

DOCKET NO. SA 516

EXHIBIT NO. 8K

**NATIONAL TRANSPORTATION SAFETY BOARD**

**WASHINGTON, D.C.**

**SAYBOLT LABORATORY REPORT OF FUEL SAMPLES TESTED ON  
OCTOBER 17, 1996**

by

Gordon J. Hookey

# SAYBOLT INC.

NEW JERSEY LAB



SAYBOLT

LABORATORY NO.: 1096364

CUSTOMER REF. NO(S):

DATE: 10/16/96

INVOICE NO: EE-32579A

## LABORATORY ANALYSIS REPORT

### DESCRIPTION

- Sample designated as:  
JET FUEL OIL
- Identifying Marks:  
SAMPLE ID: AIRCRAFT TWA,  
FLT-800, ENGINE #1  
08/16/96
- Submitted by:  
WASHINGTON, DC  
U.S. NATIONAL TRANSP.
- Client:  
US NATIONAL TRANSPORTA-  
TION SAFETY BOARD

### ANALYSIS

TEST	METHOD	RESULT
SALINITY, G/100 G (ON WATER)	REFRACTOMETER	3.4
FREE WATER, VOL PCT	CALC.	50.0

SAMPLES SHALL BE RETAINED BY SAYBOLT INC. FOR FORTY-FIVE (45) DAYS UNLESS OTHERWISE REQUESTED IN WRITING.

### NOTES

- This laboratory report may not be published or used except in full. It shall not be used in connection with any form of advertising unless written consent is received from an officer of Saybolt Inc.
- Results were based on analysis made at the time samples were received at the laboratory.
- Sample nomenclature is designated by the customer.

TG PAGE 1

MEMBERS ASTM-API-SAE

*Handwritten signature: Paul M. ...*

SAYBOLT INC.

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ATTACHMENT 10

# SAYBOLT INC.

NEW JERSEY LAB



SAYBOLT

LABORATORY NO.: 1096365

## LABORATORY ANALYSIS REPORT

CUSTOMER  
REF. NO(S):

DATE: 10/16/96

INVOICE NO: EE-32579A

### ANALYSIS

### DESCRIPTION

- Sample designated as:  
JET FUEL OIL
- Identifying Marks:  
SAMPLE ID: AIRCRAFT TWA,  
FLT-800, ENGINE #2  
08/14/96
- Submitted by:  
WASHINGTON, DC  
U.S. NATIONAL TRANSP.
- Client:  
US NATIONAL TRANSPORTA-  
TION SAFETY BOARD

### TEST

SALINITY, G/100 G (ON WATER)  
FREE WATER, VOL PCT

### METHOD

REFRACTOMETER  
CALC.

### RESULT

3.5  
50.0

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(45) DAYS UNLESS OTHERWISE REQUESTED IN WRITING

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TG

PAGE 2

MEMBERS ASTM-API-SAE

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*Paul M. P.stad.*  
SAYBOLT INC.

# SAYBOLT INC.

NEW JERSEY LAB



SAYBOLT

## LABORATORY ANALYSIS REPORT

LABORATORY NO.: 1096366

CUSTOMER  
REF. NO(S):

DATE: 10/16/96

INVOICE NO: EE-32579A

### DESCRIPTION

- **Sample designated as:**  
JET FUEL OIL
- **Identifying Marks:**  
SAMPLE ID: AIRCRAFT TWA,  
FLT-800, ENGINE #3  
08/14/96
- **Submitted by:**  
WASHINGTON, DC  
U.S. NATIONAL TRANSP.
- **Client:**  
US NATIONAL TRANSPORTA-  
TION SAFETY BOARD

ATTACHMENT 10

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### ANALYSIS

<u>TEST</u>	<u>METHOD</u>	<u>RESULT</u>
SALINITY, G/100 G (ON WATER)	REFRACTOMETER	3.7
FREE WATER, VOL PCT	CALC.	50.0

TG PAGE 3

MEMBERS ASTM-API-SAE

*Handwritten signature*

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# SAYBOLT INC.

