Brix Maritime Company Response to EPA's 104(e) Information Request

Entire response Releasable

EPA Region 10 Superfund
RELEASABLE
Date 11-23-09
Initial MAS.

882044

State of Delaware
Secretary of State
Division of Corporations
Delivered 01:52 PM 08/27/2007
FILED 01:47 PM 08/27/2007
SRV 070959726 - 0681914 FILE

CERTIFICATE OF OWNERSHIP AND MERGER

OF

BRIX MARITIME TOWING INC.
(an Oregon corporation)

INTO

BRIX MARITIME CO.
(a Delaware corporation)

It is hereby certified that:

1. Brix Maritime Co. (hereinafter sometimes referred to as the "Corporation") is a business corporation of the State of Delaware.

2. The Corporation is the owner of all of the outstanding shares of each class of stock of Brix Maritime Towing Inc. (hereinafter sometimes referred to as the "Subsidiary"), which is a business corporation of the State of Oregon.

3. The laws of the jurisdiction of organization of the Subsidiary permit the merger of a business corporation of that jurisdiction with a business corporation of another jurisdiction.

4. The Corporation hereby merges the Subsidiary into the Corporation.

5. A copy of the resolutions adopted effective as of July 31, 2007, by the Board of Directors of the Corporation to merge said Subsidiary into the Corporation is attached hereto and incorporated herein by reference.

6. This Certificate of Ownership and Merger will be effective on August 31, 2007, at 11:59 p.m., and insofar as the General Corporation Law of the State of Delaware shall govern the same, said date shall be the effective merger date.

Executed on this 22 day of August, 2007.

BRIX MARITIME CO.

By: Gary C. Faber
Its: President

SEA_DOCS:855970.1

State of Delaware
Secretary of State
Division of Corporations
Delivered 06:36 PM 01/25/2006
FILED 06:19 PM 01/25/2006
SRV 060075045 - 0681914 FILE

STATE OF DELAWARE

RESTATED CERTIFICATE OF INCORPORATION

OF

BRIX MARITIME CO.

The corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware does hereby certify:

1. The present name of the corporation is Brix Maritime Co. (the "Corporation").

2. The name under which the Corporation was originally incorporated is Twin City Barge & Towing Co.; the date of filing of the original Certificate of Incorporation of the Corporation with the Secretary of State of the State of Delaware is July 8, 1968.

3. The Certificate of Incorporation of the Corporation is hereby amended by deleting all articles in their entirety and by substituting in lieu thereof new Articles which are set forth in the Amended and Restated Certificate of Incorporation attached hereto as Exhibit A and are incorporated herein by this reference.

4. The provisions of Certificate of Incorporation of the Corporation as heretofore amended and/or supplemented, and as herein amended, are hereby restated and integrated into a single instrument which is hereinafter set forth in Exhibit A, and which is entitled "Amended and Restated Certificate of Incorporation of Brix Maritime Co." without any further amendments other than the amendments herein certified and without any discrepancy between the provisions of the Certificate of Incorporation as heretofore amended and supplemented and the provisions of the said single instrument hereinafter set forth.

5. The amendments and the restatement of the Certificate of Incorporation herein certified have been duly approved by the stockholders in accordance with the provisions of Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware.

6. The effective time of the Restated Certificate of Incorporation and the amendments herein certified shall be upon filing.

IN WITNESS WHEREOF, said Corporation has caused this certificate to be signed this this 6th day of January 2006.

BRIX MARITIME CO.

By _____
Steve T. Scalzo, President

778933.1/00788-00700

EXHIBIT A

EXHIBIT A

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION *of* BRIX MARITIME CO.

Pursuant to Section 245 of the General Corporate Law of the State of Delaware, Brix Maritime Co. (the "Corporation") does hereby adopt the following Amended and Restated Certificate of Incorporation of the Corporation, which supersede the original Certificate of Incorporation and all amendments and restatements thereto.

ARTICLE I
NAME

The name of the corporation is Brix Maritime Co.

ARTICLE II
DURATION

The Corporation is organized under the General Corporate Law of the State of Delaware and shall have perpetual existence.

ARTICLE III
PURPOSE

The Corporation is organized for the purpose of engaging in any business, trade or activity which may be conducted lawfully by a corporation formed under the General Corporate Law of the State of Delaware.

ARTICLE IV
CAPITAL STOCK

4.1 The Corporation shall have authority to issue Ten Thousand (10,000) shares of common capital stock, having no par value per share. There shall be only one class of shares.

4.2. The Board of Directors shall have the authority to issue shares of the Corporation's capital stock and the certificates therefor, subject to such transfer restrictions and other limitations as it may deem necessary to promote compliance with applicable federal and state securities laws, and to regulate the transfer thereof in such manner as may be calculated to promote such compliance.

ARTICLE V
CUMULATIVE VOTING

Stockholders entitled to vote at any election of directors shall have the right to vote, in person or by proxy, the number of shares they are entitled to cast for as many persons as there are directors to be elected. No cumulative voting for directors shall be permitted.

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ARTICLE VI
PREEMPTIVE RIGHTS

No stockholder of the Corporation shall have, as such holder, any preemptive or preferential right or subscription right to any stock of the Corporation or to any obligations convertible into stock of the Corporation, or to any warrant or option for the purchase thereof, except to the extent provided by written agreement with the Corporation.

ARTICLE VII
DIRECTORS

7.1 The number of directors of the Corporation shall be fixed as provided in the Bylaws and may be changed from time to time by amending the Bylaws.

7.2 The Board of Directors is expressly authorized to make, alter and repeal the Bylaws of the Corporation, subject to the power of the stockholders of the Corporation to change or repeal such Bylaws.

7.3 Any vacancy occurring in the Board of Directors (whether caused by resignation, death, an increase in the number of directors, or otherwise) may be filled as specified in the Bylaws.

7.4 To the fullest extent permitted by the General Corporation Law of the State of Delaware, as it exists on the date hereof or may hereafter be amended, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for conduct as a director. Any amendment to or repeal of said act shall not adversely affect a director of the Corporation with respect to any conduct of such director occurring prior to such amendment or repeal.

ARTICLE VIII
INDEMNIFICATION

8.1 Right to Indemnification. Each individual (hereinafter an "indemnitee") who was or is made a party or is threatened to be made a party to or is otherwise involved (including, without limitation, as a witness) in any actual or threatened action, suit or proceeding, whether civil, criminal, administrative or investigative and whether formal or informal (hereinafter a "proceeding"), by reason of the fact that he or she is or was a director or officer of the Corporation or, that while serving as a director or officer of the Corporation, he or she is or was also serving at the request of the Corporation as a director, officer, partner, trustee, employee or agent of another foreign or domestic corporation or of a foreign or domestic partnership, joint venture, trust, employee benefit plan or other enterprise, whether the basis of the proceeding is alleged action in an official capacity as such a director, officer, employee, partner, trustee, or agent or in any other capacity while serving as such director, officer, employee, partner, trustee, or agent, shall be indemnified and held harmless by the Corporation to the full extent permitted by applicable law as then in effect, against all expense, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties and amounts to be paid in settlement) incurred or suffered by such

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indemnitee in connection therewith, and such indemnification shall continue as to an indemnitee who has ceased to be a director, officer, employee, partner, trustee, or agent and shall inure to the benefit of the indemnitee's heirs, executors and administrators; provided, however, that no indemnification shall be provided to any such indemnitee if the Corporation is prohibited by the General Corporation Law of the State of Delaware or other applicable law as then in effect from paying such indemnification; and provided, further, that except as provided in Section 8.2 with respect to proceedings seeking to enforce rights to indemnification, the Corporation shall indemnify any such indemnitee in connection with a proceeding (or part thereof) initiated by such indemnitee only if a proceeding (or part thereof) was authorized or ratified by the Board of Directors. The right to indemnification conferred in this section shall be a contract right and shall include the right to be paid by the Corporation the expenses incurred in defending any proceeding in advance of its final disposition (hereinafter an "advancement of expenses"). Any advancement of expenses shall be made only upon delivery to the Corporation of a written undertaking (hereinafter an "undertaking"), by or on behalf of such indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal that such indemnitee is not entitled to be indemnified for such expenses under this section and upon delivery to the Corporation of a written affirmation (hereinafter an "affirmation") by the indemnitee of his or her good faith belief that such indemnitee has met the standard of conduct necessary for indemnification by the Corporation pursuant to this article.

8.2 Right of Indemnitee to Bring Suit. If a written claim for indemnification under Section 8.1 is not paid in full by the Corporation within sixty (60) days after the Corporation's receipt thereof, except in the case of a claim for an advancement of expenses, in which case the applicable period shall be twenty (20) days, the indemnitee may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim. If successful in whole or in part, in any such suit or in a suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the indemnitee shall be entitled to be paid also the expense of prosecuting or defending such suit. The indemnitee shall be presumed to be entitled to indemnification upon submission of a written claim (and, in an action brought to enforce a claim for an advancement of expenses, where the required undertaking and affirmation have been tendered to the Corporation) and thereafter the Corporation shall have the burden of proof to overcome the presumption that the indemnitee is so entitled. Neither the failure of the Corporation (including the Board of Directors, independent legal counsel or the stockholders) to have made a determination prior to the commencement of such suit that indemnification of the indemnitee is proper in the circumstances nor an actual determination by the Corporation (including the Board of Directors, independent legal counsel or the stockholders) that the indemnitee is not entitled to indemnification shall be a defense to the suit or create a presumption that the indemnitee is not so entitled.

8.3 Nonexclusivity of Rights. The right to indemnification and the advancement of expenses conferred in this article shall not be exclusive of any other right which any person may have or hereafter acquire under any statute, provision of the Articles of Incorporation or Bylaws of the Corporation or its parent corporation, if any, general or specific action of the Board of Directors, contract or otherwise.

8.4 Insurance, Contracts and Funding. The Corporation may maintain insurance, at its expense, to protect itself and any individual who is or was a director, officer, employee or agent of

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the Corporation or who, while a director, officer, employee or agent of the Corporation, is or was serving at the request of the Corporation as a agent of another foreign or domestic corporation, partnership, joint venture, trust, employee benefit plan or other enterprise against any expense, liability or loss asserted against or incurred by the individual in that capacity or arising from the individual's status as a director, officer, employee or agent, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the General Law of the State of Delaware. The Corporation may enter into contracts with any director, officer, employee or agent of the Corporation in furtherance of the provisions of this article and may create a trust fund, grant a security interest or use other means (including, without limitation, a letter of credit) to ensure the payment of such amounts as may be necessary to effect indemnification as provided in this article.

8.5 Indemnification of Employees and Agents of the Corporation. The Corporation may, by action of the Board of Directors, grant rights to indemnification and advancement of expenses to employees and agents of the Corporation with the same scope and effect as the provisions pertaining to the indemnification and advancement of expenses of directors and officers of the Corporation or pursuant to rights granted pursuant to, or provided by, the General Corporation Law of the State of Delaware or otherwise.

8.6 Persons Serving Other Entities. Any individual who is or was a director, officer or employee of the Corporation who, while a director, officer or employee of the Corporation, is or was serving (a) as a director or officer of another foreign or domestic corporation of which a majority of the shares entitled to vote in the election of its directors is held by the Corporation, (b) as a trustee of an employee benefit plan and the duties of the director or officer to the Corporation also impose duties on, or otherwise involve services by, the director or officer to the plan or to participants in or beneficiaries of the plan, or (c) in an executive or management capacity in a foreign or domestic partnership or limited liability company, joint venture, trust or other enterprise of which the Corporation is an equity interest holder or in which a wholly owned subsidiary of the Corporation is a general partner or has a majority ownership or interest shall be deemed to be so serving at the request of the Corporation and entitled to indemnification and advancement of expenses under this article.

ARTICLE IX
OTHER MATTERS

Except as otherwise provided in these articles, as amended from time to time, the Corporation reserves the right to amend, alter, change, or repeal any provision contained in these articles in any manner now or hereafter prescribed or permitted by statute. All rights of stockholders of the Corporation are subject to this reservation.

ARTICLE X
REGISTERED AGENT & OFFICE

The address of the Corporation's registered office is 1209 Orange Street, Wilmington, New Castle County, DE 19801 and the registered agent at such address is The Corporation Trust Company.

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DATED this 6th day of January 2006.

BRIX MARITIME CO.

By _____
Steve T. Scalzo, President

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CERTIFICATE OF OWNERSHIP AND MERGER

OF

BRIX RAFTING & SORTING CO.
(an Oregon corporation)

INTO

BRIX MARITIME CO.
(a Delaware corporation)

It is hereby certified that:

1. Brix Maritime Co. (hereinafter sometimes referred to as the "Corporation") is a business corporation of the State of Delaware.

2. The Corporation is the owner of all of the outstanding shares of each class of stock of Brix Rafting & Sorting Co. (hereinafter sometimes referred to as the "Subsidiary"), which is a business corporation of the State of Oregon.

3. The laws of the jurisdiction of organization of the Subsidiary permit the merger of a business corporation of that jurisdiction with a business corporation of another jurisdiction.

4. The Corporation hereby merges the Subsidiary into the Corporation.

5. A copy of the resolutions adopted on January 17, 2001, by the Board of Directors of the Corporation to merge the said Subsidiary into the Corporation is attached hereto and incorporated by reference.

6. This Certificate of Ownership and Merger will be effective upon its filing, and insofar as the General Corporation Law of the State of Delaware shall govern the same, said date shall be the effective merger date.

Executed on this 17th day of January, 2001.

BRIX MARITIME CO.

By: Steve T. Scalzo
Its: President

SBA_DOCS:546663.1

STATE OF DELAWARE
SECRETARY OF STATE
DIVISION OF CORPORATIONS
FILED 09:00 AM 01/30/2001
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STATE OF DELAWARE
SECRETARY OF STATE
DIVISION OF CORPORATIONS
FILED 09:00 AM 02/06/1995
950028115 - 681914

RESTATED CERTIFICATE OF INCORPORATION OF BRIX MARITIME CO.

IT IS HEREBY CERTIFIED THAT:

1. A. The present name of the corporation (hereinafter referred to as the "corporation") is Brix Maritime Co.

B. The name under which the corporation was originally incorporated is Twin City Barge & Towing Co.; the date of filing of the original Certificate of Incorporation of the corporation with the Secretary of State of the State of Delaware is July 8, 1968.

2. The Certificate of Incorporation of the corporation is hereby amended by striking out Paragraphs FIRST through EIGHTH in their entirety, and by substituting in lieu thereof Articles I through XI, which are set forth in the Restated Certificate of Incorporation hereinafter provided for.

ARTICLE I - NAME

The name of the corporation is Brix Maritime Co.

ARTICLE II - REGISTERED OFFICE AND AGENT

The address of the corporation's registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware, 19801. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE III - PURPOSE

The purpose of the corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

ARTICLE IV - STOCK

4.1 The total authorized shares of this corporation shall consist of Ten Thousand (10,000) shares of common stock having no par value per share.

4.2 The Board of Directors shall have the authority to issue shares of this corporation's capital stock and the certificates therefor, subject to such transfer restrictions and other limitations as it may deem necessary to promote compliance with applicable federal and state securities laws, and to regulate

the transfer thereof in such manner as may be calculated to promote such compliance.

ARTICLE V - DIRECTORS

The directors may be elected by written ballot or in any other manner by which shareholders of the corporation may act, with or without a meeting, pursuant to the Bylaws of the corporation.

ARTICLE VI - DIRECTOR LIABILITY

A director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that such provision shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General Corporation Law, or (iv) for any transaction from which the director derived an improper personal benefit. No such provision shall eliminate or limit the liability of a director for any act or omission occurring prior to the date when such provision becomes effective.

ARTICLE VII - INDEMNIFICATION

The corporation shall have power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprises, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not of itself, cause a presumption that the person did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interest of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his conduct was unlawful.

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ARTICLE VIII - PREEMPTIVE RIGHTS

Except as may be provided by contract between the corporation and any shareholder, no preemptive rights shall exist with respect to shares of stock or securities convertible into shares of stock of this corporation.

ARTICLE IX - CUMULATIVE VOTING

The right to cumulate votes in the election of directors shall not exist with respect to shares of stock of this corporation.

ARTICLE X - BYLAWS

The Board of Directors shall have the power to adopt, amend or repeal the Bylaws for this corporation, at a duly called meeting or by written consent, by the affirmative vote of a majority of the directors, subject to the power of the stockholders to adopt, amend or repeal such Bylaws in accordance with the Delaware General Corporation Law.

ARTICLE XI - AMENDMENT TO CERTIFICATE

The corporation reserves the right to amend, alter, change, or repeal any provision contained in this Certificate in any manner now or hereafter prescribed or permitted by Delaware General Corporation Law and does further authorize at any time prior to the filing of such amendment with the Delaware Secretary of State, notwithstanding authorization of the proposed amendment by the stockholders of the corporation, the Board of Directors may abandon such proposed amendment without further action by the stockholders.

3. The provisions of the Certificate of Incorporation of the corporation as heretofore amended and/or supplemented, and as herein amended, are hereby restated and integrated into a single instrument which is hereinafter set forth, and which is entitled "Restated Certificate of Incorporation of Brix Maritime Co." without any further amendments other than the amendments herein certified and without any discrepancy between the provisions of the Certificate of Incorporation as heretofore amended and supplemented and the provisions of the said single instrument hereinafter set forth.

4. The amendments and the restatement of the Certificate of Incorporation herein certified have been duly approved by the stockholders in accordance with the provisions of Sections 228, 242, and 245 of the General Corporation Law of the State of Delaware.

5. The effective time of the Restated Certificate of Incorporation and of the amendments herein certified shall be upon filing.

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Signed on February 1, 1995.

Joseph H. Langjahr, Secretary

STATE OF WASHINGTON)
) ss.
KING COUNTY)

This is to certify that on the 1st day of February, 1995, there appeared before me Joseph H. Langjahr, Secretary of Brix Maritime Co., who executed the foregoing Restated Certificate of Incorporation, and did acknowledge and declare to me that he executed the same freely and voluntarily on behalf of the corporation above-referenced, and that the facts stated in the Restated Certificate of Incorporation are true to the best of his belief.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal the day and year first above written.

Laurie J. Carlson [Printed Name]
NOTARY PUBLIC, in and for the
State of Washington, residing
at Everett

Commission expires: 9-18-97

3404-100/200332

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AGREEMENT AND PLAN OF MERGER

BETWEEN

BRIX MARITIME CO.

(a Delaware Corporation)

and

KNAPPTON CORPORATION

(a Delaware Corporation)

THIS AGREEMENT AND PLAN OF MERGER, made and entered into this 7th day of December, 1988, by and between KNAPPTON CORPORATION, a Delaware corporation, ("Knappton") and BRIX MARITIME CO., a Delaware corporation, ("Brix Maritime") herein sometimes referred to as the "Surviving Corporation", and both corporations herein sometimes referred to as the "Constituent Corporations".

WITNESSETH:

WHEREAS, Knappton is a corporation duly organized and existing under the laws of the State of Delaware and the aggregate number of shares which Knappton has authority to issue is 1,000 shares of common stock, of $1.00 par value, of which 1000 shares are issued and outstanding and are owned by Brix Maritime; and

WHEREAS, Brix Maritime is a corporation duly organized and existing under the laws of the State of Delaware, and the aggregate number of shares which Brix Maritime has authority to issue is 5,000,000 shares of common stock, $1.00 par value, of which 3,158,439 shares are issued and outstanding and are owned by approximately 1320 shareholders; and

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WHEREAS, the board of directors of each of the corporations deems it advisable that Knappton be merged into Brix Maritime on the terms and conditions hereinafter set forth in accordance with the applicable provisions of the laws of the State of Delaware which permit such merger, that the restated certificate of incorporation of Brix Maritime be amended to reduce the authorized capital from 5,000,000 shares of common stock, $1.00 par value, to 10,000 shares of common stock, without par value, that the issued and outstanding shares of Brix Maritime be reclassified into one five-hundredth (1/500th) shares of common stock, without par value, and that fractional shares be redeemed for cash.

NOW THEREFORE, in consideration of the premises and the agreements, covenants and provisions hereinafter contained, Brix Maritime and Knappton, by their respective boards of directors, have agreed and do hereby agree with each other as follows:

1. Merger. At the Effective Time (as defined in Section 2), Knappton shall be merged with and into Brix Maritime on the terms and conditions hereinafter set forth as permitted by and in accordance with the laws of the State of Delaware. The separate existence of Knappton will cease. Brix Maritime shall be the Surviving Corporation in the merger and shall continue its existence under Delaware law. The Surviving Corporation shall succeed to all the rights and property and shall be subject to all of the debts and liabilities of Knappton.

Brix Maritime shall thereupon and thereafter possess all of the rights, privileges, immunities and franchises of each of

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the Constituent Corporations and all property, real, personal and mixed, and all debts due on whatever account, including subscriptions to shares and all other choses in action, and all and every other interest of, or belonging to, or due to each of the Constituent Corporations shall be taken and deemed to be vested in the Surviving Corporation without further act or deed; and the title to all real estate, or any interest therein, vested in either of the Constituent Corporations shall not revert or be in any way impaired by reason of the merger.

Brix Maritime shall thenceforth be responsible and liable for all of the liabilities and obligations of each of the Constituent Corporations; and any claim existing, or action or proceeding pending by or against either of the Constituent Corporations may be prosecuted to judgment as if the Merger had not taken place, or the Surviving Corporation may be substituted in its place, and neither the rights of creditors nor any liens upon the property of either of the Constituent Corporations shall be impaired by the merger.

2. Effective Time. The merger shall become effective as of the close of business on the date this Agreement and Plan of Merger (or a certificate in lieu thereof) shall be filed with the Delaware Secretary of State ("Effective Time"). Any time prior to the Effective Time, this Agreement and Plan of Merger may be terminated by the board of directors of either Constituent Corporation notwithstanding approval of the Agreement and the Plan of Merger by the shareholders of both or either of the Constituent Corporations. Furthermore, the board of directors of the

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Constituent Corporations may amend this Agreement and Plan of Merger at any time prior to the filing of the Agreement and Plan of Merger (or a certificate in lieu thereof) with the Secretary of State provided that an amendment made subsequent to the adoption of the Agreement and Plan of Merger by the shareholders of Brix Maritime shall not (1) alter or change the amount or kind of shares, cash, and/or rights to be received in exchange for or on conversion of all or any of the shares of any class or series thereof of such Constituent Corporation, (2) alter or change any term of the restated certificate of incorporation of the Surviving Corporation to be effected by the merger, or (3) alter or change any of the terms and conditions of the Agreement and Plan of Merger if such alteration or change would adversely affect the holders of any class of shares of such Constituent Corporation.

