

## **OIL ANALYSIS REPORT**

Sample Rating Trend





Component Rear Differential

CHEVRON DELO SYNTHETIC GEAR 75W90 (--- QTS)

### DIAGNOSIS

#### A 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

Moderate concentration of visible dirt/debris present in the oil.

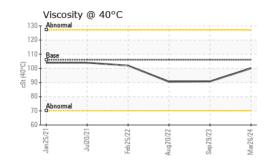
#### Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0120022	PCA0107490	PCA0079538
Sample Date		Client Info		26 Mar 2024	29 Sep 2023	20 Aug 2022
Machine Age	mls	Client Info		180058	153864	77632
Oil Age	mls	Client Info		153864	75000	0
Oil Changed		Client Info		Not Changd	Changed	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL
CONTAMINATI	ION	method	limit/base	current	history1	history2
Water		WC Method	>.2	NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	39	113	56
Chromium	ppm	ASTM D5185m	>10	<1	1	<1
Nickel	ppm	ASTM D5185m	>10	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		<1	0	<1
Aluminum	ppm	ASTM D5185m	>25	2	4	2
Lead	ppm	ASTM D5185m		_ <1	0	0
Copper	ppm	ASTM D5185m		1	1	11
Tin	ppm	ASTM D5185m		، <1	<1	<1
Vanadium	ppm	ASTM D5185m	~10	<1	0	0
Cadmium		ASTM D5185m		<1 <1	0	<1
	ppm					
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		214	223	251
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		10	10	11
Manganese	ppm	ASTM D5185m		2	5	5
Magnesium	ppm	ASTM D5185m		70	77	76
Calcium	ppm	ASTM D5185m		157	127	123
Phosphorus	ppm	ASTM D5185m		1210	1380	1344
Zinc	ppm	LOTH DEVOE				
o ''	1-1-	ASTM D5185m		135	118	124
Sulfur	ppm	ASTM D5185m ASTM D5185m		135 21904	118 22624	124 23770
Sulfur CONTAMINAN	ppm		limit/base			
	ppm	ASTM D5185m		21904	22624	23770
CONTAMINAN <sup>®</sup> Silicon	ppm TS ppm	ASTM D5185m method	>75	21904 current	22624 history1	23770 history2
CONTAMINAN	ppm TS ppm	ASTM D5185m method ASTM D5185m	>75	21904 current 16	22624 history1 25	23770 history2 19
CONTAMINAN Silicon Sodium	ppm TS ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	>75	21904 current 16 0	22624 history1 25 2	23770 history2 19 1
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm TS ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20	21904 current 16 0 1 current NONE	22624 history1 25 2 <1	23770 history2 19 1 1 1 history2 VLITE
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm TS ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method	>75 >20 limit/base	21904 current 16 0 1 current	22624 history1 25 2 <1 history1	23770 history2 19 1 1 1 history2
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm TS ppm ppm ppm scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	>75 >20 limit/base NONE	21904 current 16 0 1 current NONE	22624 history1 25 2 <1 history1 NONE	23770 history2 19 1 1 1 history2 VLITE
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm TS ppm ppm ppm scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual	>75 >20 limit/base NONE NONE	21904 current 16 0 1 1 current NONE NONE	22624 history1 25 2 <1 history1 NONE NONE	23770 history2 19 1 1 1 history2 VLITE NONE
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm TS ppm ppm ppm scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	>75 >20 limit/base NONE NONE NONE	21904 current 16 0 1 1 current NONE NONE NONE	22624 history1 25 2 <1 history1 NONE NONE NONE	23770 history2 19 1 1 1 history2 VLITE NONE NONE
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm TS ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	>75 >20 limit/base NONE NONE NONE NONE	21904 current 16 0 1 current NONE NONE NONE NONE NONE	22624 history1 25 2 <1 history1 NONE NONE NONE NONE NONE	23770 history2 19 1 1 1 history2 VLITE NONE NONE NONE
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm TS ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	>75 >20 limit/base NONE NONE NONE NONE NONE	21904 current 16 0 1 current NONE NONE NONE NONE NONE NONE NONE	22624 history1 25 2 <1 history1 NONE NONE NONE NONE LIGHT	23770 history2 19 1 1 history2 VLITE NONE NONE NONE NONE
CONTAMINAN' Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm TS ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>75 >20 limit/base NONE NONE NONE NONE NONE NONE	21904 current 16 0 1 current NONE NONE NONE NONE NONE NONE NONE NONE	22624 history1 25 2 <1 history1 NONE NONE NONE NONE LIGHT NONE	23770 history2 19 1 1 history2 VLITE NONE NONE NONE NONE NONE
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm TS ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>75 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NONE	21904 current 16 0 1 current NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE	22624 history1 25 2 <1 NONE NONE NONE NONE LIGHT NONE NONE NONE NONE	23770 history2 19 1 1 history2 VLITE NONE NONE NONE NONE NONE NONE NONE
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm TS ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>75 )20 limit/base NONE NONE NONE NONE NONE NORML NORML	21904 current 16 0 1 current NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE	22624 history1 25 2 <1 NONE NONE NONE NONE LIGHT NONE LIGHT NONE NORML NORML	23770 history2 19 1 1 history2 VLITE NONE NONE NONE NONE NONE NONE NONE NO

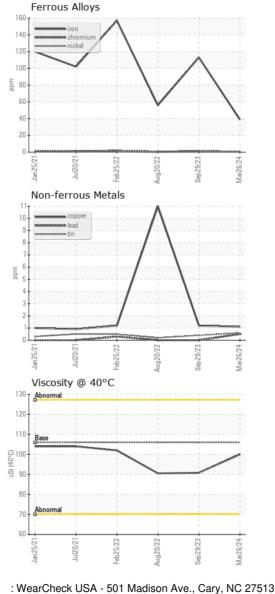


# **OIL ANALYSIS REPORT**



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	106	100	90.8	90.5
SAMPLE IMA	GES	method	limit/base	current	history1	history2
Color				no image	no image	no image
Bottom				no image	no image	no image





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

Test Package : FLEET To discuss this sample report, contact Customer Service at 1-800-237-1369.

: PCA0120022

\* - 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)

Received

Diagnosed

Tested

: 28 Mar 2024

: 29 Mar 2024

: 02 Apr 2024 - Sean Felton

Certificate L2367

Laboratory Sample No.

Lab Number : 06132354

Unique Number : 10951819

Т:

F: