

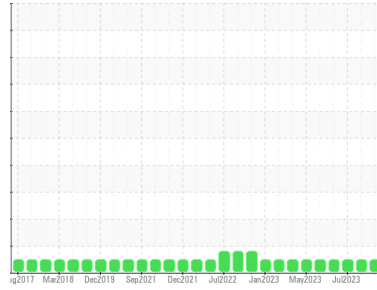


# OIL ANALYSIS REPORT



Area  
**IRIG [6105976]**  
 Machine Id  
**IRIG-GN-1104 IRIG-GN-1104 GENSET 4**  
 Component  
**Reservoir Genset**  
 Fluid  
**CHEVRON DELO 400 MULTIGRADE 15W40 (22 GAL)**

Sample Rating Trend



**NORMAL**

## 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>HLC0002827</b>	HLC0002740	HLC0002712
Sample Date	Client Info		<b>16 Sep 2023</b>	22 Aug 2023	31 Jul 2023
Machine Age	hrs	Client Info	<b>14080</b>	13580	13079
Oil Age	hrs	Client Info	<b>500</b>	500	500
Oil Changed	Client Info		<b>N/A</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>17</b>	10	14
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m >5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >12	<b>3</b>	3	<1
Lead	ppm	ASTM D5185m >17	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m >70	<b>1</b>	1	2
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 151	<b>76</b>	58	72
Barium	ppm	ASTM D5185m 0.4	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 250	<b>&lt;1</b>	<1	1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 0	<b>798</b>	598	825
Calcium	ppm	ASTM D5185m 2046	<b>1402</b>	1136	1475
Phosphorus	ppm	ASTM D5185m 1043	<b>743</b>	597	773
Zinc	ppm	ASTM D5185m 943	<b>868</b>	703	908
Sulfur	ppm	ASTM D5185m 5012	<b>3198</b>	2977	3877

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	4	4
Sodium	ppm	ASTM D5185m	<b>2</b>	2	5
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	4

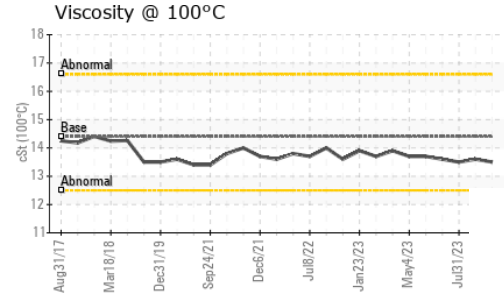
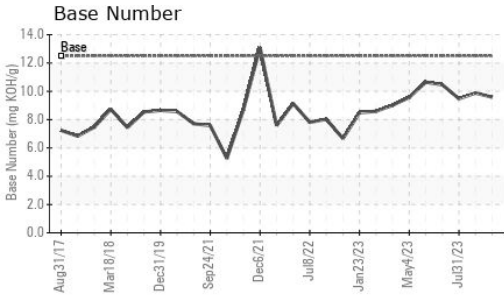
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0.4</b>	0	0.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.3</b>	9.4	8.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.4</b>	21.9	18.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>12.9</b>	14.7	13.1
Base Number (BN)	mg KOH/g	ASTM D2896 12.5	<b>9.59</b>	9.88	9.48

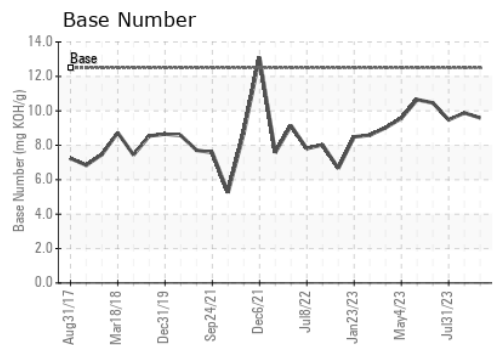
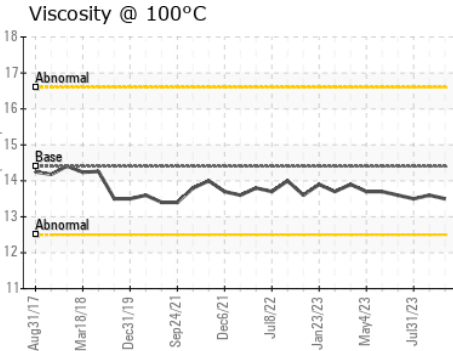
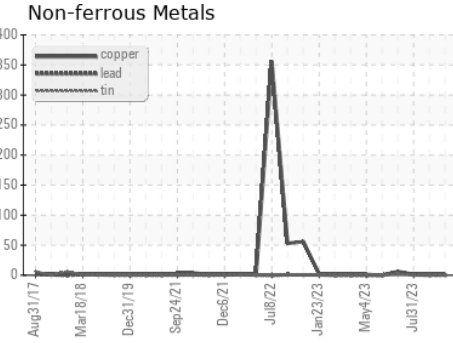
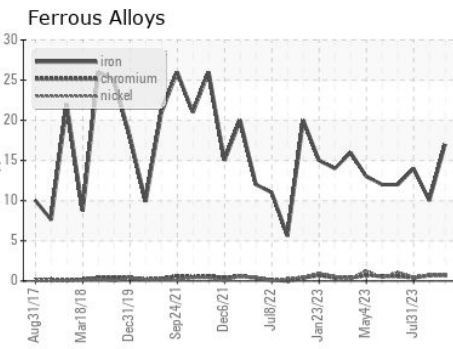
# OIL ANALYSIS REPORT



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	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.5</b>	13.6	13.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : HLC0002827 **Received** : 28 Sep 2023  
**Lab Number** : **05964308** **Diagnosed** : 02 Oct 2023  
**Unique Number** : 10670859 **Diagnostician** : Wes Davis  
**Test Package** : IND 2

**HILCORP EXPLORATION ALASKA - MILNE POINT**  
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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)