3. Directors and Officers. At the Effective Time, the board of directors and the members thereof and the officers of Brix Maritime immediately prior to the Effective Time of the merger shall be and constitute the board of directors, and the members thereof, and the officers of the Surviving Corporation.

4. Restated Certificate of Incorporation and Amendment. At the Effective Time, the restated certificate of incorporation of Brix Maritime, as filed in the office of the Delaware Secretary of State shall constitute the restated certificate of incorporation of the Surviving Corporation, except that the "FOURTH" provision of the restated certificate of incorporation of Brix Maritime shall be amended to read as follows:

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"FOURTH: The total number of shares of stock which the corporation shall have authority to issue is ten thousand (10,000), consisting of common stock without par value per share. Each share of stock shall be entitled to one vote on any corporate action requiring a vote of stockholders, and the corporation, is prohibited from issuing any nonvoting stock or other nonvoting equity securities."

5. Bylaws. The Bylaws of Brix Maritime, in effect at the Effective Time, shall constitute the Bylaws of the Surviving Corporation.

6. Cancellation of Knappton Shares. At the Effective Time of the Merger, all of the outstanding shares of Knappton shall be cancelled.

7. Manner of Converting Shares. At the Effective Time, each lot of five hundred (500) shares of issued and outstanding common stock, par value $1.00 per share, of Brix Maritime ("Old Shares"), shall be converted into one share of common stock, without par value, of Brix Maritime ("New Shares") by virtue of the merger and without any action on the part of a holder thereof. No fractional New Shares or certificates representing fractional New Shares shall be issued.

Any resulting Old Shares in lots of less than 500 Old Shares shall be converted into fractional share rights ("Fractional Share Rights"), at the rate of one Fractional Share Right for each Old Share. Fractional Share Rights shall entitle the holder (1) to receive $3.75 in exchange for each Fractional Share Right (as evidenced by a certificate for one Old Share), or (2) to combine Fractional Share Rights with other Fractional Share Rights to total 500 which, when tendered to the Surviving

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Corporation or its designated agent, shall be converted to one New Share.

Holders of Shares converted to Fractional Share Rights at the Effective Time, will have no further right to vote such shares or to participate in any distributions by the Surviving Corporation (other than $3.75 in exchange for each Fractional Share Right). Fractional Share Rights shall terminate and expire at the end of the business day one year after the Effective Time.

8. Further Assurances. If at any time the Surviving Corporation shall consider or be advised that any further assignment or assurance in law is necessary or desirable to vest in the Surviving Corporation the title to any property or rights of Knappton, the proper officers and directors of Knappton shall execute and make all such proper assignments and assurances in law and to all things necessary or proper to thus vest such property or rights in the Surviving Corporation, and otherwise to carry out the purposes of this Agreement and Plan of Merger.

9. Adoption and Filing. If this Agreement and Plan of Merger is duly adopted in the manner required by law, it may together with the appropriate certificate be filed with the Delaware Secretary of State.

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IN WITNESS WHEREOF, the parties to this Agreement and Plan of Merger, pursuant to authority duly granted by their respective boards of directors, have executed this Agreement and Plan of Merger by their respective, duly authorized officers as of the date and year first written.

KNAPPTON CORPORATION, a Delaware corporation

By: _____
President

Attest:

_____
Secretary

BRIX MARITIME CO., a Delaware corporation

By: _____
President

Attest:

_____
Secretary

Confidential Business Information

FILED

AUG 11 1988

SECRETARY OF STATE

TWIN CITY BARGE, INC.

CERTIFICATE OF AMENDMENT OF

RESTATED CERTIFICATE OF INCORPORATION

Twin City Barge, Inc. (the "Corporation"), a corporation organized and existing by virtue of the General Corporation Law of the State of Delaware,

DOES HEREBY CERTIFY THAT:

FIRST: At a meeting of the Board of Directors of the Corporation held March 4, 1988, resolutions were duly adopted setting forth proposed amendments to the Restated Certificate of Incorporation of the Corporation declaring said amendments to be advisable. The Resolutions setting forth the proposed amendments are as follows:

> RESOLVED that the Board of Directors proposes the amendment of the Restated Certificate of Incorporation of the Company to reduce the authorized capital of the Company from 12.5 million shares of common stock, $1 par value, and 10,000 shares preferred stock, $1,000 par value to five million shares of common stock, $1 par value, and that Paragraph FOURTH of the Restated Certificate of Incorporation of Twin City Barge, Inc. be amended to read as follows:
>
> > FOURTH: The total number of shares of stock which the Corporation shall have authority to issue is five million (5,000,000), consisting of common stock having a par value of $1 per share. Each share of stock shall be entitled to one vote on any corporate action requiring a vote of stockholders,

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and the Corporation is prohibited from issuing any nonvoting stock or other nonvoting equity securities.

RESOLVED that the Board of Directors proposes that the provisions in the Restated Certificate of Incorporation of the Company permitting the reorganization of the Company by the Delaware courts, be deleted and that the provisions in the Restated Certificate of Incorporation providing staggered terms for Directors of the Company be deleted, and that Paragraph FIFTH of the Restated Certificate of Incorporation of Twin City Barge, Inc. be amended to read as follows:

> FIFTH: (i) In furtherance and not in limitation of the power conferred by statute, the Board of Directors is expressly authorized to make, alter or repeal the Bylaws of the Corporation.
>
> (ii) Elections of Directors of the Corporation need not be by ballot, unless the Bylaws of the Corporation shall so provide.

RESOLVED that the Board of Directors proposes the amendment of the Restated Certificate of Incorporation of the Company . . . a new Paragraph SIXTH be added to the Restated Certificate of Incorporation of Twin City Barge, Inc., which shall read as follows:

> SIXTH: A director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a Director. This paragraph SIXTH does not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve personal misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General Corporation Law, or (iv) for any transaction from which

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the director derived an improper personal benefit.

SECOND: At a meeting of the Board of Directors of the Corporation held March 31, 1988, a Resolution was duly adopted setting forth a further amendment to the Restated Certificate of Incorporation of the Corporation declaring that such was advisable. The Resolution setting forth the proposed amendment reads as follows:

> RESOLVED that the Board of Directors proposes the amendment to the Restated Certificate of Incorporation of the Company to change the name of the Company from Twin City Barge, Inc. to Brix Maritime Co. and that Paragraph FIRST of the Restated Certificate of Incorporation of Twin City Barge, Inc. be amended to read as follows:
>
> FIRST: The name of the Corporation is Brix Maritime Co.

THIRD: Thereafter, pursuant to Section 222 of the Delaware General Corporation Law, the Annual Meeting of Shareholders was held July 19, 1988. After determining a quorum was present, in person or by proxy, a majority of the outstanding stock entitled to vote thereon, in person or by proxy, voted in favor of said Amendments.

FOURTH: A report of the Inspector of Elections indicating the outcome of votes tallied in connection with the corporate action regarding the proposed amendments was given promptly to those shareholders in person and was made a part of the Minutes of the Annual Meeting.

FIFTH: Said Amendments were duly adopted in accordance

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with the provisions of Sections 222 and 242 of the Delaware General Corporation Law.

SIXTH: The capital of the Corporation shall not be reduced under or by reason of said Certificate of Amendment.

IN WITNESS WHEREOF, said Corporation has caused this Certificate of Amendment of the Restated Certificate of Incorporation to be signed by Peter J. Brix, its President, and Robert A. Hindman, its Secretary, this 19th day of July, 1988.

Peter J. Brix
President

ATTEST:

Secretary

46570-47124(7690)

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UNANIMOUS WRITTEN CONSENT IN LIEU OF
1999 ANNUAL MEETING OF THE SHAREHOLDER
AND THE BOARD OF DIRECTORS OF
BRIX MARITIME CO.

The undersigned, being the sole shareholder and all of the members of the Board of Directors of Brix Maritime Co., a Delaware corporation, hereby waive all notices, statutory or otherwise, and unanimously consent in writing to the adoption of the following resolutions and the taking of the following actions without a meeting pursuant to Title 8, Sections 228(a) and 141(f) of the Delaware Corporation Law, such resolutions and actions to have the same force and effect as if adopted and taken at a meeting of the corporation's shareholder and directors duly called and held for such purpose.

1. Calling of the Meeting. The meeting will be deemed to have been called on December 9, 1999.

2. Election of Board of Directors.

RESOLVED, that the shareholder hereby elects the following persons to serve on the Board of Directors of the corporation until the next annual meeting of the shareholder or until their successors are elected and qualified:

Thomas V. Van Dawark
Joseph H. Langjahr

3. Election of Officers.

RESOLVED, that the newly elected Board of Directors hereby elects the following persons to serve as officers of the corporation until the next annual meeting of the Board or until their successors are elected and qualified:

President:	Thomas V. Van Dawark
Executive Vice President:	Steve T. Scalzo
Vice President and Treasurer:	Douglas D. Johnson
Senior Vice President, Sales:	Thomas F. Coburn
Vice President, Industrial Relations:	Warner D. Nelson
Vice President and Secretary:	Joseph H. Langjahr

4. Ratification of Acts.

RESOLVED, that all actions taken on behalf of the corporation by the directors and officers since and during the last annual meeting and through the date hereof are hereby ratified and approved.

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5. Execution in Counterparts.

RESOLVED, that this Consent by the undersigned may be executed in counterparts, shall be effective upon the date of the last signature hereon below, and when effective may be treated by all persons as having the same effect as if the resolutions herein contained were lawfully adopted at a meeting actually held upon due and proper notice.

DATED as of this 9th day of December, 1999.

SHAREHOLDER:

FOSS MARITIME COMPANY

By _____ Date signed: 12/9/99

Thomas V. Van Dawark
President and Chief Executive Officer

DIRECTORS:

_____ Date signed: 12/9/99

Joseph H. Langjahr

_____ Date signed: 12/9/99

Thomas V. Van Dawark

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UNANIMOUS WRITTEN CONSENT IN LIEU OF 1998 ANNUAL MEETING OF THE SHAREHOLDER AND THE BOARD OF DIRECTORS OF BRIX MARITIME CO.

The undersigned, being the sole shareholder and all of the members of the Board of Directors of Brix Maritime Co., a Delaware corporation, hereby waive all notices, statutory or otherwise, and unanimously consent in writing to the adoption of the following resolutions and the taking of the following actions without a meeting pursuant to Title 8, Sections 228(a) and 141(f) of the Delaware Corporation Law, such resolutions and actions to have the same force and effect as if adopted and taken at a meeting of the corporation's shareholder and directors duly called and held for such purpose.

1. Calling of the Meeting. The meeting will be deemed to have been called on December 11, 1998.

2. Election of Board of Directors.

RESOLVED, that the shareholder hereby elects the following persons to serve on the Board of Directors of the corporation until the next annual meeting of the shareholder or until their successors are elected and qualified:

Thomas V. Van Dawark
Joseph H. Langjahr

3. Election of Officers.

RESOLVED, that the newly elected Board of Directors hereby elects the following persons to serve as officers of the corporation until the next annual meeting of the Board or until their successors are elected and qualified:

President:	Thomas V. Van Dawark
Senior Vice President:	Steve T. Scalzo
Senior Vice President and Treasurer:	Charles H. Kauffman
Senior Vice President, Sales:	Thomas F. Coburn
Vice President, Industrial Relations:	Warner D. Nelson
Vice President and Secretary:	Joseph H. Langjahr

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4. Ratification of Acts.

RESOLVED, that all actions taken on behalf of the corporation by the directors and officers since and during the last annual meeting and through the date hereof are hereby ratified and approved.

5. Execution in Counterparts.

RESOLVED, that this Consent by the undersigned may be executed in counterparts, shall be effective upon the date of the last signature hereon below, and when effective may be treated by all persons as having the same effect as if the resolutions herein contained were lawfully adopted at a meeting actually held upon due and proper notice.

DATED as of this 11th day of December, 1998.

SHAREHOLDER:

FOSS MARITIME COMPANY

By _____ Date signed: 12/11/98
Thomas V. Van Dawark
President and Chief Executive Officer

DIRECTORS:

_____ Date signed: 12/11/98
Joseph H. Langjahr

_____ Date signed: 12/11/98
Thomas V. Van Dawark

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UNANIMOUS WRITTEN CONSENT IN LIEU OF
1997 ANNUAL MEETING OF THE SHAREHOLDER
AND THE BOARD OF DIRECTORS OF
BRIX MARITIME CO.

The undersigned, being the sole shareholder and all of the members of the Board of Directors of Brix Maritime Co., a Delaware corporation, hereby waive all notices, statutory or otherwise, and unanimously consent in writing to the adoption of the following resolutions and the taking of the following actions without a meeting pursuant to Title 8, Sections 228(a) and 141(f) of the Delaware Corporation Law, such resolutions and actions to have the same force and effect as if adopted and taken at a meeting of the corporation's shareholder and directors duly called and held for such purpose.

1. Calling of the Meeting. The meeting will be deemed to have been called on December 19, 1997.

2. Election of Board of Directors.

   RESOLVED, that the shareholder hereby elects the following persons to serve on the Board of Directors of the corporation until the next annual meeting of the shareholder or until their successors are elected and qualified:

   Thomas V. Van Dawark
   Joseph H. Langjahr

3. Election of Officers.

   RESOLVED, that the newly elected Board of Directors hereby elects the following persons to serve as officers of the corporation until the next annual meeting of the Board or until their successors are elected and qualified:

President:	Thomas V. Van Dawark
Senior Vice President, Columbia Snake River:	Edward S. Beall
Senior Vice President:	Steve T. Scalzo
Senior Vice President & Treasurer:	Charles H. Kauffman
Senior Vice President, Sales:	Thomas F. Coburn
Vice President, Industrial Relations:	Warner D. Nelson
Vice President & Secretary:	Joseph H. Langjahr

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4. Ratification of Acts.

RESOLVED, that all actions taken on behalf of the corporation by the directors and officers since and during the last annual meeting and through the date hereof are hereby ratified and approved.

5. Execution in Counterparts.

RESOLVED, that this Consent by the undersigned may be executed in counterparts, shall be effective upon the date of the last signature hereon below, and when effective may be treated by all persons as having the same effect as if the resolutions herein contained were lawfully adopted at a meeting actually held upon due and proper notice.

DATED as of this 19th day of December, 1997.

SHAREHOLDER:

FOSS MARITIME COMPANY

By _____ Date Signed: 12/19/97
Thomas V. Van Dawark
President & Chief Executive Officer

DIRECTORS:

_____ Date Signed: 12/19/97
Joseph H. Langjahr

_____ Date Signed: 12/19/97
Thomas V. Van Dawark

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UNANIMOUS WRITTEN CONSENT IN LIEU OF
1996 ANNUAL MEETING OF THE SHAREHOLDER
AND THE BOARD OF DIRECTORS OF
BRIX MARITIME CO.

The undersigned, being the sole shareholder and all of the members of the Board of Directors of Brix Maritime Co., a Delaware corporation, hereby waive all notices, statutory or otherwise, and unanimously consent in writing to the adoption of the following resolutions and the taking of the following actions without a meeting pursuant to Title 8, Sections 228(a) and 141(f) of the Delaware Corporation Law, such resolutions and actions to have the same force and effect as if adopted and taken at a meeting of the corporation's shareholder and directors duly called and held for such purpose.

1. Calling of the Meeting. The meeting will be deemed to have been called on December 5, 1996.

2. Election of Board of Directors.

   RESOLVED, that the shareholder hereby elects the following persons to serve on the Board of Directors of the corporation until the next annual meeting of the shareholder or until their successors are elected and qualified:

   Robert B. McMillen
   Thomas V. Van Dawark
   Joseph H. Langjahr

3. Election of Officers.

   RESOLVED, that the newly elected Board of Directors hereby elects the following persons to serve as officers of the corporation until the next annual meeting of the Board or until their successors are elected and qualified:

President:	Thomas V. Van Dawark
Senior Vice President, Columbia Snake River:	Edward S. Beall
Senior Vice President:	Steve T. Scalzo
Senior Vice President & Treasurer:	Charles H. Kauffman

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Senior Vice President, Sales:	Thomas F. Coburn
Vice President, Industrial Relations:	Warner D. Nelson
Vice President & Secretary:	Joseph H. Langjahr

4. Ratification of Acts.

RESOLVED, that all actions taken and all instruments executed on behalf of the corporation by the directors and officers since and during the last annual meeting and through the date hereof are hereby ratified and approved.

5. Execution in Counterparts.

RESOLVED, that this Consent by the undersigned may be executed in counterparts, shall be effective upon the date of the last signature hereon below, and when effective may be treated by all persons as having the same effect as if the resolutions herein contained were lawfully adopted at a meeting actually held upon due and proper notice.

DATED as of this 5th day of December, 1996.

SHAREHOLDER:

FOSS MARITIME COMPANY

By _____ Date Signed: 11-15-96

Thomas V. Van Dawark
President & Chief
Executive Officer

DIRECTORS:

_____ Date Signed: 11/14/96

Joseph H. Langjahr

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Robert B. McMillen

Date Signed: 12/5/96

Thomas V. Van Dawark

Date Signed: 11-15-96

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UNANIMOUS WRITTEN CONSENT IN LIEU OF
1995 ANNUAL MEETING OF THE SHAREHOLDER
AND THE BOARD OF DIRECTORS OF
BRIX MARITIME CO.

The undersigned, being the sole shareholder and all of the members of the Board of Directors of Brix Maritime Co., a Delaware corporation, hereby waive all notices, statutory or otherwise, and unanimously consent in writing to the adoption of the following resolutions and the taking of the following actions without a meeting pursuant to Title 8, Sections 228(a) and 141(f) of the Delaware Corporation Law, such resolutions and actions to have the same force and effect as if adopted and taken at a meeting of the corporation's shareholder and directors duly called and held for such purpose.

1. Calling of the Meeting. The meeting will be deemed to have been called on December 7, 1995.

2. Election of Board of Directors.

   RESOLVED, that the shareholder hereby elects the following persons to serve on the Board of Directors of the corporation until the next annual meeting of the shareholder or until their successors are elected and qualified:

   Robert B. McMillen
   Thomas V. Van Dawark
   Joseph H. Langjahr

3. Election of Officers.

   RESOLVED, that the newly elected Board of Directors hereby elects the following persons to serve as officers of the corporation until the next annual meeting of the Board or until their successors are elected and qualified:

President:	Thomas V. Van Dawark
Senior Vice President, Columbia Snake River:	Edward S. Beall
Senior Vice President:	Steve T. Scalzo
Senior Vice President & Treasurer:	Charles H. Kauffman

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Senior Vice President, Sales:	Thomas F. Coburn
Vice President, Industrial Relations:	Warner D. Nelson
Vice President & Secretary:	Joseph H. Langjahr

4. Ratification of Acts.

RESOLVED, that all actions taken and all instruments executed on behalf of the corporation by the directors and officers since and during the last annual meeting and through the date hereof are hereby ratified and approved.

5. Execution in Counterparts.

RESOLVED, that this Consent by the undersigned may be executed in counterparts, shall be effective upon the date of the last signature hereon below, and when effective may be treated by all persons as having the same effect as if the resolutions herein contained were lawfully adopted at a meeting actually held upon due and proper notice.

DATED as of this 22 day of December, 1995.

SHAREHOLDER:

FOSS MARITIME COMPANY

By Thomas V. Van Dawark — Date Signed: 11/20/95

Thomas V. Van Dawark
President & Chief
Executive Officer

DIRECTORS:

Joseph H. Langjahr — Date Signed: 11/20/95

Joseph H. Langjahr

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Robert B. McMillen

Date Signed: 12/5/95

Thomas V. Van Dawark

Date Signed: 11/20/95

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UNANIMOUS WRITTEN CONSENT IN LIEU OF 1994 ANNUAL MEETING
OF THE SHAREHOLDER AND THE BOARD OF DIRECTORS
OF
BRIX MARITIME CO.

The undersigned, being the sole shareholder and all of the members of the Board of Directors of Brix Maritime Co., a Delaware corporation, hereby waive all notices, statutory or otherwise, and unanimously consent in writing to the adoption of the following resolutions and the taking of the following actions without a meeting pursuant to Title 8, Sections 228(a) and 141(f) of the Delaware Corporation Law, such resolutions and actions to have the same force and effect as if adopted and taken at a meeting of the corporation's shareholder and directors duly called and held for such purpose.

1. Calling of the Meeting. The meeting will be deemed to have been called on December 12, 1994.

2. Election of Board of Directors.

RESOLVED, that the sole shareholder hereby elects the following persons to serve on the Boards of Directors of the corporation until the next annual meeting of the shareholder or until their successors are elected and qualified:

Robert B. McMillen
Thomas V. Van Dawark
Joseph H. Langjahr

3. Election of Officers.

RESOLVED, that the newly elected Board of Directors hereby elect the following persons to serve as officers of the corporation until the next annual meeting of the Board or until their successors are elected and qualified:

President:	Thomas V. Van Dawark
Senior Vice President, Columbia Snake River:	Edward S. Beall
Senior Vice President:	Steve T. Scalzo
Senior Vice President & Treasurer:	Charles H. Kauffman
Senior Vice President, Sales:	Thomas F. Coburn
Vice President, Industrial Relations:	Warner D. Nelson
Vice President & Secretary:	Joseph H. Langjahr

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4. Ratification of Acts.

RESOLVED, that all actions taken and all instruments executed on behalf of the corporation by the Directors and officers since and during the last annual meeting and through the date hereof are hereby ratified and approved.

5. Execution in Counterparts.

RESOLVED, that this consent by the undersigned may be executed in counterparts, shall be effective upon the date of the last signature hereon below, and when effective, may be treated by all persons as having the same effect as if the resolutions herein contained were lawfully adopted at a meeting actually held upon due and proper notice.

DATED as of this 12th day of December, 1994.

SHAREHOLDER:

FOSS MARITIME COMPANY

By _____ Date Signed: 11-29-94
Thomas V. Van Dawark
President & Chief Executive Officer

DIRECTORS:

_____ Date Signed: 11/29/94
Joseph H. Langjahr

_____ Date Signed: 12/12/94
Robert B. McMillen

_____ Date Signed: 11-29-94
Thomas V. Van Dawark

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CONSENT OF THE STOCKHOLDERS
OF
BRIX MARITIME CO.