NEW JERSEY LAB



SAYBOLT

LABORATORY NO.: 1096367

## LABORATORY ANALYSIS REPORT

CUSTOMER  
REF. NO(S):

DATE: 10/16/96  
INVOICE NO: EE-32579A

### DESCRIPTION

- Sample designated as:  
JET FUEL OIL
- Identifying Marks:  
SAMPLE ID: AIRCRAFT TWA,  
FLT-800, ENGINE #3
- Submitted by:  
WASHINGTON, DC  
U.S. NATIONAL TRANSP.
- Client:  
US NATIONAL TRANSPORTA-  
TION SAFETY BOARD

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### ANALYSIS

TEST	METHOD	RESULT
SALINITY, G/100 G	REFRACTOMETER	3.2
GRAVITY, SPECIFIC AT 60 DEG F	D-4052	0.8126
GRAVITY, API AT 60 DEG F	D-4052	42.6
FREE WATER, VOL PCT	CALC.	50.0

TG

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*Radford M. Mohr*  
SAYBOLT INC.

ATTACHMENT 10

# SAYBOLT INC.

NEW JERSEY LAB



SAYBOLT

LABORATORY NO.: 1096368

CUSTOMER REF. NO(S):

## LABORATORY ANALYSIS REPORT

DATE: 10/16/96

INVOICE NO: EE-32579A

### ANALYSIS

#### DESCRIPTION

- Sample designated as:  
JET FUEL OIL

- Identifying Marks:**

SAMPLE ID: AIRCRAFT TWA,  
FLT-881 (ATHENS FUEL)  
10/09/96

- Submitted by:**

WASHINGTON, DC

U.S. NATIONAL TRANSP.

- Client:**

US NATIONAL TRANSPORTATION SAFETY BOARD

SAMPLES SHALL BE RETAINED BY SAYBOLT INC. FOR FORTY-FIVE (45) DAYS UNLESS OTHERWISE REQUESTED IN WRITING.

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#### TEST

FLASH POINT, TAG CLOSED CUP, DEG F  
GRAVITY AT 60 DEG F  
GRAVITY SPECIFIC AT 60 DEG F  
DISTILLATION, AT 760 mmHg, DEG F  
INITIAL BOILING POINT, DEG F  
RCVD, 05 PCT, DEG F  
RCVD, 10 PCT, DEG F  
RCVD, 15 PCT, DEG F  
RCVD, 20 PCT, DEG F  
RCVD, 30 PCT, DEG F  
RCVD, 40 PCT, DEG F  
RCVD, 50 PCT, DEG F  
RCVD, 60 PCT, DEG F  
RCVD, 70 PCT, DEG F  
RCVD, 80 PCT, DEG F  
RCVD, 85 PCT, DEG F

#### METHOD

D-56  
D-4052  
D-4052  
D-86  
D-86  
D-86  
D-86  
D-86  
D-86  
D-86  
D-86  
D-86  
D-86  
D-86  
D-86  
D-86  
D-86  
D-86

#### RESULT

114  
45.7  
0.7987  
---  
305.8  
321.6  
338.8  
349.8  
360.8  
371.8  
383.8  
393.8  
405.8  
419.8  
433.8  
443.8

TG

PAGE 5

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*Radif Montad*  
SAYBOLT INC.

Attachment 10

# SAYBOLT INC.

NEW JERSEY LAB



SAYBOLT

LABORATORY NO.: 1096369

LABORATORY ANALYSIS REPORT

CUSTOMER  
REF. NO(S):

DATE: 10/16/96

INVOICE NO: EE-32579A

## ANALYSIS

### DESCRIPTION

■ **Sample designated as:**  
JET FUEL OIL

■ **Identifying Marks:**  
SAMPLE ID: AIRCRAFT TWA,  
FLT-800, ENGINE #4

■ **Submitted by:**  
WASHINGTON, DC  
U.S. NATIONAL TRANSP.

■ **Client:**  
US NATIONAL TRANSPORTA-  
TION SAFETY BOARD

SAMPLES SHALL BE RETAINED BY SAYBOLT INC. FOR FORTY-FIVE  
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### TEST

GRAVITY, AT 60 DEG F  
GRAVITY, SPECIFIC AT 60 DEG F  
FREE WATER, VOL PCT

### METHOD

D-4052  
D-4052  
CALC.

### RESULT

42.7  
0.8125  
NONE

TG

PAGE 7

MEMBERS ASTM-API-SAE

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*Malcolm Montad*

SAYBOLT INC.

# SAYBOLT INC.

NEW JERSEY LAB



SAYBOLT

## LABORATORY ANALYSIS REPORT

LABORATORY NO.: 1096630

CUSTOMER  
REF. NO(S):

DATE: 10/16/96

INVOICE NO: EE-32579A

### ANALYSIS

#### DESCRIPTION

■ Sample designated as:  
JET FUEL OIL

■ Identifying Marks:  
ID: COMBINING SAMPLES  
FROM ENGINES, 1, 2, 3 & 4,  
AIRCRAFT TWA, FLT-800  
CALVERTON, NY, U.S.N.T.S.B.

