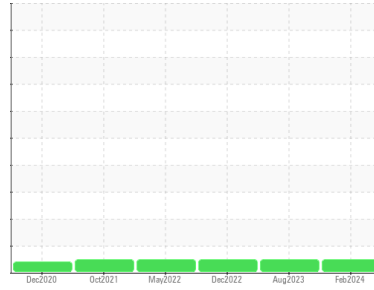


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**DT35**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- QTS)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### 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.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PCA0110858</b>	PCA0100060	PCA0087401
Sample Date	Client Info		<b>16 Feb 2024</b>	01 Aug 2023	14 Dec 2022
Machine Age	mls	Client Info	<b>205945</b>	178627	150343
Oil Age	mls	Client Info	<b>25000</b>	150343	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

### CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
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>19</b>	20	27
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >20	<b>6</b>	7	10
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >330	<b>1</b>	2	2
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	<b>3</b>	2	3
Barium	ppm	ASTM D5185m 0	<b>3</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>65</b>	69	69
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 950	<b>887</b>	1018	998
Calcium	ppm	ASTM D5185m 1050	<b>1105</b>	1225	1280
Phosphorus	ppm	ASTM D5185m 995	<b>1032</b>	1045	1112
Zinc	ppm	ASTM D5185m 1180	<b>1217</b>	1310	1354
Sulfur	ppm	ASTM D5185m 2600	<b>2983</b>	3380	3658

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>6</b>	6	6
Sodium	ppm	ASTM D5185m	<b>0</b>	2	0
Potassium	ppm	ASTM D5185m >20	<b>8</b>	8	19

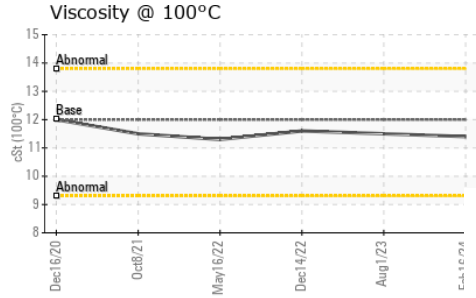
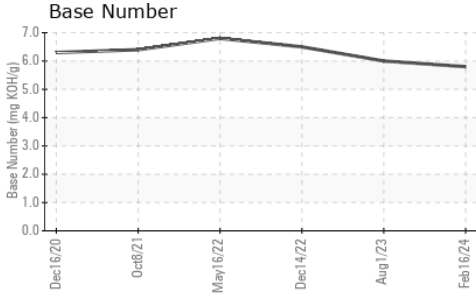
### INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.8</b>	0.7	0.9
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.7</b>	10.1	13.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>23.1</b>	21.9	26.1

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>19.6</b>	17.8	22.4
Base Number (BN)	mg KOH/g	ASTM D2896	<b>5.8</b>	6.0	6.5

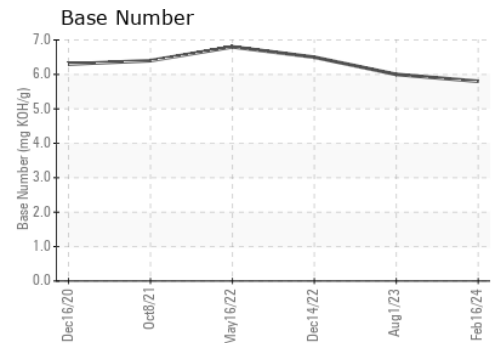
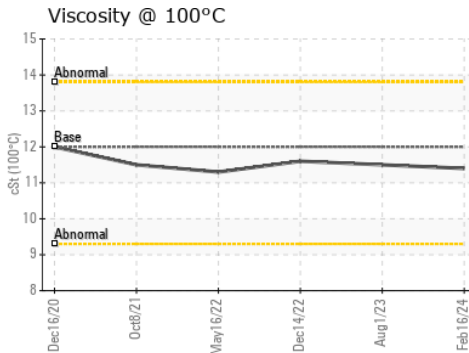
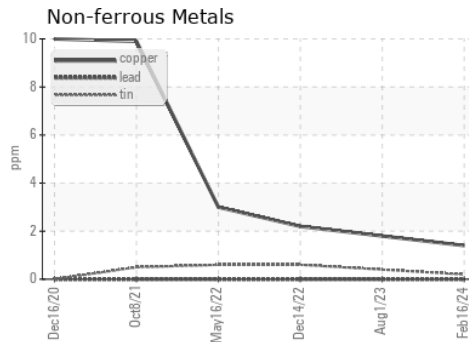
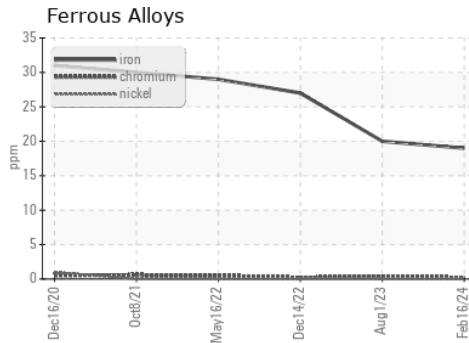
# OIL ANALYSIS REPORT



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 @ 100°C	cSt	ASTM D445	12.00	<b>11.4</b>	11.5	11.6

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0110858  
**Lab Number** : 06094036  
**Unique Number** : 10886889  
**Test Package** : FLEET

**Received** : 20 Feb 2024  
**Tested** : 21 Feb 2024  
**Diagnosed** : 21 Feb 2024 - Wes Davis

**HK STEEL INC**  
 400 N PARSON ST  
 WEST COLUMBIA, SC  
 US 29169  
 Contact: GEORGE EDWARDS  
 gedwards@nwwhite.com

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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F: