

OIL ANALYSIS REPORTS

TO: Chris Brandsma

HALLA CLIMATE CONTROL CANADA INC. [HAL440BEL]

440 COLLEGE STREET EAST P.O. BOX 575

BELLEVILLE, ON

K8N 5B2 Canada

(613)969-1460

1(613)969-8350

cbrandsm@halla.on.ca

FROM: Kevin Marson

WearCheck Canada Inc.

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customerservice@wearcheck.ca

Report Summary

Sample N°	Unit	WEAR	CONTAM'N	FLUID
<input type="checkbox"/>	WC-729579 HAL 112A Left Pump	NORMAL	NORMAL	NORMAL
<input type="checkbox"/>	WC-729551 LOMAR LOMAR CRIMPER Hydraulic System	NORMAL	ABNORMAL	MARGINAL
<input type="checkbox"/>	WC-729602 LOMAR CRIMPER S-1095A Hydraulic System	NORMAL	ABNORMAL	NORMAL
<input type="checkbox"/>	WC-729563 LOMAR CRIMP BENDER Hydraulic System	NORMAL	ABNORMAL	NORMAL
<input type="checkbox"/>	WC-729545 WNJIN AUTO ENDFORMER Hydraulic System	NORMAL	ATTENTION	NORMAL
<input type="checkbox"/>	WC-729547 GT MACHINE SUPER STAKER Hydraulic System	NORMAL	ATTENTION	NORMAL
<input type="checkbox"/>	WC-729546 BENDCO UPN BENDER Hydraulic System	NORMAL	ATTENTION	NORMAL
<input type="checkbox"/>	WC-729562 LOMAR CRIMPER Hydraulic System	NORMAL	ABNORMAL	NORMAL
<input type="checkbox"/>	WC-729553 PROFORM 2003 ENFN BENDER Hydraulic System	NORMAL	NORMAL	ATTENTION
<input type="checkbox"/>	WC-729561 LAKELAND CAN ASSEMBLY Hydraulic System	NORMAL	ABNORMAL	NORMAL
<input type="checkbox"/>	WC-729593 HAC 013B Left Pump	NORMAL	NORMAL	NORMAL
<input type="checkbox"/>	WC-729594 HAC 013B Right Blower	NORMAL	NORMAL	NORMAL
<input type="checkbox"/>	WC-729592 HAC 013B Right Pump	NORMAL	NORMAL	NORMAL
<input type="checkbox"/>	WC-729598 HRD 518 Right Blower	NORMAL	NORMAL	NORMAL
<input type="checkbox"/>	WC-729587 HRD 504 Blower	NORMAL	NORMAL	NORMAL

Total: 15 Sample Report(s)

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INDUSTRIAL OIL ANALYSIS REPORT

CONTAMINATION	NORMAL
OIL CONDITION	NORMAL
WEAR	NORMAL

HAL 112A - Left Pump

Unit Make	: LEYBOLD	Date Rec'd	: May 29, 2007	Sample Date	: May 25, 2007
Unit Model	: SV2000	Serial No.	: 5703	Time on Unit	: 0 hrs
Comp Make	: N/A	Cust. Ref No.	: {n/a}	Time on Oil	: 0 hrs
Comp Model	: N/A	Stub No.	: WC-729579	Time on Filter	: 0 hrs

RECOMMENDATION

Diagnostician: Barry Goslin

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

CONTAMINATION

There is no indication of any contamination in the component.

Sample Date	11/13/04	05/27/05	Current	Abn
Silicon	6.7	3.9	0.2	---
Potassium	0.0	0.0	0.0	---
Water (%)	<0.1	<0.1	<0.1	
>5µm	---	11180	---	1300
>15µm	---	1012	---	160
>25µm	---	104	---	
>50µm	---	10	---	
>100µm	---	0	---	
ISO 4406	---	21/17	---	17/14

OIL CONDITION

Oil Type: LEYBOLD HE-700

The condition of oil is suitable for further service.

Sample Date	11/13/04	05/27/05	Current	Base
Boron	5.7	0.0	0.0	
Barium	0.1	0.0	0.0	
Calcium	24	2.1	2.0	
Magnesium	42	0.3	0.0	
Molybdenum	0.5	0.0	0.0	
Sodium	3.2	4.2	0.0	
Phosphorus	38	2.2	0.6	
Sulfur	1711	1654	2417	
Zinc	45	4.8	1.0	
Visc@40°C	60.9	62.5	76.4	79.0
Visc@100°C	---	---	---	9.5
Oxidation	---	---	---	---
TAN	0.140	0.07	0.013	
TBN	---	---	---	

WEAR

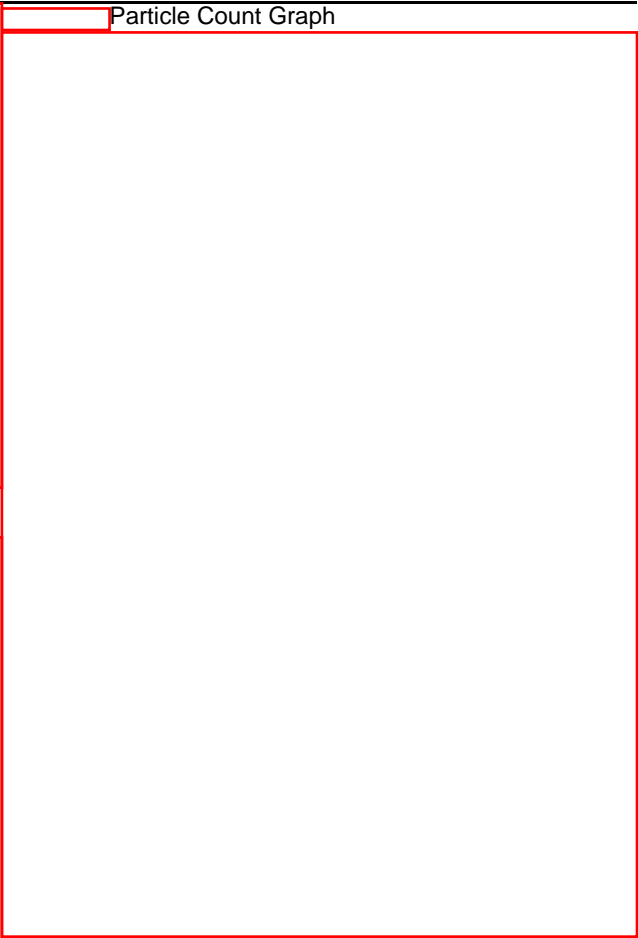
All component wear rates are normal.

Sample Date	11/13/04	05/27/05	Current	Abn
Iron	5.9	2.0	0.0	20
Nickel	0.0	0.0	0.0	20
Chromium	0.1	0.0	0.0	20
Titanium	0.0	0.0	0.0	---
Copper	0.7	0.3	0.0	20
Aluminum	2.6	0.9	0.0	20
Tin	0.0	0.0	0.0	20
Lead	0.0	0.0	0.0	20
Silver	0.3	0.0	0.0	---

Report ID - HAL440BEL [WCAMIS] 01385694 - Pg. 1

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Graphs

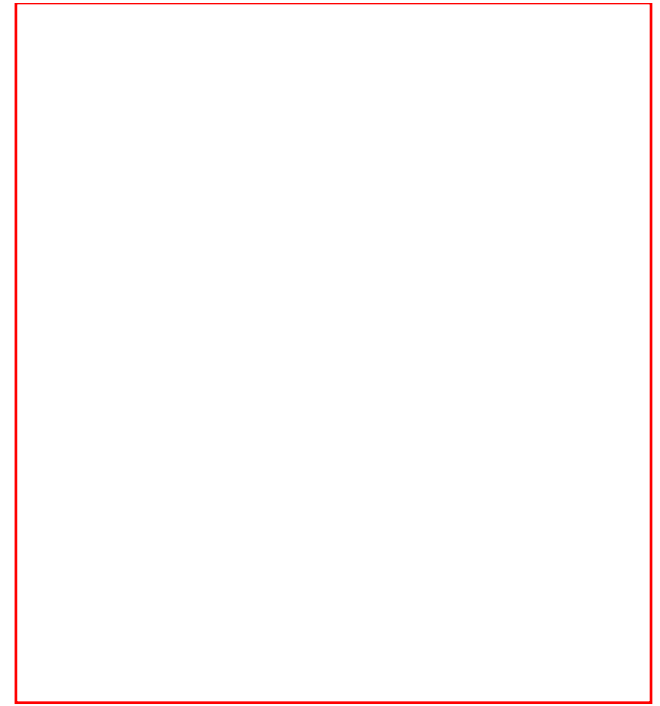


Particle Count Graph



TAN Level

Viscosity @ 40°C



If you have any questions concerning this sample report (work order no 01385694) please call 1-800-268-2131.



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INDUSTRIAL OIL ANALYSIS REPORT

CONTAMINATION **ABNORMAL**
 OIL CONDITION **MARGINAL**
 WEAR **NORMAL**

LOMAR LOMAR CRIMPER - Hydraulic System

Unit Make : N/A Date Rec'd : May 29, 2007 Sample Date : May 25, 2007
 Unit Model : N/A Serial No. : D0573A0108JB Time on Unit : 0 hrs
 Comp Make : VICKERS Cust. Ref No. : {n/a} Time on Oil : 0 hrs
 Comp Model : N/A Stub No. : WC-729551 Time on Filter : 0 hrs

RECOMMENDATION

Diagnostician: Barry Goslin

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

CONTAMINATION

There is a moderate amount of particulates (2 to >100 microns in size) present in the oil.

Sample Date	06/11/05	06/10/06	Current	Abn
Silicon	0.4	2.7	1.6	---
Potassium	0.0	1.7	0.0	---
Water (%)	<0.1	<0.1	<0.1	
>4µm(c)	8303	11331	12753	5000
>6µm(c)	1557	4906	3247	1300
>14µm(c)	196	382	306	160
>21µm(c)	47	21	93	
>38µm(c)	5	2	11	
>70µm(c)	0	0	2	
ISO 4406(c)	20/18/15	21/19/16	21/19/15	19/17/14

OIL CONDITION

Oil Type: 40 GAL of SUNOCO SUNVIS 846

The viscosity of the oil is low indicating either Viscosity Index (VI) Improvers shearing, or the addition of a lighter grade oil.

Sample Date	06/11/05	06/10/06	Current	Base
Boron	0.3	0.5	0.0	
Barium	0.1	1.2	1.2	
Calcium	50	64	66	
Magnesium	0.5	5.8	5.4	
Molybdenum	0.0	0.1	0.0	
Sodium	0.0	0.0	0.1	
Phosphorus	314	345	368	
Sulfur	2216	1154	1275	
Zinc	415	447	475	
Visc@40°C	44.6	38.4	38.6	46.0
Visc@100°C	---	---	---	6.91
Oxidation	---	---	---	---
TAN	0.43	0.42	0.337	

TBN	---	---	---	
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WEAR

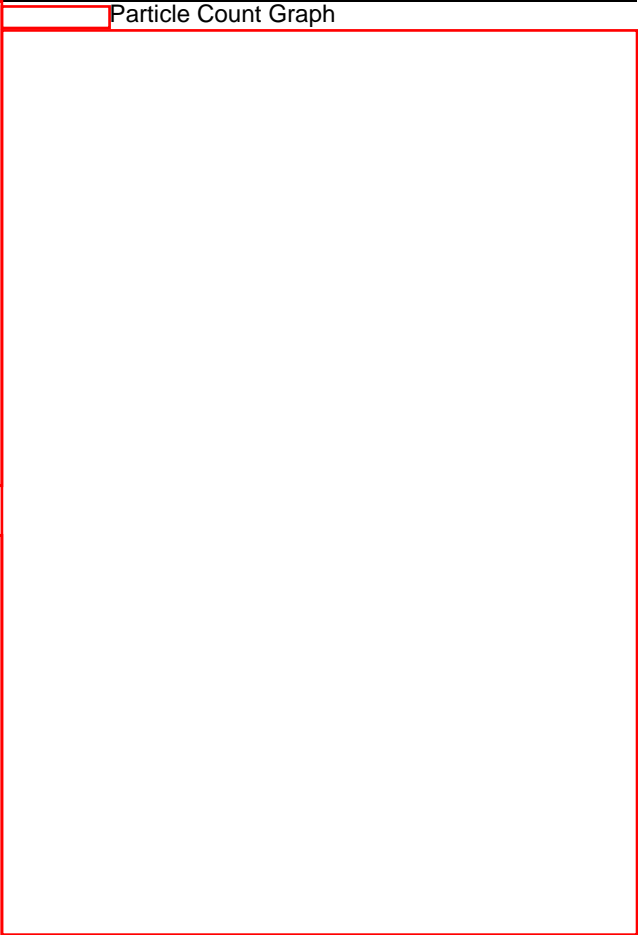
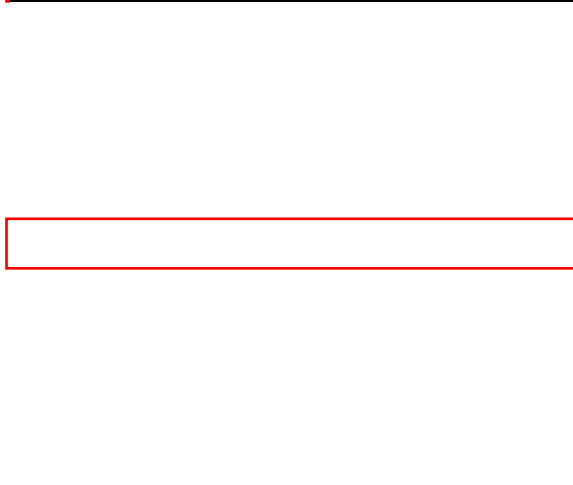
All component wear rates are normal.

