

# **PROBLEM SUMMARY**

# Sample Rating Trend

1/2019 Jan/2020 May/2020 Feb/2021 Jul/2021 Jan/2029 Jul-2029 Jul-2029 July

# VISCOSITY

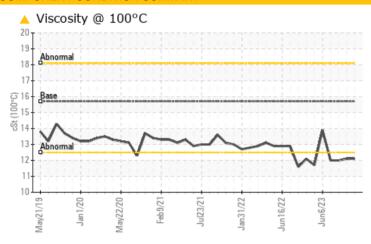
# VISCOSITY

# ERNA E HONEYCUTT Machine Id [ERNA E HONEYCUTT] 007 641346-7

**Port Genset** 

**CHEVRON DELO 400 LE 15W40 (--- GAL)** 

## **COMPONENT CONDITION SUMMARY**



#### RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS							
Sample Status				ATTENTION	ATTENTION	NORMAL	
Visc @ 100°C	cSt	ASTM D445	15.7	<b>12.1</b>	<u>▲</u> 12.1	12.0	

Customer Id: INGPAD Sample No.: MW0052565 Lab Number: 06028298 Test Package: MAR 2



To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

#### **RECOMMENDED ACTIONS**

There are no recommended actions for this sample.

#### HISTORICAL DIAGNOSIS

#### 31 Oct 2023 Diag: Sean Felton

#### VISCOSITY



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



#### 23 Aug 2023 Diag: Wes Davis

#### NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

# view report

# 20 Jul 2023 Diag: Wes Davis

#### FUEL



The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



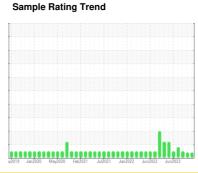


# **OIL ANALYSIS REPORT**

# ERNA E HONEYCUTT [ERNA E HONEYCUTT] 007 641346-7

**Port Genset** 

CHEVRON DELO 400 LE 15W40 (--- 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