Pursuant to Section 228 of the Delaware General Corporation Law, the undersigned, being all of the stockholders of Brix Maritime Co., a Delaware corporation ("Company"), adopt the following resolutions:

RESOLVED, that the following persons have been acting and are hereby elected to the Board of Directors to serve until the next annual meeting of stockholders of the Company and until their respective successors are elected and qualified:

Peter J. Brix
Robert J. DeArmond
Walter O. Grodahl
James R. Houston
Ellison C. Morgan

RESOLVED FURTHER, that the following persons have been acting and are hereby approved as officers, to serve in those offices until the next annual meeting of directors of the Company and until their respective successors are elected and qualified:

Peter J. Brix	Chief Executive Officer
Edward S. Beall	President
Robert A. Hindman	Sr. Vice President-Finance, Secretary
Robert J. Hasler	Sr. Vice President-Marketing
Whitney E. Olson	Vice President-Harbor Services
David G. Bishop	Vice President-Contract Towing
Bruce A. Reed	Vice President-Ocean Towing Division
Timothy J. Beyer	Vice President-Columbia and Snake River Traffic & Wood Products Manager
Laury L. Cooper	Vice President-Controller

RESOLVED FURTHER, that the Stock and Asset Purchase Agreement (the "Agreement") among the Company, Peter J. Brix, Robert J. DeArmond, Ellison C. Morgan, individually and as trustee of Management Partnership 401(k) Plan, Joseph and Sarah Tennant, John B. Altstadt and Hayden Investment Corporation (collectively "Sellers") and Foss Maritime Company ("Foss") together with all exhibits and schedules related thereto, providing for

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the sale of the stock of the Company and certain assets, in the form submitted by the directors is approved.

RESOLVED FURTHER, that the officers and directors of the Company are authorized to execute and deliver on behalf of the Company, the Agreement and such other agreements, instruments and documents contemplated by the Agreement or necessary for the consummation of the transactions contemplated thereby, each in the form and with any changes as the officer executing the document, in his or her discretion, approves, the execution and delivery thereof to be conclusive evidence of approval, and each such officer is authorized to take any other action in connection with the Agreement as such officer in his or her discretion determines necessary or advisable to effect the transactions contemplated thereby.

RESOLVED FURTHER, that the resignation of James R. Houston as director of the Company is necessary to close the Agreement and Mr. Houston is unavailable to execute such resignation, James R. Houston is removed without cause as director of the Company effective only if and as of the closing of the Agreement.

RESOLVED FURTHER, that the Company has entered into a Stockholders' Agreement, as amended, between the Company and the Stockholders and certain Put Agreements between the Company and some of its stockholders which have been approved and executed by the directors, and the actions taken on behalf of the Company by the officers and directors in negotiating and entering into the Stockholders' Agreement and the Put Agreements are approved, ratified and accepted.

RESOLVED FURTHER, that as a condition of the closing of the Agreement, the Stockholders' Agreement, as amended, and the Put Agreements are to be cancelled effective immediately prior to closing of the Agreement, such termination to be effective only if the Agreement is closed and the affected Stockholders receive the consideration provided for in the Agreement.

RESOLVED FURTHER, that the cancellation and termination of the Stockholders' Agreement and Put Agreements on behalf of the Company and each Stockholder is approved, ratified and accepted.

RESOLVED FURTHER, that the appropriate officers of the Company are authorized to do or cause to be done all such acts or things and to make, execute and deliver or cause to be made, executed and delivered, all such agreements, documents, instruments and certificates, in the name and on behalf of the Company or otherwise, as they may deem necessary, desirable or appropriate to effect or carry out the purpose and intent of the foregoing resolutions and to effect or carry out the consummation of the transaction contemplated by the Agreement approved by these resolutions.

RESOLVED FURTHER, that all vessel charters between Peter J. Brix as owner and Brix Maritime Co. or its subsidiaries shall be cancelled effective upon closing of the Agreement described above in order for a new Bare Boat Charter Party and Purchase Options between Company and Peter J. Brix, such termination to be contingent upon and effective only if the Agreement is closed and the new Bare Boat Charter Party and Purchase Options described in the Agreement becomes effective.

RESOLVED FURTHER, that all actions taken by the officers, directors or stockholders of the Company on its behalf prior to the effective date of this consent are approved, ratified and accepted.

The execution of this Consent shall constitute a written waiver of any notice required by the Delaware General Corporation law, or the this Company's Certificate of Incorporation or Bylaws.

Effective this 21st day of September, 1993.

STOCKHOLDERS OF BRIX MARITIME CO.

Peter J. Brix

Ellison C. Morgan

Ellison C. Morgan, Trustee of
Management Partnership 401(k) Plan

John B. Altstadt

Robert J. DeArmond

Joseph Tennant

Sarah Tennant

HAYDEN INVESTMENT CORPORATION

By: Peter J. Brix

Its: President

(SWW2/46570/87118/AM/546039.1)

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CONSENT

The **PORT OF PORTLAND**, a port district of the State of Oregon ("Port") and **BRIX MARITIME CO.**, a corporation ("Brix"), entered into that certain Lease dated May 14, 1992, of a certain Facility as defined in said Lease adjacent to Port property at Terminal 4, together with certain appurtenant rights (the "Lease").

Section 9.1.1 of the Lease provides for the written consent of the Port in the event of the sale of a controlling interest in the stock of Brix. **FOSS MARITIME CO.**, a Washington corporation ("Foss"), proposes to acquire a controlling interest in the stock of Brix and has requested that Brix acquire the consent of the Port.

NOW, THEREFORE, the Port hereby consents to the acquisition by Foss of a controlling interest in the stock of Brix and the parties hereby agree and affirm that the Lease, as it may have been from time to time amended prior to the date hereof, shall remain in full force and effect and the terms and conditions thereof are hereby ratified and approved.

DATED this 20th day of August, 1993.

BRIX MARITIME CO.

By: [signature]
Its: Sr. V.P. - Finance

PORT OF PORTLAND

APPROVED AS TO LEGAL SUFFICIENCY

Paul C. Olson
Counsel, Port of Portland

By: [signature]
Its: Executive Director

(SWW2/46570/87118/JRM/543372.1)

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Brix Maritime Co.
Minutes of the
Board of Directors Meeting
December 15, 1992

The Board of Directors of Brix Maritime Co. met at the offices of the Corporation in Portland, Oregon on December 15, 1992 at 10:30 a.m. pursuant to notice. Present were all the Directors. Also present were Adelle Bjonskaas and Robert A. Hindman management employees.

The minutes of the August 26, 1992 regular Board of Directors meeting and the minutes of a special telephonic Board of Directors meeting held December 8, 1992 were approved as submitted.

Mr. Brix reported that there were no legal matters pending except the normal employee injury cases which are covered by insurance.

An audit committee was established to meet with our public accountant, Coopers & Lybrand, after the audit for 1992 is completed. Committee members are Messrs. DeArmond, Morgan, Houston and will be chaired by Messr. Grodahl.

Mr. Brix recommended to the Board two members of the management team that have earned a promotion to officers of the Company. The Board discussed the recommendation and unanimously adopted the following:

> "Resolved, that Laury L. Cooper be and is hereby elected to the position of Vice President - Controller and that Timothy J. Beyer be and is hereby elected to the position of Vice President - Columbia/ Snake River Traffic Manager to be effective immediately."

Mr. Brix reviewed the current operations indicating that each division was fairly busy at this time but we do expect some slowdown occurring the next few months. We should see some growth opportunities for chip barging. The paper companies are expanding their supply areas in search of new chip suppliers because of the shutdown of area sawmills and the lack of residual wood. The Canadian National Railroad service was reviewed in light of some competitive changes taking place in the market. If changes continue in that market we may have to review our involvement and what we might do with the equipment in that service.

The Board then reviewed a list of assets that have been sold since the last meeting and a list of equipment that has been circulated to various brokers as being for sale. A discussion was held about selling major assets and the contract they service as a package. This will be reviewed by management with the goal of reducing our long term debt up to $10,000,000 during 1993.

The consolidated financial statements for November 30, 1992 were reviewed and discussed. The actual results were compared to our forecast for the year and it appears we will meet the forecast. The balance sheet impact of the new bank loan reamortization package was explained and the benefits described. The management incentive plan was also reviewed and the formula for calculating the employee bonuses was explained as well as the philosophy behind the formula.

The Forecast of Operations for 1993 was reviewed and many of the assumptions were explained to the Board. Some format changes were suggested by Board members which will be incorporated in the first forecast revision. Hedging was suggested as a means of controlling fuel costs and Mr. Houston agreed to research the subject for further consideration.

The terms of the long-term refinancing package proposed by U.S. National Bank were explained. Mr. Brix thanked the Board members for getting involved in the discussions which resulted in a reduction of the loan fee and a reduction in the interest rate. After discussing the pros and cons of the package the Board unanimously adopted the following motion:

> "Resolved, that the proposed amendments to the Company's financing agreements with the U.S. National Bank of Oregon, including revisions to both the Company's operating line and term loan be and hereby are approved and the officers of the Company be and hereby are authorized to execute the revised loan agreements and all other documents necessary to complete the refinancing."

In addition to the approval of the Bank refinancing the Board also adopted the following motion in connection with the U.S. Bank financing of the Riedel stock purchase:

> "Resolved, that the Company be and hereby is authorized to furnish any guarantees of investor loans which may be required by lenders to finance the purchase of the Company stock from A. A. Riedel."

Mr. Brix reviewed the option to purchase the remaining outstanding stock of Tweed Towing, Inc. and reviewed the consolidation of the equipment with the Brix fleet. The Board unanimously approved the following motion:

> "Resolved, that the Company, through its wholly-owned subsidiary Marine Equipment Leasing Company, be and hereby is authorized to purchase from Leila Tweed her remaining shares of Tweed Towing, Inc., and the officers of the Company be and hereby are authorized to execute all documents necessary to complete the stock purchase."

Mr Brix reviewed the terms of the purchase of the Company stock from A A. Riedel. The 2,238 shares of the Company stock owned by Mr. Riedel are being purchased by certain investors (including current shareholders) and the Company for a total of

$5,000,000 in cash to be financed in part by borrowings. Mr. Brix also explained that while the Company was committing to purchase approximately 10 percent of the Riedel stock for $500,000 an agreement had been reached with Hayden Investment Co. to subscribe and pay for such stock in order to relieve the Company of the payments it would otherwise make.

Mr. Brix outlined a form of Shareholders Agreement and a form of "Put" Agreement to be executed by the various investors and the Company, which includes certain restrictions upon the transfer of the stock in the future and subjects the stock being acquired to certain purchase rights among the investors and redemption rights in the Company. He also outlined the terms of the Stock Purchase Agreement from A. A. Riedel. Following discussion, the following resolutions were unanimously approved:

> "Resolved, that the form of Agreement for the purchase of 2,238 shares of the Company stock owned by A. A. Riedel be and hereby is approved; and
>
> "Resolved further, that the form of Shareholder Agreement and "Put" Agreement relating to the Riedel stock be and hereby is approved; and
>
> "Resolved further, that the Company be and hereby is authorized to commit to purchase and to resell to Hayden Investment Co. approximately 10 percent of the Riedel stock for the sum of $500,000; and
>
> "Resolved further, that officers of the Company be and hereby are authorized and directed to execute such documents and take such other action as may be necessary to complete the purchase of the Riedel stock.

Mr. Brix pointed out that upon the purchase of the Riedel stock, Mr. Riedel would be resigning as a Director of the Company, but has indicated his agreement to be available for consulting services to the Company. Mr. Brix outlined the form of Consulting Agreement proposed, which has a term up to ten years and pays to Mr. Riedel the sum of $7,000 per month for consulting services.

"Following discussion, it was moved seconded and unanimously:

> "Resolved, that the form of Consulting Agreement between the Company and A. A. Riedel be and hereby is approved conditioned upon the completion of the purchase of the Riedel stock and the officers of the Company be and hereby are directed to execute such documents and take such other steps as may be necessary to carry out the foregoing resolution.

"The Chairman suggested that it would be appropriate to increase Directors fees from $500 per meeting to $1,000 per meeting for non-employee directors. Following discussion, it was moved seconded and unanimously:

"Resolved, to increase Directors fees for non-employee directors from $500 per meeting to $1,000 per meeting, plus expenses incurred in attendance, effective immediately.

"There being no further business to come before the meeting, the meeting was adjourned.

ROBERT A. HINDMAN, Secretary

RESIGNATION

I, ARTHUR A. RIEDEL, hereby resign as a Director of Brix Maritime Co.

Arthur A. Riedel

Date: DECEMBER 28, 1992

RELEASE AND INDEMNITY

In consideration of the payment of ONE HUNDRED THOUSAND DOLLARS **($100,000.00)** and other good and valuable consideration, receipt of which is hereby acknowledged, ARTHUR A. RIEDEL ("Riedel") hereby releases BRIX MARITIME CO., a Delaware corporation, ST. JOHNS GROUP, INC., an Oregon corporation, LONGVIEW BOOMING, INC., a Washington corporation, their predecessors, successors, assigns, subsidiaries, affiliates, officers, directors, shareholders, employees, agents and attorneys and THE SIEGFRIED COMPANY, its partners, owners, predecessors, successors and assigns (collectively the "Indemnitees") of and from any and all claims, demands, damages, liabilities and actions or causes of action (whether at law or in equity) and known or unknown, from the beginning of time through the date of the execution of this release.

It is explicitly understood and agreed, however, that this Release shall not release or otherwise affect any agreement or obligation of any of the Indemnitees to not engage in environmental remediation or cleanup activities or to otherwise not compete with RIEDEL ENVIRONMENTAL TECHNOLOGIES, INC.

Further, Riedel hereby indemnifies and agrees to hold harmless each of the Indemnitees of and from all claims, demands, damages, liabilities and actions or causes of action (whether at law or in equity) asserted by any individual or entity presently controlled, owned or directed or which may in the future be owned, controlled or directed by Riedel except for any claims, demands, damages, liabilities and actions or causes of action (a) asserted by or on behalf of WILLAMETTE-WESTERN CORPORATION or RIEDEL ENVIRONMENTAL TECHNOLOGIES, INC., or their successors or assigns, or (b) that arise after the execution of this Release.

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This Release and Indemnity shall not apply to the terms and provisions of that certain Consulting Agreement dated December 28, 1992, between Riedel as Consultant and **BRIX MARITIME CO.**

Except as herein provided, this Release and Indemnity is intended as a full and final release of all claims, including, without limitation, all anticipated and unanticipated injuries, damages or losses resulting or arising by reason of Riedel's status as an individual, partner, officer, director, shareholder, employee, consultant, payee, promisee, obligee or otherwise in connection with the Indemnitees or the participation by Riedel, directly or indirectly, in the affairs of any of the Indemnitees.

It is understood and agreed that this Release and Indemnity shall not constitute an admission of liability by any of the Indemnitees hereunder (which liability is denied).

This Release and Indemnity is executed after full and mature consideration and consultation with legal counsel.

DATED this 29 day of December, 1992.

ARTHUR A. RIEDEL

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS OF BRIX MARITIME CO.

The Board of Directors of **BRIX MARITIME CO.** met at 6:00 p.m. in Portland, Oregon, on October 31, 1990, pursuant to notice. **PETER BRIX** acted as Chairman of the meeting. Present were directors **PETER J. BRIX, EDWARD S. BEALL** and **ROBERT J. DeARMOND, ROBERT A. HINDMAN,** the Secretary of the Company, **JAMES R. MOORE,** the legal counsel for the Company, and **WILLIAM KRAUTHOEFER,** a representative of the **UNITED STATES NATIONAL BANK OF OREGON,** the Company's lender. Also present was **ARTHUR A. RIEDEL,** one of the principal shareholders of the Company.

Mr. Brix announced that the Company had received the resignations of **LOUIS I. KAPLAN, THOMAS J. TOMJACK** and **THOMAS J. WALSH.** Legal counsel advised the Chairman that vacancies in the Board of Directors may be filled by a majority of the Directors remaining in office, even though less than a quorum under Delaware law. Following discussion, it was moved, seconded and unanimously:

> "**RESOLVED,** that **ARTHUR A. RIEDEL** and **ELI MORGAN** be and hereby are elected to the office of Director of the Company to serve until the next Annual Meeting of Shareholders and that their election should be effective immediately."

The Chairman advised the meeting that there was a quorum of the Board of Directors present for the transaction of business. By unanimous consent, the Minutes of the Board of Directors' meetings of May 31, 1990, and July 11, 1990, were approved as submitted.

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They also discussed the needs for new equipment and upon motion duly made and seconded, unanimously adopted the following resolution:

> **"RESOLVED,** that the corporation be and hereby is authorized to purchase the tug **"MARINE RETRIEVER"** from **SAUSE BROS.** at a cost of **$750,000.00** and to effect whatever improvements are necessary to make the tug fit for service."

The Secretary of the Company and legal counsel reported on the status of the merger and the payments to date to former shareholders. Legal counsel reported that there appeared to be no current litigation which was not being defended by the Company's insurers.

It was pointed out to the Board that inadvertently, by reason of the action of a broker, nine (9) shares of the corporate stock held by **ROBERT J. DeARMOND,** which was intended to be included as a capital contribution to **BRIX ACQUISTION CO.** was surrendered in the merger for a cash payment of **TWO THOUSAND ONE HUNDRED SEVENTY-FIVE DOLLARS ($2,175.00)** a share because such stock had been listed by the broker in street name. Following discussion, it was the consensus that Mr. DeArmond should be permitted to acquire nine (9) additional shares of the merged corporation for a purchase price of **TWO THOUSAND ONE HUNDRED SEVENTY-FIVE DOLLARS ($2,175.00)** per share. It was moved, seconded and unanimously:

> **"RESOLVED,** that the corporation be and hereby is authorized to issue nine (9) shares of its common stock, which is presently

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authorized but unissued, to **ROBERT J. DeARMOND** upon his agreement to subscribe therefor and to pay in cash the sum of **TWO THOUSAND ONE HUNDRED SEVENTY-FIVE DOLLARS ($2,175.00)** per share; and

> **"RESOLVED FURTHER,** that the officers of the corporation be and hereby are authorized to take such steps as may be necessary to carry out the foregoing resolution."

Mr. Hindman reported on the September 30, 1990, financial statement and the year-to-date financial statement. He also reported upon those companies in which the Company has an investment and upon certain freight write-offs which the Company has currently taken.

Mr. Beall reported on Columbia River and ocean towing operations. The Board was submitted and reviewed a list of new contracts and transactions in connection with the Company's operations.

The Chairman reported on additions and deletions to the fleet and other capital improvements and sales and responded to the questions from the Directors.

Following the election of new Directors, a discussion was held regarding Directors fees to be paid by the Company and it was moved, seconded and unanimously:

> **"RESOLVED,** that Board of Directors members **ROBERT J. DeARMOND, WALTER O. GRODAHL,** and **ELLISON MORGAN** shall receive **$500.00** per meeting plus any expenses incurred as a result of such meeting."

Mr. Beall indicated his intention to resign from the Board of Directors following the current meeting and the Board members discussed the appropriate size for the Board and number of

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directors. Following discussion, it was moved, seconded and unanimously:

> **"RESOLVED,** that the Board of Directors of the Company shall consist of five (5) directors, effective with the next meeting of the Board of Directors, such Directors to serve as provided in the Bylaws of the Company."

There being no further business the meeting was adjourned.

ROBERT A. HINDMAN, Secretary

Confidential Business Information

BRIX MARITIME CO.

MINUTES OF ANNUAL MEETING OF SHAREHOLDERS
July 6, 1990

The meeting was called to order at 10:00 a.m. by Peter Brix, President. Also present were Adelle Bjonskaas, Walter Grebe and Robert A. Hindman. Mr. Hindman, corporate Secretary, announced that the meeting was being held pursuant to a notice of annual meeting of shareholders dated June 26, 1990, called by the Board of Directors. A copy of the notice of annual meeting is attached hereto and by this reference made a part hereof. The Secretary announced that he caused the notice to be mailed to all shareholders of record as of the close of business on June 22, 1990, the record date fixed for determining shareholders entitled to notice of and to vote at this meeting as provided by the transfer agent. His certificate to that effect is attached to these minutes.

By unanimous consent, the reading of the minutes of the 1989 annual meeting was dispensed with and the minutes were adopted as prepared.

The President then appointed Ms. Adelle Bjonskaas as the inspector of the elections who had previously taken the oath of office, and her oath is attached hereto as an exhibit to these minutes. Ms. Bjonskaas then announced that there were no attending shareholders other than the President, Peter Brix, that she had examined the proxies submitted by the stockholders for the meeting and that a majority of the issued and outstanding shares of the

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common stock of the Company entitled to vote at this meeting were present, either in person or by proxy, to-wit: 79 percent.

Robert Hindman nominated the following persons to be elected as Directors, to hold office until the next annual meeting and until their successors are duly elected and qualified:

Edward S. Beall
Peter J. Brix
Robert J. DeArmond
Walter O. Grodahl
Louis I. Kaplan
Thomas J. Tomjack
Thomas J. Walsh

There being no further nominations, the nominations were closed and the nominees were all elected by a vote of 4,819 votes in favor and -0- votes against, with no abstentions. The President then declared the nominees duly elected Directors of the Company until their successors shall be elected and qualified.

There being no further business to come before the meeting, the meeting was adjourned at 10:15 a.m.

Robert A. Hindman, Secretary

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SHAREHOLDER VOTES

BRIX MARITIME CO.

ANNUAL SHAREHOLDERS MEETING

JULY 6, 1990

Votes for all directors:	4,819
Total votes received:	4,819

Adelle Bjorstrias

OATH OF INSPECTOR OF ELECTIONS

STATE OF OREGON)
) ss.
County of Multnomah)

I, Adelle Bjonskaas, appointed Inspector of Elections to act at the annual meeting of shareholders of Brix Maritime Co. held the 6th day of July 1990, do solemnly swear that I will fairly and to the best of my ability perform my duties in connection with the election of directors and in connection with all other matters required of me at such a meeting, and I will faithfully and with strict impartiality examine the proxys and canvass the votes cast at such meeting and truthfully and accurately report the results thereof.

Adelle Bjonskaas
INSPECTOR OF ELECTIONS

SUBSCRIBED & SWORN to before me this 6th day of July, 1989 90.

Arlene F. Struck
NOTARY PUBLIC FOR OREGON
My commission expires: 11/9/90

CERTIFICATE OF MAILING

I, ROBERT A. HINDMAN, do hereby certify that I, acting as Secretary of Brix Maritime Co., mailed to all shareholders of record as of the close of business on June 22, 1990 the attached notice of annual meeting which was addressed to each shareholder's last known address as shown on the corporate records of Brix Maritime Co. and its transfer agent, mailed as first class mail with postage prepaid.

DATED this 5th day of July, 1990.

Robert A. Hindman, Secretary

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SPECIAL MEETING OF SHAREHOLDERS

OF BRIX MARITIME CO.