Sample Date	06/11/05	06/10/06	Current	Abn
Iron	0.2	1.2	1.2	20
Nickel	0.0	0.0	0.0	20
Chromium	0.0	0.0	0.0	20
Titanium	0.0	0.0	0.0	---
Copper	0.2	3.4	3.7	20
Aluminum	0.0	0.1	0.0	20
Tin	0.0	0.1	0.0	20
Lead	0.0	0.4	0.0	20
Silver	0.0	0.0	0.0	---

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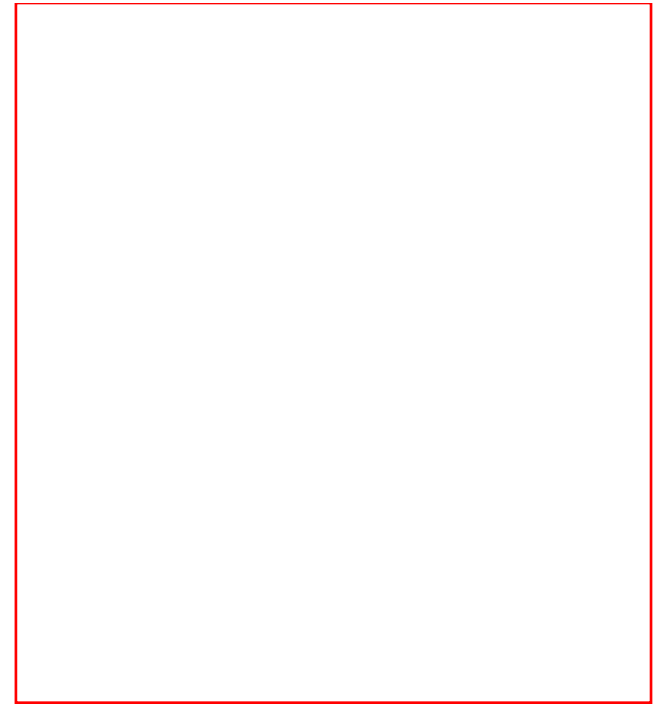
Graphs



Particle Count Graph

TAN Level

Viscosity @ 40°C



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INDUSTRIAL OIL ANALYSIS REPORT

CONTAMINATION **ABNORMAL**
 OIL CONDITION **NORMAL**
 WEAR **NORMAL**

LOMAR CRIMPER S-1095A - Hydraulic System

Unit Make : N/A Date Rec'd : May 29, 2007 Sample Date : May 25, 2007
 Unit Model : na/ Serial No. : D0570A0102JB Time on Unit : 0 hrs
 Comp Make : VICKERS Cust. Ref No. : {n/a} Time on Oil : 0 hrs
 Comp Model : N/A Stub No. : WC-729602 Time on Filter : 0 hrs

RECOMMENDATION

Diagnostician: Barry Goslin

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

CONTAMINATION

There is a high amount of particulates (2 to >100 microns in size) present in the oil.

Sample Date	05/23/05	06/17/06	Current	Abn
Silicon	1.8	1.7	0.5	---
Potassium	0.3	1.1	0.0	---
Water (%)	<0.1	<0.1	<0.1	
>4µm(c)	10370	21207	50824	5000
>6µm(c)	3246	10537	33505	1300
>14µm(c)	286	1561	7367	160
>21µm(c)	47	271	2013	
>38µm(c)	6	18	62	
>70µm(c)	0	1	4	
ISO 4406(c)	21/19/15	22/21/18	23/22/20	19/17/14

OIL CONDITION

Oil Type: 40 GAL of SUNOCO SUNVIS 846

The condition of oil is suitable for further service.

Sample Date	05/23/05	06/17/06	Current	Base
Boron	0.9	0.0	0.0	
Barium	0.5	0.4	0.0	
Calcium	77	80	90	
Magnesium	5.9	5.8	1.0	
Molybdenum	0.0	0.0	0.0	
Sodium	0.6	0.7	0.0	
Phosphorus	337	358	371	
Sulfur	928	954	5217	
Zinc	412	427	469	
Visc@40°C	43.0	45.3	43.8	46.0
Visc@100°C	---	---	---	6.91
Oxidation	---	---	---	---
TAN	0.48	0.37	0.389	

TBN	---	---	---	
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WEAR

All component wear rates are normal.

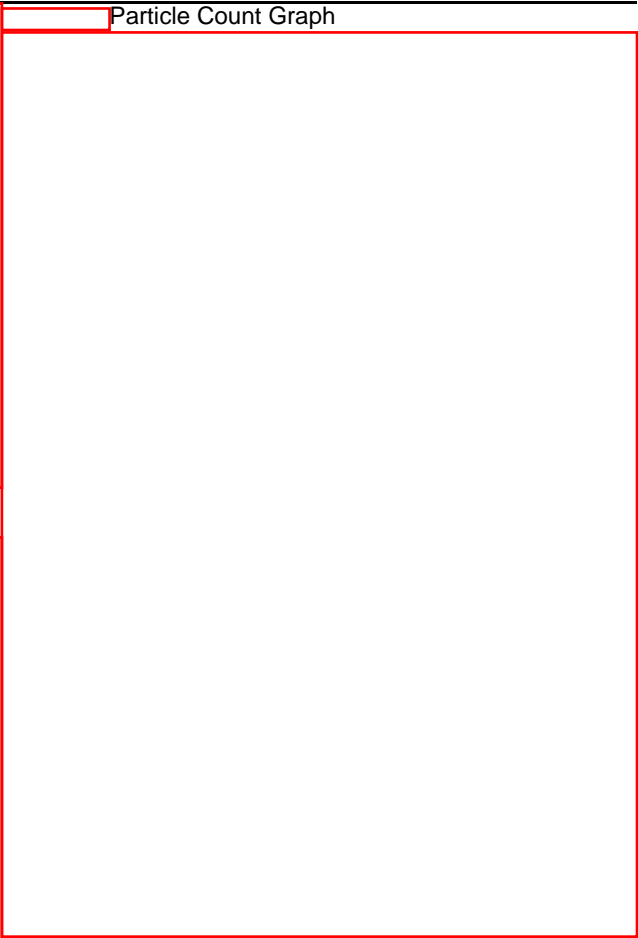
Sample Date	05/23/05	06/17/06	Current	Abn
Iron	2.2	2.2	0.0	20
Nickel	0.0	0.0	0.0	20
Chromium	0.0	0.0	0.0	20
Titanium	0.0	0.0	0.0	---
Copper	3.0	2.9	0.0	20
Aluminum	0.1	0.1	0.0	20
Tin	0.0	0.2	0.0	20
Lead	0.0	0.5	0.0	20
Silver	0.0	0.0	0.0	---

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Graphs

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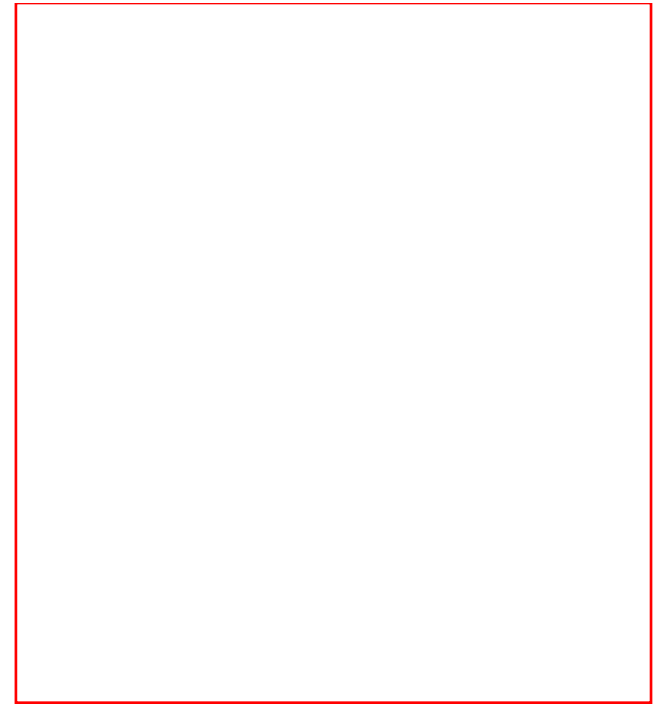
Particle Count Graph

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TAN Level

Viscosity @ 40°C



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INDUSTRIAL OIL ANALYSIS REPORT

CONTAMINATION	ABNORMAL
OIL CONDITION	NORMAL
WEAR	NORMAL

LOMAR CRIMP BENDER - Hydraulic System

Unit Make	: N/A	Date Rec'd	: May 29, 2007	Sample Date	: May 25, 2007
Unit Model	: N/A	Serial No.	: 00632A0208JA	Time on Unit	: 0 hrs
Comp Make	: PARKER	Cust. Ref No.	: {n/a}	Time on Oil	: 0 hrs
Comp Model	: N/A	Stub No.	: WC-729563	Time on Filter	: 0 hrs

RECOMMENDATION

Diagnostician: Barry Goslin

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

CONTAMINATION

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

Sample Date	05/23/05	06/16/06	Current	Abn
Silicon	3.9	2.4	3.6	---
Potassium	1.0	0.0	0.0	---
Water (%)	<0.1	<0.1	<0.1	
>4µm(c)	9913	8948	40545	5000
>6µm(c)	1736	3666	18491	1300
>14µm(c)	39	324	1433	160
>21µm(c)	11	18	63	
>38µm(c)	2	1	4	
>70µm(c)	0	0	0	
ISO 4406(c)	20/18/12	20/19/16	23/21/18	19/17/14

OIL CONDITION

Oil Type: 40 GAL of SUNOCO SUNVIS 846

The condition of oil is suitable for further service.

Sample Date	05/23/05	06/16/06	Current	Base
Boron	0.8	0.0	0.0	
Barium	0.4	0.2	0.3	
Calcium	58	53	52	
Magnesium	2.3	1.2	0.7	
Molybdenum	1.9	0.0	0.0	
Sodium	3.2	0.0	0.9	
Phosphorus	320	318	336	
Sulfur	1329	1948	2095	
Zinc	396	437	450	
Visc@40°C	42.2	42.5	42.8	46.0
Visc@100°C	---	---	---	6.91
Oxidation	---	---	---	---
TAN	0.51	0.40	0.275	

TBN	---	---	---	
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WEAR

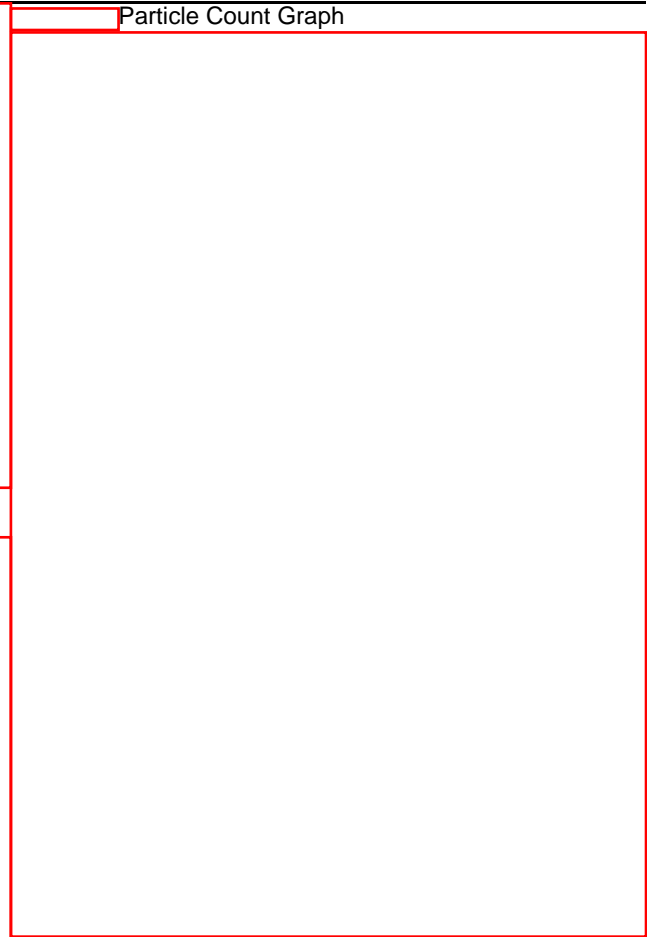
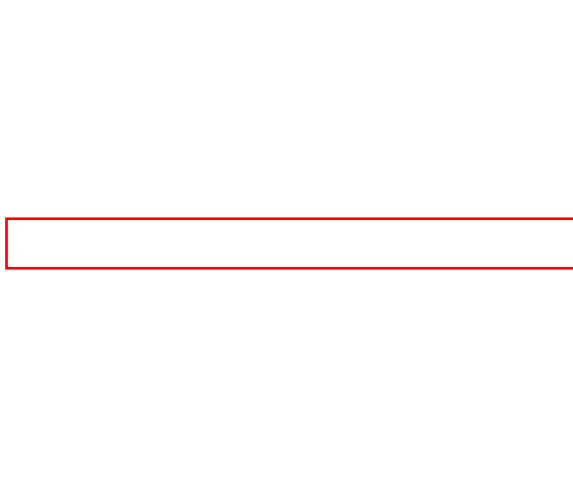
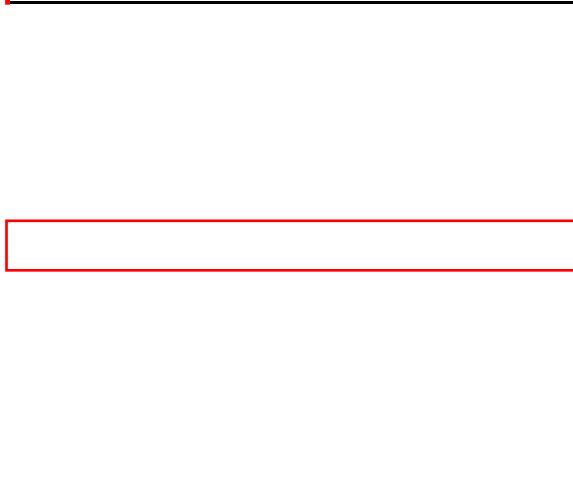
All component wear rates are normal.