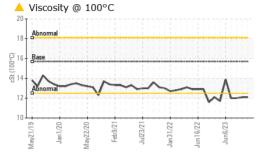
#### ▲ Fluid Condition

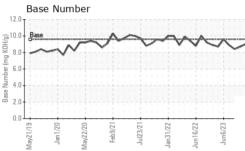
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		MW0052565	MW0043041	MW0054370
Sample Date		Client Info		01 Dec 2023	31 Oct 2023	23 Aug 2023
Machine Age	hrs	Client Info		3565	3267	2414
Oil Age	hrs	Client Info		298	409	406
Oil Changed		Client Info		Not Changd	N/A	N/A
Sample Status				ATTENTION	ATTENTION	NORMAL
CONTAMINATION	V	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	<b>&gt;50</b>	7	4	7
Chromium	ppm	ASTM D5185m	>4	, <1	0	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	/L	<1	<1	<1
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m		4	3	2
Lead	ppm	ASTM D5185m	>17	0	0	0
Copper	ppm	ASTM D5185m		1	<1	0
Tin	ppm		>15	0	<1	<1
Vanadium	ppm	ASTM D5185m	710	0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
				U	U	0
ADDITIVES	1-1-	method	limit/base	current		
ADDITIVES  Boron		method	limit/base	current	history1	history2
Boron	ppm	method ASTM D5185m	limit/base	current 389	history1 279	history2 282
Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base	current 389 6	history1 279 0	history2 282
Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 389 6 133	history1 279 0 111	history2 282 0 122
Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	389 6 133	history1 279 0 111	history2 282 0 122
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 389 6 133 1 652	history1 279 0 111 1 620	history2 282 0 122 1 650
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m		current 389 6 133 1 652 1589	history1 279 0 111 1 620 1485	history2 282 0 122 1 650 1540
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	1200	current  389  6  133  1  652  1589  713	history1 279 0 111 1 620 1485 598	history2 282 0 122 1 650 1540 670
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m		current 389 6 133 1 652 1589	history1 279 0 111 1 620 1485	history2 282 0 122 1 650 1540
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	1200 1300	current 389 6 133 1 652 1589 713 844	history1  279  0 111 1 620 1485 598 801	history2 282 0 122 1 650 1540 670 778
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	1200 1300 3200	current  389 6 133 1 652 1589 713 844 2908 current	history1  279  0 111  1 620 1485 598  801 2375	history2  282  0 122  1 650 1540 670 778 2883
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	1200 1300 3200 limit/base	current  389 6 133 1 652 1589 713 844 2908 current	history1  279  0 111  1 620 1485 598 801 2375 history1 5	history2  282  0 122  1 650 1540 670 778 2883 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	1200 1300 3200 limit/base	current  389 6 133 1 652 1589 713 844 2908 current	history1  279  0 111  1 620 1485 598 801 2375 history1	history2  282  0 122  1 650 1540 670 778 2883 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	1200 1300 3200 Iimit/base >25	current  389 6 133 1 652 1589 713 844 2908 current 9	history1 279 0 111 1 620 1485 598 801 2375 history1 5 <1	history2  282  0 122  1 650 1540 670 778 2883 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 ppm	method  ASTM D5185m	1200 1300 3200 limit/base >25 >20	current  389 6 133 1 652 1589 713 844 2908 current 9 1 2 current	history1  279  0 111  1 620 1485 598 801 2375 history1  5 <1 0 history1	history2  282  0 122  1 650 1540 670 778 2883 history2  7 1 0 history2
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	1200 1300 3200 Iimit/base >25 >20 Iimit/base	current  389 6 133 1 652 1589 713 844 2908 current 9 1 2 current 0.1	history1 279 0 111 1 620 1485 598 801 2375 history1 5 <1 0 history1 0.1	history2  282  0 122 1 650 1540 670 778 2883 history2 7 1 0 history2 0.1
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	1200 1300 3200 limit/base >25 >20	current  389 6 133 1 652 1589 713 844 2908 current 9 1 2 current	history1  279  0 111  1 620 1485 598 801 2375 history1  5 <1 0 history1	history2  282  0 122  1 650 1540 670 778 2883 history2  7 1 0 history2
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	1200 1300 3200 limit/base >25 >20 limit/base	current  389 6 133 1 652 1589 713 844 2908 current 9 1 2 current 0.1 6.7	history1 279 0 111 1 620 1485 598 801 2375 history1 5 <1 0 history1 0.1 7.0	history2  282  0 122  1 650 1540 670 778 2883 history2 7 1 0 history2 0.1 8.1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m  method  ASTM D5185m ASTM D5185m  method  *ASTM D5185m  method  *ASTM D5185m  method  *ASTM D5185m  method	1200 1300 3200 Iimit/base >25 >20 Iimit/base	current  389 6 133 1 652 1589 713 844 2908 current 9 1 2 current 0.1 6.7 22.9 current	history1  279  0 111  1 620 1485 598 801 2375 history1  5 <1 0 history1  0.1 7.0 22.5 history1	history2  282  0 122  1 650 1540 670 778 2883 history2  7 1 0 history2 0.1 8.1 20.7 history2
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 D7844  *ASTM D7624  *ASTM D7415	1200 1300 3200 limit/base >25 >20 limit/base	current  389 6 133 1 652 1589 713 844 2908 current 9 1 2 current 0.1 6.7 22.9	history1 279 0 111 1 620 1485 598 801 2375 history1 5 <1 0 history1 0.1 7.0 22.5	history2  282  0 122  1 650 1540 670 778 2883 history2  7 1 0 history2 0.1 8.1 20.7



# **OIL ANALYSIS REPORT**



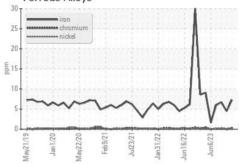


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

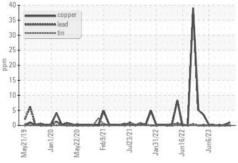
FLUID FROFER	TIES	method	IIIIII/Dase	Current	HISTORY	HISTORY
Visc @ 100°C	cSt	ASTM D445	15.7	<b>12.1</b>	<u> </u>	12.0

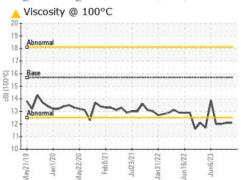
#### **GRAPHS**

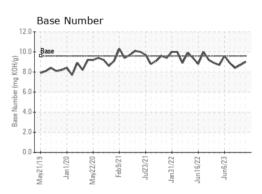
#### Ferrous Alloys















Certificate L2367

Laboratory Sample No. Lab Number

**Unique Number** 

: MW0052565 : 06028298 : 10778089 Test Package : MAR 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 07 Dec 2023

: 10 Dec 2023 Diagnosed Diagnostician : Don Baldridge

**INGRAM BARGE** 900 S 3RD ST PADUCAH, KY US 42003 Contact: JEFF BISHOP

jeff.bishop@ingrambarge.com

F: (615)695-3697

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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