

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

FIENDER EXTRUDER (S/N D23-311-650-2-2)

Gearbox Fluid NOT GIVEN (17 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

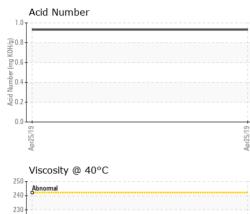
SAMPLE INFORMATION method imit/base current history1 history2 Sample Number Client Info 25 Apr 2019 Sample Date Client Info 0 Oil Age hrs Client Info 0 Oil Age hrs Client Info 0 Oil Changed Client Info N/A Sample Status method imit/base current history1 history2 Water WC Method >0.2 NEG WEAR METALS method imit/base current history1 history2 Iron ppm ASTM D5185m<>15 <1 Iron ppm ASTM D5185m >100 2 Iron ppm ASTM D5185m >200 Iron ppm </th <th></th> <th></th> <th></th> <th></th> <th>Apr2019</th> <th></th> <th></th>					Apr2019		
Sample Date Client Info 25 Apr 2019 Machine Age hrs Client Info 0 Oil Age hrs Client Info 0 Sample Status Client Info N/A Sample Status Imit/base current history1 history2 Water WC Method >0.2 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >15 <1 McKel ppm ASTM D5185m >15 <1 Nickel ppm ASTM D5185m >25 <1 Lead ppm ASTM D5185m >25 <1 Aluminum ppm ASTM D5185m <0 Audiminum ppm	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 Oil Age hrs Client Info 0 Sample Status Imitbase NORMAL CONTAMINATION method imitbase current history1 history2 Water WC Method >0.2 NEG WEAR METALS method imitbase current history1 history2 Iron ppm ASTM D5185m >15 <1 Othornium ppm ASTM D5185m >15 <1 Nickel ppm ASTM D5185m >10 2 Aluminum ppm ASTM D5185m >100 2 Copper ppm ASTM D5185m >100 2 Copper ppm ASTM D5185m 200 7 Anti	Sample Number		Client Info		WCI2344675		
Oil Age hrs Client Info 0 Oil Changed Client Info N/A Sample Status Client Info N/A CONTAMINATION method limit/base current history1 history2 Water WC Method >0.2 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >200 17 Chromium ppm ASTM D5185m >15 <1 Nickel ppm ASTM D5185m >25 <1 Aluminum ppm ASTM D5185m >200 7 Copper ppm ASTM D5185m >200 7 Antimony ppm ASTM D5185m 20 Antimony	Sample Date		Client Info		25 Apr 2019		
Oil Changed Sample Status Client Info N/A Sample Status method limit/base current history1 history2 Water WC Method >0.2 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >200 17 MEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >15 <1 Nickel ppm ASTM D5185m >15 <1 Aluminum ppm ASTM D5185m >10 2 Lead ppm ASTM D5185m >200 7 Copper ppm ASTM D5185m >20 Antimony ppm ASTM D5185m <1	Machine Age	hrs	Client Info		0		
Sample Status NORMAL CONTAMINATION method limit/base current history1 history2 Water WC Method >0.2 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >200 17 Chromium ppm ASTM D5185m >210 11 Nickel ppm ASTM D5185m >15 <1 Nickel ppm ASTM D5185m >25 <1 Aluminum ppm ASTM D5185m >200 7 Copper ppm ASTM D5185m >200 7 Tin ppm ASTM D5185m >20 Copper ppm ASTM D5185m 0 <t< th=""><th>Oil Age</th><th>hrs</th><th>Client Info</th><th></th><th>0</th><th></th><th></th></t<>	Oil Age	hrs	Client Info		0		
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.2 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >200 17 Chromium ppm ASTM D5185m >15 <1 Nickel ppm ASTM D5185m >15 <1 Aluminum ppm ASTM D5185m >25 <1 Aluminum ppm ASTM D5185m >25 <1 Aluminum ppm ASTM D5185m >25 0 Astm Dpm ASTM D5185m >20 Astm Dpm ASTM D5185m >20 Astm Dpm ASTM D5185m <1 Copper ppm ASTM D5185m <	Oil Changed		Client Info		N/A		
Water WC Method >0.2 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >200 17 Chromium ppm ASTM D5185m >15 <1 Nickel ppm ASTM D5185m >15 <1 Nickel ppm ASTM D5185m >15 <1 Aluminum ppm ASTM D5185m >25 <1 Aluminum ppm ASTM D5185m >200 7 Aluminum ppm ASTM D5185m >200 Astm D5185m >200 Antimony ppm ASTM D5185m <1 Astm D5185m <1 <th>Sample Status</th> <th></th> <th></th> <th></th> <th>NORMAL</th> <th></th> <th></th>	Sample Status				NORMAL		
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >200 17 Chromium ppm ASTM D5185m >15 <1 Nickel ppm ASTM D5185m >15 <1 Silver ppm ASTM D5185m <25 <1 Aluminum ppm ASTM D5185m >25 <1 Lead ppm ASTM D5185m >200 7 Lead ppm ASTM D5185m >200 7 Antimony ppm ASTM D5185m >20 AstM D5185m >20 Cadmium ppm ASTM D5185m <1 Boron ppm ASTM D5185m <1	CONTAMINATION	N	method	limit/base	current	history1	history2
Iron ppm ASTM D5185m >200 17 Chromium ppm ASTM D5185m >15 <1 Nickel ppm ASTM D5185m >15 <1 Titanium ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m >25 <1 Aluminum ppm ASTM D5185m >200 7 Lead ppm ASTM D5185m >200 7 Copper ppm ASTM D5185m >20 Antimony ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 20 Magnesium ppm ASTM D5185m <1 <td< th=""><th>Water</th><th></th><th>WC Method</th><th>>0.2</th><th>NEG</th><th></th><th></th></td<>	Water		WC Method	>0.2	NEG		
Chromium ppm ASTM D5185m >15 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >15 <1 Titanium ppm ASTM D5185m 0 Silver ppm ASTM D5185m <1	Iron	ppm	ASTM D5185m	>200	17		
Titanium ppm ASTM D5185m C1 Silver ppm ASTM D5185m <1 Aluminum ppm ASTM D5185m >25 <1 Lead ppm ASTM D5185m >200 7 Copper ppm ASTM D5185m >200 7 Tin ppm ASTM D5185m >200 7 Antimony ppm ASTM D5185m >200 7 Antimony ppm ASTM D5185m >20 Antimony ppm ASTM D5185m <1 Cadmium ppm ASTM D5185m <10 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m <1 </th <th>Chromium</th> <th></th> <th>ASTM D5185m</th> <th>>15</th> <th><1</th> <th></th> <th></th>	Chromium		ASTM D5185m	>15	<1		
Silver ppm ASTM D5185m <1	Nickel	ppm	ASTM D5185m	>15	<1		
Aluminum ppm ASTM D5185m >25 <1	Titanium	ppm	ASTM D5185m		0		
Lead ppm ASTM D5185m >100 2 Copper ppm ASTM D5185m >200 7 Tin ppm ASTM D5185m >25 0 Antimony ppm ASTM D5185m >25 0 Antimony ppm ASTM D5185m >25 0 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 20 Magnaese ppm ASTM D5185m <1 Magnesium pm ASTM D5185m <1 Calcium ppm ASTM D5185m <455 <	Silver	ppm	ASTM D5185m		<1		
Copper ppm ASTM D5185m >200 7 Tin ppm ASTM D5185m >25 0 Antimony ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 20 Manganese ppm ASTM D5185m <1 Magnesium ppm ASTM D5185m <1 Magnesium ppm ASTM D5185m <1 Calcium ppm ASTM D5185m <1 Sulfur ppm ASTM D5185m <10 Sulfur ppm ASTM D5185m	Aluminum	ppm	ASTM D5185m	>25	<1		
Tin ppm ASTM D5185m >25 0 Antimony ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m <1 Cadmium ppm ASTM D5185m <0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 20 Barium ppm ASTM D5185m 20 Molybdenum ppm ASTM D5185m <11 Manganese ppm ASTM D5185m <11 Magnesium ppm ASTM D5185m <11 Calcium ppm ASTM D5185m <10 Sulfur ppm ASTM D5185m 10 Sulfur ppm ASTM D5185m >50	Lead	ppm	ASTM D5185m	>100	2		
AntimonyppmASTM D5185m0VanadiumppmASTM D5185m<1CadmiumppmASTM D5185m0ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m20BariumppmASTM D5185m0MolybdenumppmASTM D5185m<1MaganeseppmASTM D5185m<1MagnesiumppmASTM D5185m<1CalciumppmASTM D5185m<1PhosphorusppmASTM D5185m10SulfurppmASTM D5185m10588SulfurppmASTM D5185m1958SodiumppmASTM D5185m29SodiumppmASTM D5185m1PotassiumppmASTM D5185m200FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2	Copper	ppm	ASTM D5185m	>200	7		
VanadiumppmASTM D5185m<1	Tin	ppm	ASTM D5185m	>25	0		
CadmiumppmASTM D5185m0ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m20BariumppmASTM D5185m0MolybdenumppmASTM D5185m<1ManganeseppmASTM D5185m<1MagnesiumppmASTM D5185m<1CalciumppmASTM D5185m<1PhosphorusppmASTM D5185m455ZincppmASTM D5185m10SulfurppmASTM D5185m1958SulfurppmASTM D5185m29SodiumppmASTM D5185m>5029PotassiumppmASTM D5185m200FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2	Antimony	ppm	ASTM D5185m		0		