Sample Date	05/23/05	06/16/06	Current	Abn
Iron	3.1	3.0	3.2	20
Nickel	0.0	0.0	0.0	20
Chromium	0.0	0.0	0.0	20
Titanium	0.0	0.0	0.0	---
Copper	5.9	5.9	7.5	20
Aluminum	0.2	0.0	0.0	20
Tin	0.1	0.0	0.0	20
Lead	0.1	0.3	0.0	20
Silver	0.0	0.0	0.0	---

Report ID - HAL440BEL [WCAMIS] 01385699 - Pg. 1

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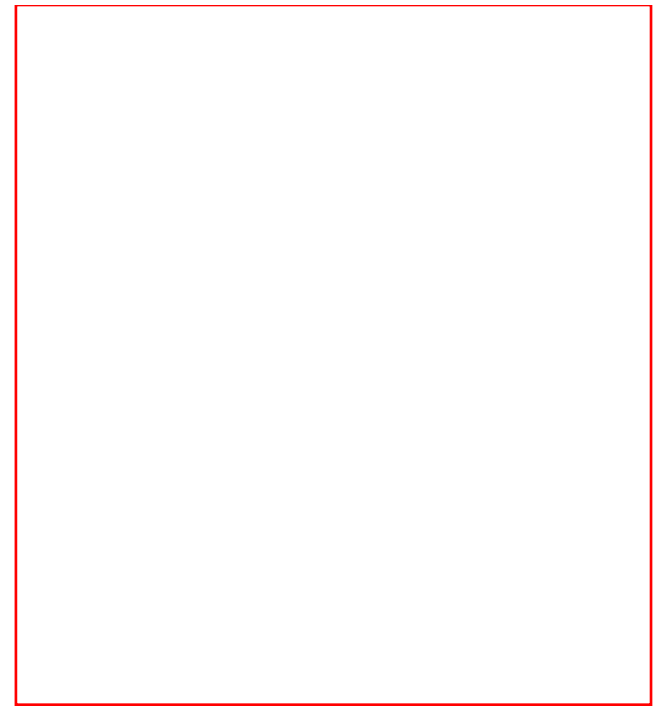
Graphs



Particle Count Graph

TAN Level

Viscosity @ 40°C



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INDUSTRIAL OIL ANALYSIS REPORT

CONTAMINATION **ATTENTION**
 OIL CONDITION **NORMAL**
 WEAR **NORMAL**

WNJIN AUTO ENDFORMER - Hydraulic System

Unit Make : N/A Date Rec'd : May 29, 2007 Sample Date : May 25, 2007
 Unit Model : N/A Serial No. : KW-970420 Time on Unit : 0 hrs
 Comp Make : VICKERS Cust. Ref No. : {n/a} Time on Oil : 0 hrs
 Comp Model : N/A Stub No. : WC-729545 Time on Filter : 0 hrs

RECOMMENDATION

Diagnostician: Barry Goslin

Resample at the next service interval to monitor.

CONTAMINATION

There is a moderate amount of particulates (2 to 15 microns in size) present in the oil.

Sample Date	05/23/05	06/10/06	Current	Abn
Silicon	6.6	0.9	1.0	---
Potassium	0.1	1.9	0.1	---
Water (%)	<0.1	<0.1	<0.1	
>4µm(c)	28987	3626	25082	5000
>6µm(c)	16830	364	2099	1300
>14µm(c)	2727	31	78	160
>21µm(c)	303	7	11	
>38µm(c)	9	2	2	
>70µm(c)	0	0	0	
ISO 4406(c)	22/21/19	19/16/12	22/18/13	19/17/14

OIL CONDITION

Oil Type: 45 GAL of SUNOCO SUNVIS 846

The condition of oil is suitable for further service.

Sample Date	05/23/05	06/10/06	Current	Base
Boron	0.3	0.5	0.0	
Barium	0.1	0.0	0.0	
Calcium	40	40	45	
Magnesium	0.5	0.4	0.0	
Molybdenum	0.0	0.1	0.0	
Sodium	0.2	0.7	0.2	
Phosphorus	314	319	333	
Sulfur	1469	1461	1808	
Zinc	360	368	400	
Visc@40°C	45.3	45.5	45.8	46.0
Visc@100°C	---	---	---	6.91
Oxidation	---	---	---	---
TAN	0.46	0.45	0.345	

TBN	---	---	---	
-----	-----	-----	-----	--

WEAR

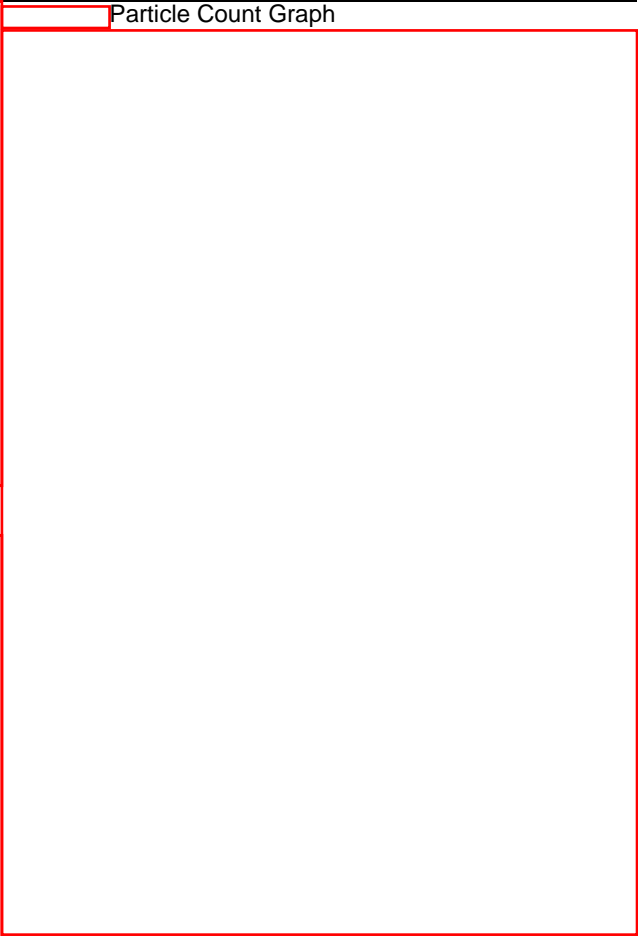
All component wear rates are normal.

Sample Date	05/23/05	06/10/06	Current	Abn
Iron	1.4	1.5	1.3	20
Nickel	0.0	0.0	0.0	20
Chromium	0.1	0.2	0.1	20
Titanium	0.0	0.0	0.0	---
Copper	6.4	6.5	5.5	20
Aluminum	0.0	0.0	0.0	20
Tin	0.0	0.2	0.0	20
Lead	0.0	0.3	0.0	20
Silver	0.0	0.0	0.0	---

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Graphs

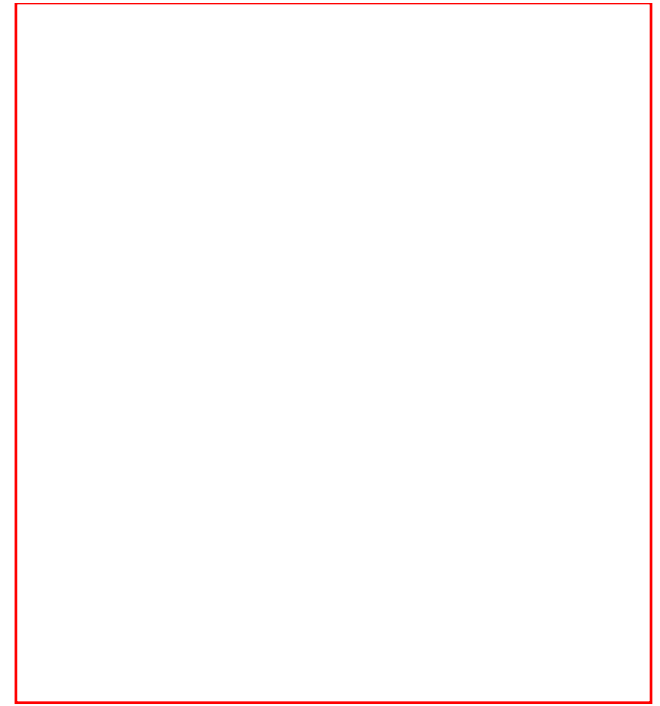


Particle Count Graph



TAN Level

Viscosity @ 40°C



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INDUSTRIAL OIL ANALYSIS REPORT

CONTAMINATION **ATTENTION**
 OIL CONDITION **NORMAL**
 WEAR **NORMAL**

GT MACHINE SUPER STAKER - Hydraulic System

Unit Make : N/A Date Rec'd : May 29, 2007 Sample Date : May 25, 2007
 Unit Model : N/A Serial No. : HAC064A Time on Unit : 0 hrs
 Comp Make : PARKER Cust. Ref No. : {n/a} Time on Oil : 0 hrs
 Comp Model : N/A Stub No. : WC-729547 Time on Filter : 0 hrs

RECOMMENDATION

Diagnostician: Barry Goslin

Resample at the next service interval to monitor.

CONTAMINATION

There is a moderate amount of silt (particulates 2 to 5 microns in size) present in the oil.

Sample Date	05/23/05	06/10/06	Current	Abn
Silicon	0.5	0.7	0.7	---
Potassium	0.4	1.4	0.0	---
Water (%)	<0.1	<0.1	<0.1	
>4µm(c)	6667	8843	10494	5000
>6µm(c)	2513	2617	1093	1300
>14µm(c)	470	143	79	160
>21µm(c)	143	18	20	
>38µm(c)	19	2	1	
>70µm(c)	4	0	0	
ISO 4406(c)	20/19/16	20/19/14	21/17/13	19/17/14

OIL CONDITION

Oil Type: 30 GAL of SUNOCO SUNVIS 846

The condition of oil is suitable for further service.