A special meeting of Shareholders of Brix Maritime Co. was held commencing at 8:30 a.m. on Tuesday, March 21, 1989, in the 16th floor conference room of the Pacwest Center, 1211 SW Fifth Avenue, Portland, Oregon. Peter J. Brix, the President of Brix Maritime Co., presided at the meeting and welcomed the Shareholders present. He requested that all Shareholders present sign the Register of Attending Shareholders. The Chairman appointed James R. Moore as Acting Secretary in the absence of Robert Hindman, the Company's Secretary.

The Acting Secretary presented the Notice of the Special Meeting dated February 17, 1989. Without objection, the reading of the Notice was dispensed with. The Acting Secretary pointed out that the list of the Shareholders as of the record date, January 13, 1989, was available for examination by those Shareholders present. The Shareholders list was certified by the Transfer Agent. The Acting Secretary announced that the Notices of the meeting were mailed commencing on February 17, 1989, and concluded by February 20, 1989, and the Certificate of the Secretary of the Company was available for inspection to any interested Shareholder.

Mr. Brix directed that a copy of the Notice and the Certificate of Mailing be included with the Minutes of this meeting. The reading of the Minutes of the 1988 Annual Meeting was deferred until the 1989 Annual Meeting of Shareholders. The Shareholders

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present were advised that the Minutes of the Company were available for inspection. Mr. Brix advised the meeting that he had appointed Mrs. Adelle Bejonskaas as Inspector of Elections for the meeting and advised that the Inspector had taken the Oath of Office and directed the Secretary to file a copy of the Oath with the Minutes of the meeting. Mr. Brix called upon the Inspector of Elections to determine whether a quorum was present at the meeting.

Mrs. Bejonskaas announced that she had examined the Register of Attending Shareholders and the proxies present at the meeting and announced that a majority of the issued and outstanding shares of the common stock of the Company entitled to vote at the meeting were present, in person or by proxy, and that a quorum existed.

Mr. Brix called the meeting to order and announced the purpose of the meeting to consider and vote upon a proposal to merge Knappton Corporation, the Company's wholly-owned subsidiary, into Brix Maritime Co. and in connection with the merger to have a 500-to-1 reverse stock split and the fractional shares created by the reverse stock split will be entitled to receive $3.75 a share, in lieu of fractional shares, all as described in the proxy material mailed to the Shareholders.

Upon the request of Mr. Brix, the Acting Secretary moved that the Agreement and Plan of Merger between Brix Maritime Co. and its wholly-owned subsidiary, Knappton Corporation, which is presented to this meeting be approved; and that in connection with

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such Agreement and Plan of Merger the Restated Certificate of Incorporation of the Company be amended to reduce the authorized capital of the Company from 5,000,000 shares of common stock, of $1 par value, to 10,000 shares of common stock, without par value; and each of the issued and outstanding shares of the Company be reclassified into 1/500th share of common stock, without par value, and that no fractional shares be issued and that in lieu thereof the Shareholders have a right to receive $3.75 in cash for each 1/500th of a share to which they would otherwise be entitled.

Mr. Brix called for discussion and indicated that Company personnel and their attorneys were available to assist in any questions concerning the transaction. There was no discussion. Mr. Brix asked if there were any Shareholders present who wished to cast ballots in lieu of proxies submitted or any Shareholder who had not submitted proxies who wished to ballot. There were none. Mr. Brix requested the Inspector of Elections to tabulate the votes and to announce the result.

The Inspector of Elections announced that the Company had 3,158,439 shares outstanding as of the record date and that holders of 2,333,956 shares had voted in favor of approving the Agreement and Plan of Merger; that holders of 23,385 shares had voted against such approval and that 2,308 shares had abstained. She announced that a majority of all shares issued and outstanding had voted in favor of the merger and plan of reorganization and that the motion had carried.

Mr. Brix announced that the Agreement and Plan of

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Merger, including the reverse stock split and the purchase of fractional shares, had been approved and announced that Company personnel and the attorneys for the Company would be available following the meeting to answer any questions concerning the merger, the reverse stock split, the purchase of shares or related matters.

Mr. Brix asked if there was any other business to come before the meeting. No response having been made, the meeting was adjourned.

JAMES R. MOORE, Acting Secretary

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SHAREHOLDER VOTES

March 21, 1989

FOR:	2,333,956
AGAINST:	22,385
ABSTAIN:	2,308
TOTAL VOTES RECEIVED:	2,358,649
TOTAL SHARES OUTSTANDING:	3,158,439

OATH OF INSPECTOR OF ELECTIONS

STATE OF OREGON)
) ss.
County of Multnomah)

I, Adelle Bjonskaas, appointed Inspector of Elections to act at the special meeting of shareholders of Brix Maritime Co. held the 21st day of March 1989, do solemnly swear that I will fairly and to the best of my ability perform my duties in connection with the election of directors and in connection with all other matters required of me at such a meeting, and I will faithfully and with strict impartiality examine the ballots and canvass the votes cast at such meeting and truthfully and accurately report the results thereof.

Adelle Bjonskaas
INSPECTOR OF ELECTIONS

SUBSCRIBED & SWORN to before me this 20th day of March, 1989.

[illegible]
NOTARY PUBLIC FOR OREGON
My commission expires: [illegible]

MINUTES OF A SPECIAL MEETING OF THE BOARD OF DIRECTORS OF BRIX MARITIME CO.

A special meeting of the Board of Directors of Brix Maritime Co. was held at 10:15 a.m. on November 17, 1988, by telephone conference call originating from the office of the corporation in Portland, Oregon. All of the Directors participated in the meeting, each being able to hear and communicate to the other Directors. Also participating in the conference call were Robert Hindman, the Chief Financial Officer of the company, and James R. Moore, counsel for the company.

Peter Brix presided at the meeting and outlined the discussion areas in connection with the matters raised at the last Board meeting concerning the cost to the company of remaining a reporting company under the securities laws, the large number of small shareholders resulting from the Chapter 11 reorganization of the company, as well as the costs of continuing the status of the company as a holding company with all operations being performed primarily through subsidiary operating companies. At the previous board meeting, the management was asked to explore alternatives and the Chairman, as well as Mr. Grodahl and Mr. Moore, outlined an alternative which would include a merger of the company with its wholly-owned subsidiary Knappton Corporation and a recapitalization of the stock which would permit all odd lot shareholders and certain other shareholders to realize a fair price for their stock without the burden of a broker's commission. The provisions of the plan as outlined would also permit smaller shareholders to

Confidential Business Information 00005222

acquire additional stock if they did not desire to convert their shareholdings to cash and the company (within certain limits) would assist in this process. The plan would also permit dissenter's rights in connection with the merger and recapitalization. There were questions from several directors and further discussion. It was pointed out that it would be appropriate to obtain independent expert advice on the value of the company's shares and that this should be accomplished at an early date if the directors determined to give authority to go forward with the merger and recapitalization. It was also pointed out in the discussion that it would be desirable if the independent directors would consult with the valuation experts and make recommendations to the Board in connection with the price to be paid for the company's shares.

Following discussion, it was moved, seconded and unanimously:

> **RESOLVED**, that management be and hereby is authorized to proceed with a merger and recapitalization plan in the format outlined at the meeting and that the officers of the company be and hereby are authorized to prepare for Board review a merger and recapitalization plan to present to the shareholders of the company and take such other steps as may be necessary or desirable and prepare such other or related documents in connection with such merger and recapitalization for review and action by the Board of Directors;
>
> **RESOLVED FURTHER**, that the officers of the company be and hereby are authorized to engage HLHZ Capital, a subsidiary of Houlihan, Lokey, Howard & Zukin, Inc. to render a preliminary valuation of the company and, if necessary, a written opinion on the fairness of a plan of merger and recapitalization from

Confidential Business Information 00005223

the standpoint of the company shareholders; and

RESOLVED FURTHER, that Messrs. Walsh, Kaplan, Tomjack and Grodahl are appointed a special committee of the Board to review with HLHZ Capital their preliminary valuation and to report their analysis and recommendation to the full Board.

The Chairman pointed out that in light of the action by the Board, it would probably be necessary to change the proposed meeting date of the Board of Directors presently set for January 5, 1989, to a date during the week of January 15, 1989, with the probability that the meeting would be held on January 20, 1989.

There being no further business, the meeting was adjourned.

ROBERT A. HINDMAN, Secretary

Confidential Business Information 00005224

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FILED

APR 4 1989 10AM

SECRETARY OF STATE

Filed for Record
State of Alaska

FEB 03 1994

Department of Commerce
and Economic Development

CERTIFICATE OF MERGER
OF
KNAPPTON CORPORATION
INTO
BRIX MARITIME CO.

The undersigned corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify:

FIRST: That the name and state of incorporation of each of the constituent corporations of the merger is as follows:

Name	State of Incorporation
Brix Maritime Co.	Delaware
Knappton Corporation	Delaware

SECOND: That an Agreement and Plan of Merger between Brix Maritime Co. and Knappton Corporation has been approved, adopted, certified, executed and acknowledged by each of the constituent corporations in accordance with the requirements of subsection (c) of Section 251 of the General Corporation Law of the State of Delaware.

THIRD: That the name of the surviving corporation of the merger is Brix Maritime Co.

FOURTH: The Restated Certificate of Incorporation of Brix Maritime Co., a Delaware corporation, shall be the Certificate of Incorporation of the surviving corporation except that Article Fourth of the Restated Certificate of Incorporation of the surviving corporation shall be amended to read as follows:

> "FOURTH: The total number of shares of stock which the corporation shall have authority to issue is ten thousand (10,000), consisting of common stock without par value per share. Each share of stock shall be entitled to one vote on any corporate action requiring a vote of stockholders, and the corporation is prohibited from issuing any non-voting stock or other non-voting equity securities."

FIFTH: That the executed Agreement and Plan of Merger between Brix Maritime Co. and Knappton Corporation is on file at the principal place of business of the surviving corporation. The address of the principal place of business of the surviving corporation is 9030 St. Helens Road, Portland, Oregon 97231.

SIXTH: That a copy of the Agreement and Plan of Merger between Brix Maritime Co. and Knappton Corporation will be furnished by the surviving corporation, on request and without cost, to any stockholder of any constituent corporation.

BRIX MARITIME CO.

By: _____
President

ATTEST:

By: _____
Secretary

Fee $10.00
+ 2.00 per county
+ 5.00 for copy (optional)

Total 87.00

Corporation Division - Business Registry

THIS SPACE FOR OFFICE USE ONLY

FILED
SEP 16 1994
SECRETARY OF STATE

Registry Number: 419919-85

ASSUMED BUSINESS NAME REGISTRATION

PLEASE TYPE OR PRINT LEGIBLY IN BLACK INK

1. ASSUMED BUSINESS NAME: Foss Maritime Company

2. Principal place of business: 660 West Ewing Street, Seattle, WA 98119
Street address City State Zip code

3. Authorized representative (ONE NAME ONLY): Joseph H. Langjahr

660 West Ewing Street, Seattle, WA 98119
Mailing Address City State Zip code

4. SIC code: 4400 (see back of this form)
Water Transportation

5. Registrants (attach a separate sheet if necessary):

Brix Maritime Co., 660 West Ewing Street, Seattle, WA 98119
Name #120596-89 Street address City State Zip code

Brix Rafting & Sorting Co., 9030 N.W. St. Helens Road, Portland, OR 97283
Name #087658-89 Street address City State Zip code

Brix Maritime Towing, Inc., 9030 N.W. St. Helens Road, Portland, OR 97283
Name #081472-17 Street address City State Zip code

** SEE ATTACHMENT FOR ADDITIONAL REGISTRANT **

6. Counties:

X All counties - statewide			
___ Baker	___ Douglas	___ Lake	___ Sherman
___ Benton	___ Gilliam	___ Lane	___ Tillamook
___ Clackamas	___ Grant	___ Lincoln	___ Umatilla
___ Clatsop	___ Harney	___ Linn	___ Union
___ Columbia	___ Hood River	___ Malheur	___ Wallowa
___ Coos	___ Jackson	___ Marion	___ Wasco
___ Crook	___ Jefferson	___ Morrow	___ Washington
___ Curry	___ Josephine	___ Multnomah	___ Wheeler
___ Deschutes	___ Klamath	___ Polk	___ Yamhill

7. Signature of all registrants (attach a separate sheet if necessary):

Joseph H. Langjahr

Joseph H. Langjahr, Vice Pres./Sec./Director for all registrants

8. Person to contact about this registration: James G. Kibble Daytime phone number: (206) 464-3939

TO RECEIVE A COPY OF THE FILED REGISTRATION WITH REGISTRY NUMBER, PLEASE ENCLOSE AN ADDITIONAL $5.00. MAKE CHECKS PAYABLE TO THE CORPORATION DIVISION.

(11/93)

CERTIFICATE

State of Oregon

OFFICE OF THE SECRETARY OF STATE
Corporation Division

I, BILL BRADBURY, Secretary of State of Oregon, and Custodian of the Seal of said State, do hereby certify:

That the attached Document File for:

BRIX MARITIME CO.

is a true copy of the original documents that have been filed with this office.

In Testimony Whereof, I have hereunto set my hand and affixed hereto the Seal of the State of Oregon.

BILL BRADBURY, Secretary of State

By Marilyn R. Smith

Marilyn R. Smith
May 20, 2003

Come visit us on the internet at http://www.filinginoregon.com
FAX (503) 378-4381

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STATE OF OREGON

Corporation Division

FILED
IN THE OFFICE OF THE SECRETARY OF STATE OF THE STATE OF OREGON
JUN [illegible]
CORPORATION DIVISION

Oregon Registry No.:
120596-89

FOREIGN BUSINESS CORPORATION
APPLICATION FOR AUTHORITY TO TRANSACT BUSINESS

1. **Name of the Corporation:**

TWIN CITY BARGE, INC.

2. **State or Country of Incorporation:** Delaware

3. **Date of Incorporation:** July 8, 1968

4. **Name of Registered Agent and Office:**

James R. Moore
Suites 1600-1800
1211 SW Fifth Avenue
Portland, Oregon 97204

5. **Principal Office of Business:**

9030 NW St. Helens Road
Portland, Oregon 97231

6. **Mailing Address for Purposes of Corporation Division Notices:**

Suites 1600-1800
1211 SW Fifth Avenue
Portland, Oregon 97204

7. **Names/Addresses of Corporation's President and Secretary:**

President: Peter J. Brix
P.O. Box 03018, Portland, OR 97203

Secretary: Robert A. Hindman
P.O. Box 03018, Portland, OR 97203

Robert A. Hindman, Secretary

Person to contact about filing: Susan K. Dodson, (503) 796-2404

VOID WITHOUT WATERMARK OR IF ALTERED OR ERASED

Submit the Original
And One True Copy
No Fee Required

STATE OF OREGON
CORPORATION DIVISION
158 12th Street NE
Salem, OR 97310

FILED
IN THE OFFICE OF THE SECRETARY
OF STATE OF THE STATE OF OREGON
DEC 12 1988
CORPORATION DIVISION

Oregon Registry Number:
120596-89

AMENDMENT TO APPLICATION FOR AUTHORITY
TO TRANSACT BUSINESS

PLEASE TYPE OR PRINT LEGIBLY IN BLACK INK

1. The name of the corporation prior to the amendment:

TWIN CITY BARGE, INC.

2. The corporate name has been changed to:

BRIX MARITIME CO.

3. The duration of the corporation has been changed to:

☐ Perpetual

OR

☐ _____ , _____

(Please give a specific date.)

Execution: [signature] Robert A. Hindman, Secretary
Signature Printed Name Title

Person to contact about this filing: Susan K. Dodson 796-2404
Name Daytime Phone Number

Submit the original and a true copy to the Corporation Division, 158 12th Street NE, Salem, Oregon 97310. There is no fee required. If you have questions, please call (503) 378-4166.

FBC-2 (6/87)

VOID IF ALTERED OR ERASED

VOID WITHOUT WATERMARK OR IF ALTERED OR ERASED

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00005388

SEE LEGEND ON REVERSE

INCORPORATED UNDER THE LAWS OF

State of Delaware

No. 9

SHARES 379

BRIX MARITIME CO.

This Certifies that Arthur A. Riedel is the owner of Three Hundred Seventy Nine (379) * * * * * * * * * * * * * Shares of the Capital Stock of

transferable only on the Books of the Corporation by the holder hereof in person or by duly authorized Attorney, on surrender of this Certificate properly endorsed.

In Witness Whereof the duly authorized officers of this Corporation have hereunto subscribed their names and caused the corporate Seal to be hereto affixed at Portland, Oregon this 12th day of March A.D. 19 91

Peter J. Brix, President

Robert A. Hindman, Secretary

Shares Each

© GOOD NS

Confidential Business Information

SEE LEGEND ON REVERSE

INCORPORATED UNDER THE LAWS OF

State of Delaware

No. 9

SHARES 379

BRIX MARITIME CO.

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Peter J. Brix, President

Robert A. Hindman, Secretary

Shares Each

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Confidential Business Information

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. NO TRANSFER, PLEDGE, OR OTHER DISPOSITION OF THE SECURITIES FOR CONSIDERATION MAY BE EFFECTED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933 AND APPLICABLE STATE SECURITIES LAWS OR AN OPINION OF COUNSEL ACCEPTABLE BY THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO AND RESTRICTED BY THE TERMS OF A SHAREHOLDER'S AGREEMENT DATED SEPTEMBER 29, 1988. A COPY OF THE SHAREHOLDER'S AGREEMENT IS AVAILABLE AT THE OFFICE OF SCHWARZ, WILLIAMSON & HYATT.

CERTIFICATE

FOR 379 SHARES

Capital Stock

Brix Maritime Co.

ISSUED TO

Arthur A. Riedel

DATED

3/12/91

For Value Received, hereby sell, assign and transfer unto

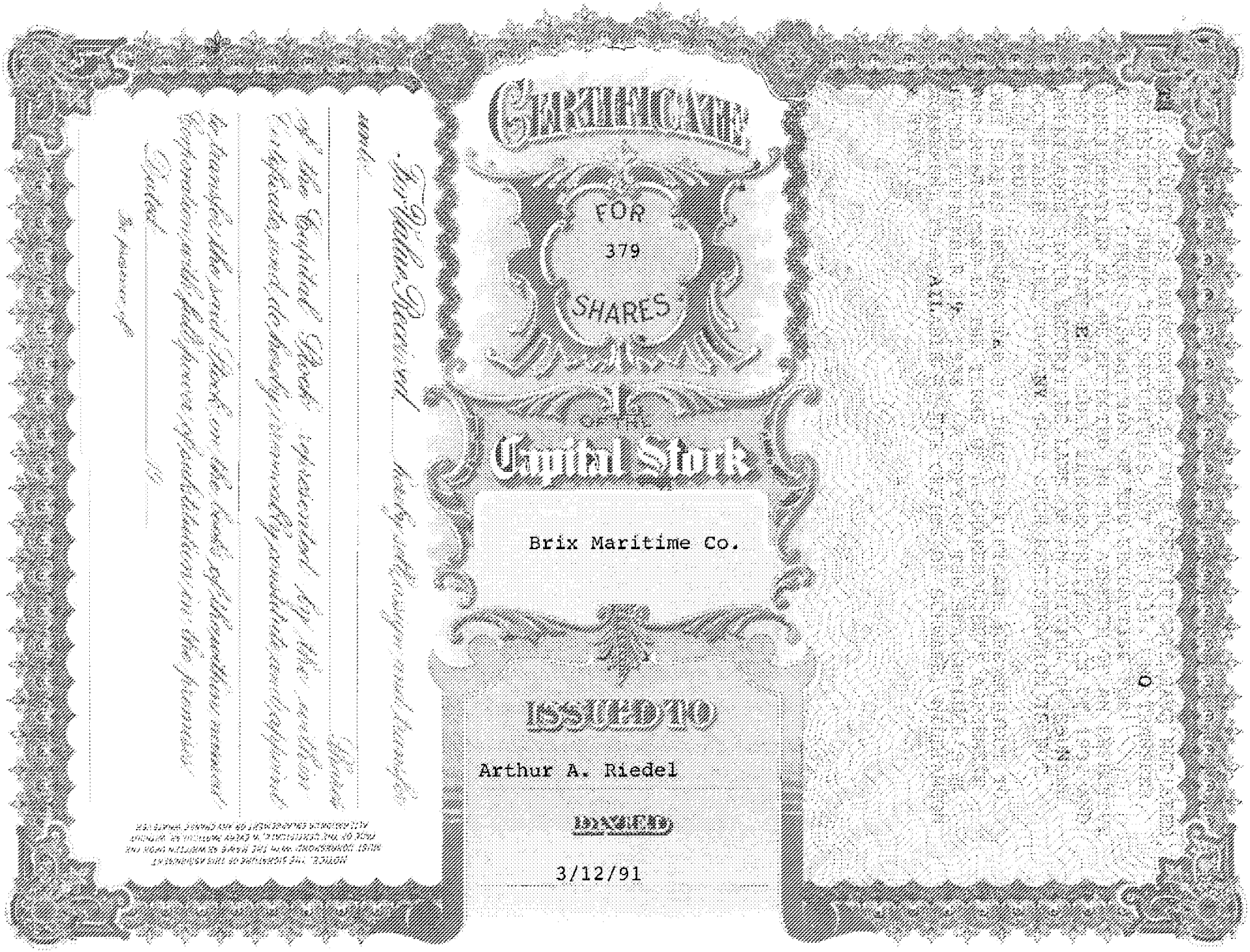
Shares of the Capital Stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

to transfer the said Stock on the books of the within named Corporation with full power of substitution in the premises.

Dated 19

In presence of

NOTICE: THE SIGNATURE OF THIS ASSIGNMENT MUST CORRESPOND WITH THE NAME AS WRITTEN UPON THE FACE OF THE CERTIFICATE, IN EVERY PARTICULAR, WITHOUT ALTERATION OR ENLARGEMENT OR ANY CHANGE WHATEVER.



No. N S

LITHO IN U.S.A.

Certificate

No. 9

For 379 Shares

Issued to

Arthur A. Riedel

Dated 19

Transferred from

Dated 19

No. Original Certificate.	No. Original Shares.	No. of Shares Transferred.

Received this Certificate

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. NO TRANSFER, PLEDGE, OR OTHER DISPOSITION OF THE SECURITIES FOR CONSIDERATION MAY BE EFFECTED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933 AND APPLICABLE STATE SECURITIES LAWS OR AN OPINION OF COUNSEL ACCEPTABLE BY THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED.

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CERTIFICATE

FOR 379 SHARES

Capital Stock

Brix Maritime Co.