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Boron ppm ASTM D5185m 20 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m <1 Manganese ppm ASTM D5185m <1 Magnesium ppm ASTM D5185m <1 Calcium ppm ASTM D5185m <1 Calcium ppm ASTM D5185m <1 Phosphorus ppm ASTM D5185m 455 Zinc ppm ASTM D5185m 10 Sulfur ppm ASTM D5185m 1958 Sulfur ppm ASTM D5185m >50 29 Sodium ppm ASTM D5185m >50 29 Potassium ppm ASTM D5185m >20 0	Cadmium	ppm	ASTM D5185m		0		
Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m <1 Manganese ppm ASTM D5185m <1 Magnesium ppm ASTM D5185m <1 Calcium ppm ASTM D5185m <1 Calcium ppm ASTM D5185m 2 Calcium ppm ASTM D5185m 455 Zinc ppm ASTM D5185m 10 Sulfur ppm ASTM D5185m 1958 Sulfur ppm ASTM D5185m >50 29 Sodium ppm ASTM D5185m >20 0 Potassium ppm ASTM D5185m >20 0 FLUID DEGRADATION method limit/base <t< th=""><th>ADDITIVES</th><th></th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></t<>	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m <1	Boron	ppm	ASTM D5185m		20		
Manganese ppm ASTM D5185m <1	Barium	ppm	ASTM D5185m		0		
Magnesium ppm ASTM D5185m <1 Calcium ppm ASTM D5185m 2 Phosphorus ppm ASTM D5185m 455 Zinc ppm ASTM D5185m 10 Sulfur ppm ASTM D5185m 10 Sulfur ppm ASTM D5185m 1958 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 29 Sodium ppm ASTM D5185m >20 0 FLUID DEGRADATION method limit/base current history1 history2	Molybdenum	ppm	ASTM D5185m		<1		
Calcium ppm ASTM D5185m 2 Phosphorus ppm ASTM D5185m 455 Zinc ppm ASTM D5185m 10 Sulfur ppm ASTM D5185m 1958 Sulfur ppm ASTM D5185m 1958 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 29 Sodium ppm ASTM D5185m >50 29 Potassium ppm ASTM D5185m >20 0 FLUID DEGRADATION method limit/base current history1 history2	Manganese	ppm	ASTM D5185m		<1		
Phosphorus ppm ASTM D5185m 455 Zinc ppm ASTM D5185m 10 Sulfur ppm ASTM D5185m 1958 Sulfur ppm ASTM D5185m 1958 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 29 Sodium ppm ASTM D5185m >20 0 FLUID DEGRADATION method limit/base current history1 history2	Magnesium	ppm	ASTM D5185m		<1		
Zinc ppm ASTM D5185m 10 Sulfur ppm ASTM D5185m 1958 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 29 Sodium ppm ASTM D5185m >50 29 Sodium ppm ASTM D5185m >50 29 Potassium ppm ASTM D5185m >20 0 FLUID DEGRADATION method limit/base current history1 history2	Calcium	ppm	ASTM D5185m		2		
SulfurppmASTM D5185m1958CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>5029SodiumppmASTM D5185m1PotassiumppmASTM D5185m>200FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2	Phosphorus	ppm	ASTM D5185m		455		
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>5029SodiumppmASTM D5185m1PotassiumppmASTM D5185m>200FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2	Zinc	ppm	ASTM D5185m		10		
Silicon ppm ASTM D5185m >50 29 Sodium ppm ASTM D5185m 1 Potassium ppm ASTM D5185m >20 0 FLUID DEGRADATION method limit/base current history1 history2	Sulfur	ppm	ASTM D5185m		1958		
SodiumppmASTM D5185m1PotassiumppmASTM D5185m>200FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2	CONTAMINANTS	5	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 0 FLUID DEGRADATION method limit/base current history1 history2	Silicon	ppm	ASTM D5185m	>50	29		
PotassiumppmASTM D5185m>200FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2	Sodium	ppm	ASTM D5185m		1		
	Potassium		ASTM D5185m	>20	0		
Acid Number (AN) mg KOH/g ASTM D8045 0.931	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045		0.931		



> 180 Apr25/19

OIL ANALYSIS REPORT

VISUAL



		VISUAL		method	limit/base		history1	history2	
		White Metal	scalar	*Visual	NONE	LIGHT			
		Yellow Metal	scalar	*Visual	NONE	NONE			
		Precipitate	scalar	*Visual	NONE	NONE			
		Silt	scalar	*Visual	NONE	NONE			
		Debris	scalar	*Visual	NONE	LIGHT			
		Sand/Dirt	scalar	*Visual	NONE	NONE			
	Apr25/19 -	Appearance	scalar	*Visual	NORML	NORML			
	Apr2	Odor	scalar	*Visual	NORML	NORML			
		Emulsified Water		*Visual	>0.2	NEG			
		Free Water	scalar	*Visual		NEG			
				mathad	limit/base		biotoryd	biotom/0	
				method	IIIIII/Dase	current	history1	history2	
		Visc @ 40°C		ASTM D445		214			
		SAMPLE IMAGE	S	method	limit/base	current	history1	history2	
	Apr25/19	Color					no image	no image	
		Bottom					no image	no image	
		Non-ferrous Meta			Apr25/19				
		Viscosity @ 40°C			Apr25/19	Acid Number			
	cSt (40°C)	240 - Abnormal 220 - 200 - Abnormal 180).1 (0.0000000000000000000000000000000000				
		Apr25/19			Apr25/19	Apr25/19			
Incate L2367 Transactions of the second seco	ample report, c	: WCI2344675 : 04702433 : 8578955 : IND 2 contact Customer Serv	D4702433Diagnosed: 30 Apr 20198578955Diagnostician: Wes DavisIND 2tact Customer Service at 1-800-237-1369.					PRINSCO - CHATSWORT PO BOX 72 CHATSWORTH, US 6092 Contact: JUSTIN MYE justin.myer@prinsco.co	
Certificate 12307 Test Package : IND 2 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)							justin.myer@prinsco.o		

Contact/Location: JUSTIN MYER - PRICHA