Sample Date	05/23/05	06/10/06	Current	Base
Boron	1.8	2.4	0.9	
Barium	0.2	0.1	0.1	
Calcium	90	90	86	
Magnesium	18	16	14	
Molybdenum	0.1	0.1	0.0	
Sodium	0.0	0.0	1.6	
Phosphorus	339	330	354	
Sulfur	777	782	1091	
Zinc	395	404	432	
Visc@40°C	42.9	43.7	43.6	46.0
Visc@100°C	---	---	---	6.91
Oxidation	---	---	---	---
TAN	0.46	0.36	0.298	

TBN	---	---	---	
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WEAR

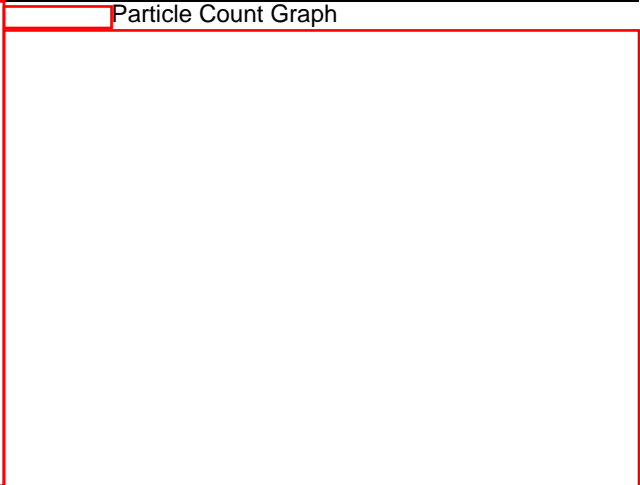
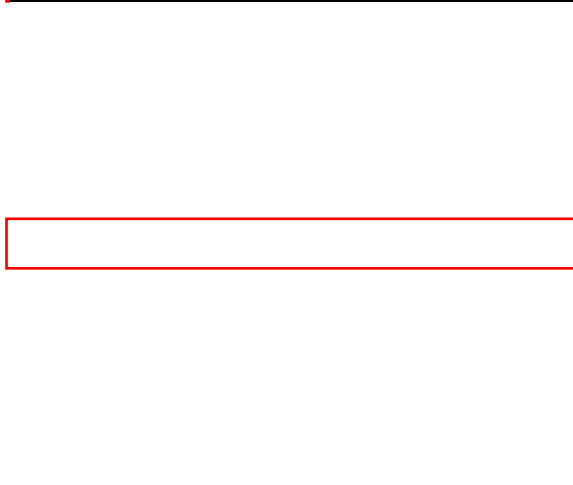
All component wear rates are normal.

Sample Date	05/23/05	06/10/06	Current	Abn
Iron	2.2	2.5	2.5	20
Nickel	0.0	0.0	0.0	20
Chromium	0.0	0.0	0.0	20
Titanium	0.0	0.0	0.0	---
Copper	24	25	22	20
Aluminum	0.8	0.7	0.3	20
Tin	0.4	0.4	0.0	20
Lead	0.2	0.8	0.0	20
Silver	0.0	0.0	0.0	---

Report ID - HAL440BEL [WCAMIS] 01385701 - Pg. 1

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Graphs

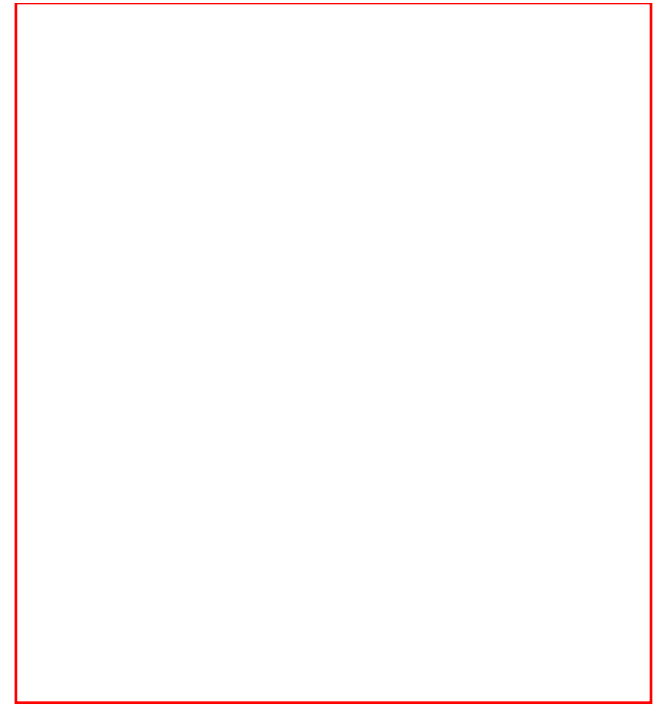


Particle Count Graph



TAN Level

Viscosity @ 40°C



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INDUSTRIAL OIL ANALYSIS REPORT

CONTAMINATION **ATTENTION**
 OIL CONDITION **NORMAL**
 WEAR **NORMAL**

BENDCO UPN BENDER - Hydraulic System

Unit Make : N/A Date Rec'd : May 29, 2007 Sample Date : May 25, 2007
 Unit Model : N/A Serial No. : HAC055A Time on Unit : 0 hrs
 Comp Make : PARKER Cust. Ref No. : {n/a} Time on Oil : 0 hrs
 Comp Model : N/A Stub No. : WC-729546 Time on Filter : 0 hrs

RECOMMENDATION

Diagnostician: Barry Goslin

Resample at the next service interval to monitor.

CONTAMINATION

There is a moderate amount of silt (particulates 2 to 5 microns in size) present in the oil.

Sample Date	05/27/05	06/10/06	Current	Abn
Silicon	0.5	2.3	0.6	---
Potassium	0.0	2.2	0.0	---
Water (%)	<0.1	<0.1	<0.1	
>4µm(c)	32336	17018	5137	5000
>6µm(c)	23351	8273	980	1300
>14µm(c)	7759	842	81	160
>21µm(c)	2370	80	25	
>38µm(c)	96	4	3	
>70µm(c)	4	0	0	
ISO 4406(c)	22/22/20	21/20/17	20/17/14	19/17/14

OIL CONDITION

Oil Type: 50 GAL of SUNOCO SUNVIS 846

The condition of oil is suitable for further service.

Sample Date	05/27/05	06/10/06	Current	Base
Boron	0.0	0.5	0.0	
Barium	0.2	0.0	0.0	
Calcium	52	52	53	
Magnesium	0.6	0.4	0.0	
Molybdenum	0.1	0.2	0.0	
Sodium	1.3	0.0	1.5	
Phosphorus	316	312	331	
Sulfur	2053	2099	2350	
Zinc	395	418	430	
Visc@40°C	44.9	44.8	44.7	46.0
Visc@100°C	---	---	---	6.91
Oxidation	---	---	---	---
TAN	0.45	0.40	0.290	

TBN	---	---	---	
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WEAR

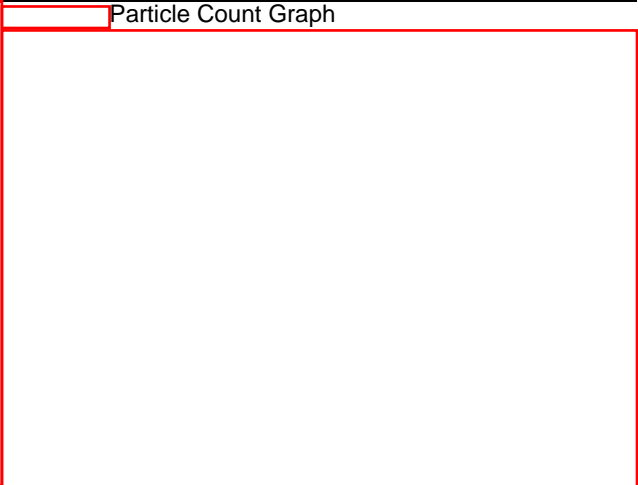
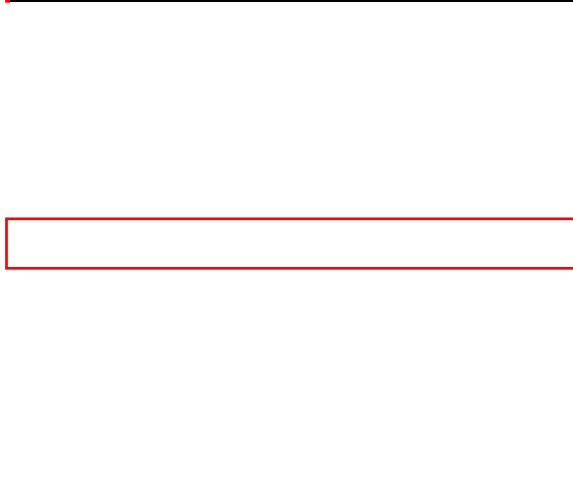
All component wear rates are normal.

Sample Date	05/27/05	06/10/06	Current	Abn
Iron	0.7	0.8	0.7	20
Nickel	0.0	0.0	0.0	20
Chromium	0.0	0.1	0.0	20
Titanium	0.0	0.0	0.0	---
Copper	3.1	3.8	4.6	20
Aluminum	0.0	0.0	0.0	20
Tin	0.0	0.0	0.0	20
Lead	0.0	0.3	0.0	20
Silver	0.0	0.0	0.0	---

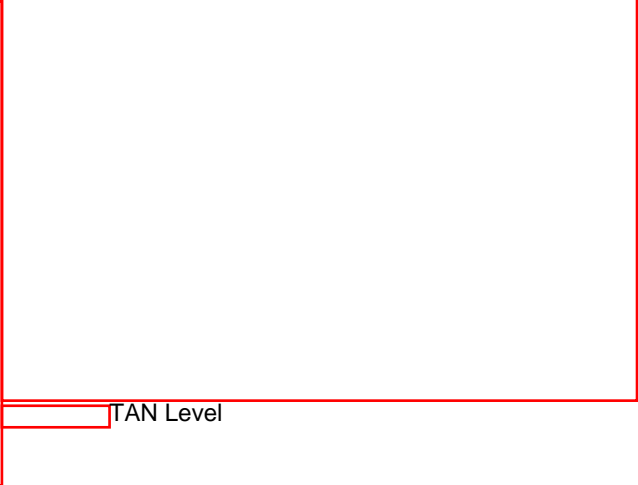
Report ID - HAL440BEL [WCAMIS] 01385702 - Pg. 1

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Graphs

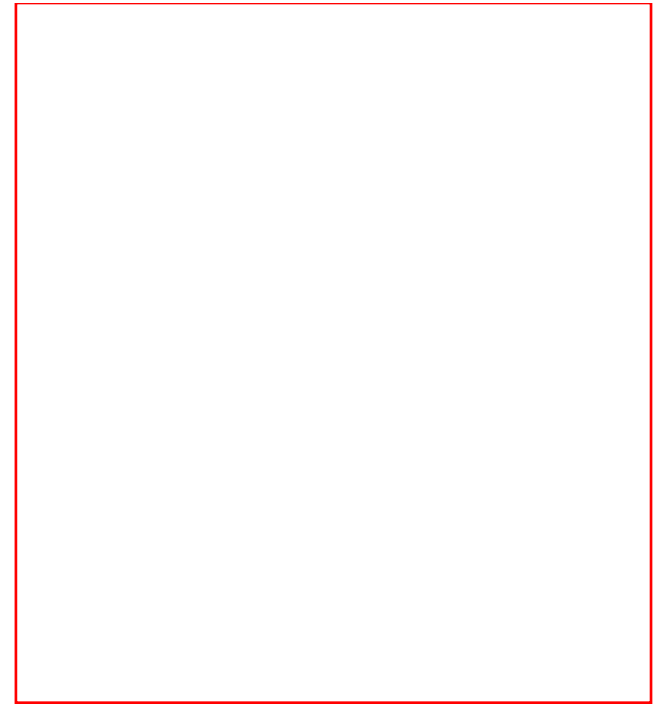


Particle Count Graph



TAN Level

Viscosity @ 40°C



If you have any questions concerning this sample report (work order no 01385702) please call 1-800-268-2131.



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INDUSTRIAL OIL ANALYSIS REPORT

CONTAMINATION	ABNORMAL
OIL CONDITION	NORMAL
WEAR	NORMAL

LOMAR CRIMPER - Hydraulic System

Unit Make	: N/A	Date Rec'd	: May 29, 2007	Sample Date	: May 25, 2007
Unit Model	: N/A	Serial No.	: HAL181	Time on Unit	: 0 hrs
Comp Make	: PARKER	Cust. Ref No.	: {n/a}	Time on Oil	: 0 hrs
Comp Model	: N/A	Stub No.	: WC-729562	Time on Filter	: 0 hrs

RECOMMENDATION

Diagnostician: Barry Goslin

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

CONTAMINATION

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

Sample Date	06/11/05	06/16/06	Current	Abn
Silicon	3.3	4.0	1.4	---
Potassium	0.8	0.1	0.0	---
Water (%)	<0.1	<0.1	<0.1	
>4µm(c)	9693	10495	17030	5000
>6µm(c)	1722	4529	5202	1300
>14µm(c)	39	361	333	160
>21µm(c)	11	24	60	
>38µm(c)	2	2	5	
>70µm(c)	0	0	0	
ISO 4406(c)	20/18/12	21/19/16	21/20/16	19/17/14

OIL CONDITION

Oil Type: 40 GAL of SUNOCO SUNVIS 846

The condition of oil is suitable for further service.

