

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



RANDY W DECK

Component Genset

Fluid CHEVRON DELO 400 MULTIGRADE 15W40 (--- 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.

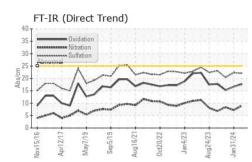
Fluid Condition

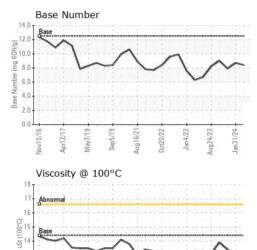
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0759610	WC0759636	WC0720226
Sample Date		Client Info		29 Mar 2024	31 Jan 2024	06 Nov 2023
Machine Age	hrs	Client Info		8071	7624	6762
Oil Age	hrs	Client Info		500	500	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	J	method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	9	6	21
Chromium	ppm	ASTM D5185m	>4	<1	0	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m		3	<1	3
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>12	5	5	5
Lead	ppm	ASTM D5185m	>17	0	1	0
Copper	ppm	ASTM D5185m	>70	2	<1	2
Tin	ppm	ASTM D5185m	>15	<1	1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base 151	current 264	history1 385	history2 108
	ppm ppm					
Boron		ASTM D5185m	151	264	385	108
Boron Barium	ppm	ASTM D5185m ASTM D5185m	151 0.4	264 0	385 0	108 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	151 0.4	264 0 124	385 0 134	108 0 113
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	151 0.4 250	264 0 124 <1 674 1701	385 0 134 <1	108 0 113 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	151 0.4 250 0 2046 1043	264 0 124 <1 674	385 0 134 <1 759 1788 862	108 0 113 <1 700 1668 806
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	151 0.4 250 0 2046 1043 943	264 0 124 <1 674 1701	385 0 134 <1 759 1788 862 1074	108 0 113 <1 700 1668 806 978
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	151 0.4 250 0 2046 1043	264 0 124 <1 674 1701 818	385 0 134 <1 759 1788 862	108 0 113 <1 700 1668 806
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	151 0.4 250 0 2046 1043 943	264 0 124 <1 674 1701 818 939	385 0 134 <1 759 1788 862 1074 3132 history1	108 0 113 <1 700 1668 806 978
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	151 0.4 250 0 2046 1043 943 5012	264 0 124 <1 674 1701 818 939 3069 current 7	385 0 134 <1 759 1788 862 1074 3132 history1 6	108 0 113 <1 700 1668 806 978 2910 history2 7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	151 0.4 250 0 2046 1043 943 5012 limit/base >25	264 0 124 <1 674 1701 818 939 3069 current 7 7 7	385 0 134 <1 759 1788 862 1074 3132 history1 6 <1	108 0 113 <1 700 1668 806 978 2910 history2 7 2
Boron Barium Molybdenum Manganese Magnesium Calcium Chosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	151 0.4 250 0 2046 1043 943 5012 limit/base >25 >20	264 0 124 <1 674 1701 818 939 3069 current 7	385 0 134 <1 759 1788 862 1074 3132 history1 6	108 0 113 <1 700 1668 806 978 2910 history2 7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	151 0.4 250 0 2046 1043 943 5012 limit/base >25	264 0 124 <1 674 1701 818 939 3069 current 7 7 3 3	385 0 134 <1 759 1788 862 1074 3132 history1 6 <1 <1 <1 history1	108 0 113 <1 700 1668 806 978 2910 history2 7 2 2 2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm i ppm i	ASTM D5185m ASTM D5185m	151 0.4 250 0 2046 1043 943 5012 limit/base >25 >20	264 0 124 <1 674 1701 818 939 3069 <u>current</u> 7 7 3 <u>current</u> 0.1	385 0 134 <1 759 1788 862 1074 3132 history1 6 <1 <1 <1 history1 0.1	108 0 113 <1 700 1668 806 978 2910 history2 7 2 2 2 history2 0.7
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	ASTM D5185m ASTM D5185m	151 0.4 250 0 2046 1043 943 5012 <i>imit/base</i> >25 >20 <i>imit/base</i>	264 0 124 <1 674 1701 818 939 3069 current 7 7 7 3 current 0.1 9.0	385 0 134 <1 759 1788 862 1074 3132 history1 6 <1 <1 <1 history1 0.1 7.2	108 0 113 <1 700 1668 806 978 2910 history2 7 2 2 2 history2 0.7 8.4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm i ppm i	ASTM D5185m ASTM D5185m	151 0.4 250 0 2046 1043 943 5012 limit/base >25 >20	264 0 124 <1 674 1701 818 939 3069 <u>current</u> 7 7 3 <u>current</u> 0.1	385 0 134 <1 759 1788 862 1074 3132 history1 6 <1 <1 <1 history1 0.1	108 0 113 <1 700 1668 806 978 2910 history2 7 2 2 2 history2 0.7
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	ASTM D5185m ASTM D5185m	151 0.4 250 0 2046 1043 943 5012 <i>imit/base</i> >25 >20 <i>imit/base</i>	264 0 124 <1 674 1701 818 939 3069 current 7 7 7 3 current 0.1 9.0	385 0 134 <1 759 1788 862 1074 3132 history1 6 <1 <1 <1 history1 0.1 7.2	108 0 113 <1 700 1668 806 978 2910 history2 7 2 2 2 history2 0.7 8.4
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	ASTM D5185m ASTM D5185m	151 0.4 250 0 2046 1043 943 5012 imit/base >25 imit/base >20 imit/base	264 0 124 <1 674 1701 818 939 3069 <u>current</u> 7 7 3 3 <u>current</u> 0.1 9.0 22.0	385 0 134 <1 759 1788 862 1074 3132 history1 6 <1 <1 <1 kistory1 0.1 7.2 22.3	108 0 113 <1 700 1668 806 978 2910 history2 7 2 2 2 history2 0.7 8.4 20.4



OIL ANALYSIS REPORT





ug16/21.

en5/19

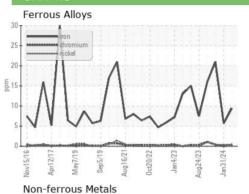
Jan4/23

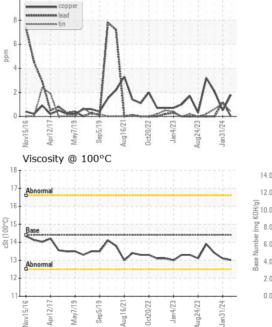
ug24/23 Jan31/24

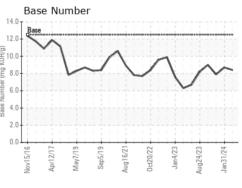
VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT		method	limit/base	current	history1	history2
1 LOID I NOI LIN		methou	iiiiii/base	current	nistory i	TIStory2
Visc @ 100°C	cSt	ASTM D445	14.4	13.0	13.1	13.4

GRAPHS

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ASSOCIATED TERMINALS - CRANE

CONVENT, LA US 70723 Contact: GREG JOSEY gjosey@associatedterminals.com T:

Abnormal

Nov15/16

Apr12/17

Lab Number : 06155124 Tested : 22 Apr 2024 Unique Number : 10990547 Diagnosed : 22 Apr 2024 - Wes Davis Test Package : FLEET Certificate 12367 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) F: (225)562-3515

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

Received

: 19 Apr 2024

Report Id: STJCONKL [WUSCAR] 06155124 (Generated: 04/23/2024 01:18:27) Rev: 1

Laboratory

Sample No.

: WC0759610

Contact/Location: GREG JOSEY - STJCONKL