



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
K. SIMKE GUN DRILLING K05100
 Machine Id
A2312041
 Component
Cutting Fluid
 Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

Wear

Iron ppm levels are noted.

Contamination

{not applicable}

Fluid Condition

{not applicable}

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Batch #	Client Info		2023 11 0601	---	---
Machine ID	Client Info		A2312041	---	---
Department	Client Info		Production	---	---
Sample From	Client Info		Machine	---	---
Production Stage	Client Info		Final	---	---
Sent to WC	Client Info		12/05/2023	---	---
Sample Number	Client Info		E30000909	---	---
Sample Date	Client Info		05 Dec 2023	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			NORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	35	---	---
Chromium	ppm	ASTM D5185(m)	0	---	---
Nickel	ppm	ASTM D5185(m)	<1	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m)	<1	---	---
Aluminum	ppm	ASTM D5185(m)	1	---	---
Lead	ppm	ASTM D5185(m)	<1	---	---
Copper	ppm	ASTM D5185(m)	4	---	---
Tin	ppm	ASTM D5185(m)	0	---	---
Antimony	ppm	ASTM D5185(m)	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

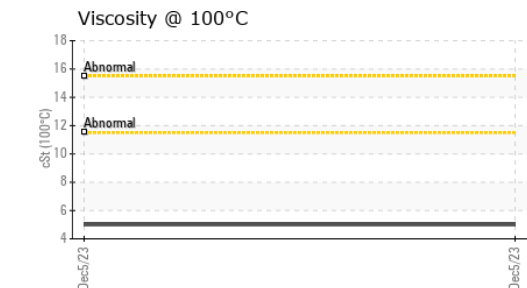
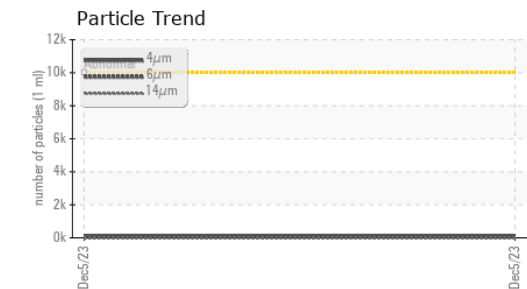
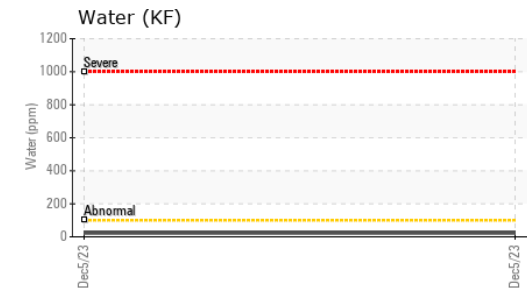
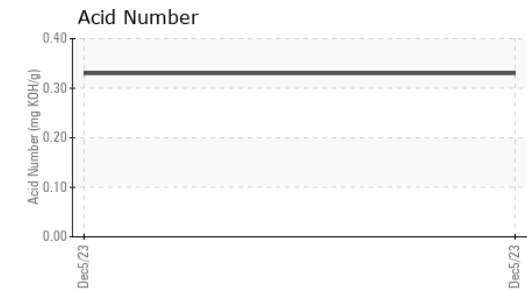
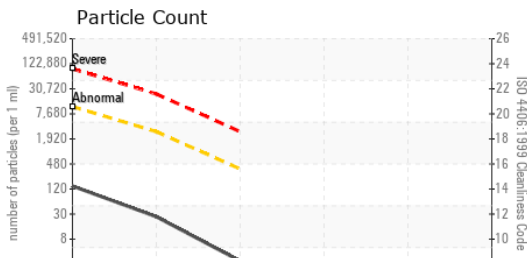
ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	1	---	---
Barium	ppm	ASTM D5185(m)	1	---	---
Molybdenum	ppm	ASTM D5185(m)	0	---	---
Manganese	ppm	ASTM D5185(m)	<1	---	---
Magnesium	ppm	ASTM D5185(m)	<1	---	---
Calcium	ppm	ASTM D5185(m)	12	---	---
Phosphorus	ppm	ASTM D5185(m)	51	---	---
Zinc	ppm	ASTM D5185(m)	14	---	---
Sulfur	ppm	ASTM D5185(m)	8451	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	1	---	---
Sodium	ppm	ASTM D5185(m)	6	---	---
Potassium	ppm	ASTM D5185(m) >20	2	---	---
Water	%	ASTM D6304*	0.002	---	---
ppm Water	ppm	ASTM D6304*	23	---	---

OIL ANALYSIS REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	125	---	---
Particles >6µm	ASTM D7647	>2500	23	---	---
Particles >14µm	ASTM D7647	>320	2	---	---
Particles >21µm	ASTM D7647	>80	1	---	---
Particles >38µm	ASTM D7647	>20	1	---	---
Particles >71µm	ASTM D7647	>4	0	---	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	14/12/9	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.33	---	---

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

FLUID PROPERTIES	method	limit/base	current	history1	history2
pH	Scale 0-14	ASTM D1287*	6.83	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	26.4	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	5	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	116	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30000909 **Received** : 13 Dec 2023
Lab Number : **02602844** **Diagnosed** : 15 Dec 2023
Unique Number : 5695929 **Diagnostician** : Tatiana Sorkina
Test Package : IND 2 (Additional Tests: KV100, PrtCount, VI)

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To discuss this sample report, contact Customer Service at 1-905-372-2251.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.