Sample Date	06/11/05	06/16/06	Current	Base
Boron	0.3	0.4	0.0	
Barium	0.3	0.0	0.1	
Calcium	51	50	49	
Magnesium	4.9	1.2	0.0	
Molybdenum	0.2	0.0	0.0	
Sodium	2.0	0.0	1.2	
Phosphorus	379	330	328	
Sulfur	1200	2066	2139	
Zinc	348	426	434	
Visc@40°C	39.8	44.5	44.5	46.0
Visc@100°C	---	---	---	6.91
Oxidation	---	---	---	---
TAN	0.41	0.34	0.259	

TBN	---	---	---	
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WEAR

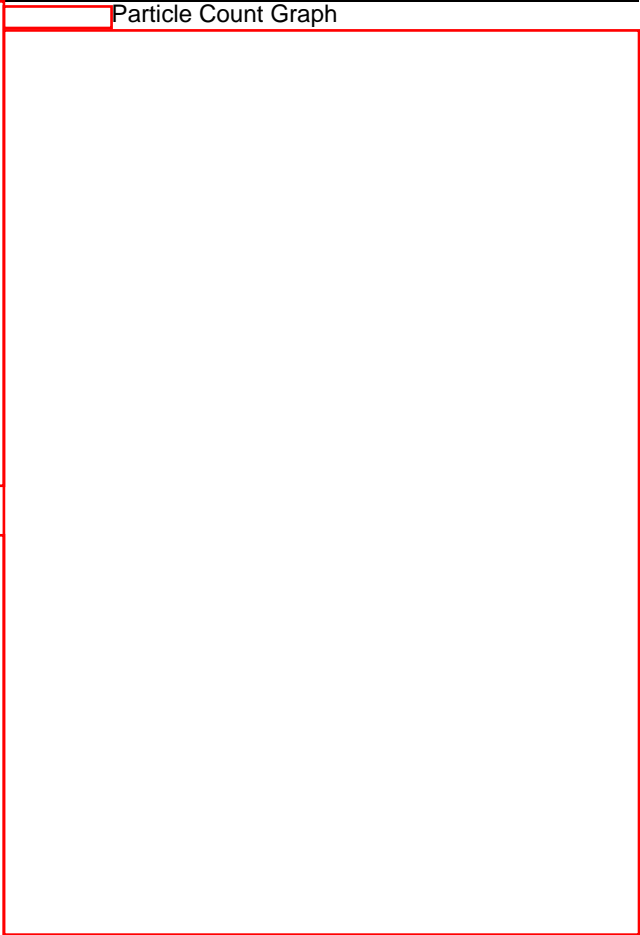
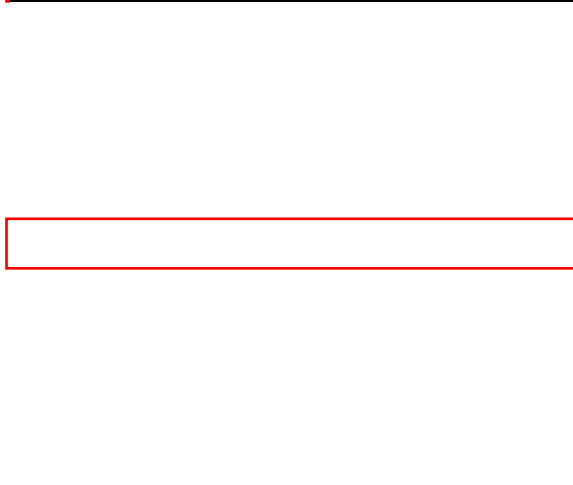
All component wear rates are normal.

Sample Date	06/11/05	06/16/06	Current	Abn
Iron	2.6	0.7	0.7	20
Nickel	0.0	0.0	0.0	20
Chromium	0.0	0.0	0.0	20
Titanium	0.0	0.0	0.0	---
Copper	5.0	2.4	2.4	20
Aluminum	0.1	0.1	0.0	20
Tin	0.0	0.2	0.0	20
Lead	0.1	0.6	0.0	20
Silver	0.0	0.9	0.0	---

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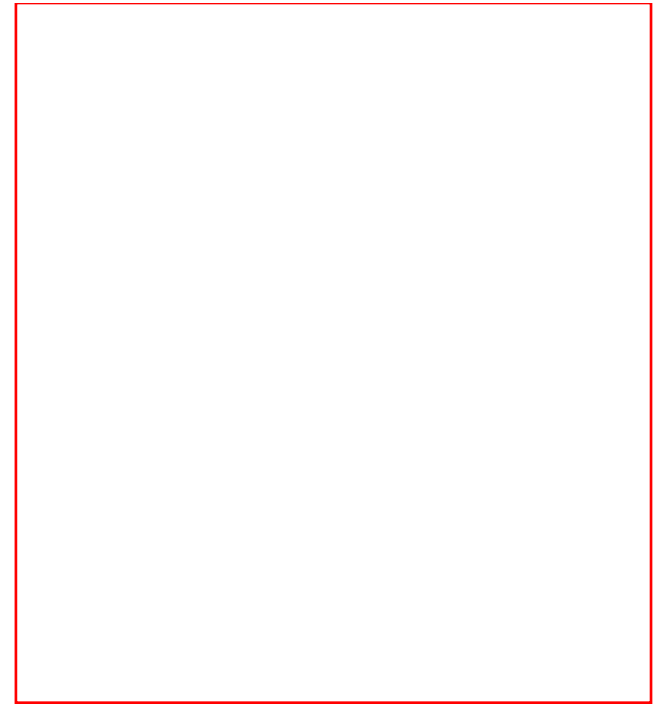
Graphs



Particle Count Graph

TAN Level

Viscosity @ 40°C



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INDUSTRIAL OIL ANALYSIS REPORT

CONTAMINATION **NORMAL**
 OIL CONDITION **ATTENTION**
 WEAR **NORMAL**

PROFORM 2003 ENFN BENDER - Hydraulic System

Unit Make : N/A Date Rec'd : May 29, 2007 Sample Date : May 25, 2007
 Unit Model : N/A Serial No. : PCM420 Time on Unit : 0 hrs
 Comp Make : PARKER Cust. Ref No. : {n/a} Time on Oil : 0 hrs
 Comp Model : N/A Stub No. : WC-729553 Time on Filter : 0 hrs

RECOMMENDATION

Diagnostician: Barry Goslin

Resample at the next service interval to monitor.

CONTAMINATION

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

Sample Date	05/27/05	06/16/06	Current	Abn
Silicon	0.4	1.7	0.6	---
Potassium	0.0	0.0	0.3	---
Water (%)	<0.1	<0.1	<0.1	
>4µm(c)	5019	14150	1687	5000
>6µm(c)	779	5916	381	1300
>14µm(c)	66	584	33	160
>21µm(c)	16	43	11	
>38µm(c)	3	5	1	
>70µm(c)	0	0	0	
ISO 4406(c)	20/17/13	21/20/16	18/16/12	19/17/14

OIL CONDITION

Oil Type: 60 GAL of SUNOCO SUNVIS 846

The condition of oil is suitable for further service. Additive levels indicate the addition of a different brand, or type of oil.

Sample Date	05/27/05	06/16/06	Current	Base
Boron	0.3	0.3	0.0	
Barium	1.4	1.2	0.0	
Calcium	66	67	93	
Magnesium	0.5	0.1	1.4	
Molybdenum	0.1	0.0	0.0	
Sodium	2.5	1.0	0.0	
Phosphorus	297	282	383	
Sulfur	879	740	5402	
Zinc	353	352	487	
Visc@40°C	40.5	40.0	43.4	46.0
Visc@100°C	---	---	---	6.91
Oxidation	---	---	---	---
TAN	0.44	0.39	0.391	

TBN	---	---	---	
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WEAR

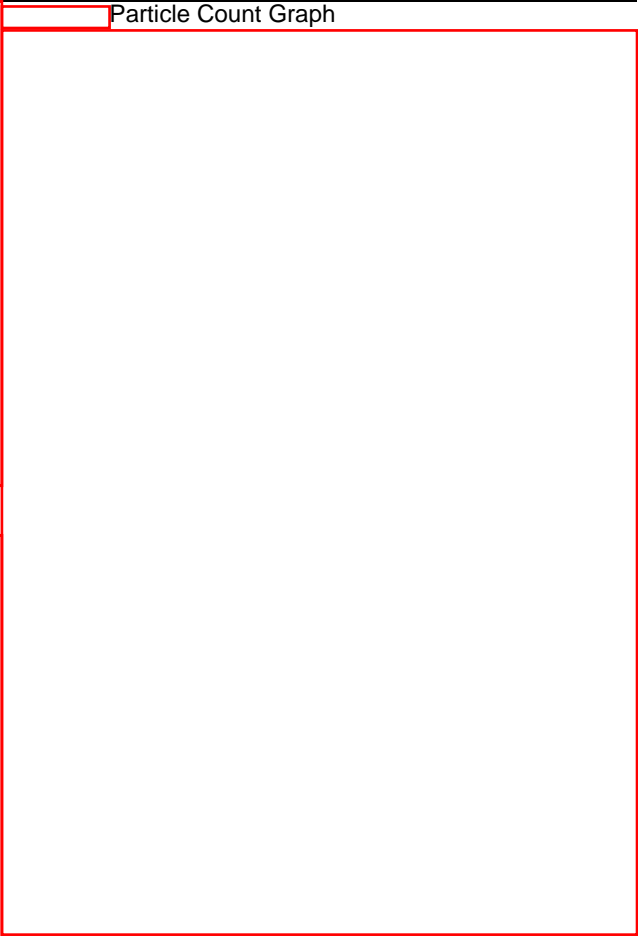
All component wear rates are normal.

Sample Date	05/27/05	06/16/06	Current	Abn
Iron	0.9	1.3	0.0	20
Nickel	0.0	0.0	0.0	20
Chromium	0.6	0.5	0.0	20
Titanium	0.0	0.0	0.0	---
Copper	15	21	0.0	20
Aluminum	0.0	0.0	0.0	20
Tin	0.0	0.0	0.0	20
Lead	1.0	2.1	0.0	20
Silver	0.1	0.1	0.0	---

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Graphs

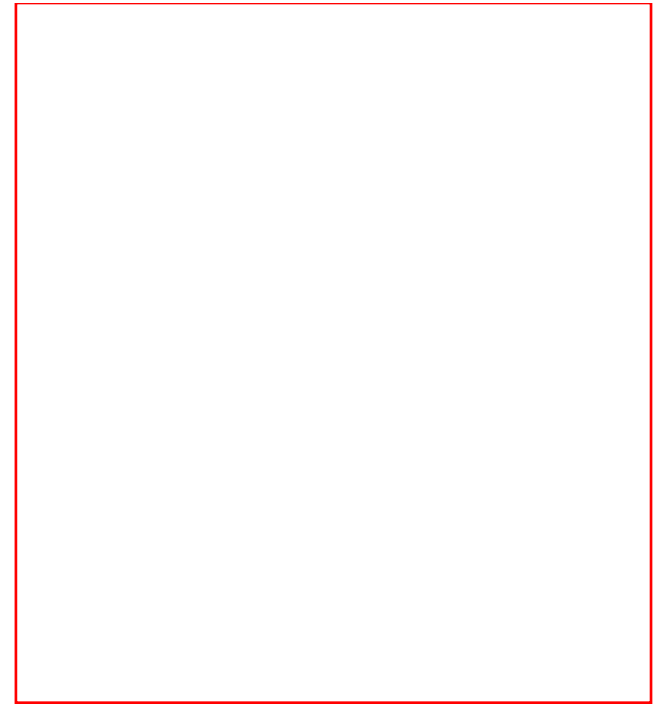


Particle Count Graph



TAN Level

Viscosity @ 40°C



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INDUSTRIAL OIL ANALYSIS REPORT

CONTAMINATION	ABNORMAL
OIL CONDITION	NORMAL
WEAR	NORMAL

LAKELAND CAN ASSEMBLY - Hydraulic System

Unit Make	: N/A	Date Rec'd	: May 29, 2007	Sample Date	: May 25, 2007
Unit Model	: N/A	Serial No.	: 300722543	Time on Unit	: 0 hrs
Comp Make	: MONARCH	Cust. Ref No.	: {n/a}	Time on Oil	: 0 hrs
Comp Model	: N/A	Stub No.	: WC-729561	Time on Filter	: 0 hrs

RECOMMENDATION

Diagnostician: Barry Goslin

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

CONTAMINATION

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

Sample Date	06/11/05	06/16/06	Current	Abn
Silicon	0.8	2.5	4.2	---
Potassium	0.4	0.0	0.6	---
Water (%)	<0.1	<0.1	<0.1	
>4µm(c)	36479	19293	45587	5000
>6µm(c)	26668	10207	23980	1300
>14µm(c)	5362	1169	1999	160
>21µm(c)	694	109	212	
>38µm(c)	7	5	9	
>70µm(c)	0	0	0	
ISO 4406(c)	22/22/20	21/21/17	23/22/18	19/17/14

OIL CONDITION

Oil Type: 30 GAL of SUNOCO SUNVIS 846

The condition of oil is suitable for further service.

