

Check Sheet

Company Name: *Central Fla. Pipeline*  
Permit Number: *AC 42-19505*  
PSD Number:  
County: *Orange*  
Permit Engineer:  
Others involved: \*

Application:

- Initial Application
- Incompleteness Letters
- Responses
- Final Application (if applicable)
- Waiver of Department Action
- Department Response

Intent:

- Intent to Issue
- Notice to Public
- Technical Evaluation
- BACT Determination
- Unsigned Permit

Attachments:

- 
- 
- 
- Correspondence with:
  - EPA
  - Park Services
  - County
  - Other
- Proof of Publication
- Petitions - (Related to extensions, hearings, etc.)

Final Determination:

- Final Determination
- Signed Permit
- BACT Determination

Post Permit Correspondence:

- Extensions
- Amendments/Modifications
- Response from EPA
- Response from County
- Response from Park Services

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
NOTICE OF PERMITS

In the matter of an  
Application for Permits by:

DER File No. AC 48-195815  
AC 48-195955  
Orange County

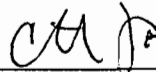
Mr. Tom Rigg  
Manager of Florida Operation  
Central Florida Pipeline Corporation  
100 GATX Drive  
Tampa, Florida 33605

Enclosed are Permit Numbers AC 48-195815 and 48-195955 to construct (modify) petroleum storage tanks Nos. 80-4 and 80-5 at Central Florida Pipeline Corporation's terminal in Taft, Orange County, Florida, issued pursuant to Section(s) 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permits pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION



C. H. Fancy, P.E., Chief  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400  
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMITS and all copies were mailed before the close of business on 7-25-91 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED,  
on this date, pursuant to  
§120.52(11), Florida Statutes,  
with the designated Department  
Clerk, receipt of which is hereby  
acknowledged.

  
(Clerk)

7-25-91  
(Date)

Copies furnished to:

Charles Collins, Central Dist.  
Stanford Strehler, Jr., P.E.

P 832 539 828

---

Tom Riggs  
GATX

AC-48-195815  
955

CM-RRR

Final Determination

Central Florida Pipeline Corporation  
Taft, Orange County, Florida

| <u>Source</u>                   | <u>Permit No.</u> |
|---------------------------------|-------------------|
| Petroleum Storage Tank No. 80-4 | AC 48-195815      |
| Petroleum Storage Tank No. 80-5 | AC 48-195955      |

Department of Environmental Regulation  
Division of Air Resources Management  
Bureau of Air Regulation

July 18, 1991

## Final Determination

The Technical Evaluation and Preliminary Determination for the permits to construct two petroleum storage tanks (Nos. 80-4 and 80-5) at Central Florida Pipeline Corporation's bulk terminal in Taft, Orange County, Florida, was distributed on June 7, 1991. The Notice of Intent to Issue was published in the Orlando Sentinel on June 15, 1991. Copies of the evaluation were available for public inspection at the Department's offices in Orlando and Tallahassee.

No comments were submitted on the Department's Intent to Issue the permits. The final action of the Department will be to issue construction permits AC 48-195815 and 48-195955 as proposed in the Technical Evaluation and Preliminary Determination.



# Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

**PERMITTEE:**  
Central Florida Pipeline Corp.  
100 GATX Drive  
Tampa, Florida 33605

**Permit Number:** AC 48-195815  
**Expiration Date:** July 1, 1993  
**County:** Orange  
**Latitude/Longitude:** 28°25'19"  
81°22'01"  
**Project:** Petroleum Storage Tank  
No. 80-4

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the installation of an 80,000 barrel petroleum storage tank (112 ft. in diameter x 48 ft. high) equipped with a Petrex, Inc. internal floating roof having double wiper seals at the terminal (SIC 5171) located at 9919 Palm Avenue, Taft, Orange County, Florida. The UTM coordinates of this facility are Zone 17, 463.8 km E and 3143 km N. This permit replaces the authority to construct this tank that was granted by construction permit No. AC 48-159517.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

**Attachment:**

1. Application received April 18, 1991.
2. GATX letter dated April 17, 1991.



# Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

**PERMITTEE:**  
Central Florida Pipeline Corp.  
100 GATX Drive  
Tampa, Florida 33605

**Permit Number:** AC 48-195955  
**Expiration Date:** July 1, 1993  
**County:** Orange  
**Latitude/Longitude:** 28°25'19"  
81°22'01"  
**Project:** Petroleum Storage Tank  
No. 80-5

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the installation of an 80,000 barrel petroleum storage tank (112 ft. in diameter x 48 ft. high) equipped with a Petrex, Inc. internal floating roof having double wiper seals at the terminal (SIC 5171) located at 9919 Palm Avenue, Taft, Orange County, Florida. The UTM coordinates of this facility are Zone 17, 463.8 km E and 3143 km N. This permit replaces the authority to construct this tank that was granted by construction permit No. AC 48-159517.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

**Attachment:**

1. Application received April 18, 1991.
2. GATX letter dated April 17, 1991.

**PERMITTEE:**  
Central Florida Pipeline Corp.

Permit No. AC 48-195815  
AC 48-195955  
Expiration Date: July 1, 1993

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.



PERMITTEE:  
Central Florida Pipeline Corp.

Permit No. AC 48-195815  
AC 48-195955  
Expiration Date: July 1, 1993

**GENERAL CONDITIONS:**

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

PERMITTEE:  
Central Florida Pipeline Corp.

Permit No. AC 48-195815  
AC 48-195955  
Expiration Date: July 1, 1993

**GENERAL CONDITIONS:**

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes Compliance with New Source Performance Standards (NSPS).

14. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

**PERMITTEE:**  
Central Florida Pipeline Corp.

Permit No. AC 48-195815  
AC 48-195955  
Expiration Date: July 1, 1993

**GENERAL CONDITIONS:**

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

**SPECIFIC CONDITIONS:**

1. The tank's throughput shall not exceed 4,000,000 barrels of petroleum fuel having a weighted average vapor pressure greater than 6.9 psia during any 12 month period. The permittee shall maintain records that show the quantity of volatile organic compounds handled in this tank.

2. This tank shall comply with all the applicable requirements of 40 CFR 60, Subpart Kb-Standards of Performance for Volatile Organic Liquid Storage Vessels (July 1, 1990). Applicable sections are 40 CFR 60.112b, 60.113B, 60.115b, and 60.116b.

3. This storage tank may be in service continuously (8,760 hours/year).

PERMITTEE:  
Central Florida Pipeline Corp.

Permit No. AC 48-195815  
AC 48-195955  
Expiration Date: July 1, 1993

**SPECIFIC CONDITIONS:**

4. This tank shall be equipped with an internal floating roof having double wiper seals. Any liquid leaks in the pump, piping, or tank shall be repaired promptly.

5. This tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).

6. Volatile organic compounds (VOC) emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, shall not exceed 9.0 TPY. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit the data to the Department's Central District office.

7. The Orange County Environmental Protection Department shall be notified in writing at least 30 days in advance of the compliance inspection.

8. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

9. An application for an operation permit must be submitted to the Department's Central District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this 25 day  
of July, 1991

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
| 20 ✓ STEVE SMALLWOOD, P.E., Director  
Division of Air Resources Mgmt.



State of Florida  
DEPARTMENT OF ENVIRONMENTAL REGULATION

| For Routing To Other Than The Addressee |                 |
|---|-----------------|
| To: _____                               | Location: _____ |
| To: _____                               | Location: _____ |
| To: _____                               | Location: _____ |
| From: _____                             | Date: _____     |

# Interoffice Memorandum

TO: Steve Smallwood  
FROM: Clair Fancy *ISigned*  
DATE: July 18, 1991  
SUBJ: Approval of Construction Permits AC 48-195815 & 48-195955  
Central Florida Pipeline Corporation

Attached for your approval and signature are permits prepared by the Bureau of Air Regulation for the above mentioned company to modify two petroleum storage tanks.

No comments were received during the public notice period.

I recommend your approval and signature.

CF/WH/plm

Attachments



CENTRAL FLORIDA PIPELINE CORPORATION  
subsidiary of  
GATX TERMINALS CORPORATION

1904 Hemlock Avenue  
Tampa, FL 33605  
813-248-8361  
Telecopier: 813-247-2476

June 20, 1991

Mr. C. H. Fancy  
Bureau Chief of Air Section  
Florida Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Re: Central Florida Pipeline Corporation  
AC48-195815 Petroleum Storage Tank No. 80-4  
AC48-195955 Petroleum Storage Tank No. 80-5  
Notice of Intent to Issue

Dear Mr. Fancy:

In accordance with the requirements set forth in Section 403.815, F.S. and DER Rule 17-103.150, FAC, Central Florida Pipeline Corporation herewith submits proof of publication of the Notice of Intent to Issue a permit to construct (modify) Petroleum Storage Tank Nos. 80-4 and 80-5 at its Taft, Florida terminal.

This Notice was published in the June 15, 1991 issue of The Orlando Sentinel.

Sincerely,

Caren I. Lennie  
Environmental Coordinator

CL:sd  
CL-4FANC

cc: Charles Collins, FDER, Central District

*W. Hanks*

RECEIVED

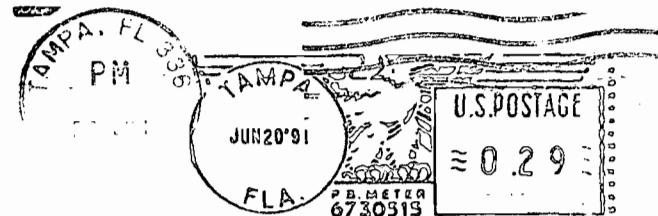
JUN 26 1991

Division of Air  
Resources Management

**GATX**

CENTRAL FLORIDA PIPELINE CORPORATION  
subsidiary of  
GATX TERMINALS CORPORATION

1904 Hemlock Avenue  
Tampa, Florida 33605-6632



Mr. C. H. Fancy  
Bureau Chief of Air Section  
Florida Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400



# The Orlando Sentinel

Published Daily  
Orlando, Orange County, Florida

State of Florida )  
COUNTY OF ORANGE ) ss.

Before the undersigned authority personally appeared \_\_\_\_\_

Juanita Rosado \_\_\_\_\_, who on oath says that

she is the Legal Advertising Representative of the Orlando Sentinel, a Daily newspaper published at Orlando, in Orange County, Florida; that the attached copy of advertisement, being a notice of intent to issue \_\_\_\_\_ in the matter of \_\_\_\_\_ Permits AC 48-195815 and 48-195955

\_\_\_\_\_ in the \_\_\_\_\_ Court, was published in said newspaper in the issues of \_\_\_\_\_ June 15, 1991

Affiant further says that the said Orlando Sentinel is a newspaper published at Orlando, in said Orange County, Florida, and that the said newspaper has heretofore been continuously published in said Orange County, Florida, each Week Day and has been entered as second-class mail matter at the post office in Orlando, in said Orange County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

*Juanita Rosado*  
\_\_\_\_\_

Sworn to and subscribed before me this 17th day

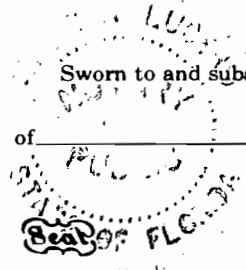
of June A.D., 19 91

*Procurator K. Green*  
\_\_\_\_\_

Notary Public

My Commission Expires August 28, 1994

Bonded Thru Brown & Brown, INC. FORM NO. AD-262



ADVERTISING CHARGE

\$184.48

### STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

#### NOTICE OF INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue permits (AC 48-195815 and 48-195955) to Central Florida Pipeline Corporation, 100 GATX Drive, Tampa Florida 33605, to construct (modify) two 80,000 barrel petroleum (gasoline or diesel fuels) storage tanks (Nos. 80-4 and 80-5) equipped with double seal internal floating roofs at their terminal located at 9919 Palm Avenue, Taft, Orange County, Florida 32824. Total volatile organic compounds (VOC) emissions from each tank are estimated to be 9.0 TPY (18 TPY for both tanks). These emissions will not cause a violation of any ambient air quality standard. A determination of Best Available Control Technology (BACT) was not required by the regulations. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;

XIAE

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application(s) have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

The applications are available for public inspection during business hours, 8:00 a.m. to 5:00 p.m., Monday Through Friday, except legal holidays, at:

Department of Environmental Regulation  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
Department of Environmental Regulation  
Central District  
3319 Maguire Blvd., Suite 232  
Orlando, Florida 32803-3767

Any person may send written comments on the proposed action to Mr. Barry Andrews at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

CL-939 Jun. 15, 1991



P 832 539 844



**Certified Mail Receipt**

No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

PS Form 3800, June 1990

|  |    |
|--|----|
| Sent to<br><i>Tom Riga</i>   |    |
| Street & No.<br><i>Central Fla. Pipeline</i>                                 |    |
| P.O. State & ZIP Code<br><i>Tampa, FL</i>                                    |    |
| Postage  | \$ |
| Certified Fee  |    |
| Special Delivery Fee   |    |
| Restricted Delivery Fee  |    |
| Return Receipt Showing to Whom & Date Delivered                              |    |
| Return Receipt Showing to Whom, Date, & Address of Delivery                  |    |
| TOTAL Postage & Fees   | \$ |
| Postmark or Date<br><i>6-7-91</i><br><i>AC 48-195815</i><br><i>" " " 955</i> |    |

**SENDER:**

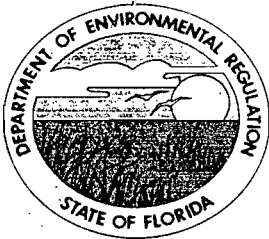
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece next to the article number.

I also wish to receive the following services (for an extra fee):

1.  Addressee's Address
2.  Restricted Delivery

Consult postmaster for fee.

|  |   |
|--|---|
| 3. Article Addressed to:<br><i>Mr. Tom Riga</i><br><i>Mgr of Fla. Operation</i><br><i>Central Fl Pipeline Corp.</i><br><i>100 GATX DR.</i><br><i>Tampa, FL 33605</i> | 4a. Article Number<br><i>P 832 539 844</i>  |
|  | 4b. Service Type<br><input type="checkbox"/> Registered <input type="checkbox"/> Insured<br><input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD<br><input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise |
| 5. Signature (Addressee)<br><i>[Signature]</i>   | 7. Date of Delivery<br><i>6-10-91</i>   |
| 6. Signature (Agent)   | 8. Addressee's Address (Only if requested and fee is paid)  |



# Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

June 7, 1991

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Tom Rigg  
Manager of Florida Operation  
Central Florida Pipeline Corporation  
100 GATX Drive  
Tampa, Florida 33605

Dear Mr. Rigg:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permits to construct (modify) petroleum storage tanks Nos. 80-4 and 80-5 at your terminal in Taft, Orange County, Florida.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Mr. Barry Andrews of the Bureau of Air Regulation.

Sincerely,

C. H. Fancy, P.E.  
Chief  
Bureau of Air Regulation

CHF/WH/plm

Attachments

c: Charles Collins, Central Dist.  
Stanford Strehler, Jr., P.E.

BEFORE THE STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of  
Application for Permits by:

Central Florida Pipeline Corp.  
100 GATX Drive  
Tampa, Florida 33605

DER File Nos. AC 48-195815  
AC 48-195955  
Orange County

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INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue air construction permits (copies attached) for the proposed project as detailed in the applications specified above, for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Central Florida Pipeline Corporation, applied on April 18, 1991, to the Department of Environmental Regulation for permits to construct (modify) petroleum storage tanks Nos. 80-4 and 80-5 at their terminal located at 9919 Palm Avenue in Taft, Orange County, Florida 32824.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The project is not exempt from permitting procedures. The Department has determined that an air construction permit is required for the proposed work.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permits. The notice shall be published one time only within 30 days, in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department, at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits.

The Department will issue the permits with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

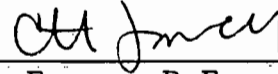
- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application(s) have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office in General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party

to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION



C. H. Fancy, P.E., Chief  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

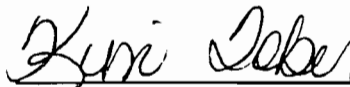
Copies furnished to:

Charles Collins, Central Dist.  
Stanford Strehler, Jr., P.E.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on 6-7-91.

FILING AND ACKNOWLEDGEMENT  
FILED, on this date, pursuant to  
§120.52(9), Florida Statutes, with  
the designated Department Clerk,  
receipt of which is hereby  
acknowledged.

  
Clerk

6-7-91  
Date

State of Florida  
Department of Environmental Regulation  
Notice of Intent to Issue

The Department of Environmental Regulation hereby gives notice of its intent to issue permits (AC 48-195815 and 48-195955) to Central Florida Pipeline Corporation, 100 GATX Drive, Tampa, Florida 33605, to construct (modify) two 80,000 barrel petroleum (gasoline or diesel fuels) storage tanks (Nos. 80-4 and 80-5) equipped with double seal internal floating roofs at their terminal located at 9919 Palm Avenue, Taft, Orange County, Florida 32824. Total volatile organic compounds (VOC) emissions from each tank are estimated to be 9.0 TPY (18 TPY for both tanks). These emissions will not cause a violation of any ambient air quality standard. A determination of Best Available Control Technology (BACT) was not required by the regulations. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner; the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application(s) have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

The applications are available for public inspection during business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Regulation  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Department of Environmental Regulation  
Central District  
3319 Maguire Blvd., Suite 232  
Orlando, Florida 32803-3767

Any person may send written comments on the proposed action to Mr. Barry Andrews at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

Technical Evaluation  
and  
Preliminary Determination

Central Florida Pipeline Corporation  
Taft, Orange County, Florida

| <u>Source</u>                   | <u>File No.</u> |
|---------------------------------|-----------------|
| Petroleum Storage Tank No. 80-4 | AC 48-195815    |
| Petroleum Storage Tank No. 80-5 | AC 48-195955    |

Department of Environmental Regulation  
Division of Air Resources Management  
Bureau of Air Regulation

June 7, 1991



## I. Application

### A. Applicant

Central Florida Pipeline Corporation  
100 GATX Drive  
Tampa, Florida 33605

### B. Project and Location

Mr. Tom Rigg, Central Florida Pipeline Corporation's Manager of Florida Operations, submitted an application for permits to construct (modify) two 80,000 barrel petroleum (gasoline and diesel fuels) storage tanks (Nos. 80-4 and 80-5) on April 18, 1991. This application corrects the emission estimate used to obtain the original construction permits for these tanks (AC 48-159517), substitutes a Pretex, Inc. for the mayflower internal floating roof originally proposed, and increases each tank throughput from 3,258,000 bbl/yr to 4,000,000 bbl/yr of fuel. The application was considered complete on receipt. These tanks are being installed at Central Florida Pipeline Corporation's terminal (SIC 5171) located at 9919 Palm Avenue, Taft, Orange County, Florida 32824. The UTM coordinates of this site are Zone 17, 463.8 km E and 3143.8 km N.

Tanks Nos. 80-4 and 80-5 are 112 ft. in diameter by 48 ft. high fixed roof tanks equipped with internal floating roofs having double wiper seals. They have a capacity of 80,000 barrels. They will be used to store gasoline and diesel fuels. Based on an annual throughput of 4,000,000 barrels of gasoline for each tank, the volatile organic compounds (VOC) emissions are estimated to be 9.0 TPY per tank (18 TPY both tanks).

## II. Rule Applicability

The proposed projects, construction (modification) of two petroleum storage tanks at a petroleum product terminal (SIC 5171), are subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code (F.A.C.).

The sources will be in an area designated maintenance for ozone (F.A.C. Rule 17-2.460) and attainment for the other criteria pollutants (F.A.C. Rule 17-2.420).

The terminal is a major facility because (VOC) emissions exceed 100 TPY. The proposed project will not cause a significant emission rate increase as defined by F.A.C. Chapter 17-2, Table 500-2. Therefore, the project is not subject to Prevention of Significant Deterioration regulations, F.A.C. Rule 17-2.500.

As the projects result in an increase in VOC emissions, they are subject to F.A.C. Rule 17-2.520 (Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements), F.A.C. Rule 17-2.620 (General Pollutant Emission

Limiting Standards), and F.A.C. Rule 17-2.660 (NSPS), specifically 40 CFR 60, Subpart Kb, Standard of Performance for VOC Storage Vessels.

### III. Technical Evaluation

An estimate of the total VOC emissions from the proposed storage tanks was made using the procedures given in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, Storage of Organic Liquids.

The calculated emissions from each proposed tank, based on a throughput of 4,000,000 barrels per year, is 2.1 lbs/hr (avg) or 9.0 TPY.

The applicant submitted data that showed the emissions would be less than the quantity predicted above. Use of improved seals on the Petrex floating roof are estimated to reduce VOC emissions from each tank to 4.41 TPY. The emission limits in these permits are based on the more conservative estimates given in AP-42.

The EPA presently has a contractor reviewing the test data provided by Petrex, Inc. that showed the seals on the floating roof reduces the deck seam emissions below those estimated by AP-42. The Department will amend the emission limits in these permits if EPA approves the lower emission factor for the Petrex, Inc. roof design under the guidance of 40 CFR 60.114b.

### IV. Air Quality Analysis

It is the judgement of the Department that the estimated VOC emissions from the proposed tanks will not create a health hazard or cause/contribute to an ambient air quality violation.

### V. Conclusion

Based on the information provided by Central Florida Pipeline Corporation, the Department has reasonable assurance that the proposed project, construction of petroleum storage tanks 80-4 and 80-5, as described in this evaluation, and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapter 17-2 of the Florida Administrative Code.