■ Submitted by:  
WASHINGTON, DC  
U.S. NATIONAL TRANSP.

■ Client:  
US NATIONAL TRANSPORTA-  
TION SAFETY BOARD

SAMPLES SHALL BE RETAINED BY SAYBOLT INC. FOR FORTY-FIVE  
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- Sample nomenclature is designated by the customer.

#### TEST

RCVD, 90 PCT, DEG F  
END POINT, DEG F  
RECOVERY, VOL PCT  
RESIDUE, VOL PCT  
LOSS, VOL PCT

#### METHOD

D-86  
D-86  
D-86  
D-86  
D-86

#### RESULT

491.8  
503.8  
98.0  
1.6  
0.4

TG

PAGE 10

MEMBERS ASTM-API-SAE

*Madison Montad*  
SAYBOLT INC.

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ATTACHMENT 10



# SAYBOLT INC.

NEW JERSEY LAB



SAYBOLT

LABORATORY NO.: 1096370

CUSTOMER  
REF. NO(S):

DATE: 10/16/96

INVOICE NO: EE-32579A

## LABORATORY ANALYSIS REPORT

### ANALYSIS

#### DESCRIPTION

- Sample designated as:  
JET FUEL OIL
- Identifying Marks:  
SAMPLE ID: AIRCRAFT TWA,  
FLT 800, ENGINE #4
- Submitted by:  
WASHINGTON, DC  
U.S. NATIONAL TRANSP.
- Client:  
US NATIONAL TRANSPORTA-  
TION SAFETY BOARD

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#### TEST

GRAVITY, AT 60 DEG F  
GRAVITY, SPECIFIC AT 60 DEG F  
FREE WATER, VOL PCT

#### METHOD

D-4052  
D-4052  
CALC.

#### RESULT

42.7  
0.8124  
NONE

TG


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MEMBERS ASTM-API-SAE

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*Paul Mohr*

SAYBOLT INC.

**SAYBOLT INC.**  
 NEW JERSEY LAB  
  
 SAYBOLT

**LABORATORY ANALYSIS REPORT**

LABORATORY NO.: 1096630

CUSTOMER  
 REF. NO(S):

DATE: 10/16/96  
 INVOICE NO: EE-32579A

DESCRIPTION	ANALYSIS																																			
<ul style="list-style-type: none"> <li>■ <b>Sample designated as:</b> JET FUEL OIL</li> <li>■ <b>Identifying Marks:</b> ID: COMBINING SAMPLES FROM ENGINES, 1,2,3 &amp; 4, AIRCRAFT TWA, FLT-800 CALVERTON,NY,U.S.N.T.S.B.</li> <li>■ <b>Submitted by:</b> WASHINGTON, DC U.S. NATIONAL TRANSP.</li> <li>■ <b>Client:</b> US NATIONAL TRANSPORTA- TION SAFETY BOARD</li> </ul>																																				
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<p>TG</p>	<p>PAGE 9</p>	<p>MEMBERS ASTM-API-SAE</p>																																		

*Handwritten Signature*  
 SAYBOLT INC.

ATTACHMENT 10

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SAYBOLT

**SAYBOLT INC.**

**NEW JERSEY LAB**

LABORATORY NO.: 1096368

CUSTOMER  
REF. NO(S):

DATE: 10/16/96

INVOICE NO: EE-32579A

**LABORATORY ANALYSIS REPORT**

**DESCRIPTION**

- **Sample designated as:**  
JET FUEL OIL
- **Identifying Marks:**  
SAMPLE ID: AIRCRAFT TWA,  
FLT-881 (ATHENS FUEL)  
10/09/96
- **Submitted by:**  
WASHINGTON, DC  
U.S. NATIONAL TRANSP.
- **Client:**  
US NATIONAL TRANSPORTA-  
TION SAFETY BOARD

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**ANALYSIS**

<u>TEST</u>	<u>METHOD</u>	<u>RESULT</u>
RCVD, 90 PCT, DEG F	D-86	453.8
RCVD, 95 PCT, DEG F	D-86	471.8
END POINT, DEG F	D-86	481.8
RECOVERY, VOL PCT	D-86	98.0
RESIDUE, VOL PCT	D-86	1.4
LOSS, VOL PCT	D-86	0.6

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PAGE 6

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