Sample Date	06/11/05	06/16/06	Current	Base
Boron	0.1	0.0	0.0	
Barium	0.1	0.0	0.0	
Calcium	50	50	52	
Magnesium	0.7	0.0	0.0	
Molybdenum	0.1	0.0	0.0	
Sodium	0.0	0.0	0.6	
Phosphorus	330	317	357	
Sulfur	1678	1634	1910	
Zinc	412	414	449	
Visc@40°C	41.6	41.8	41.9	46.0
Visc@100°C	---	---	---	6.91
Oxidation	---	---	---	---
TAN	0.33	0.39	0.317	

TBN	---	---	---	
-----	-----	-----	-----	--

WEAR

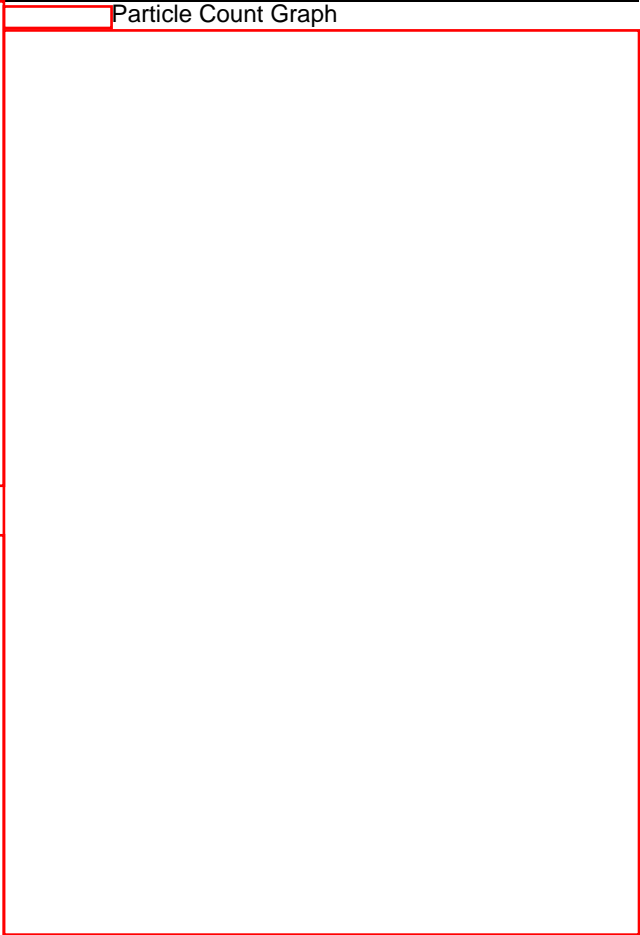
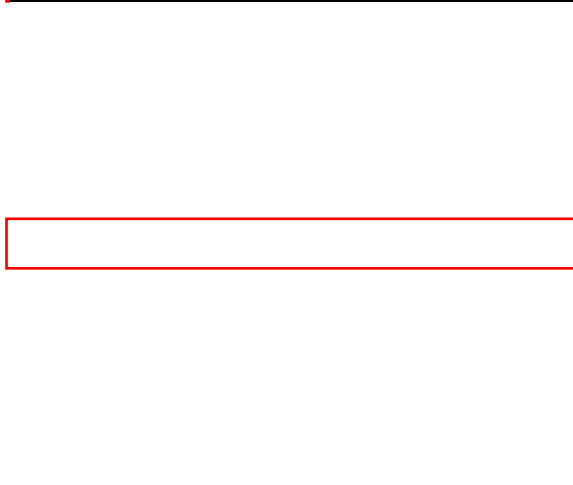
All component wear rates are normal.

Sample Date	06/11/05	06/16/06	Current	Abn
Iron	0.4	0.2	0.4	20
Nickel	0.0	0.0	0.0	20
Chromium	0.0	0.0	0.0	20
Titanium	0.0	0.0	0.0	---
Copper	4.7	7.6	8.3	20
Aluminum	0.4	0.5	0.5	20
Tin	0.0	0.0	0.0	20
Lead	0.0	0.0	0.0	20
Silver	0.0	0.0	0.0	---

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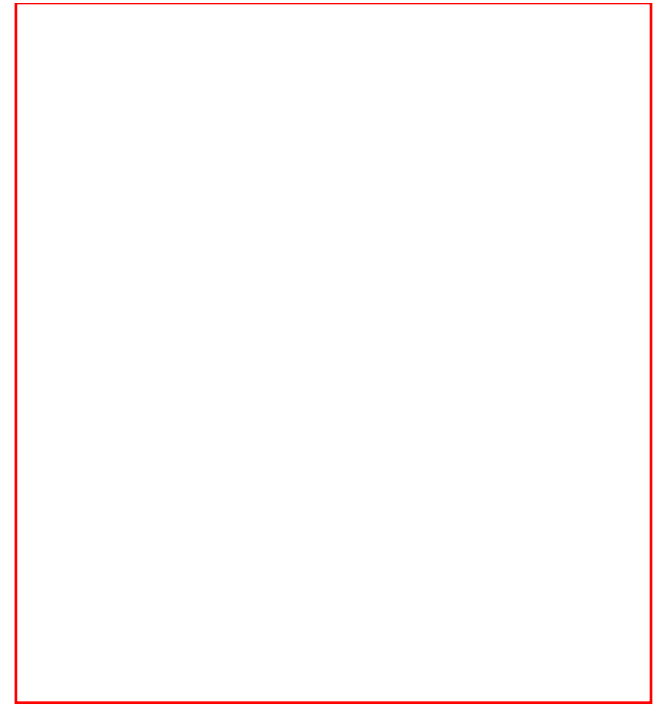
Graphs



Particle Count Graph

TAN Level

Viscosity @ 40°C



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INDUSTRIAL OIL ANALYSIS REPORT

CONTAMINATION	NORMAL
OIL CONDITION	NORMAL
WEAR	NORMAL

HAC 013B - Left Pump

Unit Make	: STOKES	Date Rec'd	: May 29, 2007	Sample Date	: May 25, 2007
Unit Model	: 149-11	Serial No.	: {n/a}	Time on Unit	: 0 hrs
Comp Make	: N/A	Cust. Ref No.	: {n/a}	Time on Oil	: 0 hrs
Comp Model	: N/A	Stub No.	: WC-729593	Time on Filter	: 0 hrs

RECOMMENDATION

Diagnostician: Barry Goslin

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

CONTAMINATION

There is no indication of any contamination in the component.

Sample Date	11/13/04	05/27/05	Current	Abn
Silicon	13	3.2	4.9	---
Potassium	0.0	0.0	0.0	---
Water (%)	<0.1	<0.1	<0.1	
>4µm(c)	---	---	---	5000
>6µm(c)	---	9984	---	1300
>14µm(c)	---	1642	---	160
>21µm(c)	---	55	---	
>38µm(c)	---	4	---	
>70µm(c)	---	1	---	
ISO 4406(c)		20/18		19/17/14

OIL CONDITION

Oil Type: TRIBOL HYDRAULIC 943AW-68

The condition of oil is suitable for further service.

Sample Date	11/13/04	05/27/05	Current	Base
Boron	2.6	0.0	1.4	
Barium	0.0	0.1	0.0	
Calcium	0.0	4.8	0.0	
Magnesium	0.1	0.2	0.0	
Molybdenum	0.0	0.2	0.0	
Sodium	0.1	0.0	0.0	
Phosphorus	452	39	461	
Sulfur	816	1258	875	
Zinc	0.7	21	0.1	
Visc@40°C	71.5	52.7	67.7	68
Visc@100°C	---	---	---	8.7
Oxidation	---	---	---	---
TAN	0.150	0.07	0.177	

TBN	---	---	---	
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WEAR

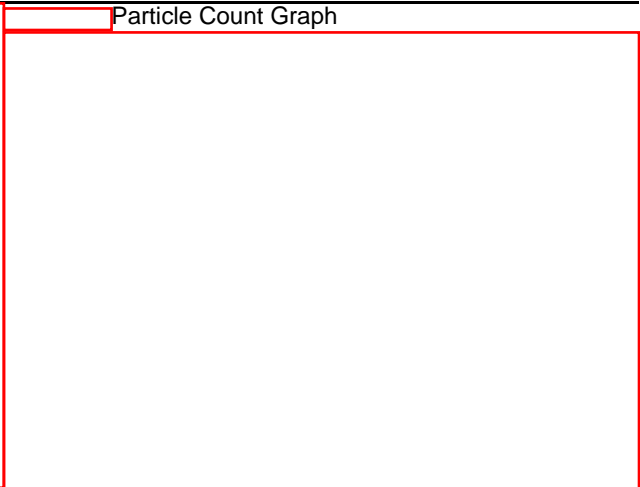
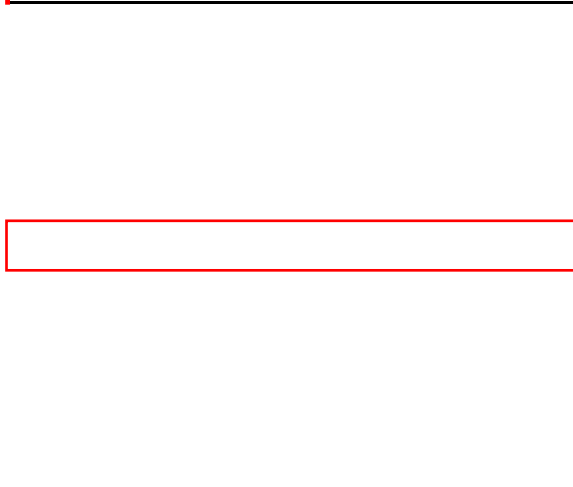
All component wear rates are normal.

Sample Date	11/13/04	05/27/05	Current	Abn
Iron	2.0	4.4	0.0	20
Nickel	0.1	0.0	0.0	20
Chromium	0.1	0.0	0.0	20
Titanium	0.0	0.0	0.0	---
Copper	0.2	0.6	0.0	20
Aluminum	0.0	0.0	0.0	20
Tin	0.0	0.0	0.0	20
Lead	0.0	0.0	0.0	20
Silver	0.3	0.0	0.0	---

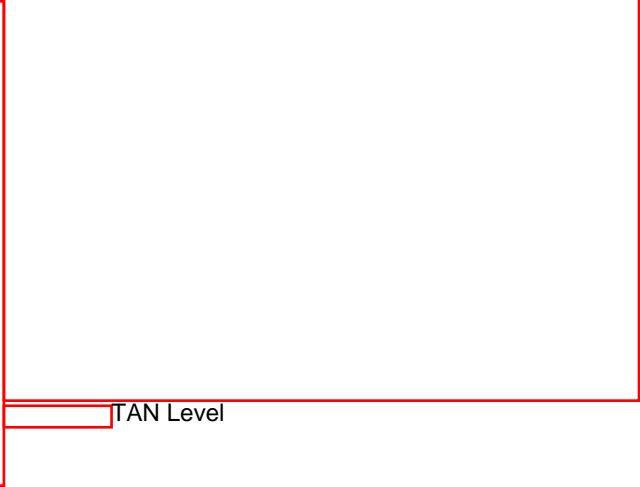
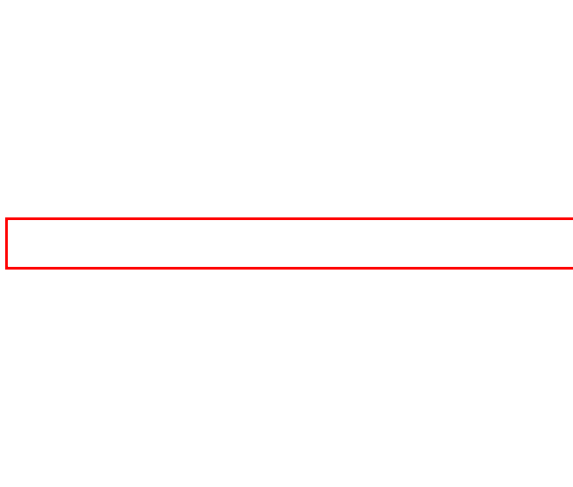
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Graphs

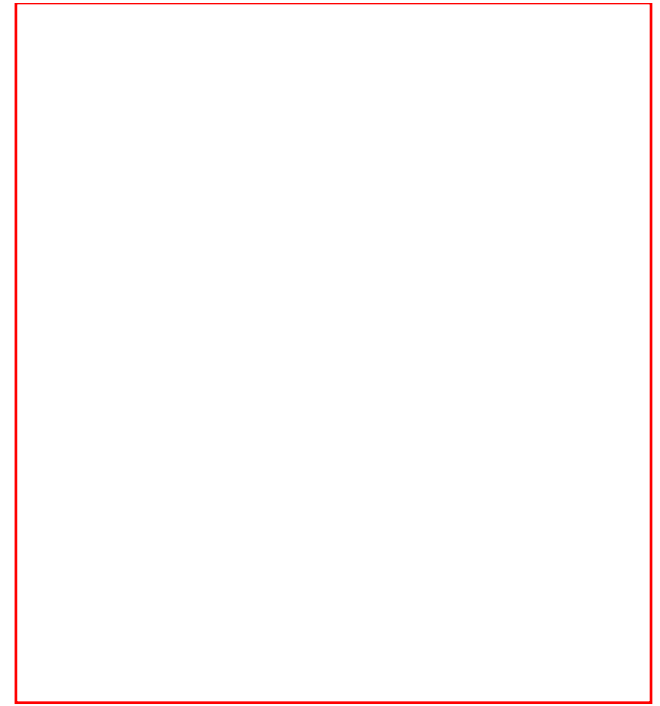


Particle Count Graph



TAN Level

Viscosity @ 40°C



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INDUSTRIAL OIL ANALYSIS REPORT

CONTAMINATION **NORMAL**
 OIL CONDITION **NORMAL**
 WEAR **NORMAL**

HAC 013B - Right Blower

Unit Make : STOKES Date Rec'd : May 29, 2007 Sample Date : May 25, 2007
 Unit Model : 306-401 Serial No. : {n/a} Time on Unit : 0 hrs
 Comp Make : N/A Cust. Ref No. : {n/a} Time on Oil : 0 hrs
 Comp Model : N/A Stub No. : WC-729594 Time on Filter : 0 hrs

RECOMMENDATION

Diagnostician: Barry Goslin

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

CONTAMINATION

There is no indication of any contamination in the component.