*CTJ*  
6/7/41

Limiting Standards), and F.A.C. Rule 17-2.660 (NSPS), specifically 40 CFR 60, Subpart Kb, Standard of Performance for VOC Storage Vessels.

### III. Technical Evaluation

An estimate of the total VOC emissions from the proposed storage tanks was made using the procedures given in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, Storage of Organic Liquids.

The calculated emissions from each proposed tank, based on a throughput of 4,000,000 barrels per year, is 2.1 lbs/hr (avg) or 9.0 TPY.

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The EPA presently has a contractor reviewing the test data provided by Petrex, Inc. that showed the seals on the floating roof reduces the deck seam emissions below those estimated by AP-42. The Department will amend the emission limits in these permits if EPA approves the lower emission factor for the Petrex, Inc. roof design under the guidance of 40 CFR 60.114b.

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It is the judgement of the Department that the estimated VOC emissions from the proposed tanks will not create a health hazard or cause/contribute to an ambient air quality violation.

### V. Conclusion

Based on the information provided by Central Florida Pipeline Corporation, the Department has reasonable assurance that the proposed project, construction of petroleum storage tanks 80-4 and 80-5, as described in this evaluation, and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapter 17-2 of the Florida Administrative Code.





# Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

**PERMITTEE:**  
Central Florida Pipeline Corp.  
100 GATX Drive  
Tampa, Florida 33605

**Permit Number:** AC 48-195815  
**Expiration Date:** July 1, 1993  
**County:** Orange  
**Latitude/Longitude:** 28°25'19"  
81°22'01"  
**Project:** Petroleum Storage Tank  
No. 80-4

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the installation of an 80,000 barrel petroleum storage tank (112 ft. in diameter x 48 ft. high) equipped with a Petrex, Inc. internal floating roof having double wiper seals at the terminal (SIC 5171) located at 9919 Palm Avenue, Taft, Orange County, Florida. The UTM coordinates of this facility are Zone 17, 463.8 km E and 3143 km N. This permit replaces the authority to construct this tank that was granted by construction permit No. AC 48-159517.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

**Attachment:**

1. Application received April 18, 1991.
2. GATX letter dated April 17, 1991.



# Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

**PERMITTEE:**  
Central Florida Pipeline Corp.  
100 GATX Drive  
Tampa, Florida 33605

**Permit Number:** AC 48-195955  
**Expiration Date:** July 1, 1993  
**County:** Orange  
**Latitude/Longitude:** 28°25'19"  
81°22'01"  
**Project:** Petroleum Storage Tank  
No. 80-5

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the installation of an 80,000 barrel petroleum storage tank (112 ft. in diameter x 48 ft. high) equipped with a Petrex, Inc. internal floating roof having double wiper seals at the terminal (SIC 5171) located at 9919 Palm Avenue, Taft, Orange County, Florida. The UTM coordinates of this facility are Zone 17, 463.8 km E and 3143 km N. This permit replaces the authority to construct this tank that was granted by construction permit No. AC 48-159517.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

**Attachment:**

1. Application received April 18, 1991.
2. GATX letter dated April 17, 1991.

**PERMITTEE:**  
Central Florida Pipeline Corp.

Permit No. AC 48-195815  
AC 48-195955  
Expiration Date: July 1, 1993

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

**PERMITTEE:**  
**Central Florida Pipeline Corp.**

**Permit No. AC 48-195815**  
**AC 48-195955**  
**Expiration Date: July 1, 1993**

**GENERAL CONDITIONS:**

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

**PERMITTEE:**  
Central Florida Pipeline Corp.

Permit No. AC 48-195815  
AC 48-195955  
Expiration Date: July 1, 1993

**GENERAL CONDITIONS:**

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes Compliance with New Source Performance Standards (NSPS).

14. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.



PERMITTEE:  
Central Florida Pipeline Corp.

Permit No. AC 48-195815  
AC 48-195955  
Expiration Date: July 1, 1993

**GENERAL CONDITIONS:**

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

**SPECIFIC CONDITIONS:**

1. The tank shall not handle more than 4,000,000 barrels of petroleum fuel having a weighted average vapor pressure greater than 6.9 psia during any 12 month period. The permittee shall maintain records that show the quantity of volatile organic compounds handled in this tank.

2. This tank shall comply with all the applicable requirements of 40 CFR 60, Subpart Kb-Standards of Performance for Volatile Organic Liquid Storage Vessels (July 1, 1990). Applicable sections are 40 CFR 60.112b, 60.113B, 60.115b, and 60.116b.

3. This storage tank may be in service continuously (8,760 hours/year).

PERMITTEE:  
Central Florida Pipeline Corp.

Permit No. AC 48-195815  
AC 48-195955  
Expiration Date: July 1, 1993

**SPECIFIC CONDITIONS:**

4. This tank shall be equipped with an internal floating roof having double wiper seals. Any liquid leaks in the pump, piping, or tank shall be repaired promptly.

5. This tank and associated equipment shall not discharge air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).

6. Volatile organic compounds (VOC) emissions from this tank, as determined by the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, Section 4.3, shall not exceed 9.0 TPY. If the parameters that the estimated emissions are based on change, the permittee shall recalculate the emissions from this tank and submit the data to the Department's Central District office.

7. The Orange County Environmental Protection Department shall be notified in writing at least 30 days in advance of the compliance inspection.

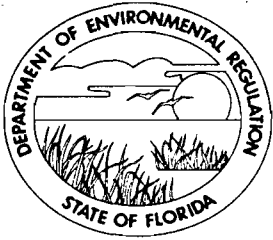
8. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

9. An application for an operation permit must be submitted to the Department's Central District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

Issued this \_\_\_\_\_ day  
of \_\_\_\_\_, 1991.

**STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION**

\_\_\_\_\_  
STEVE SMALLWOOD, P.E., Director  
Division of Air Resources Mgmt.



# Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767 • 407-894-7555

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary  
Alex Alexander, Deputy Assistant Secretary

Permittee:  
Central Florida Pipeline Corporation  
100 GATX Drive  
Tampa, Florida 33605

Attention: Ralph Baker,  
Manager of Florida Operations

I. D. Number:  
Permit/Certification  
Number: AC48-159517  
Date of Issue:  
Expiration Date: 4/30/94  
County: Orange  
Latitude/Longitude:  
28°25'19"N/81°22'01"W  
UTM: 17-463.8 KmE; 3143.8 KmN  
Project: Petroleum Storage Tanks  
Nos. 80-2, 80-3, 80-4, and 80-5

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

The permittee can construct Petroleum Storage Tanks Nos. 80-2, 80-3, 80-4 and 80-5 which are fixed/internal floating roofs with a double wiper seal in each tank. The tanks are described as follows:

| <u>Tank No.</u> | <u>Capacity</u> | <u>Type Roof</u>        | <u>Contents</u> |
|-----------------|-----------------|-------------------------|-----------------|
| 80-2            | 80,000 bbl      | Fixed/Internal Floating | Gasoline        |
| 80-3            | 80,000 bbl      | Fixed/Internal Floating | Gasoline        |
| 80-4            | 80,000 bbl      | Fixed/Internal Floating | Gasoline        |
| 80-5            | 80,000 bbl      | Fixed/Internal Floating | Gasoline        |

These four tanks are to replace the existing tanks nos. 1051, 1052, 1053, 1055, 1056, and 1057.

These sources are located at the Central Florida Pipeline Corporation bulk gasoline terminal at 9919 Palm Avenue in Taft, Orange County, Florida.

General Conditions are attached to be distributed to the permittee only.

TO Mr. Willard Hanks, Eng.  
Air Permitting Section  
FOER

FROM Caren Lennie  
Env. Coordinator  
GATX Terminals Corp.

SUBJECT Constr. Permits for Tanks 80-5 Tampa  
80-4 + 80-5 Taft

DATE 04/25/91

MESSAGE

Dear Willard:

Per our telephone conversation on 04/25/91,  
please find enclosed copies of Permit No. AC29-159753 for Tank 80-5 in Tampa and Permit No. AC48-159517 for 80-4 and 80-5 in Taft.

Also, GATX is trying to obtain additional documentation to support the reduction of the deck seam loss factor per your request and will submit as soon as possible.

Should you have any additional questions or concerns please contact me at (813) 241-1139.

Sincerely,

SIGNED

Caren Lennie



FILING AND ACKNOWLEDGEMENT  
FILED, on this date, pursuant to  
Section 120.52, Florida Statutes,  
with the designated Department  
Clerk, receipt of which is hereby  
acknowledged.

*Gene B. Barkin* 5/26/89  
Clerk Date

AA/jtw *J*

Copies furnished to:

John Bateman

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed  
before the close of business on 5-30-89 to the listed persons.

*D. Jones*

4-25-81

Lennie  
Karen & Goshel to send copies of AC's.

Told I planned on using  
AP-42 forms.

She said they needed/wanted  
better forms because EPA  
wanted a 3rd party to  
accept prior to adopting  
it in AP-42.

*amb*

PERMITTEE:

I.D. Number:  
Permit/Certification Number:  
Date of Issue:  
Expiration Date:

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefor caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.
6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:
  - a. Having access to and copying any records that must be kept under the conditions of the permit;
  - b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
  - c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.Reasonable time may depend on the nature of the concern being investigated.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:
  - a. a description of and cause of non-compliance; and

# Best Available Copy

PERMITTEE:

I.D. Number:  
Permit/Certification Number:  
Date of Issue:  
Expiration Date:

b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.
10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.
11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.
12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.
13. This permit also constitutes:
  - ( ) Determination of Best Available Control Technology (BACT)
  - ( ) Determination of Prevention of Significant Deterioration (PSD)
  - ( ) Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
  - (X) Compliance with New Source Performance Standards
4. The permittee shall comply with the following monitoring and record keeping requirements:
  - a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.
  - b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.
  - c. Records of monitoring information shall include:
    - the date, exact place, and time of sampling or measurements;
    - the person responsible for performing the sampling or measurements;
    - the date(s) analyses were performed;
    - the person responsible for performing the analyses;
    - the analytical techniques or methods used; and
    - the results of such analyses.
5. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

PERMITTEE:  
Central Florida Pipeline Corporation

Attention: Ralph Baker,  
Manager of Florida Operations

I. D. Number:  
Permit/Certification Number:  
AC48-159517  
Date of Issue:  
Expiration Date: 4/30/94

*Talk  
facilities*

SPECIFIC CONDITIONS:

1. No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor pursuant to Rule 17-2.620(2) F.A.C. Objectionable odor is defined as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance pursuant to Rule 17-2.100(131) F.A.C. Odor is defined as a sensation resulting from stimulation of the human olfactory organ pursuant to Rule 17-2.100(132) F.A.C.
2. There shall be no discharges of liquid effluents or contaminated runoff to surface or ground water without prior approval from this office. X
3. This permit does not preclude compliance with any applicable local permitting requirements and regulations. ]
4. Each tank is permitted to contain only the petroleum products described on Permit Page No. 1. —
5. The permitted product throughput for each tank is 3,258,000 bbl per year. —
6. Rule 17-2.620(1)(a)FAC states that no person shall store, pump, handle, process, load, unload or use in any process or installation volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the department. To comply, procedures to minimize pollutant emissions should include but shall not be limited to the following: X
  - a) tightly cover or close all VOC containers when they are not in use,
  - b) tightly cover, where possible, all open troughs, basins, baths, tanks, etc. when they are not in use,
  - c) maintain all piping, valves, fittings, etc. in good operating condition,
  - d) prevent excessive air turbulence across exposed VOC's,
  - e) immediately confine and clean up VOC spills and make sure certain wastes are placed in closed containers for reuse, recycling or proper disposal, and
  - f) maintain a monthly accounting of each VOC based on beginning and ending inventories, deliveries, shipments, etc.



PERMITTEE:  
Central Florida Pipeline Corporation  
  
Attention: Ralph Baker,  
Manager of Florida Operations

I. D. Number:  
Permit/Certification Number:  
AC48-159517  
Date of Issue:  
Expiration Date: 4/30/94

SPECIFIC CONDITIONS:

7. Each tank has a Fixed Roof and Internal Floating Roof and each is equipped with a Mayflower double wiper rim seal and is subject to New Source Performance Standards Subpart Kb.
8. Gasoline emissions from the facility should not cause ambient air concentrations to exceed the Acceptable Ambient Concentration (AAC) of 2.14 mg/m<sup>3</sup>.
9. Each tank must be inspected for VOC leakage and compliance with the required control technology within 30 days after being placed in operation.
10. Orange County Environmental Protection Department shall be notified at least fifteen (15) days in advance of the compliance inspections so that they may be witnessed.
11. The required inspections report shall be filed with Orange County Environmental Protection Department as soon as practical but no later than 45 days after the last test is completed.
12. Hazardous wastes generated in connection with any of the sources at this facility must be disposed of in accordance with Rule 17-30, F.A.C.
13. Tanks at this facility shall comply with the applicable requirements of Rule 17-61 F.A.C.
14. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, he must notify the Department in writing 60 days prior to the expiration of the construction permit and submit a new request for an extension of the construction permit. (Rule 17-4.09 Florida Administrative Code).

To obtain a permit, the permittee must demonstrate compliance with the conditions of the construction permit and submit the application fee, along with compliance test results and Certification of Completion of Construction to the Department's Central Florida District office 60 days prior to the expiration date of the construction permit.

This permit will expire April 30, 1994 or six months after construction is completed and the source is placed in operation, whichever date occurs first.

PERMITTEE:  
Central Florida Pipeline Corporation

Attention: Ralph Baker,  
Manager of Florida Operations

I. D. Number:  
Permit/Certification Number:  
AC48-159517  
Date of Issue:  
Expiration Date: 4/30/94

SPECIFIC CONDITIONS:

ISSUED 5-26-88

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

*cmc* *Alexander*  
A. Alexander  
Deputy Assistant Secretary  
3319 Maguire Boulevard  
Suite 232  
Orlando, Florida 32803



# Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

Richard Garrity, Deputy Assistant Secretary

June 2, 1989

## NOTICE OF PERMIT

Mr. Ralph Baker  
 Manager of Florida Operations  
 GATX Terminals Corporation  
 100 GATX Drive  
 Tampa, FL 33605

Dear Mr. Baker:

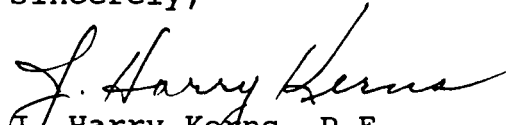
Re: Hillsborough County - AP  
 Four (4) Gasoline Storage Tanks

Enclosed is Permit Number AC29-159753 to construct four (4) gasoline storage tanks, issued pursuant to Section 403.087, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tampa, Florida.

Sincerely,

  
 J. Harry Kerns, P.E.  
 District Air Engineer

JHK/AJW/bb

cc: Environmental Protection Commission  
 of Hillsborough County  
 Robert E. Wallace III, P.E.

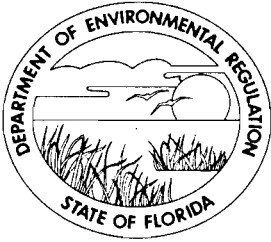
CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on JUN 02 1989 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGEMENT  
FILED, on this date, pursuant to  
Subsection 120.52(10), Florida  
Statutes, with the designated  
Department Clerk, receipt of  
which is hereby acknowledged.

Marilyn Quispe JUN 02 1989  
Clerk Date



# Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary  
Richard Garrity, Deputy Assistant Secretary

PERMITTEE:  
GATX Terminals Corporation  
100 GATX Drive  
Tampa, FL 33605

PERMIT/CERTIFICATION  
Permit No.: AC29-159753  
County: Hillsborough  
Expiration Date: 04/28/94  
Project: Four (4) Gasoline Storage  
Tanks

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the construction of four storage tanks. Tanks 80-2, 80-3, 80-4 and 80-5, each 80,000 barrel fixed cone roof storage tanks, will store gasoline. Emissions from gasoline storage will be controlled by a Mayflower Vapor Seal Corporation internal floating roof with 12" double wiper blade seals equipped on each tank.

Location: 100 GATX Drive, Tampa

UTM: 17-358.0 E 3088.7 N NEDS NO: 0085 Point ID: 01

Modifies Permit No.: A029-101491

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requirements*

PERMITTEE:  
GATX Terminals  
Corporation

Permit/Certification No.: AC29-159753  
Project: Four (4) Gasoline Storage Tanks

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions. —
2. All applicable rules of the department including design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction [Subsection 17-4.07(1), F.A.C.]. —
3. The total VOC emissions from these tanks shall not exceed 7.2 tons/year pursuant to Subsection 17-2.620(1), F.A.C. —
4. The following requirements shall apply to Tanks 80-2, 80-3, 80-4 and 80-5:
  - A. The tanks shall comply with 40 CFR 60, Subpart Kb, entitled Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for which construction, Reconstruction or Modification commenced after July 23, 1984. —
  - B. When the floating roof is resting on the leg supports, the process of filling, emptying or refilling shall be accomplished as rapidly as possible [40 CFR 60.112b(a)(1)(i)]. ]
  - C. The two seals shall be mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof [40 CFR 60.112b(a)(1)(ii)(B)].
  - D. Each opening in the internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface [40 CFR 60.112b(a)(1)(iii)].
  - E. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

6. good  
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req

PERMITTEE:  
GATX Terminals  
Corporation

Permit/Certification No.: AC29-159753  
Project: Four (4) Gasoline Storage Tanks

SPECIFIC CONDITIONS: (continued)

F. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

G. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

H. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90% of the opening.

I. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

J. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

K. Compliance with the requirements of 4.A to 4.J shall be accomplished by conducting inspections in accordance with 40 CFR 60.113b. The permittee shall notify the Department and the Environmental Protection Commission of Hillsborough County in writing at least 30 days in advance prior to initial filling of the tank [40 CFR 60.113b(a)(5)].

L. The permittee shall comply with the reporting and recordkeeping requirements stipulated in 40 CFR 60.115b. Furthermore, records of inspections required by Specific Condition 4K. shall be submitted to the Environmental Protection Commission of Hillsborough County no later than 45 days from the date of the inspection.

5. Pursuant to Section 17-2.620, F.A.C., each of Tanks 80-2, 80-3, 80-4 and 80-5 shall be equipped with pressure vacuum valves to minimize VOC emissions.

6. The Environmental Protection Commission of Hillsborough County shall be notified of the following in writing:

- (A) The date in which construction of each tank begins, postmarked not more than 30 days after such date, pursuant to 40 CFR 60.7(a)(1).

PERMITTEE:  
GATX Terminals  
Corporation

Permit/Certification No.: AC29-159753  
Project: Four (4) Gasoline Storage Tanks

SPECIFIC CONDITIONS: (continued)

- (B) The anticipated date of initial filling of each tank, postmarked not more than 60 days and not less than 30 days prior to such date, pursuant to 40 CFR 60.6(a)(2).
  - (C) The actual date of initial filling of each tank, postmarked within 15 days after the date, pursuant to 40 CFR 60.7(a)(3).
  - (D) The date the compliance test for each tank will be performed at least 30 days prior to such date.
7. The maximum gasoline throughput for each individual tank shall not exceed 1,860,000 BBL for any 12 month consecutive period.
8. In order to show compliance with the maximum gasoline additive throughput as stated in Specific Condition No. 7, a recordkeeping system shall be instituted and shall be submitted to the Environmental Protection Commission of Hillsborough County within 30 days from the issuance date of this permit.
9. Four applications for an operating permit (Certificate of Completion of Construction Form DER 17-1.202(3)) shall be submitted to the Environmental Protection Commission of Hillsborough County within 45 days of initial filling of each individual tank under this construction permit. Since the tanks will be built over an extended period of time, four operating permit applications shall be required for each individual tank.

Issued this 2 day of  
June, 19 83.

STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL REGULATION

  
Richard D. Garrity, Ph.D.  
Deputy Assistant Secretary



## GENERAL CONDITIONS

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and are binding and enforceable pursuant to the authority of Section 403.141, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.
3. As provided in Subsections 403.087(6) and 403.712(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal or plant life or property caused by the construction or operation of this permitted source or from penalties therefore, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by any order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credential or other documents as maybe required by law and at reasonable times, access to the premises, where the permitted activity is located or conducted:

GENERAL CONDITIONS (con't):

7. (con't):

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department (17-6.130) with the following information:

- (a) a description of and cause of noncompliance; and
- (b) the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the Department, may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedures and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

GENERAL CONDITIONS (con't):

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- ( ) Determination of Best Available Control Technology (BACT)
- ( ) Determination of Prevention of Significant Deterioration (PSD)
- ( ) Certification of Compliance with State Water Quality Standards (Section 401. PL 92-500)
- (X) Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the Department.

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurement;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

RULES OF THE ADMINISTRATION COMMISSION, MODEL PROCEDURES OF PROCEDURE  
CHAPTER 28-5, DECISIONS DETERMINING SUBSTANTIAL INTERESTS  
PART II, FORMAL HEARINGS  
A) PREHEARING PROCEDURES

28-5.201 Initiation of Formal Proceedings.

(1) Initiation of formal proceedings shall be made by petition to the Agency responsible for rendering final Agency action. The term petition as used herein includes any application or other document which expresses a request for formal proceedings. Each petition should be printed, typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double-spaced and indented.

(2) - All petitions filed under these rules should contain:

(a) The name and address of each Agency affected and each Agency's file or identification number, if known;

(b) The name and address of the petitioner or petitioners, and an explanation of how his/her substantial interests will be affected by the Agency determination;

(c) A statement of when and how petitioner received notice of the Agency decision of intent to render a decision;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief;

(f) A demand for relief to which the petitioner deems himself entitled; and

(g) Other information which the petitioner contends is material.