ISSUED TO

Arthur A. Riedel

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In presence of

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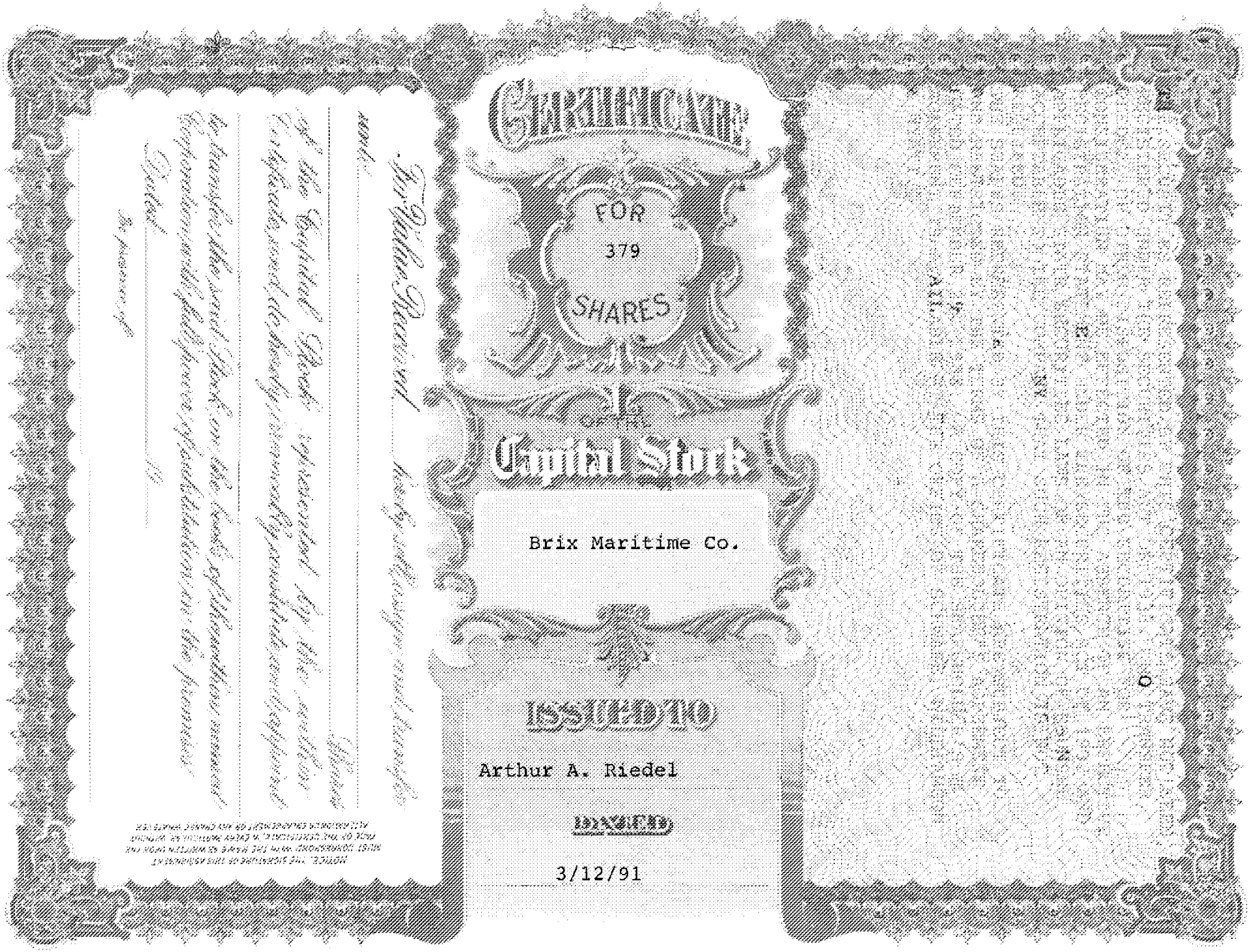

No. N S

LITHO IN U.S.A.

Certificate

No. 9

For 379 Shares

Issued to

Arthur A. Riedel

Dated 19

Transferred from

Dated 19

No. Original Certificate.	No. Original Shares.	No. of Shares Transferred.

Received this Certificate

SEE LEGENDS ON F 'ERSE

INCORPORATED UNDER THE LAWS OF

State of Delaware

No. 4 SHARES 1858

BRIX MARITIME CO.

Common Stock, no par value

This Certifies that Arthur A. Riedel is the owner of

One Thousand eight hundred and fifty eight Shares of the Capital Stock of

Brix Maritime Co.

transferable only on the Books of the Corporation by the holder hereof in person or by duly authorized Attorney, on surrender of this Certificate properly endorsed.

In Witness Whereof the duly authorized officers of this Corporation have hereunto subscribed their names and caused the corporate Seal to be hereto affixed at [illegible] Oregon

this 17th day of August A.D. 19 90

Peter J. Brix, President

Robert A. Hindman, Secretary

Shares no par Each

Confidential Business Information

SEE LEGENDS ON F 'ERSE

INCORPORATED UNDER THE LAWS OF

State of Delaware

No. 4 SHARES 1858

BRIX MARITIME CO.

Common Stock, no par value

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In Witness Whereof the duly authorized officers of this Corporation have hereunto subscribed their names and caused the corporate Seal to be hereto affixed at [illegible] Oregon

this 17th day of August A.D. 19 90

Peter J. Brix, President

Robert A. Hindman, Secretary

Shares no par Each

Confidential Business Information

Certificate

FOR

SHARES

OF THE

Capital Stock

Brix Maritime Co.

ISSUED TO

Arthur A. Riedel

DATED

August 17, 1990

Confidential Business Information

No. M 5

LITHO IN U.S.A.

Certificate

No. 4

For 1858 Shares

Issued to

Arthur A. Riedel

Dated 3-17 1990

Transferred from

Dated 19

No. Original Certificate	No. Original Shares	No. of Shares Transferred

Received this Certificate

SEE LEGENDS ON REVER

INCORPORATED UNDER THE LAWS OF

State of Delaware

No. 3

SHARES 1

BRIX MARITIME CO.

Common Stock, no par value

This Certifies that Arthur A. Riedel is the owner of

One Shares of the Capital Stock of

Brix Maritime Co.

transferable only on the Books of the Corporation by the holder hereof in person or by duly authorized Attorney, on surrender of this Certificate properly endorsed.

In Witness Whereof the duly authorized officers of the Corporation have hereunto subscribed their names and impressed the corporate Seal to be hereunto affixed at Portland, Oregon this 17th day of August A. D. 1990

Peter J. Brix, President

Robert A. Hindman, Secretary

shares no par Each

Confidential Business Information

0000553

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. NO TRANSFER, PLEDGE OR OTHER DISPOSITION OF THE SECURITIES FOR CONSIDERATION MAY BE EFFECTED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933 AND APPLICABLE STATE SECURITIES LAWS OR AN OPINION OF COUNSEL ACCEPTABLE TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO AND RESTRICTED BY THE TERMS OF A SHAREHOLDER'S AGREEMENT DATED SEPTEMBER 30, 1988. A COPY OF THE SHAREHOLDER'S AGREEMENT IS AVAILABLE AT THE OFFICE OF SEAWARE, WILLIAMSON & HEAD.

CERTIFICATE FOR SHARES OF THE Capital Stock

Brix Maritime Co.

ISSUED TO

Arthur A. Riedel

DATED

August 17, 1990

For Value Received _____ *hereby sell, assign and transfer*

unto _____

_____ *Shares*

of the Capital Stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

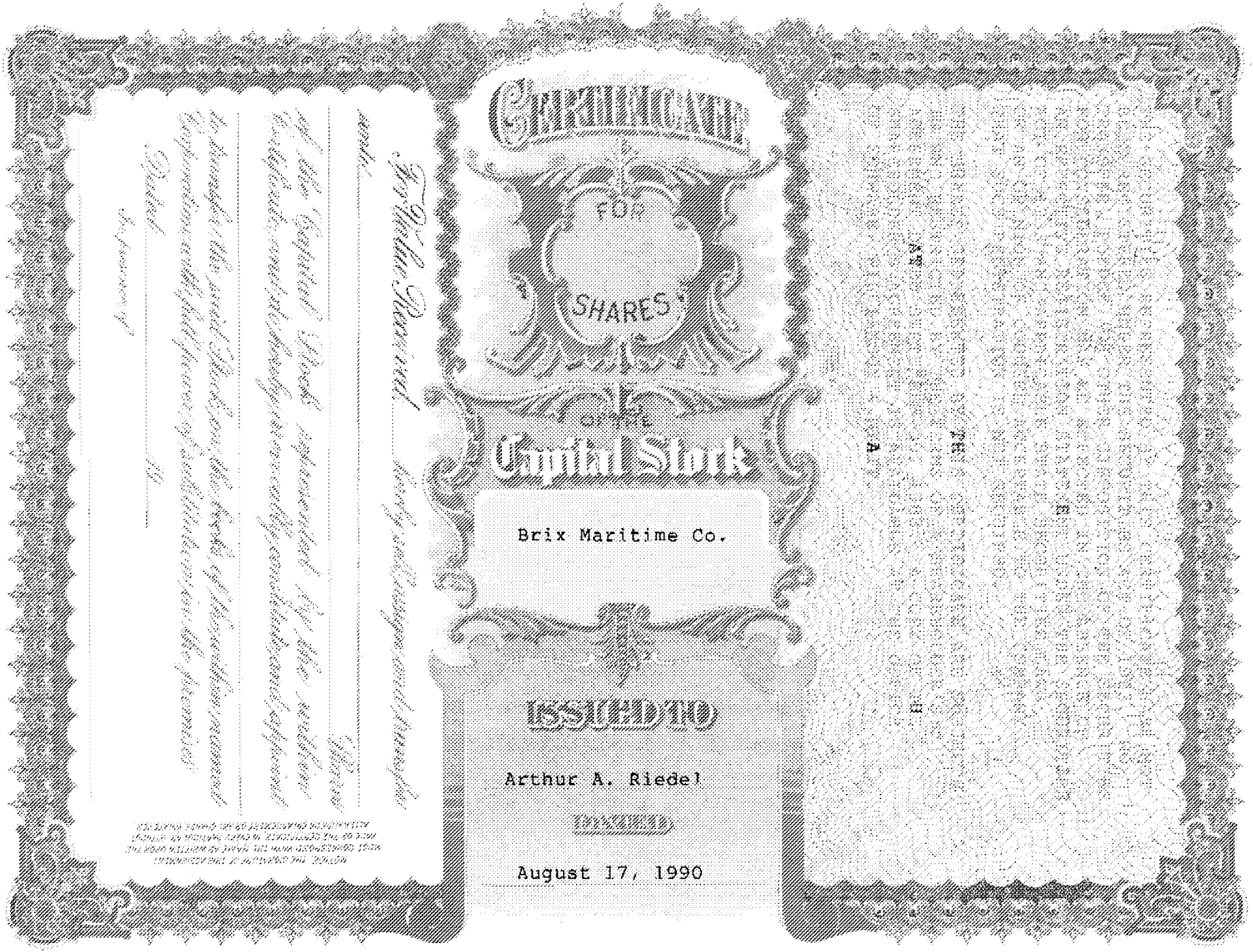
_____

to transfer the said Stock on the books of the within named Corporation with full power of substitution in the premises.

Dated _____ *19* ____

In presence of

NOTICE: THE SIGNATURE OF THIS ASSIGNMENT MUST CORRESPOND WITH THE NAME AS WRITTEN UPON THE FACE OF THE CERTIFICATE, IN EVERY PARTICULAR WITHOUT ALTERATION OR ENLARGEMENT OR ANY CHANGE WHATEVER.



No. M S

LITHO IN U.S.A.

Certificate

No. 3

For 1 Shares

Issued to

Arthur K. Riedel

Dated 8-17 1990

Transferred from

Dated 19

No. Original Certificate.	No. Original Shares.	No. of Shares Transferred.

Received this Certificate

Certificate

FOR

SHARES

OF THE

Capital Stock

Brix Maritime Co.

ISSUED TO

Arthur A. Riedel

DATED

August 17, 1990

Confidential Business Information

No. M 5

LITHO IN U.S.A.

Certificate

No. 4

For 1858 Shares

Issued to

Arthur A. Riedel

Dated 3-17 1990

Transferred from

Dated 19

No. Original Certificate	No. Original Shares	No. of Shares Transferred

Received this Certificate

SEE LEGENDS ON REVER

INCORPORATED UNDER THE LAWS OF

State of Delaware

No. 3

SHARES 1

BRIX MARITIME CO.

Common Stock, no par value

This Certifies that Arthur A. Riedel is the owner of

One Shares of the Capital Stock of

Brix Maritime Co.

transferable only on the Books of the Corporation by the holder hereof in person or by duly authorized Attorney, on surrender of this Certificate properly endorsed.

In Witness Whereof the duly authorized officers of the Corporation have hereunto subscribed their names and impressed the corporate Seal to be hereunto affixed at Portland, Oregon this 17th day of August A. D. 1990

Peter J. Brix, President

Robert A. Hindman, Secretary

shares no par Each

Confidential Business Information

0000553

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CERTIFICATE FOR SHARES OF THE Capital Stock

Brix Maritime Co.

ISSUED TO

Arthur A. Riedel

DATED

August 17, 1990

For Value Received _____ *hereby sell, assign and transfer*

unto _____

_____ *Shares*

of the Capital Stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

_____

to transfer the said Stock on the books of the within named Corporation with full power of substitution in the premises.

Dated _____ *19* ____

In presence of

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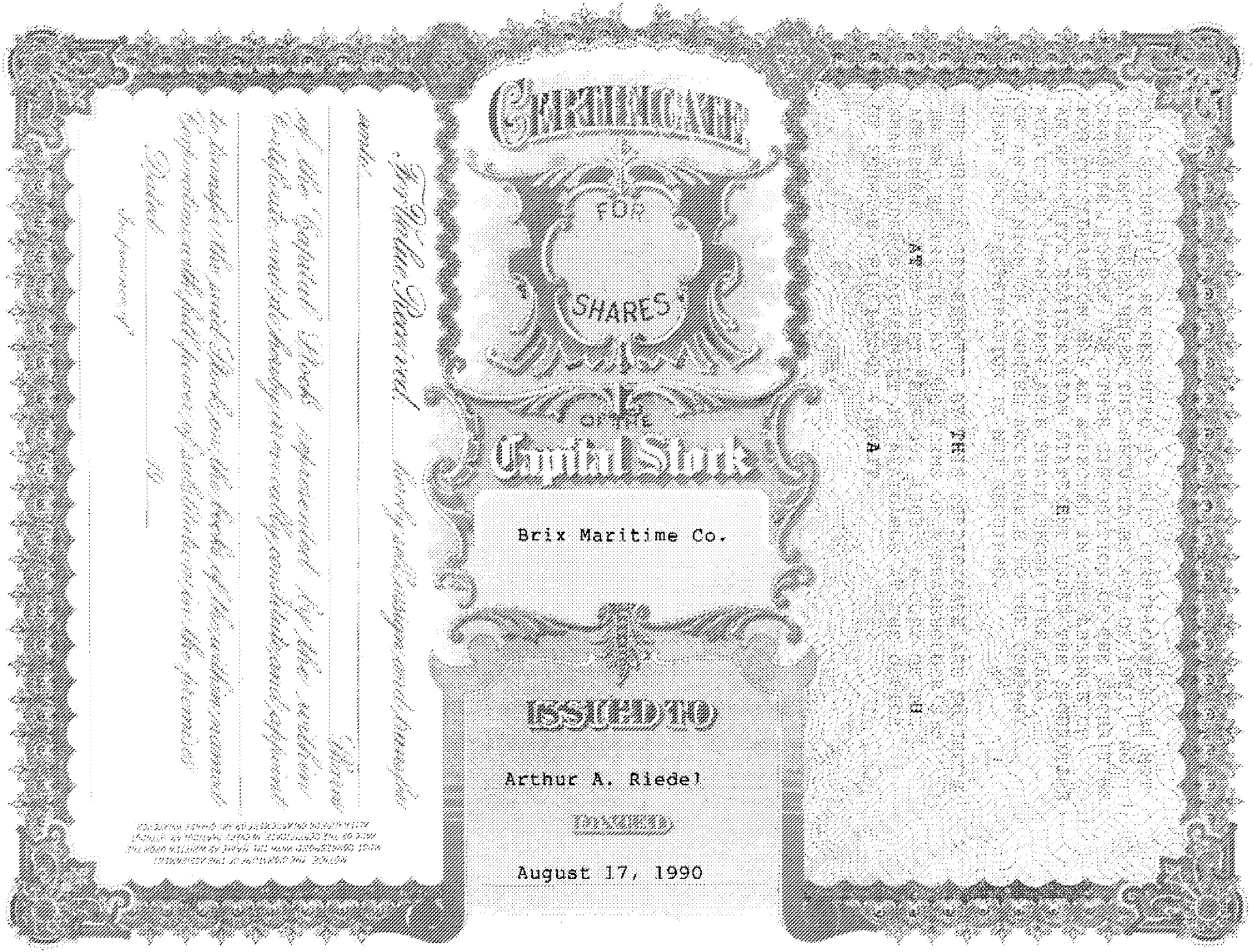

No. M S

LITHO IN U.S.A.

Certificate

No. 3

For 1 Shares

Issued to

Arthur K. Riedel

Dated 8-17 1990

Transferred from

Dated 19

No. Original Certificate.	No. Original Shares.	No. of Shares Transferred.

Received this Certificate

BRIX MARITIME CO.

UNANIMOUS CONSENT IN LIEU OF THE 2006 ANNUAL MEETING OF SHAREHOLDERS AND THE BOARD OF DIRECTORS

The undersigned, being the sole shareholder and the sole director of Brix Maritime Co., a Delaware corporation (the "Corporation"), hereby waive all notices, statutory and otherwise, and unanimously consent to the following corporate action in lieu of holding a meeting for that purpose, pursuant to Title 8, Sections 228 and 141(f) of the General Corporation Law of the State of Delaware:

1. Election of Directors

RESOLVED, that the shareholder hereby elects the following person to serve on the Board of Directors of the Corporation until the next annual meeting of the shareholder or until his successor is elected and qualified:

Paul E. Stevens

2. Election of Officers

RESOLVED, that the Board of Directors elects the following persons to serve as officers of the Corporation until the next annual meeting of the Board or until their successors are elected and qualified:

President	Gary C. Faber
Vice President & Treasurer	Kevin L. Orstad
Secretary	Frank H. Williamson
Assistant Secretary	Steven E. Giese

3. Distributions

WHEREAS, the Board has determined, pursuant to Section 170, Delaware General Corporation Law, based on financial statements of the Corporation presented to the Board, that after giving effect to the below-described distributions, the Corporation will be able to pay its debts as they become due in the usual course of business and the Corporation's total assets will exceed its total liabilities: now therefore, it is hereby

RESOLVED, that the Board approves and ratifies distributions made to the parent corporation, in an amount determined by the Treasurer, prior to the end of calendar year 2006; provided that, after giving effect to the distributions made hereunder, the Corporation will remain able to pay its debts as they become due in the usual course of business and the Corporation's total

assets will remain in excess of the sum of its total liabilities plus any shareholder's preferential rights in liquidation.

4. Ratification of Acts

RESOLVED, that all actions taken by the corporate officers and the Board of Directors on behalf of the Corporation since the last annual meeting are hereby ratified and approved.

5. Counterparts

RESOLVED, that this Consent by the undersigned may be executed in counterparts (including by facsimile), shall be effective upon the date of the last signature hereon below, and when effective, may be treated by all persons as having the same effect as if the resolutions herein contained were lawfully adopted at a meeting actually held upon due and proper notice.

[Remainder of Page Intentionally Left Blank]

SHAREHOLDER:

FOSS MARITIME COMPANY

By _____ Dated 20 March 2007
Paul E. Stevens, Chief Executive Officer

DIRECTOR:

_____ Dated 20 March 2007
Paul E. Stevens

Confidential Business Information 00005564

BRIX MARITIME CO.

UNANIMOUS CONSENT IN LIEU OF THE 2005 ANNUAL MEETING OF SHAREHOLDERS AND THE BOARD OF DIRECTORS

The undersigned, being the sole shareholder and the sole director of Brix Maritime Co., a Delaware corporation (the "Corporation"), hereby waive all notices, statutory and otherwise, and unanimously consent to the following corporate action in lieu of holding a meeting for that purpose, pursuant to Title 8, Sections 228 and 141(f) of the General Corporation Law of the State of Delaware:

1. Amended and Restated Certificate of Incorporation

WHEREAS, the Board of Directors believes it to be in the best interest of the Corporation and its sole shareholder to amend and restate the Corporation's Certificate of Incorporation; now, therefore, it is hereby

RESOLVED, that the Board of Directors hereby approves the Amended and Restated Certificate of Incorporation (the "Amended and Restated Certificate"), in the form attached hereto as Exhibit A, and recommends the Amended and Restated Certificate to Foss Maritime Company, the sole shareholder, for its approval in accordance with the General Corporation Law of the State of Delaware; and

WHEREAS, Foss Maritime Company concurs that it is in the best interest of the Corporation to amend and restate the Corporation's Certificate of Incorporation; now, therefore, it is hereby

RESOLVED, that Foss Maritime Company hereby approves the Amended and Restated Certificate, in the form attached hereto as Exhibit A; and

RESOLVED FURTHER, that upon approval of the Amended and Restated Certificate by Foss Maritime Company, any officer of the Corporation is hereby authorized and directed to sign and file with the Secretary of State of the State of Delaware the Amended and Restated Certificate of Incorporation.

2. Amended and Restated Bylaws

WHEREAS, the Board of Directors and the sole shareholder believe it is in the best interest of the Corporation to amend and restate the Bylaws of the Corporation; now, therefore, it is hereby

RESOLVED, that the Amended and Restated Bylaws in the form attached hereto as Exhibit B is hereby approved, ratified and confirmed.

Confidential Business Information

3. Election of Directors

RESOLVED, that the shareholder hereby elects the following person to serve on the Board of Directors of the Corporation until the next annual meeting of the shareholder or until his successor is elected and qualified:

Paul E. Stevens

4. Election of Officers

RESOLVED, that the Board of Directors elects the following persons to serve as officers of the Corporation until the next annual meeting of the Board or until their successors are elected and qualified:

President	Steve T. Scalzo
Vice President & Treasurer	Douglas D. Johnson
Secretary	Frank H. Williamson
Assistant Secretary	Steven E. Giese

5. Distributions

WHEREAS, the Board has determined, pursuant to Section 170, Delaware General Corporation Law, based on financial statements of the Corporation presented to the Board, that after giving effect to the below-described distributions, the Corporation will be able to pay its debts as they become due in the usual course of business and the Corporation's total assets will exceed its total liabilities: now therefore, it is hereby

RESOLVED, that the Board approves and ratifies distributions made to the parent corporation, in an amount determined by the Treasurer, prior to the end of calendar year 2005; provided that, after giving effect to the distributions made hereunder, the Corporation will remain able to pay its debts as they become due in the usual course of business and the Corporation's total assets will remain in excess of the sum of its total liabilities plus any shareholder's preferential rights in liquidation.

