

## **OIL ANALYSIS REPORT**

Sample Rating Trend

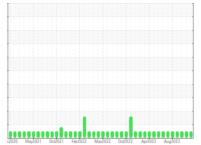
### NORMAL



Component

Reciprocating Compressor

PETRO CANADA SENTRON LD 3000 (--- LTR)





#### SAMPLE INFORMATION method PC0085498 Client Info PC0085484 PC90000473 Sample Number 16 Feb 2024 17 Jan 2024 Sample Date Client Info 31 Oct 2023 18761 18212 Machine Age hrs **Client Info** 16657 Oil Age hrs Client Info 0 3000 2236 Oil Changed **Client Info** Not Changd Changed Changed NORMAL Sample Status NORMAL NORMAL WEAR METALS 2 ASTM D5185(m) >50 <1 Iron ppm <1 Chromium ppm ASTM D5185(m) >10 0 0 0 Nickel ppm ASTM D5185(m) 0 <1 0 ASTM D5185(m) Titanium 0 0 0 ppm 0 Silver ppm ASTM D5185(m) <1 <1 Aluminum ASTM D5185(m) >25 1 1 2 ppm >25 Lead ASTM D5185(m) 0 <1 0 ppm ASTM D5185(m) 6 10 Copper >50 15 ppm Tin ppm ASTM D5185(m) >15 <1 <1 0 Antimony ASTM D5185(m) 0 0 0 ppm Vanadium ppm ASTM D5185(m) 0 0 0 Beryllium ASTM D5185(m) 0 0 0 ppm Cadmium ASTM D5185(m) 0 0 0 ppm **ADDITIVES** 5 1 1 Boron ppm ASTM D5185(m) <1 0 0 Barium ppm ASTM D5185(m) 1 0 2 0 Molybdenum ASTM D5185(m) ppm <1 <1 0 0 0 Manganese ppm ASTM D5185(m) 1 7 Magnesium ppm ASTM D5185(m) 5 7 7 Calcium ppm ASTM D5185(m) 1220 1229 1220 1293 261 Phosphorus 298 260 295 ppm ASTM D5185(m) Zinc ppm ASTM D5185(m) 350 299 295 335 Sulfur 1995 2074 2108 ppm ASTM D5185(m) 0 Lithium ASTM D5185(m) <1 ppm <1 CONTAMINANTS 1 2 Silicon ASTM D5185(m) >25 1 ppm Sodium ASTM D5185(m) 1 ppm <1 <1 Potassium ppm ASTM D5185(m) >20 <1 1 0 Water % ASTM D6304\* >0.1 0.002 0.003 31 ppm Water ASTM D6304\* >1000 18 ppm

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>1300	445	211	
Particles >6µm	ASTM D7647	>640	136	56	
Particles >14µm	ASTM D7647	>160	19	5	
Particles >21µm	ASTM D7647	>40	6	2	
Particles >38µm	ASTM D7647	>10	1	1	
Particles >71µm	ASTM D7647	>3	1	0	
Oil Cleanliness	ISO 4406 (c)	>17/16/14	16/14/11	15/13/10	