(3) Upon receipt of a petition for formal proceedings, the Agency shall either accept or deny the petition, and if accepted shall elect either to conduct the hearing itself through the Agency head, or member thereof, assign a person authorized by Subsection 120.57(1)(a) or other authority, or request that a Hearing Officer from the Division of Administrative Hearings be assigned to conduct the hearing.

(a) A petition may be denied if the petitioner does not state adequately a material factual allegation, such as a substantial interest in the Agency determination, or if the petition is untimely.

(b) The Agency shall promptly give written notice to all parties of the action taken on the petition, and shall state with particularity its reasons therefor.

(4) If the Agency elects to request that a Hearing Officer of the Division of Administrative Hearings be assigned to conduct the hearing, the Agency shall forward the petition, and all materials filed with the Agency, to the Division of Administrative hearings, and shall notify all parties of its action.

Specific Authority: 120.53(1), 120.54(10), F.S.  
Law Implemented: 120.57, F.S.  
History: New 3-23-80

Section 17-103.155, Florida Administrative Code  
Rules of Administrative Procedure  
Final Agency Action (Non-Rulemaking) and Appeal

17-103.155 Petition for Administrative Hearing; Waiver of Right to Administrative Proceeding.

(1)(a) Any person whose substantial interests may be affected by proposed or final agency action by the Department may file a petition for formal administrative hearing in accordance with this rule if the person disputes the material facts upon which the Department's action is based.

(b) Any person whose substantial interests may be affected by proposed or final action by the Department may file a petition for informal administrative hearing in accordance with this rule if the person objects to the Department's action but does not dispute the material facts upon which the Department's action is based.

(2) A petition for formal or informal administrative hearing pursuant to Section 120.57, F.S., shall contain the following information:

(a) The name, address, and telephone number of each petitioner. If the petitioner challenges a Department action or proposed action on a permit application, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed shall also be included;

(b) A statement of how and when each petitioner received notices of the Department action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of those material facts (i.e., those facts upon which the Department's action or proposal is based) is disputed by petitioner. If no facts are disputed, petitioner shall so state;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action;

(g) A statement of relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

(3)(a) A petition shall be in the form required by this rule and must be filed (received) in the Office of General Counsel of the Department within the following number of days after receipt or publication (whichever occurs first) of notice of proposed agency action or of notice of agency action:

1. Petitions concerning Department action or proposed action on applications for permits (except permits for hazardous waste facilities):  
days;

2. Petitions concerning Department action or proposed action on applications for hazardous waste facility permits: 45 days;

3. Petitions concerning notices of violation when no informal conference is held: 20 days after receipt of the notice of violation;

4. Petitions concerning notices of violation when an informal conference is held: 10 days after receipt of notice of completion of the informal conference;

5. Petitions concerning other Department actions or proposed actions: 21 days. The petitioner shall also serve a copy of the petition on all other parties to the proceeding, as identified in the published notice, at the time of filing.

(b) Failure to timely file a petition within the applicable time period after receipt of notice of agency action or receipt of notice of proposed agency action, whichever notice first occurs, shall constitute a waiver if any right to request an administrative proceeding under Chapter 120, F.S.

(4) If a petition is filed that does not substantially comply with the requirements of subsection (2) of this rule, the Department shall issue an order dismissing the petition with leave to file an amended petition complying with the requirements of this rule within 15 days of service of the order. If an amended petition complying with this rule is not filed (received) within 15 days of service of the order, the petitioner's right to a proceeding under Section 120.57, F.S., is waived.

(5) When there has been no publication of notice of agency action or notice of proposed agency action as prescribed in Rule 17-103.150, F.A.C., a person who has actual knowledge of the agency action or has knowledge which would lead a reasonable person to conclude that the Department has taken final agency action, has a duty to make further inquiry within 14 days of obtaining such knowledge by contacting the Department to ascertain whether action has occurred. The Department shall upon receipt of such an inquiry, if agency action has occurred, promptly provide the person with notice as prescribed by Rule 17-103.150, F.A.C. Failure of the person to make inquiry with the Department within 14 days after obtaining such knowledge may stop the person from obtaining an administrative proceeding on the agency action.

(6)(a) "Receipt of notice of agency action" means receipt of written notice of final agency action, as prescribed by Department rule, or the publication, pursuant to Department rule, of notice of final agency action, whichever first occurs.

(b) "Receipt of notice of proposed agency action" means receipt of written notice (such as a letter of intent) that the Department proposes to take certain action, or the publication pursuant to Department rule of notice of proposed agency action, whichever first occurs.

(7) Notwithstanding any other provision in this Chapter, should a substantially affected person who fails to timely request a hearing under Section 120.57, F.S., administratively appeal the final Department action or order, the record on appeal shall be limited to:

(a) the application and accompanying documentation submitted by the applicant prior to the issuance of the agency's intent to issue or deny the requested permit;

(b) the materials and information relied upon by the agency in determining the final agency action or order;

(c) any notices issued or published; and

(d) the final agency action or order entered concerning the permit application.

(8) In such cases where persons do not timely exercise their rights accorded by Section 120.57(1), Florida Statutes, the allegations of fact contained in or incorporated by the final agency action shall be deemed uncontested and true, and appellants may not dispute the truth of such allegations upon subsequent appeal.

(9) Any applicant may challenge the Department's request for additional information by filing with the Office of General Counsel an appropriate petition for administrative proceeding pursuant to Section 120.60, F.S., following receipt by the applicant of the Department's notification pursuant to Section 403.0876, F.S., that additional information is required.

Specific Authority: 120.53, 403.0876, 403.815, F.S.

Law Implemented: 120.53, F.S.

History: New 9-20-79; Amended 4-28-81; Transferred from 17-1.62 and Amended 6-1-84; Amended 10-19-88.



RECEIVED DER - MAIL ROOM  
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100 GATX DRIVE  
TAMPA, FL 33605  
TWX: 810-876-0804  
TELECOPIER: 813-247-4274  
MAIN OFFICE: 813-248-2148

April 17, 1991

Mr. C. H. Fancy, P. E.  
Bureau Chief of Air Section  
Florida Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Re: Hillsborough County - AP Permit No. AC29-159753  
Orange County - AP Permit No. AC48-159517  
Permit Modification Application

Dear Mr. Fancy:

GATX Terminals Corporation (GATX) and its subsidiary, Central Florida Pipeline Corporation (CFPL), have been issued Florida Department of Environmental Regulation (FDER) Permits AC29-159753 and AC48-159517, respectively, for the construction of 80,000 barrel petroleum storage tanks at the Tampa and Taft facilities.

In review of the emissions calculations provided in support of the construction permit applications, GATX noted that an incorrect assumption of zero deck seam loss was used in the emissions calculations, when, in fact, a deck seam loss should be assumed. The revised calculations, reflecting the appropriate deck seam loss, are provided as attachments to the enclosed applications to modify a permit for construction of a new source.

The incorporation of a deck seam loss results in the following VOC emissions changes:

AC29-159753, Tank 80-5

Assuming: Zero deck seam loss, Mayflower IFR  
1,860,000 barrels per year throughput 1.80 tons/yr.  
(presently permitted)

Assuming: Deck seam loss, Mayflower IFR  
1,860,000 barrels per year throughput 6.89 tons/yr.

AC48-159517, Tanks 80-4 and 80-5

Assuming: Zero deck seam loss, Mayflower IFR  
3,258,000 barrels per year throughput 1.9 tons/yr.  
(per tank)  
(presently permitted)

1031

TO Florida Dept. of Environmental Regulation FROM GATX Terminals Corp.

SUBJECT 2 sets (4 copies each) permit Applications DATE 4/17/91

MESSAGE Dear Sir or Madam,

The enclosed permit applications are for two (2) separate facility locations. GATX has sent them together as both address the Air Section. The original cover letter to Mr. C.H. Fancy pertains to both permit applications. In addition, please find enclosed a copy of the cover letter for Mr. Willard Hanks. Hopefully this note will clarify the contents of the package and aid in distribution.

Sincerely,

GATX Terminals Corp.

SIGNED

Caren J. Jenkie  
Environmental Coordinator



Mr. C. H. Fancy  
April 17, 1991  
Page 2

Assuming: Deck seam loss, Mayflower IFR  
3,258,000 barrels per year throughput 6.94 tons/yr.  
(per tank)

GATX has also decided to install internal floating roofs (IFR) manufactured by Petrex, Inc., rather than those manufactured by Mayflower Vapor Seal Corporation as presented in the original construction permit applications. The Petrex design provides more efficient vapor emissions control than the Mayflower design. The resultant calculated emissions using the lower deck seam loss factor are noted below:

AC29-159753, Tank 80-5

Assuming: Deck seam loss, Petrex IFR  
1,860,000 barrels per year throughput 4.36 tons/yr.

AC48-159517, Tanks 80-4 and 80-5

Assuming: Deck seam loss, Petrex IFR  
3,258,000 barrels per year throughput 4.41 tons/yr.  
(per tank)

Design information for the Petrex IFR is provided as attachments to the enclosed applications.

GATX has recognized a need to increase the annual throughput on all three tanks to accommodate a forecasted increase in demand. The anticipated throughput for Tank 80-5 (AC29-159753) increases the original permitted throughput of 1,860,000 barrels per year to 2,880,000 barrels per year; and the anticipated throughput for Tanks 80-4 and 80-5 (AC48-159517) increases from 3,258,000 barrels per year (per tank) to 4,000,000 barrels per year (per tank). The resultant calculated emissions are noted below:

AC29-159753, Tank 80-5

Assuming: Deck seam loss, Petrex IFR  
2,880,000 barrels per year throughput 4.39 tons/yr.



FEDERAL EXPRESS

QUESTIONS? CALL 800-238-5355 TOLL FREE

AIRBILL PACKAGE TRACKING NUMBER

8675180894

10537 8675180894

RECIPIENT'S COPY

Date: 4-17-91

From (Your Name) Please Print: E. Macinski  
 Your Phone Number (Very Important): (813) 248-2148  
 Company: GATX TERMINALS CORP  
 Street Address: 100 GATX DR  
 City: TAMPA State: FL ZIP Required: 33609

To (Recipient's Name) Please Print: C.H. Fanaj  
 Recipient's Phone Number (Very Important):  
 Company: FDER  
 Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes): 2600 Blair Stone Rd  
 City: Tallahassee State: FL ZIP Required: 32399

YOUR INTERNAL BILLING REFERENCE INFORMATION (First 24 characters will appear on invoice):

IF HOLD FOR PICK-UP, Print FEDEX Address Here  
 Street Address:  
 City: State: ZIP Required:

PAYMENT 1  Bill Sender 2  Bill Recipient's FedEx Acct. No. 3  Bill 3rd Party FedEx Acct. No. 4  Bill Credit Card  
 5  Cash/Check

| SERVICES (Check only one box)   |  | DELIVERY AND SPECIAL HANDLING (Check services required) |                         | PACKAGES  | WEIGHT In Pounds Only   | YOUR DECLARED VALUE  | Emp. No.  | Date | Federal Express Use |
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Mr. C. H. Fancy  
April 17, 1991  
Page 3

AC48-159517, Tanks 80-4 and 80-5

Assuming: Deck seam loss, Petrex IFR  
4,000,000 barrels per year throughput 4.43 tons/yr.  
(per tank)

As discussed with Mr. Willard Hanks of FDER on April 17, 1991, GATX is proceeding with construction of these tanks, and will be installing the higher efficiency Petrex internal floating roofs.

GATX herewith respectfully submits applications for the modification of construction permits AC29-159753 and AC48-159517. These applications reflect a correction in the original permit application calculations (i.e., assumption of a deck seam loss), installation of the Petrex internal floating roof and increased annual throughput.

The application fees of \$200 per application are enclosed for the modification of these two permits.

GATX appreciates FDER's time in discussing these permit modification applications prior to this submittal. Please contact me at (813) 241-1125 or 248-2148 if GATX can provide any assistance in your review of these applications.

Sincerely,  
GATX TERMINALS CORPORATION



Elaine R. Macinski  
Environmental and Safety Manager

ERM:mrr  
em-fan

c: T. Rigg  
S. Strehler  
W. Hanks, FDER

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**C&S** The Citizens and Southern National Bank of Florida Hillsborough County

**CENTRAL FLORIDA PIPELINE CORPORATION** 02-90

PHONE 813 248-2148  
1904 HEMLOCK AVENUE  
TAMPA, FL 33605

362

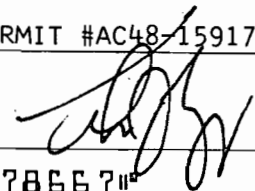
631

APRIL 17, 19 91

PAY TWO HUNDRED AND 00/100----- DOLLARS \$ 200.00

TO THE ORDER OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

FOR PERMIT #AC48-15917



0090078667



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**GATX TERMINALS CORPORATION** 02-90

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0884

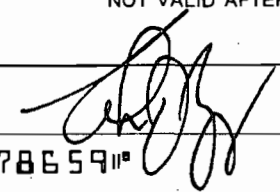
APRIL 17, 19 91

PAY TWO HUNDRED AND 00/100----- DOLLARS \$ 200.00

TO THE ORDER OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

FOR PERMIT #AC29-159753

NOT VALID AFTER 90 DAYS



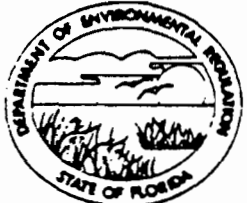
0090078659



# 200 pd  
4-18-91  
Receipt # 15126

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301



AC 48-195815

BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

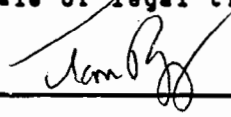
SOURCE TYPE: Two (2) Petroleum Storage Tanks     New<sup>1</sup>     Existing  
APPLICATION TYPE:     Construction     Operation     Modification  
COMPANY NAME: Central Florida Pipeline Corporation    COUNTY: Orange  
Identify the specific emission point source(s) addressed in this application (i.e. Lime  
Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Tank Nos. 80-4 & 80-5  
SOURCE LOCATION: Street 9919 Palm Avenue    City Taft  
UTM: East 17-463.8 KM    North 3143.8 KM  
Latitude 28 ° 25 ' 19 "N    Longitude 81 ° 22 ' 01 "W  
APPLICANT NAME AND TITLE: Tom Rigg, Manager of Florida Operations  
APPLICANT ADDRESS: 100 GATX Drive, Tampa, Florida 33605

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative\* of GATX Terminals Corporation  
I certify that the statements made in this application for a modification  
permit are true, correct and complete to the best of my knowledge and belief. Further,  
I agree to maintain and operate the pollution control source and pollution control  
facilities in such a manner as to comply with the provision of Chapter 403, Florida  
Statutes, and all the rules and regulations of the department and revisions thereof. I  
also understand that a permit, if granted by the department, will be non-transferable  
and I will promptly notify the department upon sale or legal transfer of the permitted  
establishment.

\*Attach letter of authorization

Signed:   
Tom Rigg, Manager of Florida Operations  
Name and Title (Please Type)  
Date: 4/17/91 Telephone No. (813) 248-2148

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have  
been designed/examined by me and found to be in conformity with modern engineering  
principles applicable to the treatment and disposal of pollutants characterized in the  
permit application. There is reasonable assurance, in my professional judgment, that

See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.



Signed Stan Strehler

Stanford L. Strehler, P.E.  
Name (Please Type)

GATX Terminals Corporation  
Company Name (Please Type)

100 GATX Drive, Tampa, Florida 33605  
Mailing Address (Please Type)

Florida Registration No. 032697 Date: 4.17.91 Telephone No. (813) 248-2148

**SECTION II: GENERAL PROJECT INFORMATION**

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

see attached sheet

B. Schedules of project covered in this application (Construction Permit Application Only)  
Start of Construction upon receipt of amended permit Completion of Construction phased construction over two (2) years

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Cost for pollution controls approximately \$110,000.00 per tank

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

Previous D.E.R. permit no. AC48-159517, issued 5/26/89, expires 4/30/94

E. Requested permitted equipment operating time: hrs/day 24; days/wk 7; wks/yr 52;  
if power plant, hrs/yr N/A; if seasonal, describe: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

F. If this is a new source or major modification, answer the following questions.  
(Yes or No)

1. Is this source in a non-attainment area for a particular pollutant? No  
a. If yes, has "offset" been applied? N/A  
b. If yes, has "Lowest Achievable Emission Rate" been applied? N/A  
c. If yes, list non-attainment pollutants. \_\_\_\_\_ N/A

2. Does best available control technology (BACT) apply to this source?  
If yes, see Section VI. No

3. Does the State "Prevention of Significant Deterioration" (PSD)  
requirement apply to this source? If yes, see Sections VI and VII. No

4. Do "Standards of Performance for New Stationary Sources" (NSPS)  
apply to this source? Yes

5. Do "National Emission Standards for Hazardous Air Pollutants"  
(NESHAP) apply to this source? No

H. Do "Reasonably Available Control Technology" (RACT) requirements apply  
to this source? Yes

a. If yes, for what pollutants? VOC's

b. If yes, in addition to the information required in this form,  
any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justifi-  
cation for any answer of "No" that might be considered questionable.

**SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)**

**A. Raw Materials and Chemicals Used in your Process, if applicable:**

| Description | Contaminants |      | Utilization Rate - lbs/hr | Relate to Flow Diagram |
|-------------|--------------|------|---------------------------|------------------------|
|             | Type         | % Wt |                           |                        |
|             |              |      |                           |                        |
|             |              |      |                           |                        |
|             |              |      |                           |                        |
|             |              |      |                           |                        |
|             |              |      |                           |                        |

**B. Process Rate, if applicable: (See Section V, Item 1)**

1. Total Process Input Rate (lbs/hr): \_\_\_\_\_

2. Product Weight (lbs/hr): For throughput of tank, see calculations sheet

**C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)**

| Name of Contaminant | Emission <sup>1</sup> |             | Allowed Emission Rate per Rule 17-2 <sup>2</sup> | Allowable Emission lbs/hr <sup>3</sup> | Potential <sup>4</sup> Emission |      | Relate to Flow Diagram |
|---------------------|-----------------------|-------------|--|--|---------------------------------|------|------------------------|
|                     | Maximum lbs/hr        | Actual T/yr |  |  | lbs/yr                          | T/yr |                        |
| VOC's               | 2.02                  | 8.86        | N/A  | N/A                                    | 17,720                          | 8.86 | N/A                    |
|                     |                       |             |  |  |                                 |      |                        |
|                     |                       |             |  |  |                                 |      |                        |
|                     |                       |             |  |  |                                 |      |                        |

<sup>1</sup>See Section V, item 2.

<sup>2</sup>Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

<sup>3</sup>Calculated from operating rate and applicable standard.

<sup>4</sup>Emission, if source operated without control (See Section V, Item 3).

A. Emission shown is total for two (2) tanks. See attached calculations.

B. Potential emission as defined in Rule 17-2.

J. Control Devices: (See Section V, Item 4)

| Name and Type<br>(Model & Serial No.)  | Contaminant | Efficiency | Range of Particles<br>Size Collected<br>(in microns)<br>(If applicable) | Basis for<br>Efficiency<br>(Section V<br>Item 5) |
|--|-------------|------------|---|--|
| Internal Floating<br>Roof with double<br>vapor mounted<br>urethane foam log<br>seals | VOC's       | N/A        | N/A   | N/A  |
|  |             |            |   |  |
|  |             |            |   |  |
|  |             |            |   |  |

E. Fuels N/A

| Type (Be Specific) | Consumption* |         | Maximum Heat Input<br>(MMBTU/hr) |
|--------------------|--------------|---------|----------------------------------|
|                    | avg/hr       | max./hr |                                  |
|                    |              |         |                                  |
|                    |              |         |                                  |
|                    |              |         |                                  |
|                    |              |         |                                  |

\*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: \_\_\_\_\_ Percent Ash: \_\_\_\_\_

Density: \_\_\_\_\_ lbs/gal Typical Percent Nitrogen: \_\_\_\_\_

Heat Capacity: \_\_\_\_\_ BTU/lb \_\_\_\_\_ BTU/gal

Other Fuel Contaminants (which may cause air pollution): \_\_\_\_\_

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average \_\_\_\_\_ Maximum \_\_\_\_\_

G. Indicate liquid or solid wastes generated and method of disposal.

---



---



---



---



H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: \_\_\_\_\_ ft. Stack Diameter: \_\_\_\_\_ ft.  
 Gas Flow Rate: \_\_\_\_\_ ACFM \_\_\_\_\_ DSCFM Gas Exit Temperature: \_\_\_\_\_ °F.  
 Water Vapor Content: \_\_\_\_\_ % Velocity: \_\_\_\_\_ FPS

SECTION IV: INCINERATOR INFORMATION

N/A

| Type of Waste            | Type 0 (Plastics) | Type I (Rubbish) | Type II (Refuse) | Type III (Garbage) | Type IV (Pathological) | Type V (Liq. & Gas By-prod.) | Type VI (Solid By-prod.) |
|--------------------------|-------------------|------------------|------------------|--------------------|------------------------|------------------------------|--------------------------|
| Actual lb/hr Incinerated |                   |                  |                  |                    |                        |                              |                          |
| Uncontrolled (lbs/hr)    |                   |                  |                  |                    |                        |                              |                          |

Description of Waste \_\_\_\_\_

Total Weight Incinerated (lbs/hr) \_\_\_\_\_ Design Capacity (lbs/hr) \_\_\_\_\_

Approximate Number of Hours of Operation per day \_\_\_\_\_ day/wk \_\_\_\_\_ wks/yr. \_\_\_\_\_

Manufacturer \_\_\_\_\_

Date Constructed \_\_\_\_\_ Model No. \_\_\_\_\_

|                   | Volume (ft) <sup>3</sup> | Heat Release (BTU/hr) | Fuel |        | Temperature (°F) |
|-------------------|--------------------------|-----------------------|------|--------|------------------|
|                   |                          |                       | Type | BTU/hr |                  |
| Primary Chamber   |                          |                       |      |        |                  |
| Secondary Chamber |                          |                       |      |        |                  |

Stack Height: \_\_\_\_\_ ft. Stack Diameter: \_\_\_\_\_ Stack Temp. \_\_\_\_\_

Gas Flow Rate: \_\_\_\_\_ ACFM \_\_\_\_\_ DSCFM\* Velocity: \_\_\_\_\_ FPS

\*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device:  Cyclone  Wet Scrubber  Afterburner  
 Other (specify) \_\_\_\_\_

Brief description of operating characteristics of control devices: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

**SECTION V: SUPPLEMENTAL REQUIREMENTS**

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]  
See calculations
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.  
See calculations
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).  
See calculations
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.) See Petrex Internal Floating Roof Systems for a typical IFR. New tanks will be of similar design.
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).  
See calculations
6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.  
See attached
7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).  
See attached
8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.  
See attached

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.
10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

**SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY N/A**

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

Yes  No

| Contaminant | Rate or Concentration |
|-------------|-----------------------|
|             |                       |
|             |                       |
|             |                       |
|             |                       |

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

Yes  No

| Contaminant | Rate or Concentration |
|-------------|-----------------------|
|             |                       |
|             |                       |
|             |                       |
|             |                       |

C. What emission levels do you propose as best available control technology?

| Contaminant | Rate or Concentration |
|-------------|-----------------------|
|             |                       |
|             |                       |
|             |                       |
|             |                       |

D. Describe the existing control and treatment technology (if any).

- |                           |                          |
|---------------------------|--------------------------|
| 1. Control Device/System: | 2. Operating Principles: |
| 3. Efficiency:*           | 4. Capital Costs:        |

\*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant

Rate or Concentration

| Contaminant | Rate or Concentration |
|-------------|-----------------------|
|             |                       |
|             |                       |
|             |                       |
|             |                       |

10. Stack Parameters

- a. Height: ft.
- b. Diameter: ft.
- c. Flow Rate: ACFM
- d. Temperature: °F.
- e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:<sup>1</sup>
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:<sup>2</sup>
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:<sup>1</sup>
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:<sup>2</sup>
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:

<sup>1</sup>Explain method of determining efficiency.