Sample Date	11/13/04	05/27/05	Current	Abn
Silicon	2.3	7.2	2.0	---
Potassium	0.0	0.0	0.0	---
Water (%)	<0.1	<0.1	<0.1	
>4µm(c)	---	36362	---	2500
>6µm(c)	---	25227	---	640
>14µm(c)	---	4496	---	80
>21µm(c)	---	662	---	
>38µm(c)	---	20	---	
>70µm(c)	---	2	---	
ISO 4406(c)		22/22/19		18/16/13

OIL CONDITION

Oil Type: LEYBOLD HE-200

The condition of oil is suitable for further service.

Sample Date	11/13/04	05/27/05	Current	Base
Boron	1.9	0.0	0.7	
Barium	0.1	0.1	0.0	
Calcium	0.5	4.8	0.4	
Magnesium	0.1	0.3	0.0	
Molybdenum	0.0	0.2	0.0	
Sodium	0.1	0.0	0.0	
Phosphorus	0.0	55	0.2	
Sulfur	1319	1232	472	
Zinc	1.4	20	0.8	
Visc@40°C	52.2	52.7	60.7	58
Visc@100°C	---	---	---	9.1
Oxidation	---	---	---	---
TAN	0.040	0.05	0.019	

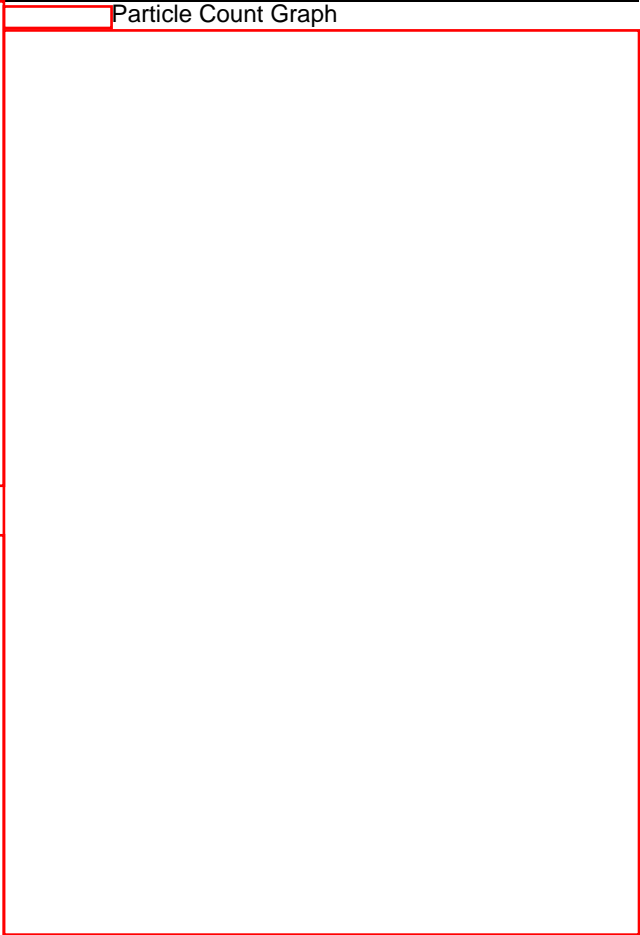
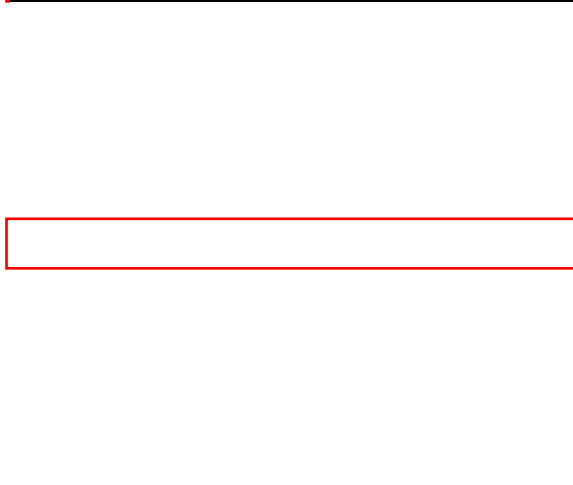
TBN	---	---	---	
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WEAR

All component wear rates are normal.

Sample Date	11/13/04	05/27/05	Current	Abn
Iron	4.5	3.4	1.6	20
Nickel	0.0	0.0	0.0	20
Chromium	0.0	0.0	0.0	20
Titanium	0.0	0.0	0.0	---
Copper	0.0	0.5	0.0	20
Aluminum	0.0	0.1	0.0	20
Tin	0.0	0.0	0.0	20
Lead	0.0	0.0	0.0	20
Silver	0.2	0.0	0.0	---

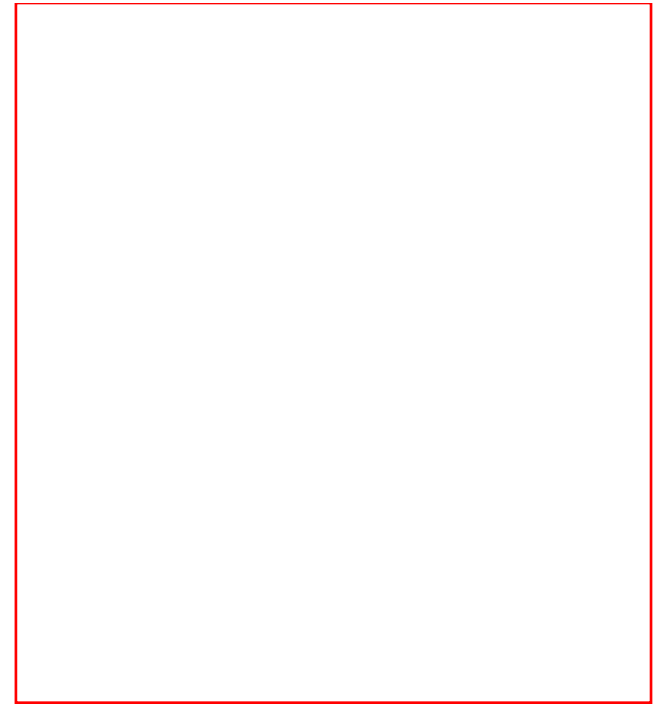
Graphs



Particle Count Graph

TAN Level

Viscosity @ 40°C



If you have any questions concerning this sample report (work order no 01385715) please call 1-800-268-2131.



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Report ID - HAL440BEL [WCAMIS] 01385715 - Pg. 2

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INDUSTRIAL OIL ANALYSIS REPORT

CONTAMINATION **NORMAL**
 OIL CONDITION **NORMAL**
 WEAR **NORMAL**

HAC 013B - Right Pump

Unit Make : STOKES

Date Rec'd : May 29, 2007

Sample Date : May 25, 2007

Unit Model : 149-11

Serial No. : {n/a}

Time on Unit : 0 hrs

Comp Make : N/A

Cust. Ref No. : {n/a}

Time on Oil : 0 hrs

Comp Model : N/A

Stub No. : WC-729592

Time on Filter : 0 hrs

RECOMMENDATION

Diagnostician: Barry Goslin

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

CONTAMINATION

There is no indication of any contamination in the component.

Sample Date	11/13/04	05/27/05	Current	Abn
Silicon	20	37	9.6	---
Potassium	0.0	1.0	0.0	---
Water (%)	<0.1	<0.1	<0.1	
>4µm(c)	---	---	---	5000
>6µm(c)	---	---	---	1300
>14µm(c)	---	---	---	160
>21µm(c)	---	---	---	
>38µm(c)	---	---	---	
>70µm(c)	---	---	---	
ISO 4406(c)				19/17/14

OIL CONDITION

Oil Type: TRIBOL HYDRAULIC 943AW-68

The condition of oil is suitable for further service.

Sample Date	11/13/04	05/27/05	Current	Base
Boron	4.1	3.5	1.4	
Barium	0.0	0.1	0.0	
Calcium	0.6	0.7	0.1	
Magnesium	0.2	0.0	0.0	
Molybdenum	0.0	0.1	0.0	
Sodium	0.6	0.0	0.0	
Phosphorus	476	475	476	
Sulfur	883	882	907	
Zinc	2.2	1.4	0.7	
Visc@40°C	66.6	67.5	67.3	68
Visc@100°C	---	---	---	8.7
Oxidation	---	---	---	---
TAN	0.200	0.25	0.139	

TBN	---	---	---	
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WEAR

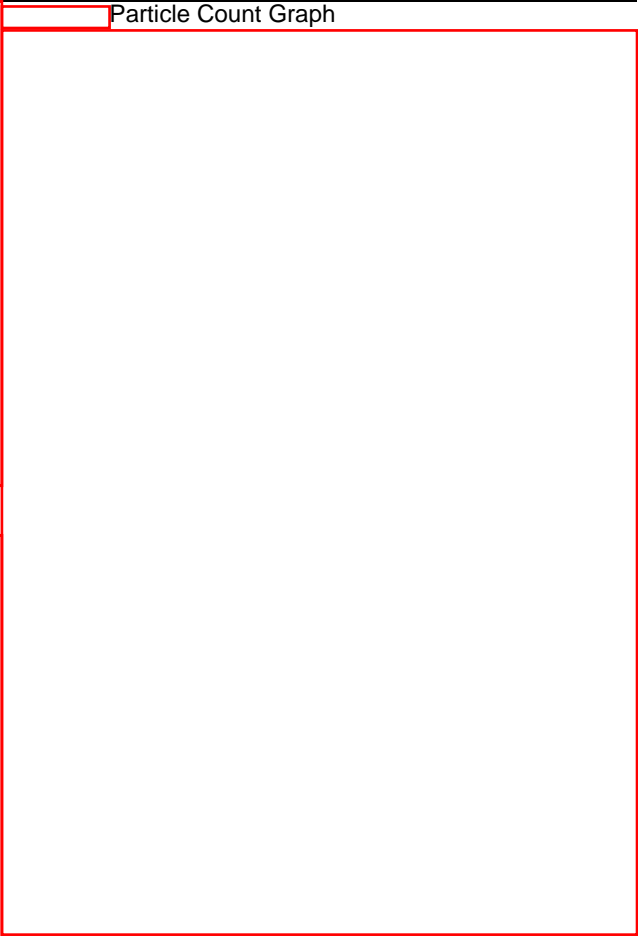
All component wear rates are normal.

Sample Date	11/13/04	05/27/05	Current	Abn
Iron	5.4	4.9	2.3	20
Nickel	0.1	0.0	0.0	20
Chromium	0.1	0.0	0.0	20
Titanium	0.0	0.0	0.0	---
Copper	0.6	0.1	0.1	20
Aluminum	0.0	0.3	0.0	20
Tin	0.0	0.0	0.0	20
Lead	0.0	0.0	0.0	20
Silver	0.3	0.0	0.0	---

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Graphs

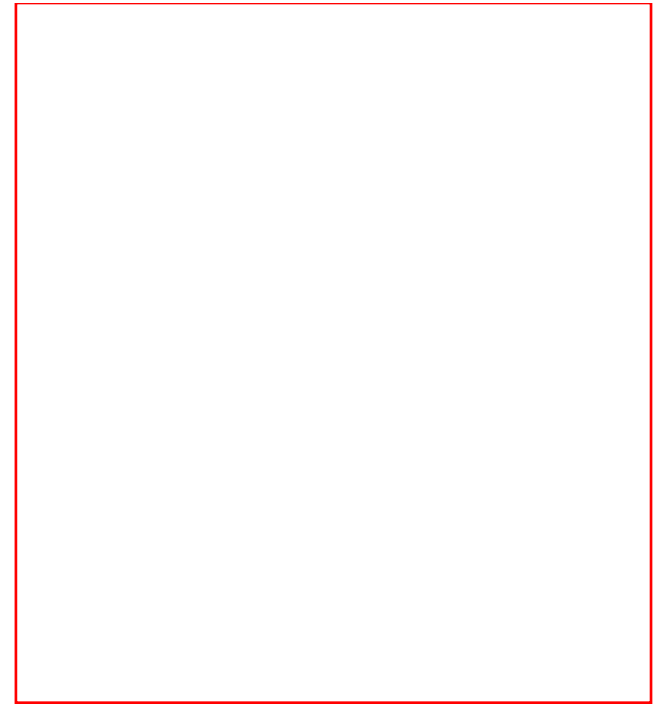


Particle Count Graph



TAN Level

Viscosity @ 40°C



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INDUSTRIAL OIL ANALYSIS REPORT

CONTAMINATION **NORMAL**
 OIL CONDITION **NORMAL**
 WEAR **NORMAL**

HRD 518 - Right Blower

Unit Make : LEYBOLD

Date Rec'd : May 29, 2007

Sample Date : May 25, 2007

Unit Model : WSU 501

Serial No. : 2000000002

Time on Unit : 0 hrs

Comp Make : N/A

Cust. Ref No. : {n/a}

Time on Oil : 0 hrs

Comp Model : N/A

Stub No. : WC-729598

Time on Filter : 0 hrs

RECOMMENDATION

Diagnostician: Barry Goslin

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

CONTAMINATION

There is no indication of any contamination in the component.