6. Ratification of Acts

RESOLVED, that all actions taken by the corporate officers and the Board of Directors on behalf of the Corporation since the last annual meeting are hereby ratified and approved.

7. Counterparts

RESOLVED, that this Consent by the undersigned may be executed in counterparts (including by facsimile), shall be effective upon the date of the last signature hereon below, and when effective, may be treated by all persons as having the same effect as if the resolutions herein contained were lawfully adopted at a meeting actually held upon due and proper notice.

[Remainder of Page Intentionally Left Blank]

Confidential Business Information

SHAREHOLDER:

FOSS MARITIME COMPANY

By _____ Dated 1/6/06
Paul E. Stevens, Chairman & CEO

DIRECTOR:

_____ Dated 1/6/06
Paul E. Stevens

Confidential Business Information

BRIX MARITIME CO.

UNANIMOUS CONSENT IN LIEU OF THE 2004 ANNUAL MEETING OF SHAREHOLDERS AND THE BOARD OF DIRECTORS

The undersigned, being the sole shareholder and all of the members of the Board of Directors of Brix Maritime Co., a Delaware corporation (the "Corporation"), hereby waive all notices, statutory and otherwise, and unanimously consent to the following corporate action in lieu of holding a meeting for that purpose, pursuant to Title 8, Sections 228 and 141(f) of the Delaware Corporation Law:

1. Election of Directors

RESOLVED, that the shareholder hereby elects the following person to serve on the Board of Directors of the Corporation until the next annual meeting of the shareholder or until his successor is elected and qualified:

Steve T. Scalzo

2. Election of Officers

RESOLVED, that the Board of Directors elects the following persons to serve as officers of the Corporation until the next annual meeting of the Board or until their successors are elected and qualified:

President	Steve T. Scalzo
Vice President & Treasurer	Douglas D. Johnson
Secretary	Frank H. Williamson
Assistant Secretary	Steven E. Giese

3. Distributions

WHEREAS, the Board has determined, pursuant to Section 170, Delaware General Corporation Law, based on financial statements of the Corporation presented to the Board, that after giving effect to the below-described distributions, the Corporation will be able to pay its debts as they become due in the usual course of business and the Corporation's total assets will exceed its total liabilities: now therefore, it is hereby

RESOLVED, that the Board approves and ratifies distributions made to the parent corporation, in an amount determined by the Treasurer, prior to the end of calendar year 2004; provided that, after giving effect to the distributions made

Confidential Business Information 00005610

hereunder, the Corporation will remain able to pay its debts as they become due in the usual course of business and the Corporation's total assets will remain in excess of the sum of its total liabilities plus any shareholder's preferential rights in liquidation.

4. Ratification of Acts

RESOLVED, that all actions taken by the corporate officers and the directors on behalf of the Corporation since the last annual meeting are hereby ratified and approved.

5. Counterparts

RESOLVED, that this Consent by the undersigned may be executed in counterparts, shall be effective upon the date of the last signature hereon below, and when effective, may be treated by all persons as having the same effect as if the resolutions herein contained were lawfully adopted at a meeting actually held upon due and proper notice.

SHAREHOLDER:

FOSS MARITIME COMPANY

By _____ Dated 12/10/04
Steve T. Scalzo, President

DIRECTOR:

_____ Dated 12/10/04
Steve T. Scalzo

Confidential Business Information 00005611

BRIX MARITIME CO.

UNANIMOUS CONSENT IN LIEU OF THE 2003 ANNUAL MEETING OF SHAREHOLDERS AND THE BOARD OF DIRECTORS

The undersigned, being the sole shareholder and all of the members of the Board of Directors of Brix Maritime Co., a Delaware corporation (the "Corporation"), hereby waive all notices, statutory and otherwise, and unanimously consent to the following corporate action in lieu of holding a meeting for that purpose, pursuant to Title 8, Sections 228 and 141(f) of the Delaware Corporation Law:

1. Election of Directors

RESOLVED, that the shareholder hereby elects the following person to serve on the Board of Directors of the Corporation until the next annual meeting of the shareholder or until his successor is elected and qualified:

Steve T. Scalzo

2. Election of Officers

RESOLVED, that the Board of Directors elects the following persons to serve as officers of the Corporation until the next annual meeting of the Board or until their successors are elected and qualified:

President	Steve T. Scalzo
Senior Vice President	Thomas F. Coburn
Vice President & Secretary	Joseph H. Langjahr
Vice President & Treasurer	Douglas D. Johnson
Assistant Secretary	Steven E. Giese

3. Distributions

WHEREAS, the Board has determined, pursuant to Section 170, Delaware General Corporation Law, based on financial statements of the Corporation presented to the Board, that after giving effect to the below-described distributions, the Corporation will be able to pay its debts as they become due in the usual course of business and the Corporation's total assets will exceed its total liabilities: now therefore, it is hereby

RESOLVED, that the Board approves and ratifies distributions made to the parent corporation, in an amount determined by the Treasurer, prior to the end of calendar year 2003; provided that, after giving effect to the distributions made

Confidential Business Information

hereunder, the Corporation will remain able to pay its debts as they become due in the usual course of business and the Corporation's total assets will remain in excess of the sum of its total liabilities plus any shareholder's preferential rights in liquidation.

4. Ratification of Acts

RESOLVED, that all actions taken by the corporate officers and the directors on behalf of the Corporation since the last annual meeting are hereby ratified and approved.

5. Counterparts

RESOLVED, that this Consent by the undersigned may be executed in counterparts, shall be effective upon the date of the last signature hereon below, and when effective, may be treated by all persons as having the same effect as if the resolutions herein contained were lawfully adopted at a meeting actually held upon due and proper notice.

SHAREHOLDER:

FOSS MARITIME COMPANY

By _____ Dated 12/11/03
Steve T. Scalzo, President

DIRECTOR:

_____ Dated 12/11/03
Steve T. Scalzo

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UNANIMOUS CONSENT IN LIEU OF
2002 ANNUAL MEETING OF THE SHAREHOLDER
AND THE BOARD OF DIRECTORS OF
BRIX MARITIME CO.

The undersigned, being the sole shareholder and all of the members of the Board of Directors of Brix Maritime Co., a Delaware corporation, hereby waive all notices, statutory or otherwise, and unanimously consent in writing to the adoption of the following resolutions and the taking of the following actions without a meeting pursuant to Title 8, Sections 228(a) and 141(f) of the Delaware Corporation Law, such resolutions and actions to have the same force and effect as if adopted and taken at a meeting of the corporation's shareholder and directors duly called and held for such purpose.

1. Election of Board of Directors.

RESOLVED, that the shareholder hereby elects the following persons to serve on the Board of Directors of the corporation until the next annual meeting of the shareholder or until their successors are elected and qualified:

Steve T. Scalzo

2. Election of Officers.

RESOLVED, that the newly elected Board of Directors hereby elects the following persons to serve as officers of the corporation until the next annual meeting of the Board or until their successors are elected and qualified:

President:	Steve T. Scalzo
Vice President and Treasurer:	Douglas D. Johnson
Senior Vice President:	Thomas F. Coburn
Vice President and Secretary:	Joseph H. Langjahr

3. Ratification of Acts.

RESOLVED, that all actions taken on behalf of the corporation by the directors and officers since and during the last annual meeting and through the date hereof are hereby ratified and approved.

Confidential Business Information 00005646

SHAREHOLDER:

FOSS MARITIME COMPANY

By _____ Date signed: 3/26/03
Steve T. Scalzo
President and Chief Executive Officer

DIRECTORS:

_____ Date signed: 3/26/03
Steve T. Scalzo

Confidential Business Information 00005647

UNANIMOUS WRITTEN CONSENT IN LIEU OF
2001 ANNUAL MEETING OF THE SHAREHOLDER
AND THE BOARD OF DIRECTORS OF
BRIX MARITIME CO.

The undersigned, being the sole shareholder and all of the members of the Board of Directors of Brix Maritime Co., a Delaware corporation, hereby waive all notices, statutory or otherwise, and unanimously consent in writing to the adoption of the following resolutions and the taking of the following actions without a meeting pursuant to Title 8, Sections 228(a) and 141(f) of the Delaware Corporation Law, such resolutions and actions to have the same force and effect as if adopted and taken at a meeting of the corporation's shareholder and directors duly called and held for such purpose.

1. Calling of the Meeting. The meeting will be deemed to have been called on December 7, 2001.

2. Election of Board of Directors.

RESOLVED, that the shareholder hereby elects the following persons to serve on the Board of Directors of the corporation until the next annual meeting of the shareholder or until their successors are elected and qualified:

Steve T. Scalzo
Thomas V. Van Dawark

3. Election of Officers.

RESOLVED, that the newly elected Board of Directors hereby elects the following persons to serve as officers of the corporation until the next annual meeting of the Board or until their successors are elected and qualified:

President:	Steve T. Scalzo
Vice President and Treasurer:	Douglas D. Johnson
Senior Vice President:	Thomas F. Coburn
Vice President and Secretary:	Joseph H. Langjahr

4. Ratification of Acts.

RESOLVED, that all actions taken on behalf of the corporation by the directors and officers since and during the last annual meeting and through the date hereof are hereby ratified and approved.

Confidential Business Information 00005783

5. Execution in Counterparts.

RESOLVED, that this Consent by the undersigned may be executed in counterparts, shall be effective upon the date of the last signature hereon below, and when effective may be treated by all persons as having the same effect as if the resolutions herein contained were lawfully adopted at a meeting actually held upon due and proper notice.

DATED as of this 7th day of December, 2001.

SHAREHOLDER:

FOSS MARITIME COMPANY

By _____ Date signed: 12/7/2001
Steve T. Scalzo
President and Chief Executive Officer

DIRECTORS:

_____ Date signed: 12/7/2001
Steve T. Scalzo

_____ Date signed: 12/7/2001
Thomas V. Van Dawark

Confidential Business Information 00005784

UNANIMOUS WRITTEN CONSENT IN LIEU OF
2000 ANNUAL MEETING OF THE SHAREHOLDER
AND THE BOARD OF DIRECTORS OF
BRIX MARITIME CO.

The undersigned, being the sole shareholder and all of the members of the Board of Directors of Brix Maritime Co., a Delaware corporation, hereby waive all notices, statutory or otherwise, and unanimously consent in writing to the adoption of the following resolutions and the taking of the following actions without a meeting pursuant to Title 8, Sections 228(a) and 141(f) of the Delaware Corporation Law, such resolutions and actions to have the same force and effect as if adopted and taken at a meeting of the corporation's shareholder and directors duly called and held for such purpose.

1. Calling of the Meeting. The meeting will be deemed to have been called on December 29, 2000.

2. Election of Board of Directors.

RESOLVED, that the shareholder hereby elects the following persons to serve on the Board of Directors of the corporation until the next annual meeting of the shareholder or until their successors are elected and qualified:

Steve T. Scalzo
Thomas V. Van Dawark

3. Election of Officers.

RESOLVED, that the newly elected Board of Directors hereby elects the following persons to serve as officers of the corporation until the next annual meeting of the Board or until their successors are elected and qualified:

President:	Steve T. Scalzo
Vice President and Treasurer:	Douglas D. Johnson
Senior Vice President:	Thomas F. Coburn
Vice President:	Warner D. Nelson
Vice President and Secretary:	Joseph H. Langjahr

4. Ratification of Acts.

RESOLVED, that all actions taken on behalf of the corporation by the directors and officers since and during the last annual meeting and through the date hereof are hereby ratified and approved.

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5. Execution in Counterparts.

RESOLVED, that this Consent by the undersigned may be executed in counterparts, shall be effective upon the date of the last signature hereon below, and when effective may be treated by all persons as having the same effect as if the resolutions herein contained were lawfully adopted at a meeting actually held upon due and proper notice.

DATED as of this 29th day of December, 2000.

SHAREHOLDER:

FOSS MARITIME COMPANY

By _____ Date signed: 12/29/2000
Steve T. Scalzo
President and Chief Executive Officer

DIRECTORS:

_____ Date signed: 12/29/2000
Steve T. Scalzo

_____ Date signed: 12/29/2000
Thomas V. Van Dawark

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FORM S. F. E.

Incorporated Under the Laws of the State of Delaware

See Transfer Restrictions on Reverse

NUMBER 27

SHARES 5,177

BRIX MARITIME, CO.

Total Authorized Shares: 10,000 Shares of Common Stock No Par Value

This Certifies that FOSS MARITIME COMPANY is the registered holder of Five Thousand One Hundred Seventy-Seven (5,177) Common Shares

transferable only on the books of the Corporation by the holder hereof in person or by Attorney upon surrender of this Certificate properly endorsed.

In Witness Whereof, the said Corporation has caused this Certificate to be signed by its duly authorized officers and its Corporate Seal to be hereunto affixed this 15th day of April A.D. 2003

Steve T. Scalzo, President

Joseph H. Langjahr, Secretary

Confidential Business Information

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PROGRESS REPORT – FIRST QUARTER 2006

BRIX MARITIME COMPANY
PORTLAND, OREGON

Prepared for

Brix Maritime Company

Prepared by

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224

April 14, 2006

PROGRESS REPORT – FIRST QUARTER 2006

BRIX MARITIME COMPANY
PORTLAND, OREGON

Prepared for

Brix Maritime Company

Prepared by

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224

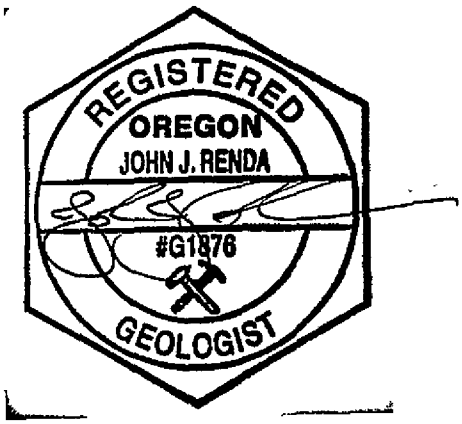
April 14, 2006

Progress Report – First Quarter 2006

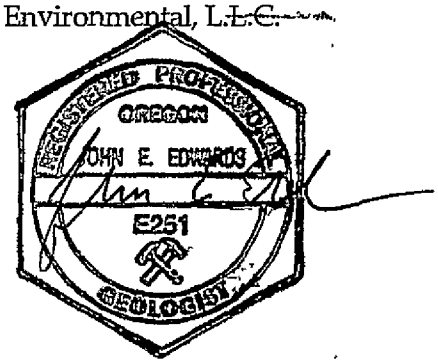
Brix Maritime Company

Portland, Oregon

The material and data in this report were prepared under the supervision and direction of the undersigned.



John J. Renda, R.G.
Anchor Environmental, L.~~L.C.~~



John Edwards, R.G. C.E.G.
Anchor Environmental, L.L.C.

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1 INTRODUCTION

This Progress Report was prepared in accordance with Section II(H) of the Oregon Department of Environmental Quality (DEQ) Voluntary Agreement for Remedial Investigation and Source Control Measures (ECSI 2464 No. LQDVC-NWR-02-03). This report covers the work completed during the quarter ending March 31, 2006 for the Brix Maritime site in Portland, Oregon (Figure 1) and is divided into the following subject areas:

- Actions Taken During the First Quarter
- Actions Scheduled for the Second Quarter
- Data Generated in the First Quarter
- Summaries of Problems and Actions Taken To Resolve Problems

2 ACTIONS TAKEN DURING THE FIRST QUARTER

- Anchor submitted the Fourth Quarter 2005 progress report to DEQ in January 2006.
- Water levels were measured in monitoring wells MW-1 through MW-8 and at the river staff gauge on February 16, 2006.
- Monitoring wells MW-1, MW-3, MW-4, and MW-5 were sampled on February 16, 2006.
- Monitoring well MW-4 was resampled on March 16, 2006 to confirm test results from the February 16, 2006 sampling.

3 ACTIONS SCHEDULED FOR THE SECOND QUARTER

- In May 2006, water levels will be measured in monitoring wells MW-1 through MW-8 and at the river staff gage.
- Monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5 (if sufficient water is present), MW-6, and MW-7 will be sampled in May 2006.
- Prepare and submit the First Quarter Progress Report (this report) to DEQ.
- Begin preparation of Source Control Decision Document as outlined in Section 7 of the Portland Harbor Joint Source Control Strategy.

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4 DATA GENERATED IN THE FIRST QUARTER

4.1 Hydrology Data and Potentiometric Surface Map

Water levels were measured in all onsite monitoring wells and at the river staff gauge on February 16, 2006. Water levels and groundwater elevations based on the 1988 North American Vertical Datum (NAVD 88) are presented in Table 1. No free-phase petroleum hydrocarbons were detected in any of the monitoring wells.

During the water level measurements, the river bank was examined for petroleum hydrocarbon seeps or sheens. No petroleum hydrocarbon seeps or sheens were observed.

A groundwater potentiometric surface map, using the February 16, 2006 water level measurements, is shown on Figure 2. Consistent with all past monitoring events, the contour pattern indicates that shallow groundwater flows west to east from the upland portion of the site to the river.

4.2 Groundwater Sampling

Monitoring wells MW-1, -3, -4, and -5 were sampled on February 16, 2006. Field sampling procedures, field parameters, field sampling data sheets, and chain of custody documentation are in Appendix A. Monitoring well MW-4 was resampled on March 16, 2006.

4.3 Groundwater Analytical Testing

The groundwater samples, including one duplicate sample, were analyzed for total petroleum hydrocarbons (TPH) as gasoline by NWTPH-Gx; TPH as diesel and heavy oils by NWTPH-Dx; Polycyclic Aromatic Hydrocarbons (PAHs) by U.S. Environmental Protection Agency (USEPA) Method 8270-SIM; Volatile Organic Compounds (VOCs) by USEPA Method 8260. The analytical results are presented in Tables 2 through 4. A copy of the laboratory report is in Appendix B. Concentrations at MW-4 were typically an order of magnitude lower in March compared to February results.

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4.4 Data Validation

Review of the sampling and laboratory records showed no apparent discrepancies between samples collected in the field and those analyzed in the laboratory. The data are judged to be acceptable for their intended use. The data validation review of the laboratory records is summarized in Appendix C.

5 SUMMARIES OF PROBLEMS AND ACTIONS TAKEN TO RESOLVE PROBLEMS

No problems were encountered.