<sup>2</sup>Energy to be reported in units of electrical power - KWH design rate.

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:<sup>1</sup>

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:<sup>2</sup>

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:<sup>1</sup>

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:<sup>2</sup>

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:<sup>1</sup>

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:<sup>2</sup>

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

<sup>1</sup> Explain method of determining efficiency.

Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:<sup>1</sup>

Contaminant

Rate or Concentration

| Contaminant | Rate or Concentration |
|-------------|-----------------------|
|             |                       |
|             |                       |

(8) Process Rate:<sup>1</sup>

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:<sup>1</sup>

Contaminant

Rate or Concentration

| Contaminant | Rate or Concentration |
|-------------|-----------------------|
|             |                       |
|             |                       |

(8) Process Rate:<sup>1</sup>

10. Reason for selection and description of systems:

<sup>1</sup>Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION N/A

A. Company Monitored Data

1. \_\_\_\_\_ no. sites \_\_\_\_\_ TSP \_\_\_\_\_ ( ) SO<sub>2</sub>\* \_\_\_\_\_ Wind spd/di:

Period of Monitoring \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
month day year month day year

Other data recorded \_\_\_\_\_

Attach all data or statistical summaries to this application.

Specify bubbler (B) or continuous (C).

2. Instrumentation, Field and Laboratory

- a. Was instrumentation EPA referenced or its equivalent?  Yes  No
- b. Was instrumentation calibrated in accordance with Department procedures?  
 Yes  No  Unknown

B. Meteorological Data Used for Air Quality Modeling

- 1. \_\_\_\_\_ Year(s) of data from \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
month day year month day year
- 2. Surface data obtained from (location) \_\_\_\_\_
- 3. Upper air (mixing height) data obtained from (location) \_\_\_\_\_
- 4. Stability wind rose (STAR) data obtained from (location) \_\_\_\_\_

C. Computer Models Used

- 1. \_\_\_\_\_ Modified? If yes, attach description.
- 2. \_\_\_\_\_ Modified? If yes, attach description.
- 3. \_\_\_\_\_ Modified? If yes, attach description.
- 4. \_\_\_\_\_ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

| Pollutant       | Emission Rate   |
|-----------------|-----------------|
| TSP             | _____ grams/sec |
| SO <sub>2</sub> | _____ grams/sec |

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

SECTION II

GENERAL PROJECT INFORMATION

QUESTION A:

GATX Terminals Corporation proposes to construct two (2) 80,000 Bbl. cone roof gasoline storage tanks. The new tanks shall be equipped with an internal floating roof with a double vapor mounted urethane foam log seal.

These tanks will be in compliance with FDER Rule 17-2 and 40CFR60 Subpart Kb.

Upon completion of construction GATX Terminals Corporation desires to include the above two (2) tanks under the existing terminal tankage permit by amendment.



Vapor mounted primary  
Rim mounted secondary

Using AP42-4.3

EMISSIONS LOSS CALCULATIONS

TANK NO. 80-4 (Tank 80-5 calculations are identical)  
GASOLINE IFR - 112' DIAM.

$$LT = L_R + L_W + L_F + L_D$$

Throughput Amounts: 4,000,000

Rim Seal Loss -

$$LR = K_s V^n P^* D M K_c$$

LR = Rim seal loss

Ks = Seal factor 2.5

V = Avg. wind speed 0 - not req'd w/IFR

n = Seal related wind speed exp. 0

P\* = Vapor pressure function 0.157

D = Tank diameter 112'

M = Avg/ vapor molecular wt. 64

K<sub>c</sub> = Product factor 1

$$2.5 \times 0.157 \times 112 \times 64 \times 1 = 2813.44 \text{ lbs.} \\ 1.41 \text{ TPY}$$

EMISSIONS LOSS CALCULATIONS  
TANK NO. 80-4  
GASOLINE IFR - 112' DIAM.

Withdrawal Loss -

$$L = \frac{(0.943) QCWL}{W D} \left[ 1 + \frac{NcFc}{D} \right]$$

L = Withdrawal loss (lb./yr.)  
W

\*\*using constr. appl.  
thruput

Q = Throughput 4,000,000

C = Shell clingage factor .0015

W = Avg. organic liquid density 5.6

L  
D = Tank diameter 112'

Nc = Number of columns 0

Fc = Effective column diameter 0.7

$$\frac{(0.943) (4,000,000) (.0015) (5.6)}{112} \left[ 1 + \frac{0 \times 0.7}{112} \right]$$

( 282.90)

(1.00) = 282.90 lbs./yr.  
.14 TPY

EMISSION LOSS CALCULATIONS  
TANK NO. 80-4  
GASOLINE IFR - 112' DIAM.

Deck Fitting Loss -

$$L = F \cdot P^* \cdot M \cdot K_c$$

$\begin{matrix} \text{F} & & \text{F} & & \text{v} \end{matrix}$

L = Fitting loss (lbs./yr.)  
F

F = Total deck fitting loss factor:  
F

| <u>Deck Fittings</u> | <u>N</u> ( <u>K</u> ) |
|----------------------|-----------------------|
|                      | <u>F</u> ( <u>F</u> ) |
| Access Hatch         | 2 (1.6)               |
| Column Well          | 0 (19)                |
| Ladder Well          | 1 (56)                |
| Vacuum Breaker       | 1 (.07)               |
| Roof Legs            | 0 ** (7.9)            |

\*\* Roof legs will be capped.

$$[3.2 + 0 + 56 + 0.7 + 0 + 15] = 74.90$$

P\* = Vapor pressure function 0.157

M = Avg. vapor molecular wt. 64  
v

K = Product factor 1  
c

$$74.90 \times 0.157 \times 64 \times 1 = 752.60 \text{ lbs./yr.}$$

.38 TPY

EMISSION LOSS CALCULATIONS  
TANK NO. 80-4  
GASOLINE IFR - 112' DIAM.

Deck Seam Loss -

$$L_D = K_D \frac{S}{D} \frac{D^2}{D} P^* \frac{M}{v} K_c$$

$L_D$  = Deck seam loss (lb./yr.)

$K_D$  = Deck seam loss per unit seam length factor                      0.12\*

$S_D$  = Deck seam loss factor                      0.33

$D$  = Tank diameter                      112'

$P^*$  = Vapor pressure function                      0.157

$M_v$  = Avg. molecular wt.                      64

$K_c$  = Product factor                      1

$$0.12 \times 0.33 \times 112^2 \times 0.157 \times 64 \times 1 =$$

$$0.12 \times 0.33 \times 12,544 \times 0.157 \times 64 \times 1 = 4,991.27 \text{ lbs./yr.}$$

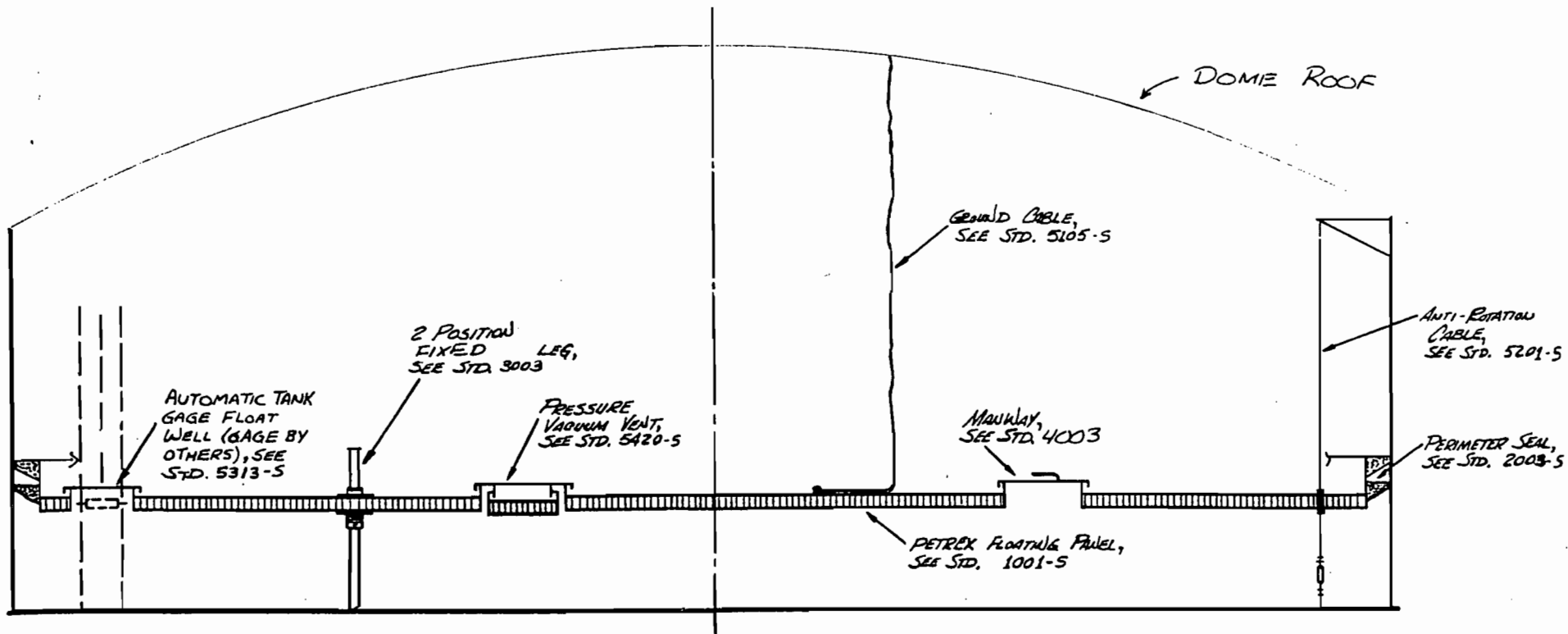
2.50 TPY

\*This number reflects reduction factor incorporated per test summary. See Attachment II.

Total Loss

$$LT = L_R + L_W + L_F + L_D =$$

$$1.41 + .14 + .38 + 2.50 = \underline{\underline{4.43 \text{ TPY}}}$$



TYPICAL SECTION THRU DOME ROOF TANK

W/ PETREX INTERNAL FLOATING ROOF RESTING ON LEGS IN LOW POSITION

TYPICAL NUMBER OF FLOATING ROOF FITTINGS FOR 112' Ø TANK

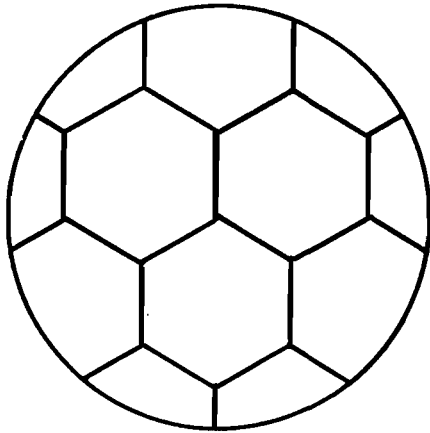
| No. | Description                |
|-----|----------------------------|
| 38  | Adjustable Legs            |
| -   | Column Seals               |
| 2   | Manways                    |
| 2   | Pressure Vacuum Vent       |
| 1   | Auto. Tank Gage Float Well |
| -   | Gage Funnel                |
| 3   | Ground Cables              |
| 1   | Anti-Rotation Cable        |
| -   | Center Vent                |
| -   | Shell Vents                |

**PETREX Inc.**

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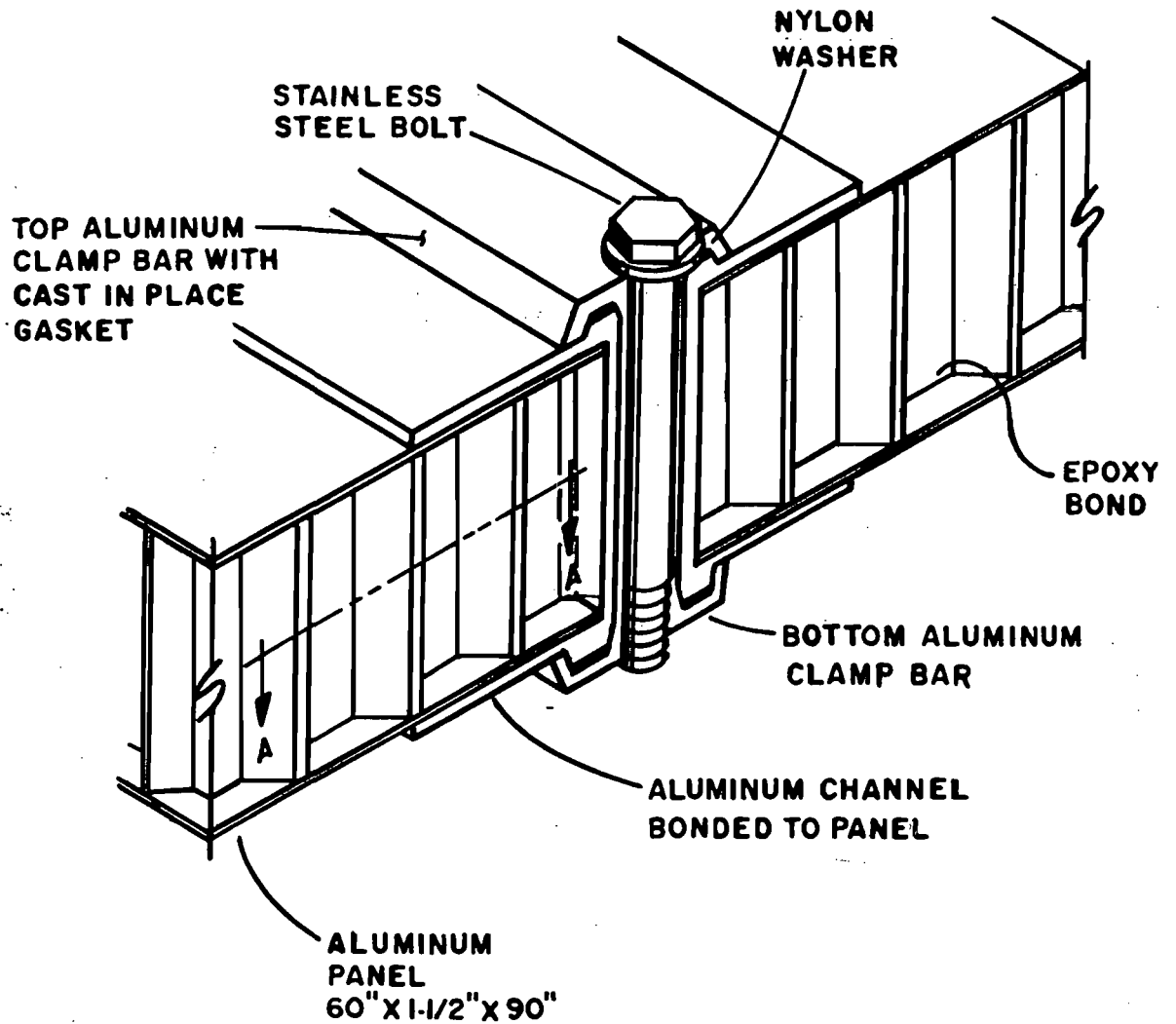
TYPICAL SELECTION AND DETAILS OF THE PETREX INTERNAL FLOATING ROOF SYSTEM

| DATE     | BY  | CK  | JOB     | NN    | RFV |
|----------|-----|-----|---------|-------|-----|
| 10-15-81 | MAT | WLW | 4/18/91 | Q2906 | - 0 |



**SECTION A-A**

**HONEYCOMB CORE OF PANEL**



**PETREX Inc.**

P.O. Box 907 • Warren, Pennsylvania

16365 • (814) 723-2050

BY WISE

CK

DATE 1-10-90

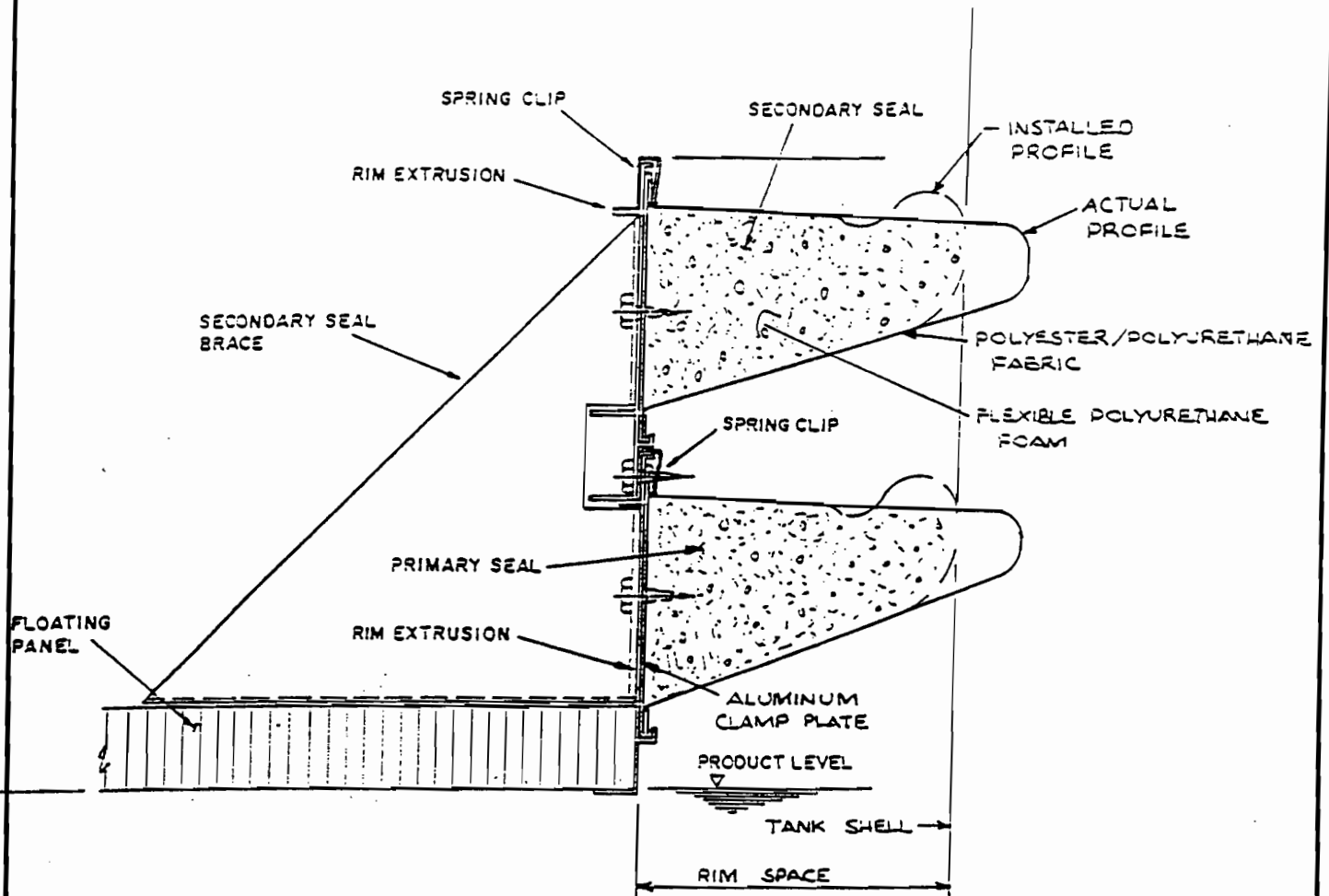
**PANEL JOINING  
DETAIL**

DRAWING NO.

**STD. 1001-S**

REV.

**4**



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16365 • (814) 723-2050

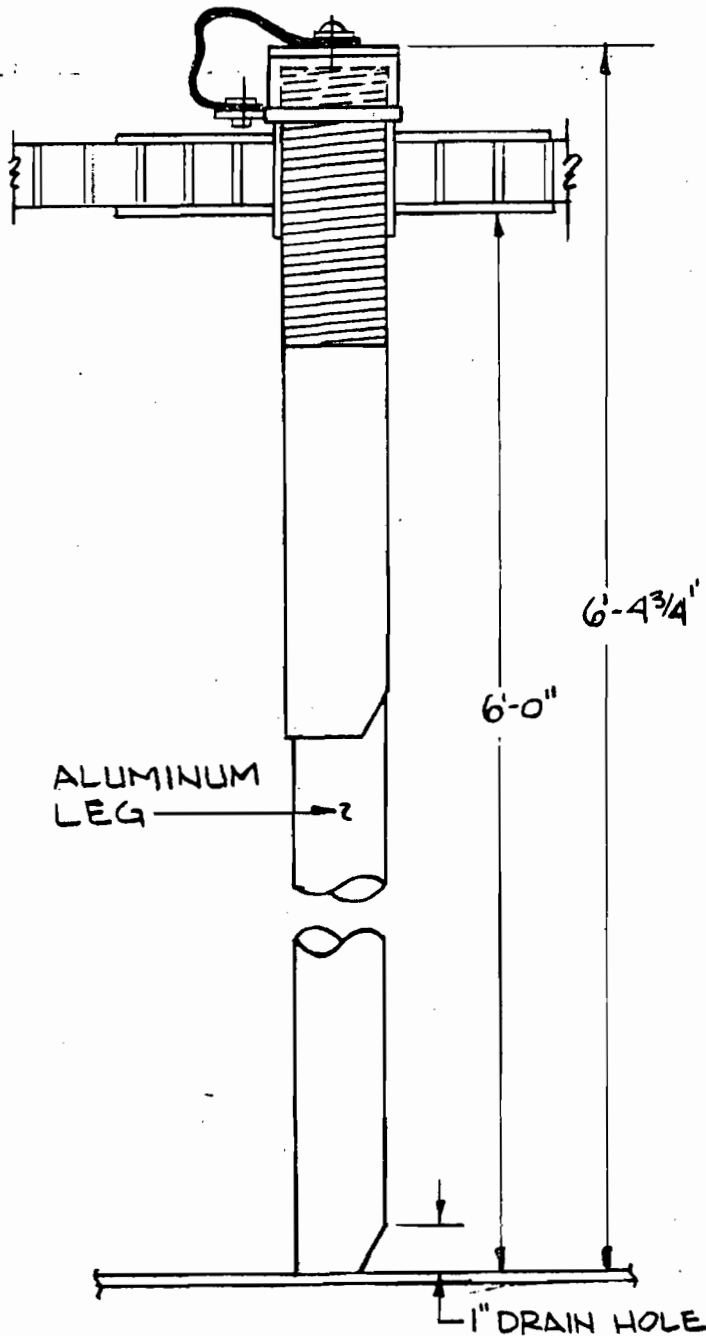
EY WISE  
CK  
DATE 11-3-88

**PRIMARY AND  
SECONDARY  
SEAL DETAIL**

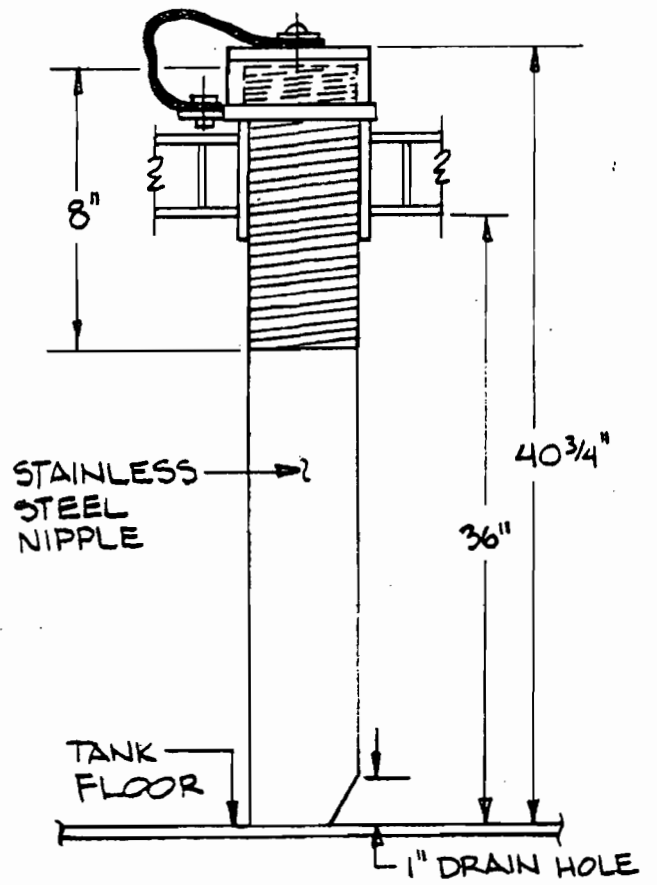
DRAWING NO.  
**STD.2003-S**

REV.  
**1**

HIGH LEG POSITION



LOW LEG POSITION



**PETREX Inc.**

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16365 • (814) 723-2050

BY JAM

CK

DATE 2-21-91

LEG ASSEMBLY W/  
NIPPLE AS LOW LEG

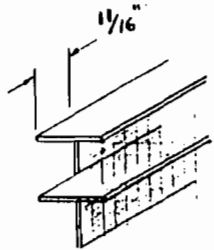
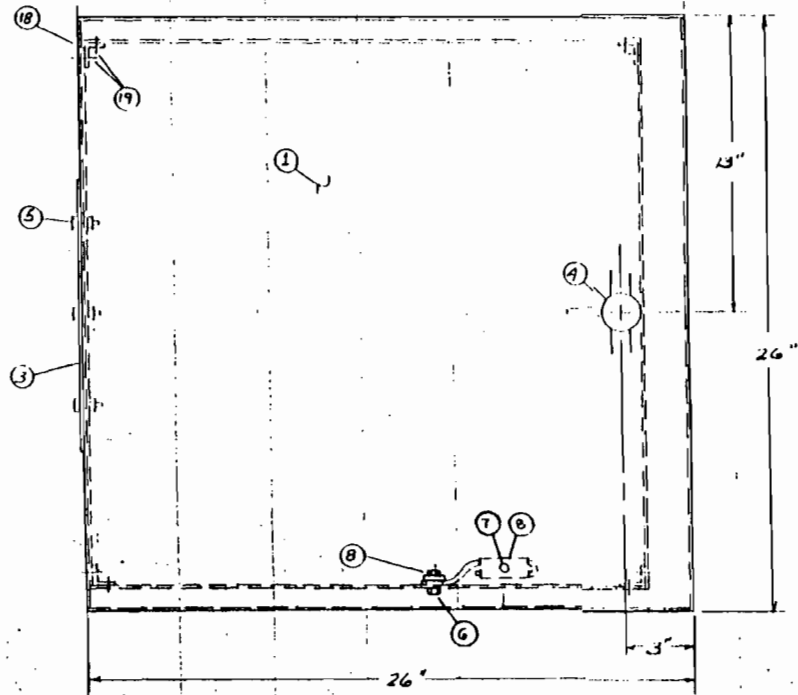
DRAWING NO.

STD. 3003  
SUPPLEMENT

REV.

0

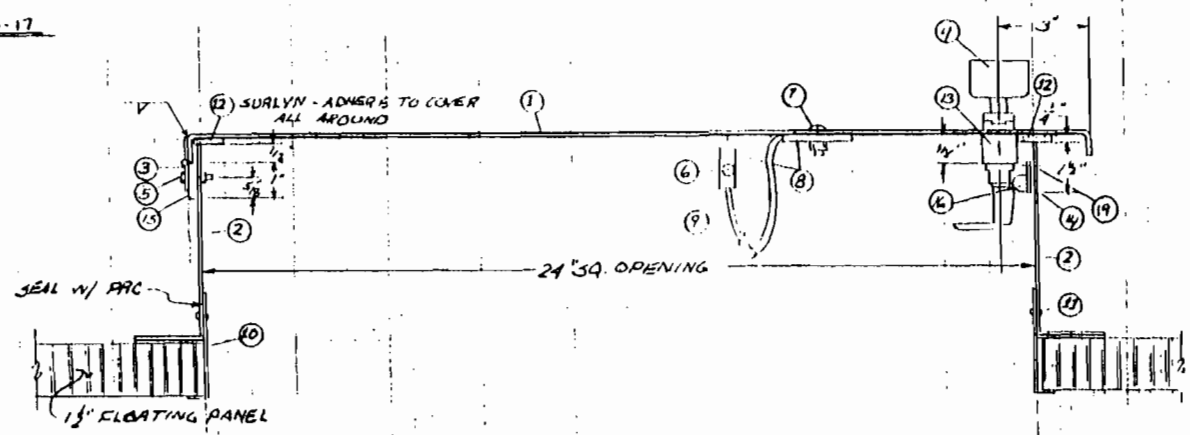




**BILL OF MATERIALS**

| MARK | REQD. | DESCRIPTION   |
|------|-------|---|
| 1    | 1     | 1/8" ALUM. HATCH COVER 26" SQ. W/ 3/8" LIP              |
| 2    | 4     | 1/8" ALUM. HATE 6 3/8" x 2 1/2" W/ 2" LIP               |
| 3    | 1     | ALUM. HINGE 1 1/2" x 1 1/2" x 1 1/2" LG.                |
| 4    | 1     | HANDLE ASSEMBLY   |
| 5    | 3     | 1/4" x 3/8" LG. ALUM. HEX. HD. BOLTS W/ NUTS & WASHERS  |
| 6    | 1     | 1/4" x 3/8" LG. S.S. HEX. HD. BOLTS W/ NUTS & WASHERS   |
| 7    | 1     | 1/4" x 1 1/2" LG. S.S. HEX. HD. BOLTS W/ NUTS & WASHERS |
| 8    | 2     | 1/4" x 1 1/2" x 2" LG. ALUM. CLAMP BRK                  |
| 9    | 1     | S.S. CABLE 1/8" x 3/16" LG. W/ TERMINAL P.A.S.          |
| 10   | 2     | COLUMN WELL EXT. (STD. 4001) 1 23 1/8" LG.              |
| 11   | 12    | POP NUTS 1/8" x 3/8" LG.                                |
| 12   | 1     | SURILYN GASKET 1 1/2" x 1 1/2" LG.                      |
| 13   | 1     | 1 1/2" x 3/4" x 3/4" LG. SPACER BLOCK                   |
| 14   | 1     | 1/8" x 1/8" x 3/4" LG. SPACER SURILYN                   |
| 15   | 1     | 1/4" x 1" x 12" LG. ALUM. BRK                           |
| 16   | 1     | LATCH   |
| 17   | 2     | COLUMN WELL EXT. (STD. 4001) 25" LG (HOLE)              |
| 18   | 4     | ANGLE 1" x 1" x 1/8" x 3" LG. ALUM.                     |
| 19   | 20    | FIBER 3/16" DIA. x 1" LG. ALUM.                         |

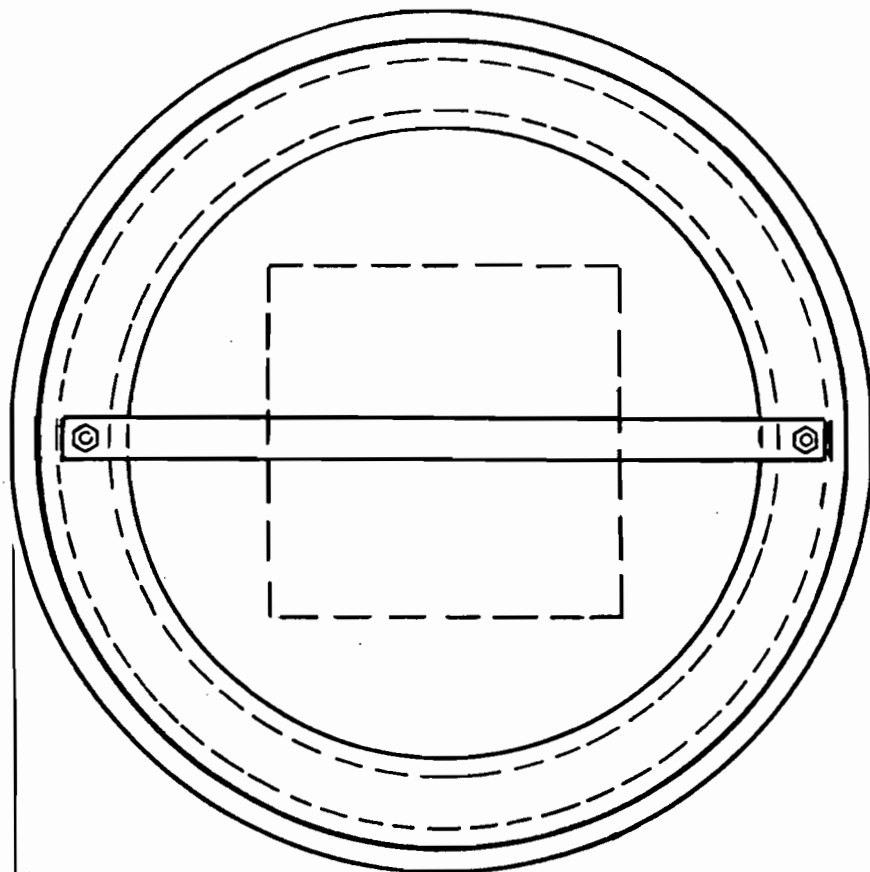
NOTE:  
LATCH LATCH MODIFIED WITH NEW FIBERGLASS PARTS (1/4" x 2 1/2" x 1/2" DIA. x 2 FIBER BLOCKS 1/4" x 1/4" x 3/8")



**PETREX Inc.**  
P.O. Box 907 - Warren, Pennsylvania 15085 - (814) 773 2050

**TYP 24" SQUARE ALUMINUM HATCH WITH HANDLE ASSEMBLY**

|          |     |     |           |     |
|----------|-----|-----|-----------|-----|
| DATE     | BY  | CHK | JOB       | REV |
| 11-18-82 | SEB |     | STD. 4003 | 4   |



PLAN VIEW

31 3/4"  $\phi$

GASKET

LIQUID SURFACE

FLOAT

ELEVATION

FLOATING ROOF

PV VENT SHOWN IN CLOSED POSITION. IN THE OPEN POSITION, THE FLOAT WILL HANG FROM A STRAP IN THE OPEN POSITION.

© 1982 PETREX Inc.

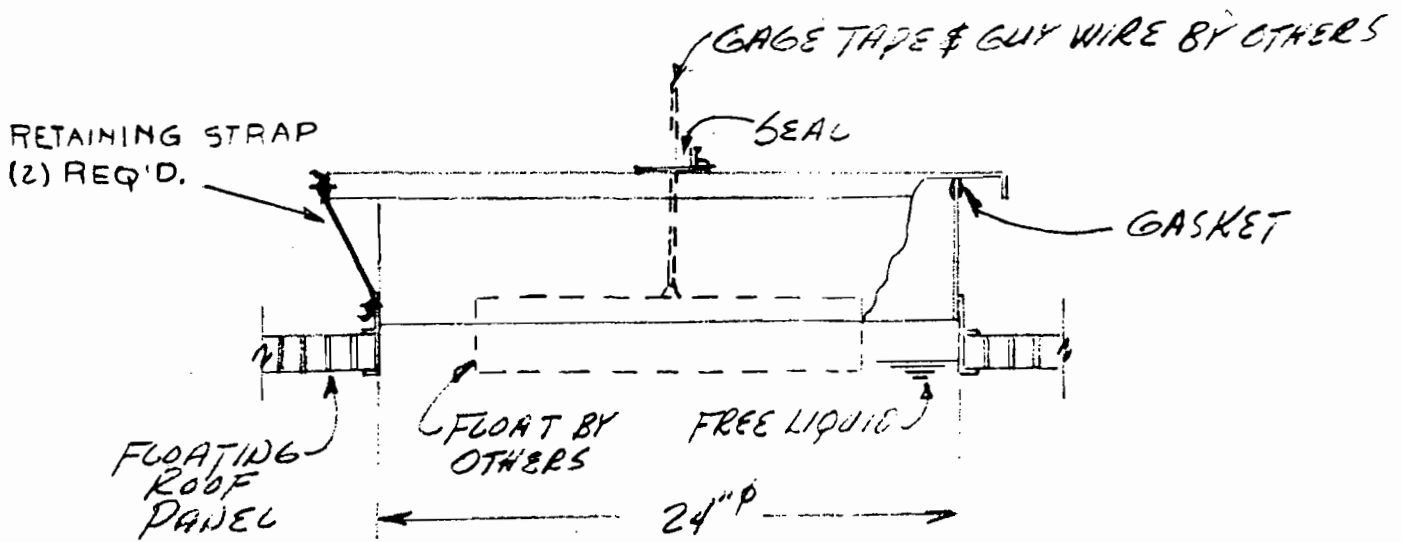
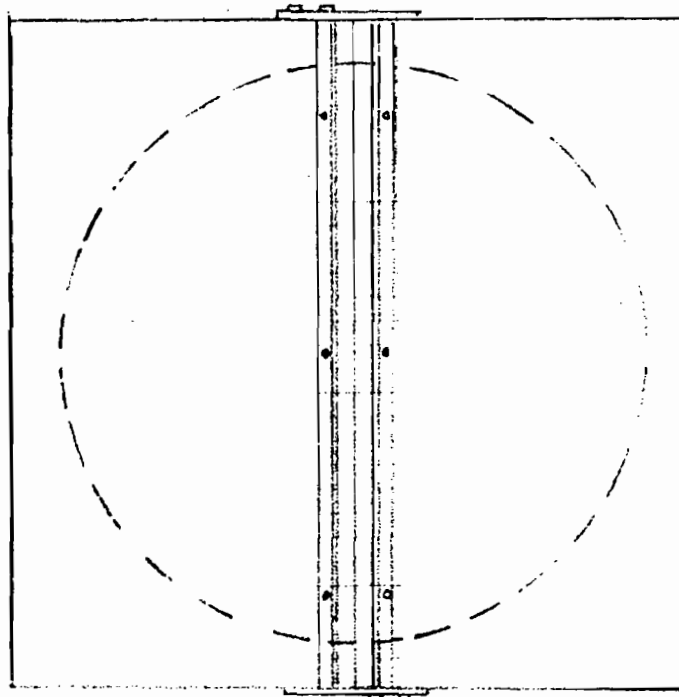
**PETREX** INC.  
WARREN, PA.

BY D.W.G.  
CK'  
DATE 9.28.81

**PV VENT**

DRAWING NO.  
**STD 5420-S**

REV  
**2**



**PETREX Inc.**

P.O. Box 907 • Warren, Pennsylvania

70385 • (814) 723-2050

BY *D.W.G.*

CK *WLW*

DATE *1-21-85*

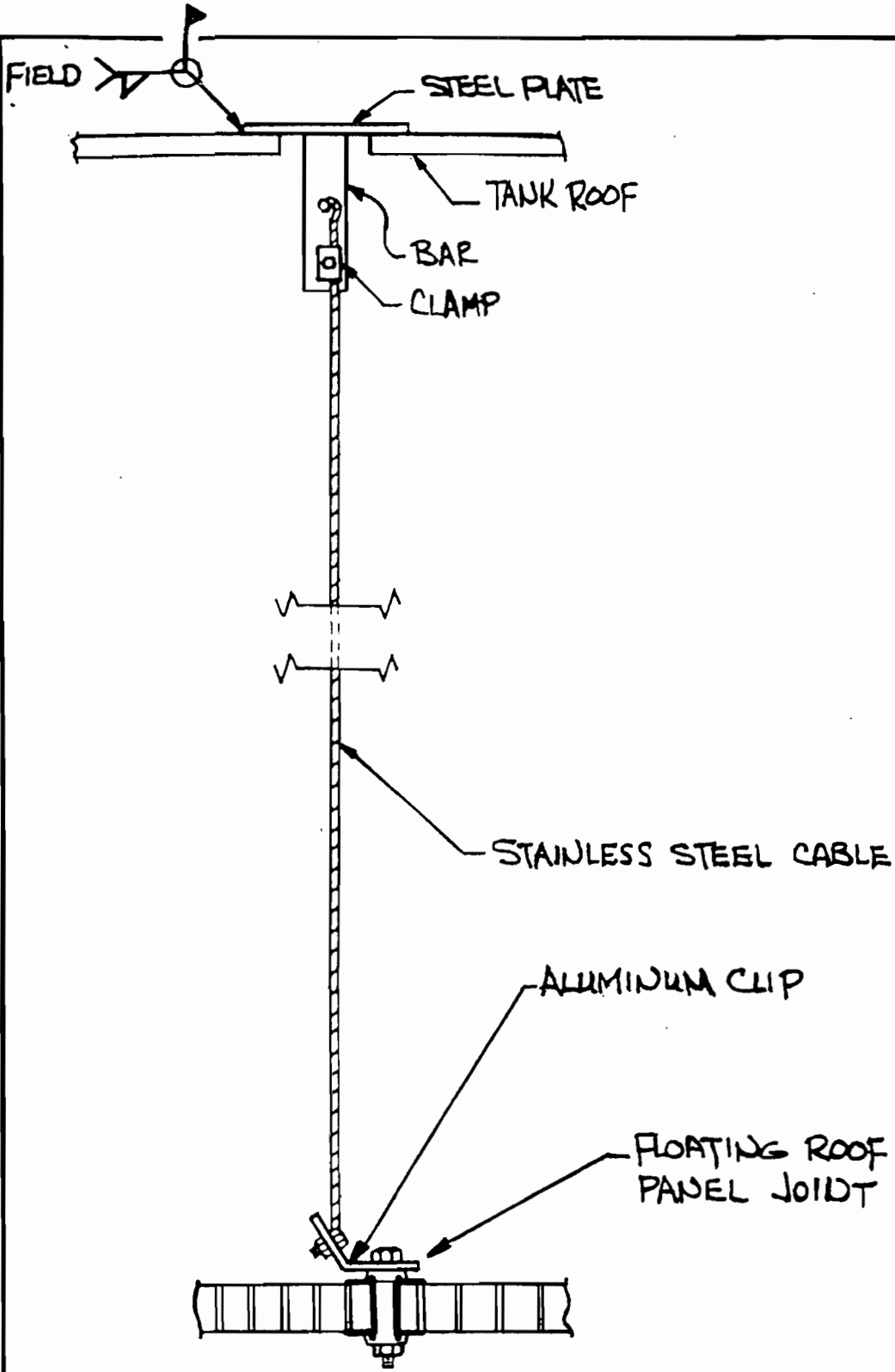
*AUTOMATIC  
GAGE FLOAT WELL*

DRAWING NO.