Sample Date	11/13/04	05/27/05	Current	Abn
Silicon	3.6	1.4	1.1	---
Potassium	0.0	0.0	0.0	---
Water (%)	<0.1	<0.1	<0.1	
>4µm(c)	---	---	---	2500
>6µm(c)	---	569	---	640
>14µm(c)	---	71	---	80
>21µm(c)	---	5	---	
>38µm(c)	---	0	---	
>70µm(c)	---	0	---	
ISO 4406(c)		16/13		18/16/13

OIL CONDITION

Oil Type: LEYBOLD HE-200

The condition of oil is suitable for further service.

Sample Date	11/13/04	05/27/05	Current	Base
Boron	2.6	0.8	0.7	
Barium	4.1	1.2	0.0	
Calcium	3.8	2.0	0.2	
Magnesium	0.2	0.1	0.0	
Molybdenum	0.0	0.0	0.0	
Sodium	0.7	1.2	0.0	
Phosphorus	5.2	1.5	1.1	
Sulfur	1342	1500	767	
Zinc	4.2	1.6	0.1	
Visc@40°C	92.8	74.9	59.4	58
Visc@100°C	---	---	---	9.1
Oxidation	---	---	---	---
TAN	0.090	0.08	0.214	

TBN	---	---	---	
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WEAR

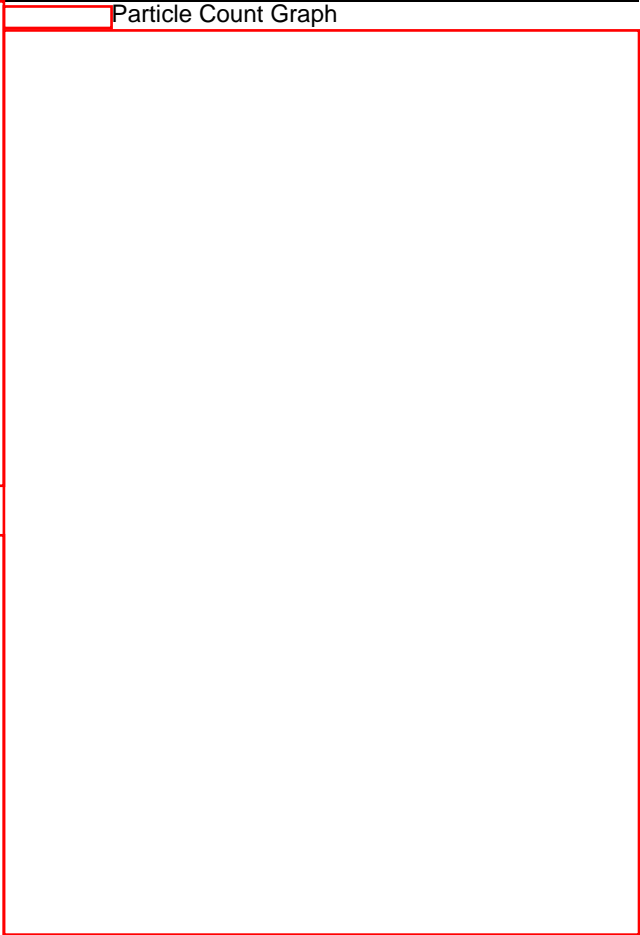
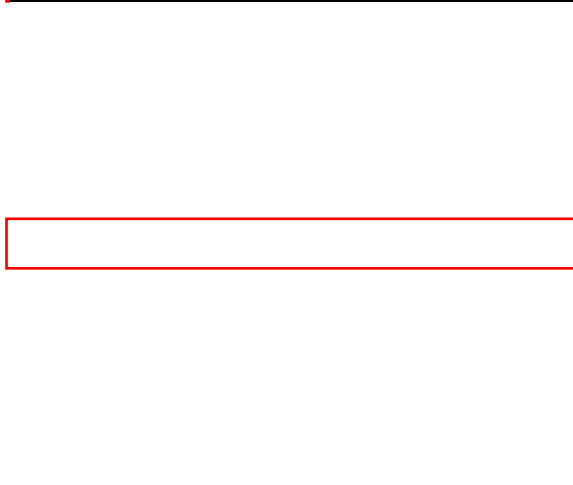
All component wear rates are normal.

Sample Date	11/13/04	05/27/05	Current	Abn
Iron	2.2	1.3	0.6	20
Nickel	0.0	0.0	0.0	20
Chromium	0.2	0.0	0.0	20
Titanium	0.0	0.0	0.0	---
Copper	0.6	0.1	0.0	20
Aluminum	0.0	0.1	0.0	20
Tin	0.0	0.0	0.0	20
Lead	0.0	0.0	0.0	20
Silver	0.3	0.0	0.0	---

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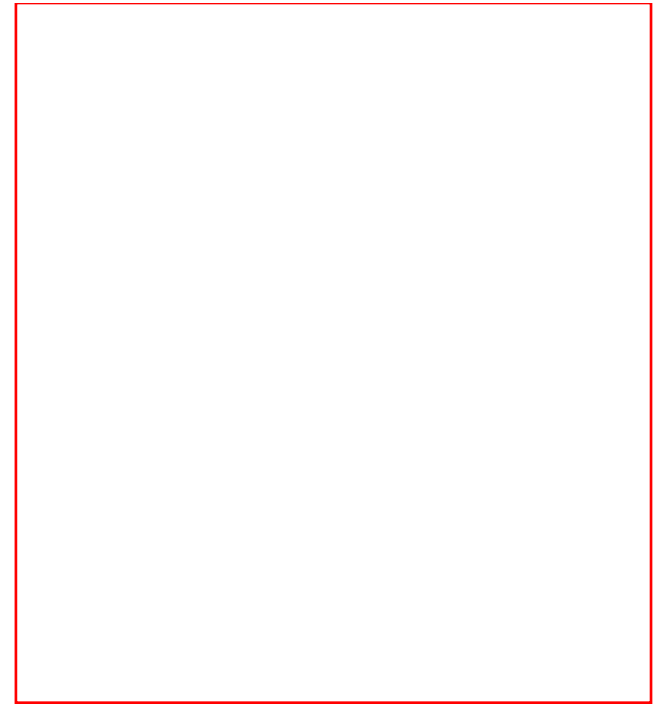
Graphs



Particle Count Graph

TAN Level

Viscosity @ 40°C



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INDUSTRIAL OIL ANALYSIS REPORT

CONTAMINATION	NORMAL
OIL CONDITION	NORMAL
WEAR	NORMAL

HRD 504 - Blower

Unit Make	: LEYBOLD	Date Rec'd	: May 29, 2007	Sample Date	: May 25, 2007
Unit Model	: WSU 501-H	Serial No.	: 1512	Time on Unit	: 0 hrs
Comp Make	: N/A	Cust. Ref No.	: {n/a}	Time on Oil	: 0 hrs
Comp Model	: N/A	Stub No.	: WC-729587	Time on Filter	: 0 hrs

RECOMMENDATION

Diagnostician: Barry Goslin

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

CONTAMINATION

There is no indication of any contamination in the component.

Sample Date	11/13/04	05/27/05	Current	Abn
Silicon	1.2	0.4	1.4	---
Potassium	0.0	0.0	0.0	---
Water (%)	<0.1	<0.1	<0.1	
>4µm(c)	---	1811	---	2500
>6µm(c)	---	540	---	640
>14µm(c)	---	79	---	80
>21µm(c)	---	28	---	
>38µm(c)	---	4	---	
>70µm(c)	---	0	---	
ISO 4406(c)		18/16/13		18/16/13

OIL CONDITION

Oil Type: LEYBOLD HE-200

The condition of oil is suitable for further service.

Sample Date	11/13/04	05/27/05	Current	Base
Boron	3.1	0.3	0.5	
Barium	0.1	0.0	0.0	
Calcium	113	1.9	0.6	
Magnesium	34	0.0	0.1	
Molybdenum	0.0	0.0	0.0	
Sodium	14	0.2	0.0	
Phosphorus	40	1.2	5.7	
Sulfur	1853	1533	1203	
Zinc	35	2.8	0.4	
Visc@40°C	64.6	67.0	57.5	58
Visc@100°C	---	---	---	9.1
Oxidation	---	---	---	---
TAN	0.250	0.05	0.015	

TBN	---	---	---	
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WEAR

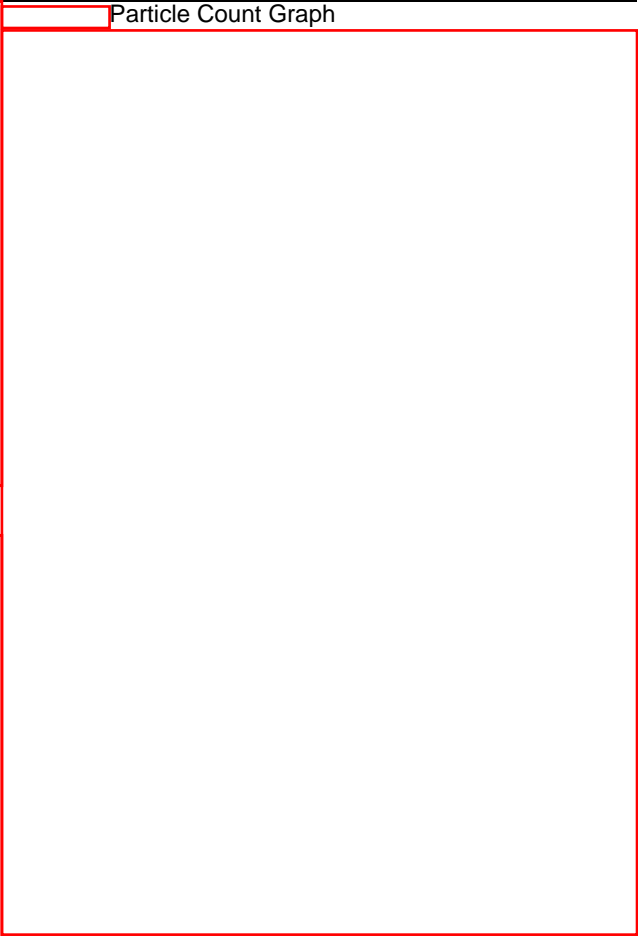
All component wear rates are normal.

Sample Date	11/13/04	05/27/05	Current	Abn
Iron	3.7	0.0	0.1	20
Nickel	0.0	0.0	0.0	20
Chromium	0.1	0.0	0.0	20
Titanium	0.0	0.0	0.0	---
Copper	0.6	0.0	0.0	20
Aluminum	0.0	0.0	0.0	20
Tin	0.0	0.0	0.0	20
Lead	0.0	0.0	0.0	20
Silver	0.3	0.0	0.0	---

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Graphs

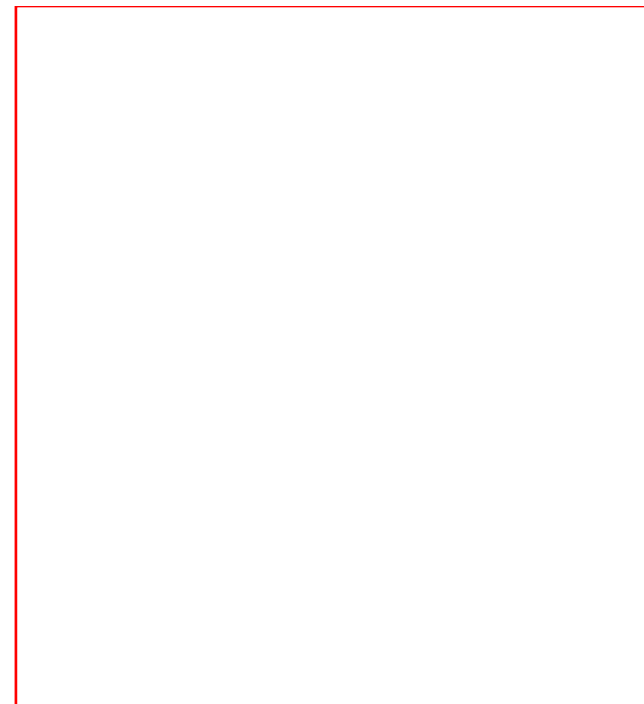


Particle Count Graph



TAN Level

Viscosity @ 40°C



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