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TABLES

Table 1
Hydrology Data
Brix Maritime
Portland, Oregon

Well	Reference Elevation (Feet NAVD88)	Screen Interval Feet NAVD88	Elevation Top of Perching Layer* (Feet NAVD88)	Date (MM/DD/YY)	DTW (feet)	Water above base of screen (Feet)	Water Elevation (Feet NAVD88)	Comments
Monitoring Wells								
MW-1	41.81	35.1 - 20.1	21.16	02/28/03	18.89	2.86	22.92	
MW-1	41.81	35.1 - 20.1	21.16	03/31/03	19.43	2.32	22.38	
MW-1	41.81	35.1 - 20.1	21.16	04/29/03	19.69	2.06	22.12	
MW-1	41.81	35.1 - 20.1	21.16	05/22/03	20.22	1.53	21.59	
MW-1	41.81	35.1 - 20.1	21.16	07/07/03	21.08	0.67	20.73	
MW-1	41.81	35.1 - 20.1	21.16	07/30/03	21.13	0.62	20.68	
MW-1	41.81	35.1 - 20.1	21.16	08/28/03	21.24	0.51	20.57	
MW-1	41.81	35.1 - 20.1	21.16	09/30/03	21.15	0.60	20.66	
MW-1	41.81	35.1 - 20.1	21.16	10/16/03	21.10	0.65	20.71	
MW-1	41.81	35.1 - 20.1	21.16	12/03/03	21.06	0.69	20.75	
MW-1	41.81	35.1 - 20.1	21.16	12/26/03	20.46	1.29	21.35	
MW-1	41.81	35.1 - 20.1	21.16	01/30/04	19.01	2.74	22.80	
MW-1	41.81	35.1 - 20.1	21.16	03/04/04	19.60	2.15	22.21	
MW-1	41.81	35.1 - 20.1	21.16	04/29/04	20.91	0.84	20.90	
MW-1	41.81	35.1 - 20.1	21.16	05/27/04	21.13	0.62	20.68	
MW-1	41.81	35.1 - 20.1	21.16	07/06/04	21.22	0.53	20.59	
MW-1	41.81	35.1 - 20.1	21.16	07/26/04	21.28	0.47	20.53	
MW-1	41.81	35.1 - 20.1	21.16	10/29/04	21.25	0.50	20.56	
MW-1	41.81	35.1 - 20.1	21.16	02/25/05	20.81	0.94	21.00	
MW-1	41.81	35.1 - 20.1	21.16	05/05/05	20.63	1.12	21.18	
MW-1	41.81	35.1 - 20.1	21.16	08/02/05	21.18	0.57	20.63	
MW-1	41.81	35.1 - 20.1	21.16	09/29/05	21.21	0.54	20.60	
MW-1	41.81	35.1 - 20.1	21.16	11/22/05	20.78	0.97	21.03	
MW-1	41.81	35.1 - 20.1	21.16	02/16/06	18.10	3.65	23.71	
MW-2	42.13	32.9 - 17.9	18.98	02/28/03	19.88	4.37	22.25	
MW-2	42.13	32.9 - 17.9	18.98	03/31/03	20.36	3.89	21.77	
MW-2	42.13	32.9 - 17.9	18.98	04/29/03	20.64	3.61	21.49	
MW-2	42.13	32.9 - 17.9	18.98	05/22/03	21.06	3.19	21.07	
MW-2	42.13	32.9 - 17.9	18.98	07/07/03	22.17	2.08	19.96	
MW-2	42.13	32.9 - 17.9	18.98	07/30/03	22.50	1.75	19.63	
MW-2	42.13	32.9 - 17.9	18.98	08/28/03	22.84	1.41	19.29	
MW-2	42.13	32.9 - 17.9	18.98	09/30/03	23.07	1.18	19.06	
MW-2	42.13	32.9 - 17.9	18.98	10/16/03	23.06	1.19	19.07	
MW-2	42.13	32.9 - 17.9	18.98	12/03/03	22.54	1.71	19.59	
MW-2	42.13	32.9 - 17.9	18.98	12/26/03	21.58	2.67	20.55	
MW-2	42.13	32.9 - 17.9	18.98	01/30/04	20.05	4.20	22.08	
MW-2	42.13	32.9 - 17.9	18.98	03/04/04	20.57	3.68	21.56	
MW-2	42.13	32.9 - 17.9	18.98	04/29/04	21.89	2.36	20.24	
MW-2	42.13	32.9 - 17.9	18.98	05/27/04	22.29	1.96	19.84	
MW-2	42.13	32.9 - 17.9	18.98	07/06/04	22.70	1.55	19.43	
MW-2	42.13	32.9 - 17.9	18.98	07/26/04	22.85	1.40	19.28	
MW-2	42.13	32.9 - 17.9	18.98	10/29/04	22.90	1.35	19.23	
MW-2	42.13	32.9 - 17.9	18.98	02/25/05	22.20	2.05	19.93	
MW-2	42.13	32.9 - 17.9	18.98	05/05/05	21.73	2.52	20.40	
MW-2	42.13	32.9 - 17.9	18.98	08/02/05	22.48	1.77	19.65	
MW-2	42.13	32.9 - 17.9	18.98	09/29/05	22.90	1.35	19.23	
MW-2	42.13	32.9 - 17.9	18.98	11/22/05	22.07	2.18	20.06	
MW-2	42.13	32.9 - 17.9	18.98	02/16/06	19.24	5.01	22.89	
MW-3	41.93	32.9 - 17.9	19.71	07/29/02	22.91	1.11	19.02	
MW-3	41.93	32.9 - 17.9	19.71	08/22/02	23.50	0.52	18.43	Oil detected in well, thickness estimated at 0.02 foot
MW-3	41.93	32.9 - 17.9	19.71	09/30/02	23.37	0.65	18.56	Oil detected in well, thickness estimated at 0.02 foot
MW-3	41.93	32.9 - 17.9	19.71	10/30/02	23.68	0.34	18.25	DTP = 23.49 (0.19 foot thick)
MW-3	41.93	32.9 - 17.9	19.71	11/27/02	23.30	0.72	18.63	DTP = 23.16 (0.14 foot thick)
MW-3	41.93	32.9 - 17.9	19.71	12/30/02	21.99	2.03	19.94	Oil noted on probe, product too thin to measure with interface probe
MW-3	41.93	32.9 - 17.9	19.71	02/28/03	19.75	4.27	22.18	Oil noted on probe, product too thin to measure with interface probe
MW-3	41.93	32.9 - 17.9	19.71	03/31/03	20.24	3.78	21.69	No oil noted on probe
MW-3	41.93	32.9 - 17.9	19.71	04/29/03	20.50	3.52	21.43	No oil noted on probe
MW-3	41.93	32.9 - 17.9	19.71	05/22/03	20.94	3.08	20.99	No oil noted on probe
MW-3	41.93	32.9 - 17.9	19.71	07/07/03	22.21	1.81	19.72	No oil noted on probe
MW-3	41.93	32.9 - 17.9	19.71	07/30/03	22.62	1.40	19.31	No oil noted on probe
MW-3	41.93	32.9 - 17.9	19.71	08/28/03	22.95	1.07	18.98	Oil noted on probe, product too thin to measure with interface probe
MW-3	41.93	32.9 - 17.9	19.71	09/30/03	23.15	0.87	18.78	DTP = 23.04 (0.11 foot thick)
MW-3	41.93	32.9 - 17.9	19.71	10/16/03	22.40	1.62	19.53	No oil noted on probe
MW-3	41.93	32.9 - 17.9	19.71	12/03/03	22.21	1.81	19.72	Sheen, product too thin to measure
MW-3	41.93	32.9 - 17.9	19.71	12/26/03	21.44	2.58	20.49	No oil noted on probe
MW-3	41.93	32.9 - 17.9	19.71	01/30/04	19.80	4.22	22.13	No oil noted on probe
MW-3	41.93	32.9 - 17.9	19.71	03/04/04	20.41	3.61	21.52	No oil noted on probe
MW-3	41.93	32.9 - 17.9	19.71	04/29/04	21.82	2.20	20.11	No oil noted on probe
MW-3	41.93	32.9 - 17.9	19.71	05/27/04	22.25	1.77	19.68	No oil noted on probe
MW-3	41.93	32.9 - 17.9	19.71	07/06/04	22.66	1.36	19.27	No oil noted on probe
MW-3	41.93	32.9 - 17.9	19.71	07/26/04	22.91	1.11	19.02	DTP = 22.89 (0.02 foot thick)
MW-3	41.93	32.9 - 17.9	19.71	10/29/04	22.29	1.73	19.64	Oil noted on probe, product too thin to measure with interface probe
MW-3	41.95	32.9 - 17.9	19.71	02/25/05	22.03	2.01	19.92	No oil noted on probe
MW-3	41.95	32.9 - 17.9	19.71	05/05/05	21.55	2.49	20.40	No oil noted on probe
MW-3	41.95	32.9 - 17.9	19.71	08/02/05	22.32	1.72	19.63	DTP = 22.31 (0.01 foot thick)
MW-3	41.95	32.9 - 17.9	19.71	09/29/05	22.37	1.67	19.58	Sheen noted on probe, product too thin to measure with interface probe
MW-3	41.95	32.9 - 17.9	19.71	11/22/05	21.97	2.07	19.98	Sheen noted on probe, product too thin to measure with interface probe
MW-3	41.95	32.9 - 17.9	19.71	02/16/06	19.12	4.92	22.83	No oil noted on probe

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Table 1
Hydrology Data
Brix Maritime
Portland, Oregon

Well	Reference Elevation (Feet NAVD88)	Screen Interval Feet NAVD88	Elevation Top of Perching Layer[2] (Feet NAVD88)	Date (MM/DD/YY)	DTW (feet)	Water above base of screen (Feet)	Water Elevation (Feet NAVD88)	Comments
MW-4	23.55	19.4 - 9.4	18.10	07/29/02	11.62	2.53	11.93	
MW-4	23.55	19.4 - 9.4	18.10	08/22/02	11.77	2.38	11.78	
MW-4	23.55	19.4 - 9.4	18.10	09/30/02	11.94	2.21	11.61	
MW-4	23.55	19.4 - 9.4	18.10	10/30/02	12.06	2.09	11.49	
MW-4	23.55	19.4 - 9.4	18.10	11/27/02	11.85	2.30	11.70	
MW-4	23.55	19.4 - 9.4	18.10	12/30/02	10.24	3.91	13.31	
MW-4	23.55	19.4 - 9.4	18.10	02/28/03	4.34	9.81	19.21	
MW-4	23.55	19.4 - 9.4	18.10	03/31/03	4.59	9.56	18.96	
MW-4	23.55	19.4 - 9.4	18.10	04/29/03	5.46	8.69	18.09	
MW-4	23.55	19.4 - 9.4	18.10	05/22/03	8.59	5.56	14.96	
MW-4	23.55	19.4 - 9.4	18.10	07/07/03	10.69	3.46	12.86	
MW-4	23.55	19.4 - 9.4	18.10	07/30/03	11.03	3.12	12.52	
MW-4	23.55	19.4 - 9.4	18.10	08/28/03	11.40	2.75	12.15	
MW-4	23.55	19.4 - 9.4	18.10	09/30/03	11.74	2.41	11.81	
MW-4	23.55	19.4 - 9.4	18.10	10/16/03	11.40	2.75	12.15	
MW-4	23.55	19.4 - 9.4	18.10	12/03/03	10.59	3.56	12.96	
MW-4	23.55	19.4 - 9.4	18.10	12/26/03	9.50	4.65	14.05	
MW-4	23.55	19.4 - 9.4	18.10	01/30/04	5.41	8.74	18.14	
MW-4	23.55	19.4 - 9.4	18.10	03/04/04	9.05	5.10	14.50	
MW-4	23.55	19.4 - 9.4	18.10	04/29/04	11.00	3.15	12.55	
MW-4	23.55	19.4 - 9.4	18.10	05/27/04	10.89	3.26	12.66	
MW-4	23.55	19.4 - 9.4	18.10	07/06/04	11.26	2.89	12.29	
MW-4	23.55	19.4 - 9.4	18.10	07/26/04	11.56	2.59	11.99	
MW-4	23.55	19.4 - 9.4	18.10	10/29/04	11.06	3.09	12.49	
MW-4	23.55	19.4 - 9.4	18.10	02/25/05	10.60	3.55	12.95	
MW-4	23.55	19.4 - 9.4	18.10	05/05/05	9.55	4.60	14.00	
MW-4	23.55	19.4 - 9.4	18.10	08/02/05	10.95	3.20	12.60	
MW-4	23.55	19.4 - 9.4	18.10	09/29/05	11.19	2.96	12.36	
MW-4	23.55	19.4 - 9.4	18.10	11/22/05	10.85	3.30	12.70	
MW-4	23.55	19.4 - 9.4	18.10	02/16/06	8.30	5.85	15.25	
MW-4	23.55	19.4 - 9.4	18.10	03/16/06	8.45	5.70	15.10	
MW-5	41.66	34.9 - 19.9	19.31	02/28/03	19.45	2.30	22.21	
MW-5	41.66	34.9 - 19.9	19.31	03/31/03	19.99	1.76	21.67	
MW-5	41.66	34.9 - 19.9	19.31	04/29/03	20.25	1.50	21.41	
MW-5	41.66	34.9 - 19.9	19.31	05/22/03	20.75	1.00	20.91	
MW-5	41.66	34.9 - 19.9	19.31	07/07/03	21.93	-0.18	19.73	Insufficient water to collect sample
MW-5	41.66	34.9 - 19.9	19.31	07/30/03	22.08	-0.33	19.58	dry
MW-5	41.66	34.9 - 19.9	19.31	08/28/03	22.08	-0.33	19.58	dry
MW-5	41.66	34.9 - 19.9	19.31	09/30/03	22.13	-0.38	19.53	dry
MW-5	41.66	34.9 - 19.9	19.31	10/16/03	22.10	-0.35	19.56	Insufficient water to collect sample
MW-5	41.66	34.9 - 19.9	19.31	12/03/03	22.13	-0.38	19.53	dry
MW-5	41.66	34.9 - 19.9	19.31	12/26/03	21.35	0.40	20.31	
MW-5	41.66	34.9 - 19.9	19.31	01/30/04	19.59	2.16	22.07	
MW-5	41.66	34.9 - 19.9	19.31	03/04/04	20.16	1.59	21.50	
MW-5	41.66	34.9 - 19.9	19.31	04/29/04	21.67	0.08	19.99	Insufficient water to collect sample
MW-5	41.66	34.9 - 19.9	19.31	05/27/04	21.99	-0.24	19.67	water level below bottom of screen (dry)
MW-5	41.66	34.9 - 19.9	19.31	07/06/04	21.98	-0.23	19.68	water level below bottom of screen (dry)
MW-5	41.66	34.9 - 19.9	19.31	07/26/04	dry	dry		dry
MW-5	41.66	34.9 - 19.9	19.31	10/29/04	22.00	-0.25	19.66	water level below bottom of screen (dry)
MW-5	41.66	34.9 - 19.9	19.31	02/25/05	21.85	-0.10	19.81	water level below bottom of screen (dry)
MW-5	41.66	34.9 - 19.9	19.31	05/05/05	21.41	0.34	20.25	
MW-5	41.66	34.9 - 19.9	19.31	08/02/05	22.01	-0.26	19.65	water level below bottom of screen (dry)
MW-5	41.66	34.9 - 19.9	19.31	09/29/05	22.01	-0.26	19.65	water level below bottom of screen (dry)
MW-5	41.66	34.9 - 19.9	19.31	11/22/05	22.00	-0.25	19.66	water level below bottom of screen (dry)
MW-5	41.66	34.9 - 19.9	19.31	02/16/06	18.91	2.84	22.75	
MW-6	41.21	31.4 - 16.4	20.49	07/07/03	20.26	4.56	20.95	
MW-6	41.21	31.4 - 16.4	20.49	07/30/03	20.57	4.25	20.64	
MW-6	41.21	31.4 - 16.4	20.49	08/28/03	21.02	3.80	20.19	
MW-6	41.21	31.4 - 16.4	20.49	09/30/03	21.02	3.80	20.19	
MW-6	41.21	31.4 - 16.4	20.49	10/16/03	20.93	3.89	20.28	
MW-6	41.21	31.4 - 16.4	20.49	12/03/03	21.53	3.29	19.68	
MW-6	41.21	31.4 - 16.4	20.49	12/26/03	19.24	5.58	21.97	
MW-6	41.21	31.4 - 16.4	20.49	01/30/04	17.70	7.12	23.51	
MW-6	41.21	31.4 - 16.4	20.49	03/04/04	18.16	6.66	23.05	
MW-6	41.21	31.4 - 16.4	20.49	04/29/04	19.66	5.16	21.55	
MW-6	41.21	31.4 - 16.4	20.49	05/27/04	20.17	4.65	21.04	
MW-6	41.21	31.4 - 16.4	20.49	07/06/04	20.71	4.11	20.50	
MW-6	41.21	31.4 - 16.4	20.49	07/26/04	21.23	3.59	19.98	
MW-6	41.21	31.4 - 16.4	20.49	10/29/04	21.48	3.34	19.73	
MW-6	41.21	31.4 - 16.4	20.49	02/25/05	19.78	5.04	21.43	
MW-6	41.21	31.4 - 16.4	20.49	05/05/05	19.19	5.63	22.02	
MW-6	41.21	31.4 - 16.4	20.49	08/02/05	20.57	4.25	20.64	
MW-6	41.21	31.4 - 16.4	20.49	09/29/05	21.25	3.57	19.96	
MW-6	41.21	31.4 - 16.4	20.49	11/22/05	20.58	4.24	20.63	
MW-6	41.21	31.4 - 16.4	20.49	02/16/06	17.45	7.37	23.76	

Table 1
Hydrology Data
Brix Maritime
Portland, Oregon

Well	Reference Elevation (Feet NAVD88)	Screen Interval Feet NAVD88	Elevation Top of Perching Layer[2] (Feet NAVD88)	Date (MM/DD/YY)	DTW (feet)	Water above base of screen (Feet)	Water Elevation (Feet NAVD88)	Comments
MW-7	40.95	31.5 - 16.5	15.79	07/07/03	21.21	3.25	19.74	
MW-7	40.95	31.5 - 16.5	15.79	07/30/03	21.76	2.70	19.19	
MW-7	40.95	31.5 - 16.5	15.79	08/28/03	22.32	2.14	18.63	
MW-7	40.95	31.5 - 16.5	15.79	09/30/03	22.67	1.79	18.28	
MW-7	40.95	31.5 - 16.5	15.79	10/16/03	22.72	1.74	18.23	
MW-7	40.95	31.5 - 16.5	15.79	12/03/03	22.90	1.56	18.05	
MW-7	40.95	31.5 - 16.5	15.79	12/26/03	20.32	4.14	20.63	
MW-7	40.95	31.5 - 16.5	15.79	01/30/04	18.26	6.20	22.69	
MW-7	40.95	31.5 - 16.5	15.79	03/04/04	18.96	5.50	21.99	
MW-7	40.95	31.5 - 16.5	15.79	04/29/04	20.49	3.97	20.46	
MW-7	40.95	31.5 - 16.5	15.79	05/27/04	21.10	3.36	19.85	
MW-7	40.95	31.5 - 16.5	15.79	07/06/04	21.98	2.48	18.97	
MW-7	40.95	31.5 - 16.5	15.79	07/26/04	22.40	2.06	18.55	
MW-7	40.95	31.5 - 16.5	15.79	10/29/04	22.99	1.47	17.96	
MW-7	40.95	31.5 - 16.5	15.79	02/25/05	20.80	3.66	20.15	
MW-7	40.95	31.5 - 16.5	15.79	05/05/05	20.20	4.26	20.75	
MW-7	40.95	31.5 - 16.5	15.79	08/02/05	21.60	2.86	19.35	
MW-7	40.95	31.5 - 16.5	15.79	09/29/05	22.47	1.99	18.48	
MW-7	40.95	31.5 - 16.5	15.79	11/22/05	22.05	2.41	18.90	
MW-7	40.95	31.5 - 16.5	15.79	02/16/06	18.31	6.15	22.64	
MW-8	41.73	24.8 - 19.8	20.00	02/25/05	21.15	0.78	20.58	
MW-8	41.73	24.8 - 19.8	20.00	05/05/05	21.81	0.12	19.92	
MW-8	41.73	24.8 - 19.8	20.00	08/02/05	21.19	0.74	20.54	
MW-8	41.73	24.8 - 19.8	20.00	09/29/05	21.33	0.60	20.40	
MW-8	41.73	24.8 - 19.8	20.00	11/22/05	20.63	1.30	21.10	
MW-8	41.73	24.8 - 19.8	20.00	02/16/06	19.39	2.54	22.34	
River Gauge[1]								
River	4.33	NA	NA	10/30/02	2.75	NA	7.08	
River	4.33	NA	NA	11/27/02	3.1	NA	7.43	
River	4.33	NA	NA	12/30/02	7.5	NA	11.83	
River	4.33	NA	NA	02/28/03	6.1	NA	10.43	
River	4.33	NA	NA	03/31/03	8.0	NA	12.33	
River	4.33	NA	NA	04/29/03	8.0	NA	12.33	
River	4.33	NA	NA	05/22/03	6.5	NA	10.83	
River	4.33	NA	NA	07/07/03	4.0	NA	8.33	
River	4.33	NA	NA	07/30/03	3.5	NA	7.83	
River	4.33	NA	NA	08/28/03	3.3	NA	7.63	
River	4.33	NA	NA	09/30/03	2.1	NA	6.43	
River	4.33	NA	NA	10/16/03	2.2	NA	6.53	
River	4.33	NA	NA	12/03/03	3.5	NA	7.83	
River	4.33	NA	NA	12/26/03	6.7	NA	11.03	
River	4.33	NA	NA	01/30/04	11.0	NA	15.33	
River	4.33	NA	NA	03/04/04	5.0	NA	9.33	
River	4.33	NA	NA	04/29/04	4.0	NA	8.33	
River	4.33	NA	NA	05/27/04	6.6	NA	10.93	
River	4.33	NA	NA	07/06/04	5.5	NA	9.83	
River	4.33	NA	NA	07/26/04	2.75	NA	7.08	
River	4.33	NA	NA	10/29/04	3.75	NA	8.08	
River	4.33	NA	NA	02/25/05	4.0	NA	8.33	
River	4.33	NA	NA	05/05/05	5.0	NA	9.33	
River	4.33	NA	NA	08/02/05	4.4	NA	8.73	
River	4.33	NA	NA	08/25/05	3.6	NA	7.93	
River	4.33	NA	NA	09/29/05	1.0	NA	5.33	
River	4.33	NA	NA	11/22/05	3.4	NA	7.73	
River	4.33	NA	NA	02/16/06	5.9	NA	10.23	

Note: DTW = Depth to Water; DTP = Depth to Product; NA = Not Applicable
1 - The river gauge is marked in 1-foot increments, field measurements are estimated to the closest 0.1 foot.
2 - Perching unit identified as Silty Sand in MW-1, MW-2, MW-3, and MW-6; Sandy Silt in MW-8; and Silt in MW-4, MW-5, and MW-7.