*5313-5*

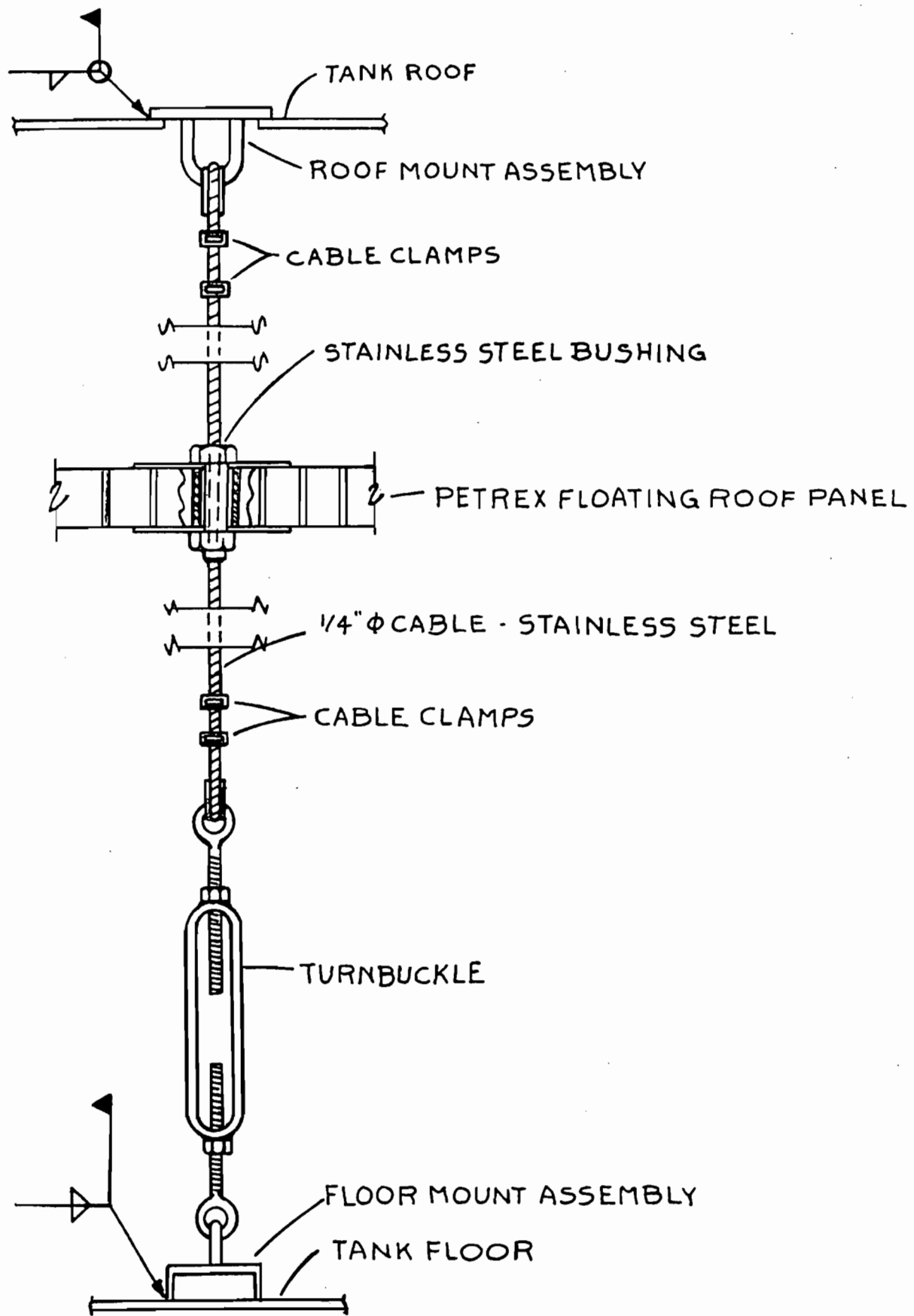
REV.

*1*



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|                              |      |                                  |
|------------------------------|------|----------------------------------|
| GROUND CABLE INSTALLATION    |      |                                  |
| CUST                         | NO.  | DRAWN DW6                        |
| LOCATION                     |      | SCALE NONE                       |
| TK. NO.                      | SIZE | DATE 9-28-81                     |
| PETREX INC<br>WARREN, PENNA. |      | DRAWING NO.<br><b>STD 5105-S</b> |



**PETREX Inc.**

P.O. Box 907 • Warren, Pennsylvania  
16365 • (814) 723-2050

BY D.W.G.

CK

DATE 9-28-81

ANTI-ROTATION  
CABLE ASSEMBLY

DRAWING NO.

STD. 5201-S

REV.

1

SPECIFICATIONS FOR INTERNAL FLOATING ROOFS

1. SCOPE

The roof shall be full-surface contact type designed to eliminate the presence of air-vapor mixture under the floating roof and shall meet these specifications and the intent of the latest edition of API Standard 650, Appendix H.

2. MATERIAL

- a. Aluminum Extrusions: Alloy 6063 T6 or equal.
- b. Aluminum Panels: Skin - .014 minimum, Alloy 3003 H16 or equal.  
Core - 1-inch ACG NP Honeycomb
- c. Adhesive: Compatible with product stored and materials joined and have an expected service life equal to the service life of the roof.
- d. Aluminum Plate: Alloy 3003 H16 or equal.
- e. Stainless Steel Plate: ASTM A 240 Type 304.
- f. Aluminum Pipe: Alloy 6061 T6 or equal.
- g. Seal: Foam - Polyurethane, ASTM D 3453 or equal.  
Wrap - Polyurethane coated fabric, .025 minimum thickness.
- h. Fasteners: Structural: Stainless steel  
Nonstructural: Aluminum

3. DESIGN

- a. The roof and accessories shall be so designed as to allow the internal floating roof to operate throughout its normal travel without manual attention and without damage to any part of the tank or floating roof.
- b. The roof shall be designed and built to float and rest in a reasonably horizontal pattern.
- c. All basic components, except for the seal materials, are to be metal. For JP-4 or JP-5 service all metal parts in contact with the product shall be aluminum or stainless steel.

- d. The internal floating roof shall be designed to safely support at least two men (500 pounds over one square foot) walking anywhere on the roof while the roof is floating or resting on its supports, without damaging the floating roof and without allowing product on the roof. For floating roofs less than 30 feet in diameter this criteria is reduced to 250 pounds over one square foot.
- e. The floating roof shall be naturally buoyant and provide buoyancy to support at least three times its own weight, and shall not sink if punctured anywhere. Buoyancy is based on a product with a specific gravity of 0.70.
- f. Complete electrical continuity of the floating roof and the full surface of the liquid shall be provided, with surface resistance less than 0.000725 ohms per foot DC at 70° F.
- g. Panels shall be joined together by means of a bolted and gasketed clamp and channel member bonded to the panel edge. The joint shall transmit the design loads without failure or leakage.

#### 4. SUPPORT LEGS

- a. Floating roof shall be provided with two position legs: low position 36" and high position 78". However, the low position can be preset at any height.
- b. Changing high/low position must be accomplished from top side of floating roof and while tank is in service. In addition the legs shall be completely removable from the top side of the floating roof, while in service if necessary.
- c. Each leg must be capable of vertical adjustment of  $\pm 3$ " in the event that the tank bottom settles after tank is in service. Adjustment to be made from top side of floating roof while tank is in service.
- d. Legs and attachments to be designed to support a uniform load of 12.5 lb. per sq. ft.
- e. Legs to be 2"  $\emptyset$  aluminum or stainless steel (0.150 minimum wall).
- f. Legs shall be self-draining (notched or perforated).

#### 5. SEAL

- a. The space between the outer periphery of the floating roof and the tank shell shall be sealed by primary and secondary flexible sealing devices.
- b. The seals shall be flexible foam covered with coated fabric wrap.

- c. All materials used as part of the seals shall be durable in the tank's environment, abrasion resistant and shall not discolor or contaminate the liquid stored.
- d. The seals shall be designed to accommodate +2, -4, inches of local deviation between the floating roof and the shell.
- e. Seal construction shall be such that the seal can be installed, removed and replaced by hand from the top of the floating roof.
- f. The primary vapor mounted seal shall function above the liquid level and be free draining without trapping any liquid.
- g. The secondary seal is to be installed above the primary seal.

#### 6. PENETRATIONS

Columns, ladders, and other rigid vertical appurtenances that penetrate the floating roof shall have a vapor seal provided which will permit a local deviation of  $\pm 5$  inches. Appurtenances shall be plumb within a tolerance of 3 inches. Gasketed sliding cover plates, which are free to move with the appurtenance relative to the cover, shall be sized to allow the full movement without exposing product within the opening.

A rim shall be provided around the floating roof periphery and shall extend 6 inches minimum above the liquid to contain product turbulence. Columns, ladders, and other openings shall extend 3 inches above the liquid.

#### 7. MANWAYS

At least one manhole shall be provided for access to and ventilation of the tank when the roof is on its supports and the tank is empty. It shall be at least 30 in. I.D. and may be of the gasketed loose-cover type, provided the height of the manway neck is such as to prevent the product contents from flowing onto the roof.

#### 8. GAUGING

The floating roof shall have an 8"  $\emptyset$  opening for gauging from the tank roof. The opening is to be located directly below the gauge hatch on the tank roof. On the top side of the floating roof the opening shall have a flapper type seal and a 20"  $\emptyset$  funnel.

#### 9. AUTOMATIC TANK GAGE

The floating roof shall have a covered and gasketed float well for automatic gage. The float well shall be a minimum of 24" diameter and provide sufficient clearance for the float.



## 10. GROUNDING

Floating roof shall be electrically bonded to the tank. This shall be accomplished with flexible cables from the tank roof to the floating roof (minimum of two, uniformly distributed). They shall be 1/8-inch diameter stainless steel aircraft cable to insure strength, corrosion resistance, joint reliability, flexibility, and service life.

## 11. ANTI-ROTATION

The floating roof shall be prevented from rotation by means of a vertical cable firmly fixed to the tank roof and bottom. The cable shall pass through a stainless steel bushing mounted in the floating roof. The cable shall be 1/4 stainless steel aircraft type and made taut by means of a turnbuckle. All cable fittings shall be Type 304 stainless steel.

## 12. VENTS

- a. Floating Roof: A pressure/vacuum gasketed vent shall be provided on the floating roof to prevent overstressing of the floating roof or seal. This vent shall be adequate to evacuate air and gasses from underneath the roof when the roof is on its supports during filling operations. It shall also be adequate to release any vacuum generated underneath the roof after it settles on its supports during withdrawal operations. It shall not open while the roof is fully afloat due to pressure or vacuum.
- b. Tank Shell: Circulation vents shall be located above the seal of the floating roof when the tank is full. The maximum spacing shall be 32 ft. but in no case shall there be less than four equally spaced vents. The total open area of these vents shall be equal to, or greater than 0.2 sq. ft. per foot of tank diameter. Vents shall be covered with rain hood and coarse screen.
- c. Fixed Roof: An open vent shall be provided at the center or at the highest elevation of the fixed roof. It shall have a weather cover and a maximum open area of 50 sq. in. Vent opening shall be covered with a coarse screen.

## 13. EMERGENCY OVERFLOWS

Tank shell vents may be used as emergency overflows with at least 50% of the circulation venting area remaining unobstructed during overflow event.

## 14. MATERIAL PLACEMENT

Placement of the floating roof materials into the tank shall be through an opening (provided by others) 2-foot by 6-foot in the tank fixed roof.

15. TESTING

Testing for buoyancy and leaks is unnecessary as panels are inherently buoyant with over 8,000 flotation cells per panel.

16. EXPERIENCE

The internal floating roof contractor must have at least 5 years experience furnishing and installing full-surface contact floating roofs as described in this specification and provide a list of twenty-five installations, including owner, location, size and year completed.

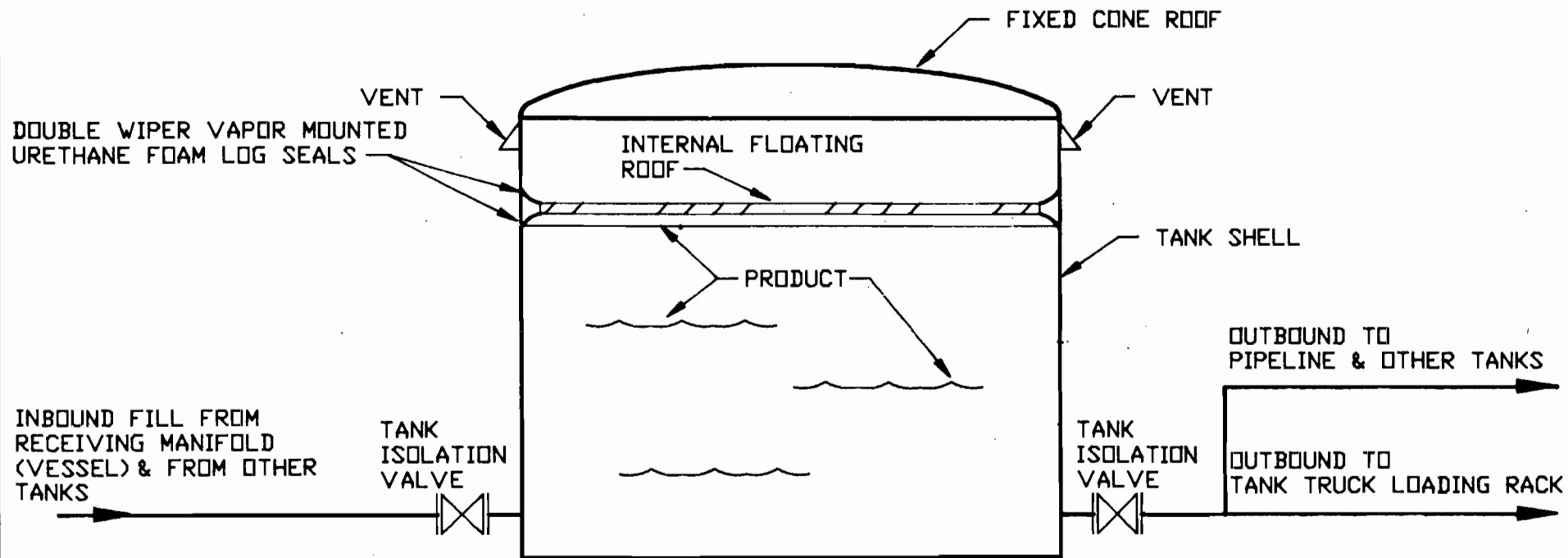
17. WARRANTY

The internal floating roof contractor must warrant its work for a period of one year from the date of completion of its work to the extent that it will repair any defects which may appear because of faulty design, workmanship or material furnished.

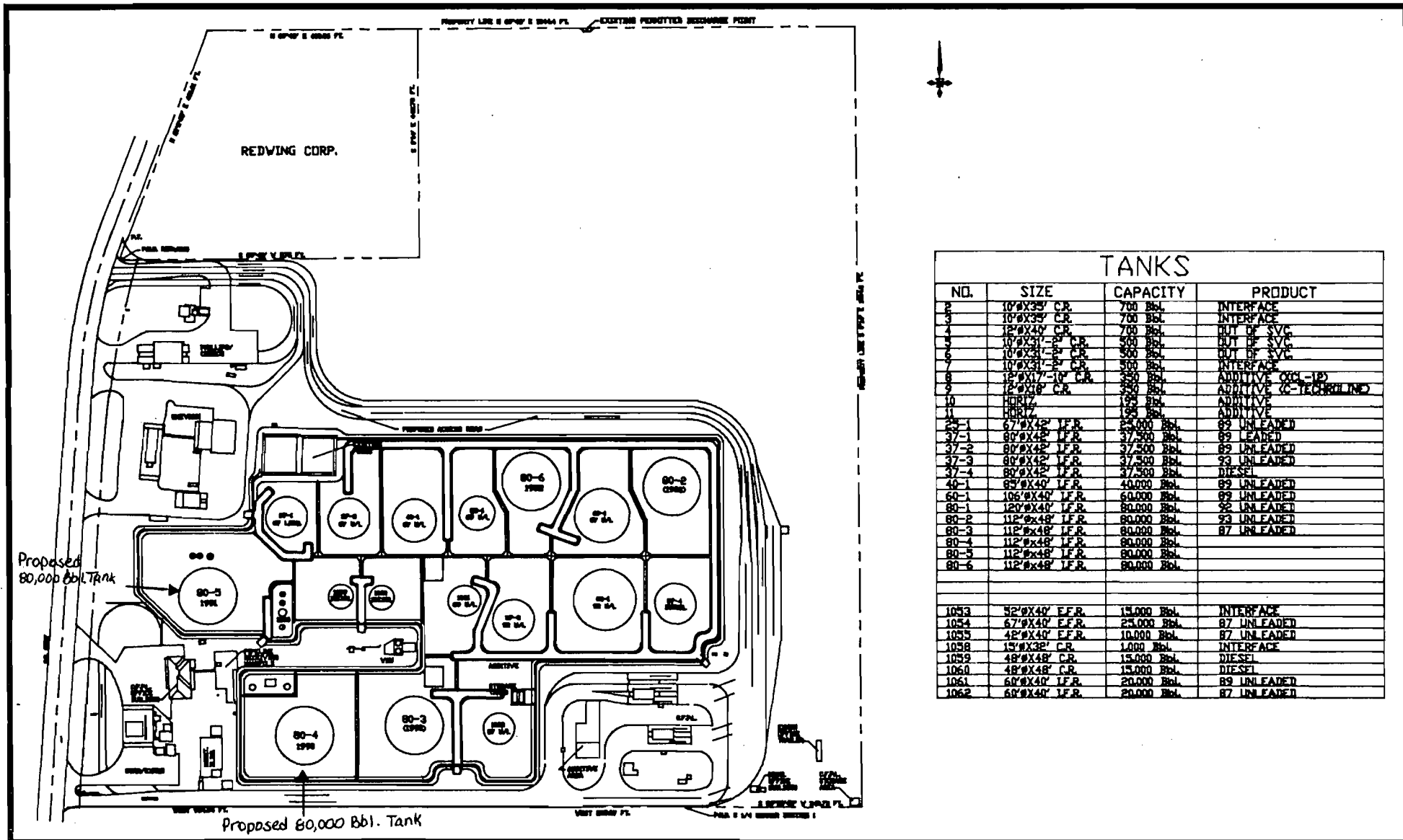
18. SPECIAL ITEMS

The following items may be required if checked and specified on attached sheets:

- \_\_\_\_\_ Gauge pipe
- \_\_\_\_\_ Ladder
- \_\_\_\_\_ Gauge ladder
- \_\_\_\_\_ Roof hatch 30" x 30", for tank roof.
- \_\_\_\_\_ Gauge hatch 8"  $\emptyset$ , for tank roof
- \_\_\_\_\_ Floating swingline with track
- \_\_\_\_\_ Leg pads
- \_\_\_\_\_ Foam dam
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