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



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Water (KF)					FLUID DEGRA	DATION	method	limit/base	current	history1	history2
00 - Severe					Acid Number (AN)	mg KOH/g	ASTM D974*	0.86	0.21	0.17	
00-					VISUAL		method	limit/base	current	history1	history2
00					White Metal	scalar	Visual*	NONE	NONE	NONE	
0.0					Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
Abnormal					Precipitate	scalar	Visual*	NONE	NONE	NONE	
Jan17/24				Feb16/24 -	Silt	scalar	Visual*	NONE	NONE	NONE	
Jan1				Feb1	Debris	scalar	Visual*	NONE	NONE	NONE	
Viscosity @ 100	0°C				Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
8 T 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2					Appearance	scalar	Visual*	NORML	NORML	NORML	
Abnormal					Odor	scalar	Visual*	NORML	NORML	NORML	
					Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	
5					Free Water	scalar	Visual*		NEG	NEG	
2 - Abnormal	$\sim$				FLUID PROPE	RTIES	method	limit/base	current	history1	history2
					Visc @ 40°C	cSt	ASTM D7279(m)	124.3	118	118	118
120 150 150 150 150 150 150	/22	/22	/23 -		Visc @ 100°C	cSt	ASTM D7279(m)	13.7	13.1	13.1	13.1
Dec2/20 May8/21 Oct24/21	Feb 15/22 May17/22	0ct28/22	Apr21/23	Aug18/23	Viscosity Index (VI)	Scale	ASTM D2270*	106	105	105	105
Particle Trend	-				SAMPLE IMAG	ES	method	limit/base	current	history1	history2
k Abnormal 4μm k 4μm k 4μm 4μm 4μm 4μm 4μm 4μm 4μm 4μm					Color						no image
Dec2/20 +	Feb15/22 +	0ct28/22	Apr21/23	Augliö/23	Bottom GRAPHS						no image
Viscosity @ 100					Ferrous Alloys				Particle Count		
1 2222 C C C C C C C C C C C C C C C C C					10 iron i		12001011	491,520	) I		[ <sup>26</sup>
7- Abnormal					E 5-	~		122,880	-		-24
						n	<u> </u>	30,720	Severe		-22
Base					Dec2/20 - May8/21 - Oct24/21 -	May17/22	Oct28/22 Apr21/23 Aun18/23	Ê 7,680			-20
2 Abnormal	~				Dec Ma Octi	Mayl	0ct2 Apr2 Aur1	30 1.920 30 1.920 30 1.920 480	Abnormal	•	-20 -18 -16
1-					Non-ferrous Metal	S		partic 480			
3/20 5/20 5/21 5/21	122	/22	/23-		30 copper		Den Fride	ja 120			-14
Dec2/20 May8/21 0ct24/21	Feb 15/22 May 17/22	0ct28/22	Apr21/23	Aug 18/23	E <sup>20</sup> in tin	~ (	L	→ <sup>₩</sup> 30		-	-14
Viscosity @ 40°					0	V	Summer Street Street		3 -		-10
) <del>-</del>					Dec2/20 May8/21 0ct24/21	May17/22	Oct28/22 Apr21/23 Aura18/23		2-	-	
Abnormal					- 0 E	May	Apr Aud	. (	4μ 6μ	14µ 21µ	38µ 71µ
Base					Viscosity @ 40°C			(b/)	A 1   A1	ing Eng	50µ 11µ
Base					G 120			ģ 4.00		a los estas de la	
m	m	n	~		요 130 Base 5 120 The sec 5 12	~ -		(b)H0,4.00 Will H0,4.00 Will H0	)		
Abnormal	V				Abnormal	/		Num I Num	Base		
04	2	2 -			110-1	7/22 -	8/22	Acid Acid	Dec2/20 May8/21	5/22 - 7/22 - 8/22 -	1/23 -
Dec2/20 May8/21 0ct24/21	Feb 15/22 May 17/22	0ct28/22	Apr21/23	Aug 1 8/23	Dec2/20 May8/21 Oct24/21 Feb 15/22	May17/22	0ct28/22 Apr21/23 Aud18/23	2	Dec May Oct2	Feb15/22 May17/22 0ct28/22	Apr21/23 Aug18/23
	ISO 17025:2 Accredite Laborator	LA 1000079 017	Labor Samp Lab N	atory le No. umber	: WearCheck - C8-1175 : PC0085498 : 02617665 : 5734775	5 Appleby Recei Teste Diagn	ved : 23 d : 27	gton, ON L7I 3 Feb 2024 7 Feb 2024 7 Feb 2024 - W		1050	u <b>Vista Energ</b> 8 67 Ave, #20 nde Prairie, A CA T8W 0K