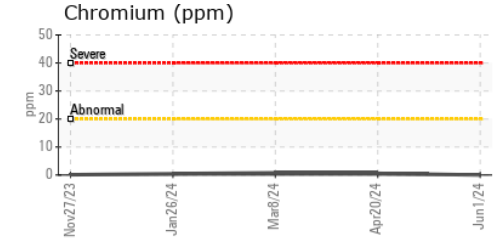
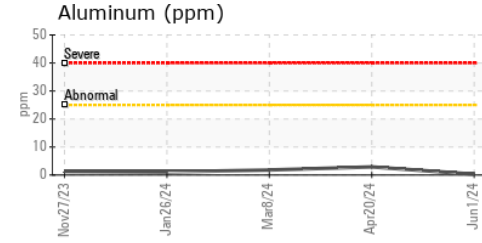
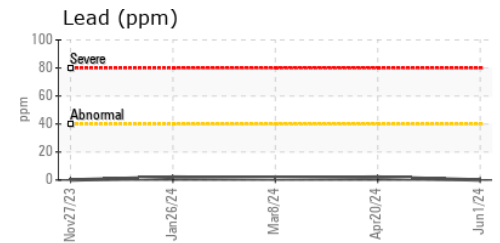
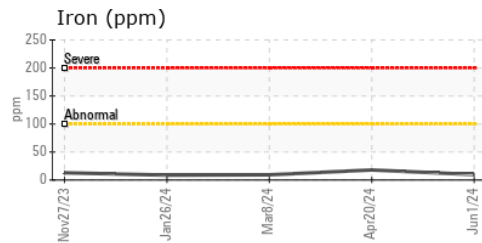
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	118	89.2	88.7	90.8
Visc @ 100°C	cSt	ASTM D445	15.9	12.3	12.3	12.5
Viscosity Index (VI)	Scale	ASTM D2270	143	132	133	133

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO10002115      **Received** : 07 Jun 2024  
**Lab Number** : 06203523      **Tested** : 12 Jun 2024  
**Unique Number** : 11070984      **Diagnosed** : 12 Jun 2024 - Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: KV40, PercentFuel, VI )

**ANCHOR STONE TULSA ROCK**  
 TULSA ROCK QUARRY, 66TH ST N 145TH AVENUE  
 TULSA, OK 74137  
 Contact: SKIP SAENGERHAUSEN  
 skip@anchorstoneco.com  
 T: (918)928-4575  
 F:

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)