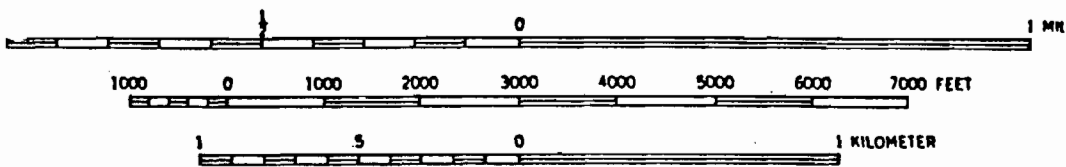
# FLOW DIAGRAM



| TANKS |               |             |                         |
|-------|---------------|-------------|-------------------------|
| NO.   | SIZE          | CAPACITY    | PRODUCT                 |
| 3     | 10'x36' C.R.  | 780 Bbl.    | INTERFACE               |
| 4     | 10'x36' C.R.  | 780 Bbl.    | INTERFACE               |
| 5     | 10'x36' C.R.  | 780 Bbl.    | OUT OF SVC              |
| 6     | 10'x36' C.R.  | 780 Bbl.    | OUT OF SVC              |
| 7     | 10'x36' C.R.  | 780 Bbl.    | OUT OF SVC              |
| 8     | 10'x36' C.R.  | 780 Bbl.    | INTERFACE               |
| 9     | 12'x48' C.R.  | 850 Bbl.    | ADDITIVE (C-TECHROLING) |
| 10    | 12'x48' C.R.  | 850 Bbl.    | ADDITIVE                |
| 11    | 12'x48' C.R.  | 850 Bbl.    | ADDITIVE                |
| 23-1  | 67'x40' F.R.  | 25,000 Bbl. | 89 UNLEADED             |
| 37-1  | 80'x48' F.R.  | 37,500 Bbl. | 89 LEADED               |
| 37-2  | 80'x48' F.R.  | 37,500 Bbl. | 89 UNLEADED             |
| 37-3  | 80'x48' F.R.  | 37,500 Bbl. | 93 UNLEADED             |
| 37-4  | 80'x48' F.R.  | 37,500 Bbl. | DIESEL                  |
| 40-1  | 85'x40' F.R.  | 40,000 Bbl. | 89 UNLEADED             |
| 60-1  | 106'x40' F.R. | 60,000 Bbl. | 89 UNLEADED             |
| 80-1  | 120'x48' F.R. | 80,000 Bbl. | 92 UNLEADED             |
| 80-2  | 112'x48' F.R. | 80,000 Bbl. | 93 UNLEADED             |
| 80-3  | 112'x48' F.R. | 80,000 Bbl. | 87 UNLEADED             |
| 80-4  | 112'x48' F.R. | 80,000 Bbl. |                         |
| 80-5  | 112'x48' F.R. | 80,000 Bbl. |                         |
| 80-6  | 112'x48' F.R. | 80,000 Bbl. |                         |
| 1053  | 52'x40' F.R.  | 15,000 Bbl. | INTERFACE               |
| 1054  | 67'x40' F.R.  | 25,000 Bbl. | 87 UNLEADED             |
| 1055  | 48'x40' F.R.  | 10,000 Bbl. | 87 UNLEADED             |
| 1058  | 15'x36' C.R.  | 1,000 Bbl.  | INTERFACE               |
| 1059  | 48'x48' C.R.  | 15,000 Bbl. | DIESEL                  |
| 1060  | 48'x48' C.R.  | 15,000 Bbl. | DIESEL                  |
| 1061  | 60'x40' F.R.  | 20,000 Bbl. | 89 UNLEADED             |
| 1062  | 60'x40' F.R.  | 20,000 Bbl. | 87 UNLEADED             |

|  |  |  |
|--|--|--|
| <p>THE DRAWING IS TRACKED BY THE PROPERTY OF THE GATX TERMINALS CORPORATION AND MUST BE RETURNED TO THE PROPERTY OF THE GATX TERMINALS CORPORATION. ANY REPRODUCTION OR TRANSMISSION OF THIS DRAWING WITHOUT THE WRITTEN CONSENT OF THE GATX TERMINALS CORPORATION IS STRICTLY PROHIBITED.</p> | <p>FILE NO. CFPL/DOC</p> <p>FILE NAME T776001A</p> <p>PLOT SCALE 1=1</p> <p>CD NO. N/A</p> <p>DRAWN BY RTM</p> <p>DATE 8/17/90</p> <p>SCALE N.T.S.</p> | <p><b>GATX</b> CENTRAL FLORIDA PIPELINE CORP.<br/>TAPT TERMINAL &amp; FLUOROCRYL GATX TERMINALS CORPORATION</p> <p>GENERAL ARRANGEMENT - PLOT PLAN</p> |
|  | <p>DATE 8/17/90</p>  |  |
|  | <p>SCALE N.T.S.</p>  |  |
|  | <p>DATE 8/17/90</p>  |  |

BEST AVAILABLE COPY SCALE 1:24,000



# PINE CASTLE, FLA.

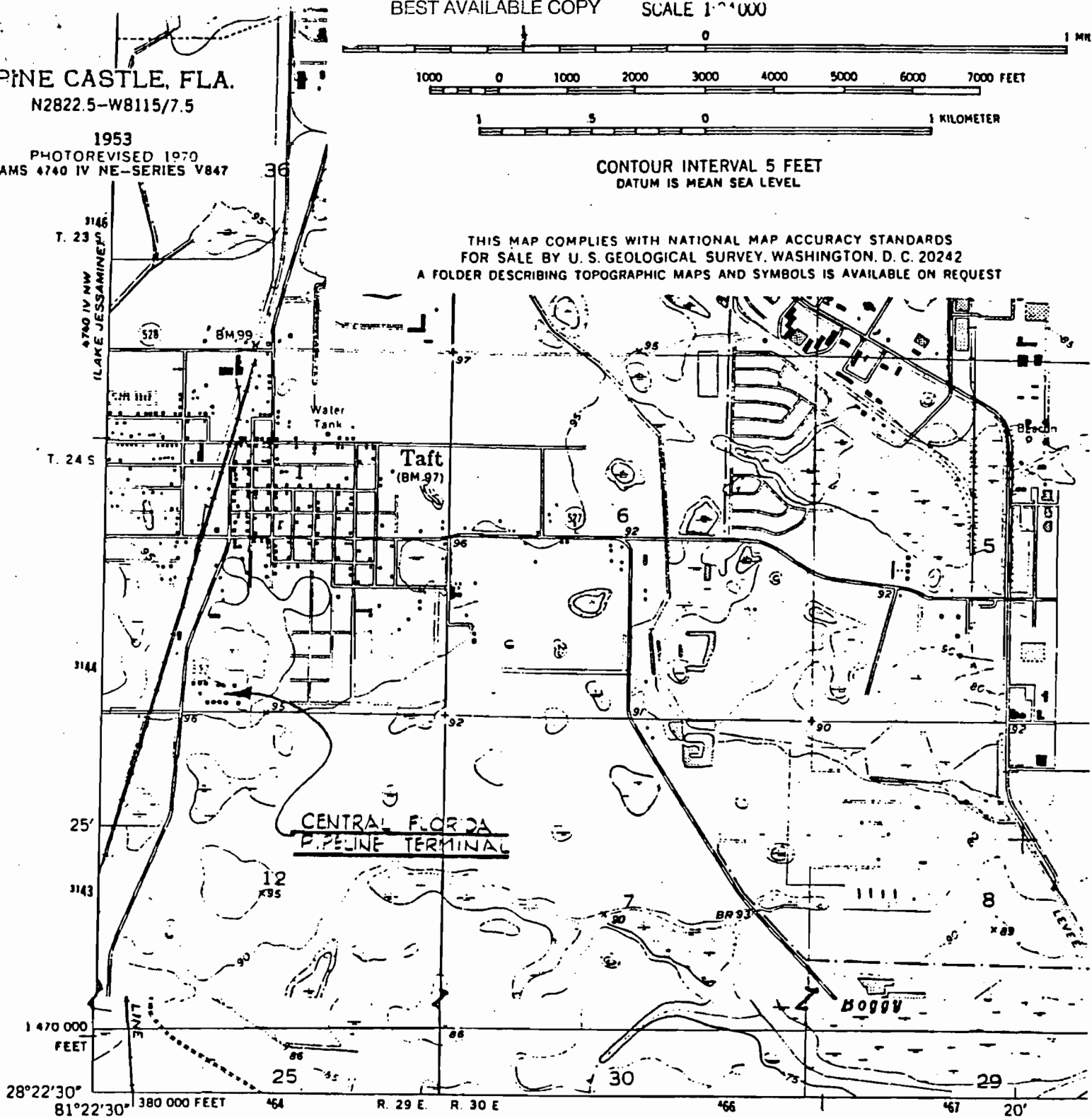
N2822.5-W8115/7.5

1953

PHOTOREVISED 1970  
AMS 4740 IV NE-SERIES V847

CONTOUR INTERVAL 5 FEET  
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



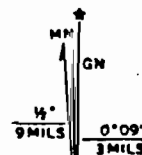
Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, and USCE

Culture and drainage in part compiled by U. S. Corps of Engineers  
from aerial photographs taken 1950. Topography by plane-table  
surveys 1953

Polyconic projection. 1927 North American datum  
10,000-foot grid based on Florida coordinate system,  
east zone

1000-meter Universal Transverse Mercator grid ticks,  
zone 17, shown in blue



UTM GRID AND 1970 MAGNETIC NORTH  
DECLINATION AT CENTER OF SHEET

(MISSIMMEE)  
4740 IV SW

ATTACHMENT II

American Petroleum Institute  
1220 L Street, Northwest  
Washington, D.C. 20005  
202-682-8145



J. K. Walters  
Director, Measurement Coordination

December 18, 1989  
RE: 330

Mr. W. L. Wagner, P.E.  
President  
PETREX Inc.  
2349 Dorcon Road  
P. O. Box 907  
Warren, Pennsylvania 16365

Dear Mr. Wagner:

Your January 24, 1989 letter requested that API 2519 be revised to include an additional  $K_d$  factor for bolted, gasketed and washer tanks.

That request was reviewed by the API Committee on Evaporation Loss Measurement and referred to a task group. The task group found that there would be value in being able to calculate emissions since there is increased interest in retrofitting tanks with internal floaters.

The group also found that owners of PETREX tanks could use the factor provided by PETREX. However, the factor is not yet suitable as a general factor in API Publication 2519. The value of  $K_d$  may vary with the type of gasketing material used and on the configuration of the clamping mechanism. Further tests are necessary since your "completely sealed container" may not necessarily represent results obtained under actual tank conditions.

If you believe API should do more work in this area, it would be appropriate to run a budget proposal by CELM for consideration in the 1991 API budget. If you wish to pursue this, please give me a call.

Very truly yours,

A handwritten signature in cursive script that reads "J.K. Walters" followed by a flourish.

cc: Members - CELM

# PETREX Inc.

2349 Dorcon Road • P. O. Box 907 • Warren, Pennsylvania 16365  
Telephone 814-723-2050 • Telefax 814-723-2055 • Telex 510 101 3005

January 24, 1989

American Petroleum Institute  
1220 L Street N.W.  
Washington, DC 20005

Attention: J. K. Walters

Subject: API 2519, Third Edition  
June 1983

Gentlemen:

This letter requests that API 2519 be revised to include an additional  $K_d$  factor for bolted, gasketed, and washered deck seams.

This request is based on a 12-month bench test that we conducted comparing both the standard and gasketed bolted seam. We recommended for a fully gasketed and caulked bolted seam  $K_d = 0.12$ .

The basis for this recommendation and description of the test is included in the attached report.

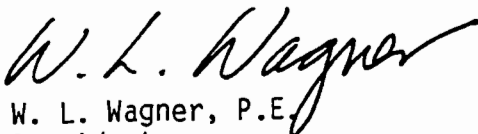
We have installed many floating roofs using a gasketed bolting seam with significant reduction of evaporation loss.

Also enclosed are evaporation loss summary sheets for a 30', 60' and 120' diameter tank using both standard and gasketed bolting seams. The reduction in evaporation loss is certainly noteworthy.

If you have questions or need additional information please contact us.

Very truly yours,

PETREX, Inc.

  
W. L. Wagner, P.E.  
President

WLW/br

Encls.



# PETREX Inc.

2349 Dorcon Road • P. O. Box 907 • Warren, Pennsylvania 16365  
Telephone 814-723-2050 • Telefax 814-723-2055 • Telex 510 101 3005

SUBJECT: Test for Vapor Loss through Clamp Bars used on PETREX Internal Floating Roof System.

- Purpose To determine the effect on vapor loss of casting a gasketing into the grooves of the top clamp bar of bolted panel joint.
- Procedure Three pans were covered with honeycomb panels. The panels were sealed to the pans with 1/2" fillet of PR 1422. After the sealer had cured, one cell in each panel was pierced and the pans were filled with an equal amount of gasoline. The pierced cell was then sealed with PR 1422. One panel had the standard joint construction down the middle. One panel had a gasketed joint down the middle. The third panel was without a joint to establish the integrity of the panel to pan sealing method. See attached sketches. The three test pans are weighed periodically.
- Test Material -- Three aluminum pans approximately 9-1/2" x 2-3/4" x 17-1/2".  
- Premium unleaded gasoline from United Refinery.  
- Aluminum honeycomb panel 12" x 1-1/2" x 20".  
- Channel extrusions.  
- Top and bottom clamp bars with 1/4" bolts.  
- Nylon washers.  
- PR 1422 B2 sealer.
- Test Equipment This test will expose both the standard and gasketed clamp bars to the exact same environmental conditions. Therefore the relative improvement in reducing vapor loss will be meaningful. Elevated temperature and wind effect

were not included in the test because of the addition of complexity to the set-up. Again the results would still have the same relative values.

Some consideration was given to having the test panels simulate actual floating conditions. Again this would have unnecessarily made the test more complex, e.g. vapor loss through seal area and re-supply of evaporated gasoline.

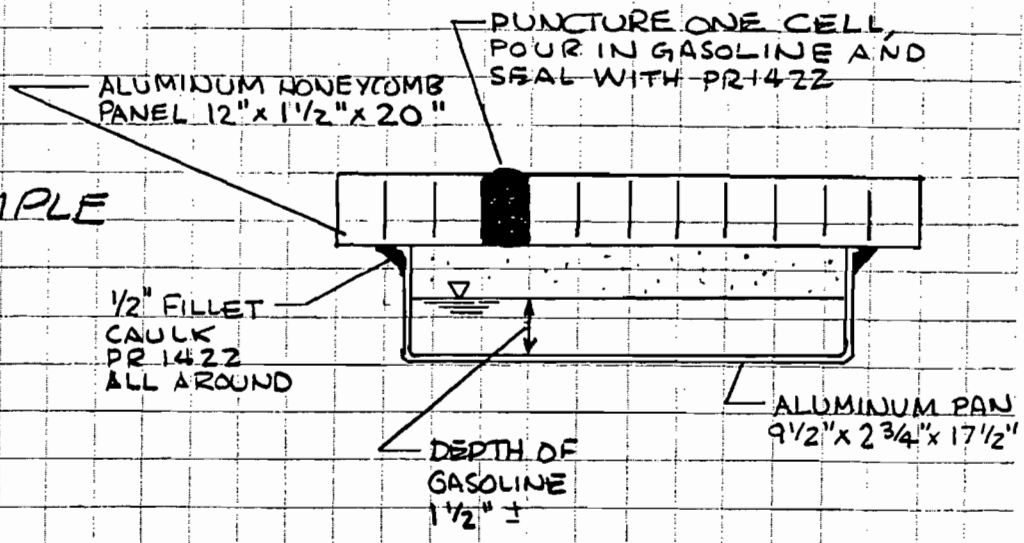
In actual condition the volume of the vapor space under the clamp bar is about 25 times less than the test set-up.

The larger volume in the test set-up will tend to breathe more than in actual conditions, therefore the test results are conservative, with the real vapor loss through the gasketed clamp bar being less than the tests indicated.

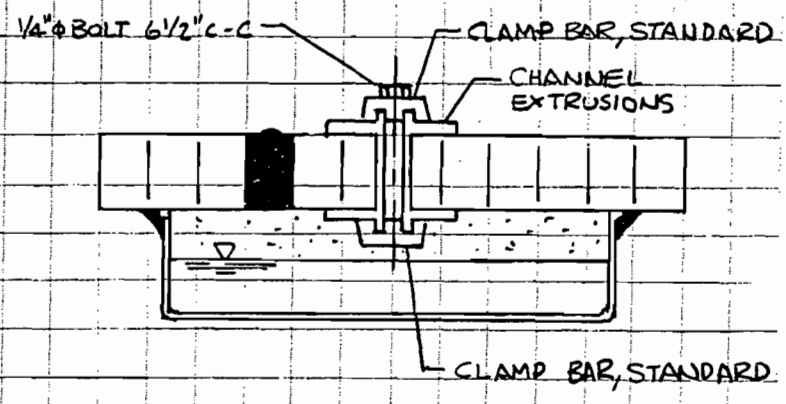
BY: WLW DATE: 3.5.84 SUBJECT: TEST SET UP JOB NO. \_\_\_\_\_

CK: \_\_\_\_\_ DATE: \_\_\_\_\_ PAGE 3 OF \_\_\_\_\_

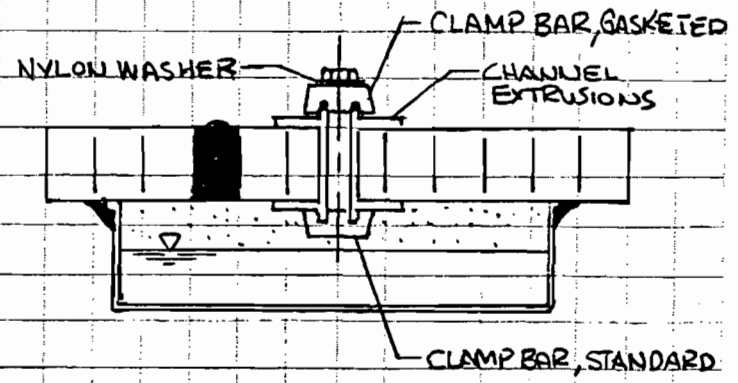
TEST 1  
REFERENCE SAMPLE



TEST 2  
STANDARD CLAMP BAR



TEST 3  
GASKETED CLAMP BAR



BY: WLW DATE: 3.5.84 SUBJECT: CLAMP BARS

JOB NO. \_\_\_\_\_

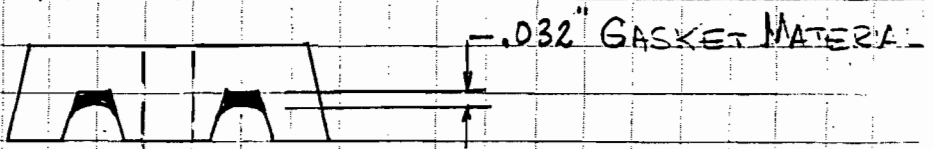
CK: \_\_\_\_\_ DATE: \_\_\_\_\_

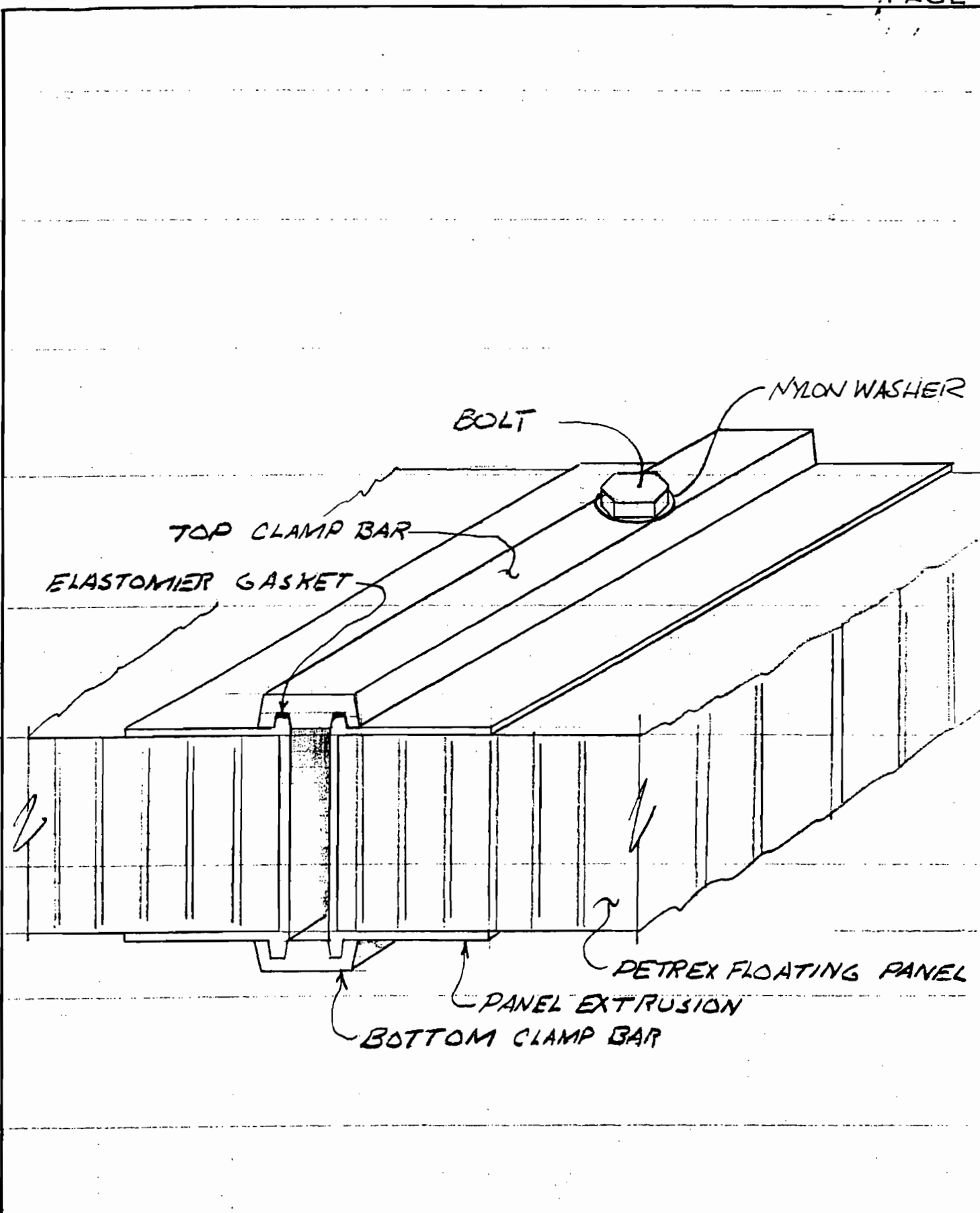
PAGE 4 OF \_\_\_\_\_

STANDARD CLAMP BAR



GASKETED CLAMP BAR

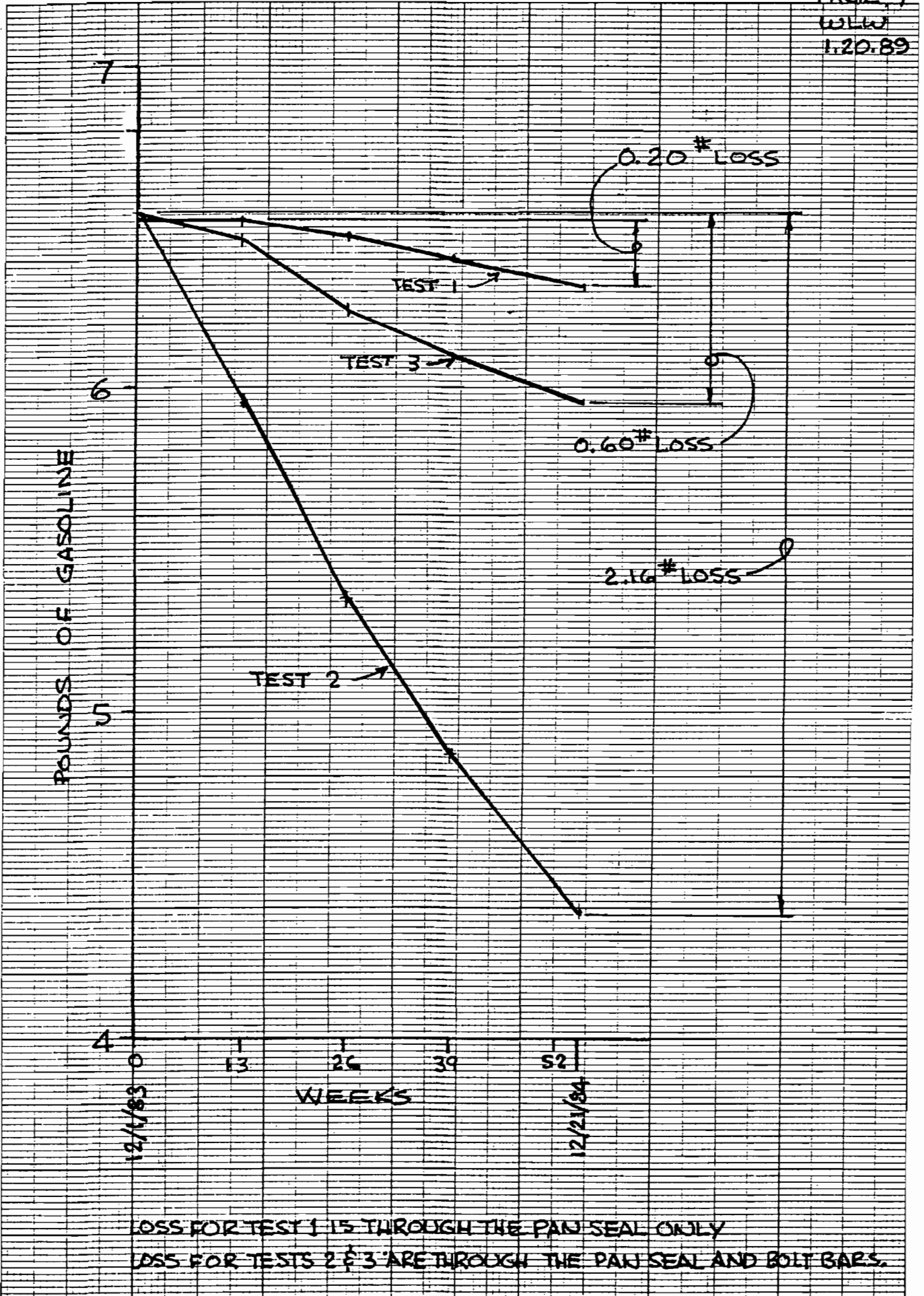




|   |                     |                                       |             |      |
|---|---------------------|---------------------------------------|-------------|------|
| <b>PETREX Inc.</b><br>P.O. Box 907 • Warren, Pennsylvania<br>15385 • (814) 723-0050 | BY <i>SEB</i>       | CAST IN PLACE TOP<br>CLAMP BAR GASKET | DRAWING NO. | REV. |
|   | CK <i>WLW</i>       |                                       |             | 0    |
|   | DATE <i>7/18/83</i> |                                       |             |      |

TEST RESULTS

| Weight of Gasoline<br>(weight of pans not included) | <u>Test 1<br/>Ref.</u> | <u>Test 2<br/>Raw</u> | <u>Test 3<br/>Gasket</u> |
|---|------------------------|-----------------------|--------------------------|
| 12.01.83, Start                                     | 6.52                   | 6.55                  | 6.55                     |
| 04.02.84, 3 Months                                  | 6.52                   | 5.95                  | 6.46                     |
| 07.02.84, 6 Months                                  | 6.47                   | 5.35                  | 6.24                     |
| 10.02.84, 9 Months                                  | 6.40                   | 4.87                  | 6.10                     |
| 12.21.84, End 385 DAYS.                             | 6.32                   | 4.39                  | 5.95                     |



LOSS FOR TEST 1 IS THROUGH THE PAN SEAL ONLY  
 LOSS FOR TESTS 2 & 3 ARE THROUGH THE PAN SEAL AND BOLT BARS.

Recalculation of  $K_d$ :

API 2519 deck seam loss factor is a combination of two tests conducted by API in 1982:

- 1) Phase 1R, bolted skin and pontoon
- 2) Phase 3, bolted honeycomb panels

Both tests utilized metal-to-metal seam construction. PETREX has redesigned the seam to incorporate gaskets and bolthead washers that increase the efficiency of the seam. This redesign was bench tested for 385 days and the results are given below.

The deck seam loss factor is based on Equation 11:

$$F_d = K_d S_d D^2$$

Only  $K_d$ , deck seam loss per units seam length factor, is affected by the addition of gasketed bolt bars to the honeycomb panels.

$$K_d = \frac{c (\pi/4) (365 \text{ days/year})}{(0.1036)}$$

$c$  = average loss per foot of deck seam. In API 2519,  $c$  is an average of the tests for Phase 1R and Phase 3.

The results of a 385-day bench test are summarized below:

No. 1 Reference Sample

|          |         |                                   |
|----------|---------|-----------------------------------|
| 12/01/83 | Day 0   | 6.52 pounds of gasoline           |
| 12/21/84 | Day 385 | <u>6.32</u>                       |
|          |         | 0.20 pounds loss through caulking |

No. 2 Standard Bolt Bar

|          |         |  |
|----------|---------|--|
| 12/01/83 | Day 0   | 6.55 pounds of gasoline                          |
| 12/21/84 | Day 385 | <u>4.39</u>                                      |
|          |         | 2.16 pounds loss through clamp bars and caulking |

No. 3 Gasketed Bolt Bar

|          |         |  |
|----------|---------|--|
| 12/01/83 | Day 0   | 6.55 pounds of gasoline                          |
| 12/21/84 | Day 385 | <u>5.95</u>                                      |
|          |         | 0.60 pounds loss through clamp bars and caulking |



Considering the loss through the bolt bars only (deduct loss through pan seal) the gasketed bolt bar reduced the vapor losses by . . .

$$\frac{(2.16 - 0.20) - (0.60 - 0.20)}{(2.16 - 0.20)} \times 100 = 79\% \text{ reduction}$$

The current API 2519  $K_d$  value is calculated as follows:

$$\text{Phase 1R } c = 0.44 \times 10^{-4} \frac{\text{lb - mole/yr}}{\text{ft}}$$

$$\text{Phase 3 } c = \frac{2.04 \times 10^{-4}}{2}$$

$$\text{Average } c = \frac{2.48 \times 10^{-4}}{2} = 1.24 \times 10^{-4} \frac{\text{lb mole/yr}}{\text{ft}}$$

$$K_d = \frac{(1.24 \times 10^{-4}) (\pi/4) (365)}{0.1036} = 0.34 \frac{\text{lb - mole/yr}}{\text{ft}}$$

By incorporating the 79% reduction of vapor loss into the API 2519 format the revised  $K_d$  calculated as follows:

← 79%  
REDUCTION

$$\text{Phase 1R } c = 0.44 \times 10^{-4} \frac{\text{lb mole/yr}}{\text{ft}}$$

$$\text{Phase 3 } c = \frac{(1-0.79) 2.04 \times 10^{-4}}{2}$$

$$\text{Average } c = \frac{0.868 \times 10^{-4}}{2} = 0.434 \times 10^{-4} \frac{\text{lb - mole/yr}}{\text{ft}}$$

$$K_d = \frac{(0.434 \times 10^{-4}) (\pi/4) (365)}{0.1036} = 0.12 \frac{\text{lb mole/yr}}{\text{ft}}$$

{ INTERNAL FLOATING ROOF EVAPORATION LOSSES }

CUSTOMER: BMJ Oil Co.

LOCATION: Warren PA

TANK NO: 1

TANK SIZE: 30 FT  $\times$  40 FT

|                         |                   |
|-------------------------|-------------------|
| TOTAL EVAPORATION LOSS: | 2618 LBS PER YEAR |
|                         | 12 BBL PER YEAR   |

BASED ON THE FOLLOWING DATA & ASSUMPTIONS AND API 2519:

STOCK & TANK

STOCK TYPE: GASOLINE

REID VAPOR PRESSURE: 10 psi

AVERAGE ANNUAL STOCK STORAGE TEMP: 47 °F

TANK COLOR: WHITE

TRUE VAPOR PRESSURE: 5.4 psia

VAPOR MOLEC WGT: 64

DENSITY: 5.84 LBS/GAL

SHELL CONDITION: LIGHT RUST

AVERAGE NET THROUGHPUT: 60000 BBL/YR

NUMBER OF COLUMNS: 1

TYPE OF COLUMNS: 8-INCH DIAMETER PIPE COLUMNS

EFFECTIVE COLUMN DIAMETER: .7 FT

INTERNAL FLOATING ROOF

DECK SEAMS: NON-WELDED

DECK CONSTRUCTION: RECTANGULAR PANELS 5 FT BY 7.5 FT

RIM SEAL SYSTEM: VAPOR-MOUNTED PRIMARY SEAL PLUS SECONDARY SEAL

DECK FITTINGS:

|  |      |
|--|------|
| ACCESS HATCH: UNBOLTED COVER, GASKETED   | 1    |
| AUTO TANK GAGE: UNBOLTED COVER, GASKETED | 1    |
| COLUMN WELL: SLIDING COVER, GASKETED     | 1    |
| LADDER WELL: SLIDING COVER, GASKETED     | 1    |
| DECK LEG: ADJUSTABLE                     | 10 - |
| VACUUM BREAKER: GASKETED                 | 1    |

PETREX, INC

P.O. BOX 907

WARREN, PA 16365

TEL: (814) 723-2050

PETREX NO: 123

BY: WLW DATE: 1-24-89

INTERNAL FLOATING ROOF EVAPORATION LOSSES

CUSTOMER: BMJ Oil Co.

LOCATION: Warren PA

TANK NO: 1      TANK SIZE: 30 FT  $\varnothing$  X 40 FT

|                         |                   |
|-------------------------|-------------------|
| TOTAL EVAPORATION LOSS: | 2142 LBS PER YEAR |
|                         | 10 BBL PER YEAR   |

**18.2% REDUCTION**

BASED ON THE FOLLOWING DATA & ASSUMPTIONS AND API 2519:

**STOCK & TANK**

STOCK TYPE: GASOLINE  
REID VAPOR PRESSURE: 10 psi  
AVERAGE ANNUAL STOCK STORAGE TEMP: 47 °F  
TANK COLOR: WHITE  
TRUE VAPOR PRESSURE: 5.4 psia  
VAPOR MOLEC WGT: 64  
DENSITY: 5.84 LBS/GAL  
SHELL CONDITION: LIGHT RUST  
AVERAGE NET THROUGHPUT: 60000 BBL/YR  
NUMBER OF COLUMNS: 1  
TYPE OF COLUMNS: 8-INCH DIAMETER PIPE COLUMNS  
EFFECTIVE COLUMN DIAMETER: .7 FT

**INTERNAL FLOATING ROOF**

DECK SEAMS: NON-WELDED GASKETED  
DECK CONSTRUCTION: RECTANGULAR PANELS 5 FT BY 7.5 FT  
RIM SEAL SYSTEM: VAPOR-MOUNTED PRIMARY SEAL PLUS SECONDARY SEAL  
DECK FITTINGS:  
ACCESS HATCH: UNBOLTED COVER, GASKETED      1  
AUTO TANK GAGE: UNBOLTED COVER, GASKETED      1  
COLUMN WELL: SLIDING COVER, GASKETED      1  
LADDER WELL: SLIDING COVER, GASKETED      1  
DECK LEG: ADJUSTABLE      10  
VACUUM BREAKER: GASKETED      1

PETREX, INC  
P.O. BOX 907  
WARREN, PA 16365  
TEL: (814) 723-2050

PETREX NO: 123  
BY: WLW    DATE: 1-24-89

INTERNAL FLOATING ROOF EVAPORATION LOSSES

CUSTOMER: BMJ Oil Co.

LOCATION: Warren PA

TANK NO: 2

TANK SIZE: 60 FT  $\varnothing$  X 40 FT

|                         |                   |
|-------------------------|-------------------|
| TOTAL EVAPORATION LOSS: | 5795 LBS PER YEAR |
|                         | 27 BBL PER YEAR   |

BASED ON THE FOLLOWING DATA & ASSUMPTIONS AND API 2519:

STOCK & TANK

STOCK TYPE: GASOLINE  
REID VAPOR PRESSURE: 10 psi  
AVERAGE ANNUAL STOCK STORAGE TEMP: 47 °F  
TANK COLOR: WHITE  
TRUE VAPOR PRESSURE: 5.4 psia  
VAPOR MOLEC WGT: 64  
DENSITY: 5.84 LBS/GAL  
SHELL CONDITION: LIGHT RUST  
AVERAGE NET THROUGHPUT: 240000 BBL/YR  
NUMBER OF COLUMNS: 1  
TYPE OF COLUMNS: 8-INCH DIAMETER PIPE COLUMNS  
EFFECTIVE COLUMN DIAMETER: .7 FT

INTERNAL FLOATING ROOF

DECK SEAMS: NON-WELDED  
DECK CONSTRUCTION: RECTANGULAR PANELS 5 FT BY 7.5 FT  
RIM SEAL SYSTEM: VAPOR-MOUNTED PRIMARY SEAL PLUS SECONDARY SEAL  
DECK FITTINGS:  
ACCESS HATCH: UNBOLTED COVER, GASKETED 1  
AUTO TANK GAGE: UNBOLTED COVER, GASKETED 1  
COLUMN WELL: SLIDING COVER, GASKETED 1  
LADDER WELL: SLIDING COVER, GASKETED 1  
DECK LEG: ADJUSTABLE 17-  
VACUUM BREAKER: GASKETED 1

PETREX, INC  
P.O. BOX 907  
WARREN, PA 16365  
TEL: (814) 723-2050

PETREX NO: 123  
BY: WLW DATE: 1-24-89

INTERNAL FLOATING ROOF EVAPORATION LOSSES

CUSTOMER: BMJ Oil Co.

LOCATION: Warren PA

TANK NO: 2

TANK SIZE: 60 FT  $\phi$  X 40 FT

|                         |                   |                        |
|-------------------------|-------------------|------------------------|
| TOTAL EVAPORATION LOSS: | 3888 LBS PER YEAR | <b>32.9% REDUCTION</b> |
|                         | 18 BBL PER YEAR   |                        |

BASED ON THE FOLLOWING DATA & ASSUMPTIONS AND API 2519:

STOCK & TANK

STOCK TYPE: GASOLINE  
REID VAPOR PRESSURE: 10 psi  
AVERAGE ANNUAL STOCK STORAGE TEMP: 47 °F  
TANK COLOR: WHITE  
TRUE VAPOR PRESSURE: 5.4 psia  
VAPOR MOLEC WGT: 64  
DENSITY: 5.84 LBS/GAL  
SHELL CONDITION: LIGHT RUST  
AVERAGE NET THROUGHPUT: 240000 BBL/YR  
NUMBER OF COLUMNS: 1  
TYPE OF COLUMNS: 8-INCH DIAMETER PIPE COLUMNS  
EFFECTIVE COLUMN DIAMETER: .7 FT

INTERNAL FLOATING ROOF

DECK SEAMS: NON-WELDED GASKETED

DECK CONSTRUCTION: RECTANGULAR PANELS 5 FT BY 7.5 FT  
RIM SEAL SYSTEM: VAPOR MOUNTED PRIMARY SEAL PLUS SECONDARY SEAL  
DECK FITTINGS:  
ACCESS HATCH: UNBOLTED COVER, GASKETED 1  
AUTO TANK GAGE: UNBOLTED COVER, GASKETED 1  
COLUMN WELL: SLIDING COVER, GASKETED 1  
LADDER WELL: SLIDING COVER, GASKETED 1  
DECK LEG: ADJUSTABLE 17  
VACUUM BREAKER: GASKETED 1

PETREX, INC  
P.O. BOX 902  
WARREN, PA 16365  
TEL: (814) 723-2050

PETREX NO: 123  
BY: WLW DATE: 1-24-89

INTERNAL FLOATING ROOF EVAPORATION LOSSES

CUSTOMER: BMJ Oil Co.

LOCATION: Warren PA

TANK NO: 3      TANK SIZE: 120 FT  $\phi$  X 40 FT

|                         |                    |
|-------------------------|--------------------|
| TOTAL EVAPORATION LOSS: | 17976 LBS PER YEAR |
|                         | 84 BBL PER YEAR    |

BASED ON THE FOLLOWING DATA & ASSUMPTIONS AND API 2519:

STOCK & TANK

STOCK TYPE: GASOLINE  
 REID VAPOR PRESSURE: 10 psi  
 AVERAGE ANNUAL STOCK STORAGE TEMP: 47 °F  
 TANK COLOR: WHITE  
 TRUE VAPOR PRESSURE: 5.4 psia  
 VAPOR MOLEC WGT: 64  
 DENSITY: 5.84 LBS/GAL  
 SHELL CONDITION: LIGHT RUST  
 AVERAGE NET THROUGHPUT: 960000 BBL/YR -  
 NUMBER OF COLUMNS: 7  
 TYPE OF COLUMNS: 8-INCH DIAMETER PIPE COLUMNS  
 EFFECTIVE COLUMN DIAMETER: .7 FT

INTERNAL FLOATING ROOF

DECK SEAMS: NON-WELDED  
 DECK CONSTRUCTION: RECTANGULAR PANELS 5 FT BY 7.5 FT  
 RIM SEAL SYSTEM: VAPOR MOUNTED PRIMARY SEAL PLUS SECONDARY SEAL  
 DECK FITTINGS:

|  |    |
|--|----|
| ACCESS HATCH: UNBOLTED COVER, GASKETED   | 1  |
| AUTO TANK GAGE: UNBOLTED COVER, GASKETED | 1  |
| COLUMN WELL: SLIDING COVER, GASKETED     | 7  |
| LADDER WELL: SLIDING COVER, GASKETED     | 1  |
| DECK LEG: ADJUSTABLE                     | 41 |
| VACUUM BREAKER: GASKETED                 | 1  |

PETREX, INC  
 P.O. BOX 907  
 WARREN, PA 16365  
 TEL: (814) 723-2050

PETREX NO: 123  
 BY: WLW    DATE: 1-24-89

INTERNAL FLOATING ROOF EVAPORATION LOSSES

CUSTOMER: BMJ Oil Co.

LOCATION: Warren PA

TANK NO: 3

TANK SIZE: 120 FT  $\phi$  X 40 FT

|                         |                    |
|-------------------------|--------------------|
| TOTAL EVAPORATION LOSS: | 10351 LBS PER YEAR |
|                         | 48 BBL PER YEAR    |

**42.4% REDUCTION**

BASED ON THE FOLLOWING DATA & ASSUMPTIONS AND API 2519:

STOCK & TANK

STOCK TYPE: GASOLINE  
REID VAPOR PRESSURE: 10 psi  
AVERAGE ANNUAL STOCK STORAGE TEMP: 47 °F  
TANK COLOR: WHITE  
TRUE VAPOR PRESSURE: 5.4 psia  
VAPOR MOLEC WGT: 64  
DENSITY: 5.84 LBS/GAL  
SHELL CONDITION: LIGHT RUST  
AVERAGE NET THROUGHPUT: 960000 BBL/YR  
NUMBER OF COLUMNS: 7  
TYPE OF COLUMNS: 8-INCH DIAMETER PIPE COLUMNS  
EFFECTIVE COLUMN DIAMETER: .7 FT

INTERNAL FLOATING ROOF

DECK SEAMS: NON-WELDED GASKETED  
DECK CONSTRUCTION: RECTANGULAR PANELS 5 FT BY 7.5 FT  
RIM SEAL SYSTEM: VAPOR-MOUNTED PRIMARY SEAL PLUS SECONDARY SEAL  
DECK FITTINGS:  
ACCESS HATCH: UNBOLTED COVER, GASKETED 1  
AUTO TANK GAGE: UNBOLTED COVER, GASKETED 1  
COLUMN WELL: SLIDING COVER, GASKETED 7  
LADDER WELL: SLIDING COVER, GASKETED 1  
DECK LEG: ADJUSTABLE 41  
VACUUM BREAKER: GASKETED 1

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PETREX NO: 123  
BY: WLW DATE: 1-24-89