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Table 2
Total Petroleum Hydrocarbons
Brix Maritime
Portland, Oregon

Location (sample depth in ft bgs)	Matrix	Date Sampled	Diesel Range Organics		Residual Range Organics		Gasoline Range Organics	
MW-1	Water	07/07/03	0.27	L	0.5	U	1.3	H
MW-1	Water	10/16/03	0.73	L	0.5	U	8.1	H
MW-1	Water	01/30/04	0.60	L	0.5	U	4.0	H
MW-1	Water	04/29/04	0.71	L	0.5	U	5.8	H
MW-1 Duplicate	Water	04/29/04	0.79	L	0.5	U	5.7	H
MW-1	Water	07/26/04	0.92	L	0.5	U	9.3	Y
MW-1 Duplicate	Water	07/26/04	0.93	L	0.5	U	9.3	Y
MW-1	Water	10/29/04	1.10	L	0.5	U	8.8	Y
MW-1	Water	02/25/05	1.40	L	0.5	U	12.0	DY
MW-1 Duplicate	Water	02/25/05	1.30	L	0.5	U	11.0	DY
MW-1	Water	05/05/05	0.88	L	0.54	U	12.0	DY
MW-1 Duplicate	Water	05/05/05	0.85	L	0.52	U	12.0	DY
MW-1	Water	08/02/05	1.00	L	0.52	U	14.0	DY
MW-1	Water	11/22/05	1.30	Z	0.53	U	13.0	D
MW-1	Water	02/16/06	0.73	L	0.53	U	12.0	Y
MW-2	Water	07/07/03	0.25	U	0.5	U	0.05	U
MW-2	Water	10/16/03	0.27	U	0.53	U	0.05	U
MW-2	Water	01/30/04	0.25	U	0.5	U	0.05	U
MW-2	Water	04/29/04	0.25	U	0.5	U	0.05	U
MW-2	Water	07/26/04	0.25	U	0.5	U	0.25	U
MW-2	Water	10/29/04	0.25	U	0.5	U	0.25	U
MW-2	Water	05/05/05	0.27	U	0.53	U	0.25	U
MW-2	Water	11/22/05	0.28	U	0.55	U	0.25	U
MW-3	Water	07/30/02	3.4	Y	1.6	O		
MW-3	Water	07/07/03	1.9	Y	8.5	O	0.05	U
MW-3	Water	10/16/03	0.92	Y	1.8	O	0.059	Y
MW-3	Water	01/30/04	0.79	Y	0.6	O	0.05	U
MW-3	Water	04/29/04	0.7	Y	0.77	O	0.05	U
MW-3	Water	07/26/04	2.5	Y	8.3	O	0.25	U
MW-3	Water	10/29/04	1.2	Y	3.1	O	0.25	U
MW-3	Water	02/25/05	1.2	Y	1.8	O	0.25	U
MW-3	Water	05/05/05	1.0	Z	1.2	Z	0.25	U
MW-3	Water	08/02/05	1.2	Y	4.0	OJ	0.25	U
MW-3 Duplicate	Water	08/02/05	1.1	Z	1.7	OJ	0.25	U
MW-3	Water	11/22/05	0.78	Z	0.77	Z	0.25	U
MW-3 Duplicate	Water	11/22/05	0.67	Z	0.71	Z	0.25	U
MW-3	Water	02/16/06	0.56	Z	0.62	Z	0.25	U
MW-3 Duplicate	Water	02/16/06	0.54	Z	0.55	U	0.25	U
MW-4	Water	07/29/02	0.26	U	0.52	U		
MW-4	Water	07/07/03	0.25	U	0.52	O	0.05	U
MW-4 Duplicate	Water	07/07/03	0.25	U	0.5	U	0.05	U
MW-4	Water	10/16/03	0.25	U	0.5	U	0.65	Y
MW-4 Duplicate	Water	10/16/03	0.25	U	0.5	U	0.66	Y
MW-4	Water	01/30/04	0.25	U	0.5	U	0.05	U
MW-4	Water	04/29/04	0.25	U	0.5	U	0.05	U
MW-4	Water	07/26/04	0.25	U	0.5	U	0.25	U
MW-4	Water	10/29/04	0.73	Z	1.0	Z	0.25	U
MW-4 Duplicate	Water	10/29/04	0.63	Z	0.96	Z	0.25	U
MW-4	Water	02/25/05	0.25	U	0.50	U	0.25	U
MW-4	Water	05/05/05	0.26	U	0.51	U	0.25	U
MW-4	Water	08/02/05	0.28	U	0.55	U	0.25	U
MW-4	Water	11/22/05	0.27	U	0.53	U	0.25	U
MW-4	Water	02/16/06	0.54	Y	0.55	U	1.1	Y
MW-4	Water	03/16/06	0.28	U	0.55	U	0.25	U
MW-5	Water	01/30/04	0.62	L	0.5	U	1.4	H
MW-5 Duplicate	Water	01/30/04	0.63	L	0.5	U	1.5	H
MW-5	Water	05/05/05	1.3	L	0.55	U	5.2	Y
MW-5	Water	02/16/06	0.27	U	0.54	U	0.89	H
MW-6	Water	07/07/03	0.25	U	0.5	U	0.05	U
MW-6	Water	10/16/03	0.27	U	0.53	U	0.05	U
MW-6	Water	01/30/04	0.25	U	0.5	U	0.05	U
MW-6	Water	04/29/04	0.25	U	0.5	U	0.05	U
MW-6	Water	07/26/04	0.25	U	0.5	U	0.25	U
MW-6	Water	10/29/04	0.25	U	0.5	U	0.25	U
MW-6	Water	05/05/05	0.28	U	0.55	U	0.25	U
MW-6	Water	11/22/05	0.28	U	0.65	O	0.25	U
MW-7	Water	07/07/03	0.25	U	0.5	U	0.05	U
MW-7	Water	10/16/03	0.27	U	0.53	U	0.05	U
MW-7	Water	01/30/04	0.25	U	0.5	U	0.05	U
MW-7	Water	04/29/04	0.25	U	0.5	U	0.05	U
MW-7	Water	07/26/04	0.25	U	0.5	U	0.25	U
MW-7	Water	10/29/04	0.25	U	0.5	U	0.25	U
MW-7	Water	05/05/05	0.27	U	0.54	U	0.25	U
MW-7	Water	11/22/05	0.27	U	0.53	U	0.25	U
MW-8	Water	02/25/05	1.0	Y	1.3	O	0.25	U

Notes: Water concentrations are in mg/L. Soil concentrations are in mg/kg.
ft bgs = feet below ground surface.
D = The reported result is from a dilution.
U = Not detected at method reporting limit.
O = The fingerprint resembles oil, but does not match the calibration standard.
L = The fingerprint resembles a petroleum product, but the elution pattern indicates the presence of lighter weight constituents than the calibration standard.
H = The fingerprint resembles a petroleum product, but the elution pattern indicates the presence of heavier weight constituents than the calibration standard.
Y = The fingerprint resembles a petroleum product in the correct carbon range, but the elution pattern does not match the calibration standard.
Z = The chromatic fingerprint does not resemble a petroleum product.

TABLE 3
Polycyclic Aromatic Hydrocarbons
Brix Maritime
Portland, Oregon

Sample Designation	MW-1		MW-1		MW-1		MW-1		MW-1		MW-1 Dup		MW-1		MW-1 Dup		MW-1		MW-1		MW-1 Dup		MW-1		MW-1 Dup		MW-1		MW-1		MW-1	
Matrix	Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Date Sampled	02/28/03		07/07/03		10/16/03		01/30/04		04/29/04		04/29/04		07/26/04		07/26/04		10/29/04		02/25/05		02/25/05		05/05/05		05/05/05		08/02/05		11/22/05		02/16/06	
LPAHs	**LPAHs**																															
Naphthalene	23	D	23	D	160	D	110	D	170	D	150	D	170	D	170	D	160	D	150	D	170	D	210	D	190	D	180	D	200	D	200	D
Acenaphthylene	0.19		0.02	U	0.02	U	0.15	UB	0.02	U	0.02	U	0.019	U	0.019	U	0.020	U	0.10		0.088	Ui	0.083	Ui	0.072	Ui	0.071	Ui	0.087	Ui	0.099	Ui
Acenaphthene	0.43		0.38		0.34		0.17		0.30		0.23		0.34		0.33		0.33		0.33		0.38		0.34		0.31		0.32		0.39		0.18	
Dibenzofuran	0.12		0.067		0.085		0.032		0.062		0.057		0.073		0.074		0.085		0.093		0.10		0.075		0.060		0.084		0.086		0.041	
Fluorene	0.36		0.27		0.24		0.11		0.19		0.14		0.23		0.24		0.23		0.28		0.32		0.25		0.19		0.26		0.29		0.21	
Phenanthrene	1.8		0.56		0.42		0.16		0.34		0.27		0.36		0.36		0.32		0.44		0.53		0.34		0.32		0.35		0.43		0.61	
Anthracene	0.53		0.11		0.065		0.073		0.079		0.057		0.068		0.067		0.070		0.090		0.099		0.061		0.061		0.062		0.056		0.150	
2-Methylnaphthalene	9.0		7.9		42.0	D	40.0	D	46.0	D	40.0	D	51.0	D	49.0	D	42.0	D	46	D	53.0	D	56	D	49	D	46	D	69	D	52	D
Total LPAH	35.43		32.29		203.15		150.55		216.97		190.75		222.07		220.07		203.04		197.33		224.43		267.07		239.94		227.08		270.25		253.19	
HPAHs	**HPAHs**																															
Fluoranthene	4.3		0.5		0.3		0.39		0.33		0.24		0.31		0.33		0.21		0.27		0.31		0.38		0.34		0.26		0.35		1.0	
Pyrene	13	D	1.2		0.9		1.6		0.76		0.57		0.80		0.85		0.60		0.50		0.57		0.69		0.64		0.54		0.65		2.7	
Benz(a)anthracene	2.1		0.22		0.16		0.20		0.12		0.084		0.13		0.130		0.130		0.096		0.11		0.11		0.081		0.079		0.079		0.140	
Chrysene	2.7		0.27		0.24		0.24		0.16		0.11		0.15		0.15		0.15		0.11		0.12		0.14		0.11		0.11		0.11		0.23	
Benzo(b)fluoranthene	1.4		0.088		0.073		0.047		0.049		0.029		0.044		0.041		0.084		0.038		0.038		0.036		0.020	U	0.034		0.020	U	0.028	
Benzo(k)fluoranthene	1.1		0.098		0.096		0.053		0.061		0.036		0.047		0.043		0.082		0.034		0.044		0.038		0.021		0.021		0.020	U	0.022	
Benzo(a)pyrene	2.0		0.11		0.097		0.064		0.066		0.038		0.056		0.052		0.110		0.046		0.048		0.042		0.020		0.037		0.020	U	0.022	
Indeno(1,2,3-cd)pyrene	1.5		0.023		0.036		0.02	U	0.02	U	0.02	U	0.019	U	0.019	U	0.044		0.020	U	0.020	U	0.020	U	0.020	U	0.020	UJ	0.020	U	0.020	U
Dibenz(a,h)anthracene	0.17		0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.019	U	0.019	U	0.020	U	0.020	U	0.020	U	0.020	U	0.020	U	0.020	UJ	0.020	U	0.020	U
Benzo(g,h,i)perylene	1.5		0.028		0.043		0.02	U	0.021		0.20	U	0.019	U	0.019	U	0.055		0.020	U	0.020	U	0.020	U	0.020	U	0.020	UJ	0.020	U	0.020	U
Total HPAHs	29.77		2.53		1.98		2.59		1.57		1.11		1.54		1.60		1.47		1.09		1.24		1.44		1.21		1.08		1.19		4.14	

NOTE: µg/L = micrograms per liter or parts per billion.
B = detected in method blank at sigificant concentration.
D = the reported result is from a dilution.
J = estimated concentration.
U = not detected at or above the indicated method reporting limit.
i = the MRL/MDL has been elevated due to a chromatographic interference.

TABLE 3
Polycyclic Aromatic Hydrocarbons
Brix Maritime
Portland, Oregon

Sample Designation	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2
Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Date Sampled	02/28/03	07/07/03	10/16/03	01/30/04	04/29/04	07/26/04	10/29/04	05/05/05	09/29/05	11/22/05
LPAHs						**LPAHs**				
Naphthalene	0.082	0.02 U	0.023	0.037	0.023	0.18	0.026	0.020 U	0.020 U	0.020 U
Acenaphthylene	0.023	0.02 U	0.022 U	0.110 UB	0.020 U	0.13	0.021	0.020 U	0.020 U	0.020 U
Acenaphthene	0.02 U	0.02 U	0.022 U	0.020 U	0.020 U	0.024	0.020 U	0.020 U	0.020 U	0.020 U
Dibenzofuran	0.02 U	0.02 U	0.022 U	0.020 U	0.020 U	0.019 U	0.020 U	0.020 U	0.020 U	0.020 U
Fluorene	0.02 U	0.02 U	0.022 U	0.020 U	0.020 U	0.023	0.020 U	0.020 U	0.020 U	0.020 U
Phenanthrene	0.15	0.02 U	0.031	0.020 U	0.020 U	0.31	0.026	0.020 U	0.020 U	0.020 U
Anthracene	0.032	0.02 U	0.022 U	0.034	0.036	0.11	0.032	0.020 U	0.020 U	0.020 U
2-Methylnaphthalene	0.02 U	0.02 U	0.022 U	0.022	0.020 U	0.03	0.020 U	0.020 U	0.020 U	0.020 U
Total LPAH	0.29	0.02	0.05	0.09	0.06	0.81	0.11	0.02	0.02	0.02
HPAHs						**HPAHs**				
Fluoranthene	0.29	0.02 U	0.070	0.022	0.02 U	0.62	0.084	0.037	0.020 U	0.020 U
Pyrene	0.42	0.02 U	0.091	0.020	0.02 U	0.87	0.090	0.045	0.029	0.020 U
Benz(a)anthracene	0.11	0.02 U	0.023	0.020	0.02 U	0.31	0.043	0.022	0.020 U	0.020 U
Chrysene	0.17	0.02 U	0.042	0.02 U	0.02 U	0.48	0.060	0.026	0.020 U	0.020 U
Benzo(b)fluoranthene	0.14	0.02 U	0.036	0.020	0.02 U	0.48	0.080	0.030	0.020 U	0.020 U
Benzo(k)fluoranthene	0.13	0.02 U	0.035	0.023	0.02 U	0.42	0.061	0.022	0.020 U	0.020 U
Benzo(a)pyrene	0.19	0.02 U	0.022 U	0.035	0.02 U	0.73	0.10	0.042	0.020 U	0.020 U
Indeno(1,2,3-cd)pyrene	0.20	0.02 U	0.073	0.022	0.02 U	0.88	0.14	0.053	0.020 U	0.020 U
Dibenz(a,h)anthracene	0.02 U	0.02 U	0.022 U	0.020 U	0.02 U	0.10 J	0.02 U	0.020 U	0.020 U	0.020 U
Benzo(g,h,i)perylene	0.22	0.02 U	0.090	0.020	0.02 U	1.10	0.18	0.059	0.020 U	0.020 U
Total HPAHs	1.87	0.02	0.46	0.18	0.02	5.99	0.84	0.34	0.03	0.02

NOTE: µg/L = micrograms per liter or parts per billion.
B = detected in method blank at sigificant concentration.
D = the reported result is from a dilution.
J = estimated concentration.
U = not detected at or above the indicated method reporting limit.
i = the MRL/MDL has been elevated due to a chromatographic interference.

TABLE 3
Polycyclic Aromatic Hydrocarbons
Brix Maritime
Portland, Oregon

Sample Designation	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3 Dup	MW-3	MW-3 Dup	MW-3	MW-3 Dup
Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Date Sampled	07/30/02	02/28/03	07/07/03	10/16/03	01/30/04	04/29/04	07/26/04	10/29/04	02/25/05	05/05/05	08/02/05	08/02/05	11/22/05	11/22/05	02/16/06	02/16/06
LPAHs									**LPAHs**							
Naphthalene	0.36	0.75	0.34	0.34	0.11	0.35	0.28 D	0.040	0.17	0.082	0.086	0.088	0.084	0.086	0.034	0.035
Acenaphthylene	0.02 U	0.22	0.02 U	0.02 U	0.14 UB	0.02 U	0.38 D	0.038	0.022	0.020 U	0.0206	0.025	0.020 U	0.020 U	0.020 U	0.020 U
Acenaphthene	0.26	1.3	0.16	0.21	0.04	0.13	0.89 D	0.088	0.12	0.078	0.110	0.110	0.091	0.10	0.038	0.038
Dibenzofuran	0.025	0.11	0.02 U	0.021	0.020 U	0.035	0.19 U	0.02	0.022	0.021	0.024	0.024	0.024	0.027	0.020 U	0.020 U
Fluorene	0.09	1.0	0.1	0.11	0.037	0.082	0.84 D	0.039	0.063	0.054	0.071	0.066	0.070	0.072	0.032	0.033
Phenanthrene	0.11	2.9	0.2	0.14	0.06	0.12	2.3 D	0.02 U	0.072	0.068	0.092 J	0.053 J	0.098	0.11	0.10	0.11
Anthracene	0.02 U	0.55	0.039	0.022	0.032	0.034	0.96 D	0.02 U	0.029	0.021	0.034 J	0.024 J	0.020	0.025	0.029	0.030
2-Methylnaphthalene	0.28	1.8	0.34	0.31	0.15	0.34	1.20 D	0.024	0.22	0.22	0.17	0.16	0.34	0.43	0.11	0.12
Total LPAH	1.13	8.63	1.18	1.13	0.43	1.09	6.85	0.25	0.72	0.54	0.61	0.55	0.73	0.85	0.34	0.37
HPAHs									**HPAHs**							
Fluoranthene	0.056	4.9	0.22	0.077	0.075	0.080	5.8 D	0.050	0.060	0.058	0.180 J	0.056 J	0.053	0.065	0.21	0.21
Pyrene	0.058	7.6 D	0.22	0.082	0.090	0.079	7.2 D	0.057	0.056	0.060	0.210 J	0.064 J	0.055	0.070	0.35	0.36
Benz(a)anthracene	0.02 U	2.1 D	0.06	0.02 U	0.022	0.02 U	2.3 D	0.020 U	0.020 U	0.020 U	0.051 J	0.020 UJ	0.020 U	0.020 U	0.021	0.021
Chrysene	0.02 U	2.3 D	0.071	0.02 U	0.023	0.02 U	2.6 D	0.020 U	0.020 U	0.020 U	0.067 J	0.020 UJ	0.020 U	0.020 U	0.027	0.028
Benzo(b)fluoranthene	0.022	1.8 D	0.038	0.02 U	0.02 U	0.02 U	1.90 U	0.020 U	0.020 U	0.020 U	0.030 J	0.020 UJ	0.020 U	0.020 U	0.020 U	0.020 U
Benzo(k)fluoranthene	0.02 U	1.7 D	0.065	0.02 U	0.02 U	0.02 U	1.90 U	0.020 U	0.020 U	0.020 U	0.066 J	0.020 UJ	0.020 U	0.020 U	0.020 U	0.020 U
Benzo(a)pyrene	0.02 U	2.3 D	0.053	0.02 U	0.036	0.02 U	3.0 D	0.020 U	0.020 U	0.020 U	0.050 J	0.020 UJ	0.020 U	0.020 U	0.020 U	0.020 U
Indeno(1,2,3-cd)pyrene	0.02 U	1.5 D	0.041	0.02 U	0.02	0.02 U	1.90 U	0.020 U	0.020 U	0.020 U	0.057 J	0.020 UJ	0.020 U	0.020 U	0.020 U	0.020 U
Dibenz(a,h)anthracene	0.02 U	0.20 U	0.20 U	0.02 U	0.02 U	0.02 U	1.90 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.020 UJ	0.020 U	0.020 U	0.020 U	0.020 U
Benzo(g,h,i)perylene	0.02 U	1.9 D	0.039	0.02 U	0.02 U	0.02 U	1.90 D	0.020 U	0.020 U	0.020 U	0.055 J	0.020 UJ	0.020 U	0.020 U	0.020 U	0.020 U
Total HPAHs	0.14	26.10	0.80	0.16	0.27	0.16	22.80	0.11	0.12	0.12	0.77	0.12	0.11	0.14	0.61	0.62

NOTE: µg/L = micrograms per liter or parts per billion.
B = detected in method blank at sigificant concentration.
D = the reported result is from a dilution.
J = estimated concentration.
U = not detected at or above the indicated method reporting limit.
i = the MRL/MDL has been elevated due to a chromatographic interference.

TABLE 3
Polycyclic Aromatic Hydrocarbons
Brix Maritime
Portland, Oregon

Sample Designation	MW-4	MW-4	MW-4	MW-4 Dup	MW-4	MW-4 Dup	MW-4	MW-4	MW-4	MW-4	MW-4 Dup	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Date Sampled	07/29/02	02/28/03	07/07/03	07/07/03	10/16/03	10/16/03	01/30/04	04/29/04	07/26/04	10/29/04	10/29/04	02/25/05	05/05/05	08/02/05	11/22/05	02/16/06	03/16/06
LPAHs									**LPAHs**								
Naphthalene	**0.039**	**18** D	**0.16**	**0.12**	**0.11**	**0.12**	**0.074**	**0.093**	**0.024**	**0.054**	**0.047**	0.020 U	0.020 U	**0.074**	0.020 U	**72** D	**2.8**
Acenaphthylene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.053 UB	0.02 U	0.019 U	**0.027**	**0.023**	0.020 U	0.020 U	0.020 U	0.020 U	0.032 Ui	0.021 U
Acenaphthene	**0.51**	**0.60**	**0.11**	**0.11**	**0.36**	**0.40**	**0.16**	**0.061**	**0.096**	**0.860**	**1.100**	**0.11**	**0.046**	0.020 U	**0.21**	**0.23**	**0.087**
Dibenzofuran	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.020 U	**0.020**	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.021 U
Fluorene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	**0.064**	0.021 U
Phenanthrene	**0.043**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.880 Ui	1.100 Ui	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.021 U
Anthracene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	**0.024**	**0.030**	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.021 U
2-Methylnaphthalene	0.02 U	**0.80**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.020 U	0.020 U	0.020 U	0.020 U	**0.038**	0.020 U	**12** D	**0.21**
Total LPAH	**0.59**	**19.40**	**0.27**	**0.23**	**0.47**	**0.52**	**0.23**	**0.15**	**0.12**	**0.97**	**1.22**	**0.11**	**0.05**	**0.11**	**0.21**	**12.29**	**3.10**
HPAHs									**HPAHs**								
Fluoranthene	**0.033**	**0.024**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	**0.020**	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.021 U
Pyrene	**0.046**	**0.055**	**0.021**	0.02 U	0.02	**0.024**	0.02 U	0.02 U	0.019 U	**0.038**	**0.029**	0.020 U	0.020 U	0.020 U	**0.031**	0.020 U	0.021 U
Benz(a)anthracene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.021 U
Chrysene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.021 U
Benzo(b)fluoranthene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.021 U
Benzo(k)fluoranthene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.021 U
Benzo(a)pyrene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.021 U
Indeno(1,2,3-cd)pyrene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.020 U	0.020 U	0.021 U
Dibenz(a,h)anthracene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.020 U	0.020 U	0.021 U
Benzo(g,h,i)perylene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.020 U	0.020 U	0.021 U
Total HPAHs	**0.08**	**0.08**	**0.021**	0.02	0.02	**0.024**	0.02	0.02	0.02	**0.06**	**0.03**	0.02	0.02	0.02	**0.03**	0.02	0.02

NOTE: µg/L = micrograms per liter or parts per billion.
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J = estimated concentration.
U = not detected at or above the indicated method reporting limit.
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TABLE 3
Polycyclic Aromatic Hydrocarbons
Brix Maritime
Portland, Oregon

Sample Designation	MW-5	MW-5 dup	MW-5	MW-5 dup	MW-5	MW-5	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Date Sampled	02/28/03	02/28/03	01/30/04	01/30/04	05/05/05	02/16/06	07/07/03	10/16/03	01/30/04	04/29/04	07/26/04	10/29/04	05/05/05	11/22/05
LPAHs							**LPAHs**							
Naphthalene	19 D	17 D	2.9	2.1	5.3 D	0.4	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U	0.082	0.02 U
Acenaphthylene	0.10	0.40	0.02 U	0.02 U	0.71 Ui	0.077 Ui	0.02 U	0.02 U	0.042	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U
Acenaphthene	1.3	1.3	0.6	0.5	2.1	0.49	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U
Dibenzofuran	0.2	0.19	0.081	0.057	0.66	0.056	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U
Fluorene	1.2	1.3	0.48	0.32	3.4	0.28	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U
Phenanthrene	2.3	3.1	1.1	0.8	7.3	0.75	0.02 U	0.02 U	0.025	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U
Anthracene	0.55	0.93	0.34	0.24	1.0	0.24	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U
2-Methylnaphthalene	31 D	31 D	1.5	1.1	1.8 D	0.3	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U	0.027	0.02 U
Total LPAH	55.64	55.22	7.02	5.02	21.56	2.54	0.02	0.02	0.07	0.02	0.019	0.02	0.11	0.02
HPAHs							**HPAHs**							
Fluoranthene	3.1 J	6.5 J	1.5	1.1	2.2	1.3	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U
Pyrene	4.3 J	9.1 J	1.8	1.4	2.0	1.9	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.023	0.02 U	0.02 U
Benz(a)anthracene	0.72 J	2.80 J	0.18	0.14	0.099	0.14	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U
Chrysene	0.96 J	3.4 J	0.22	0.17	0.15	0.20	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U
Benzo(b)fluoranthene	0.44 J	2.2 J	0.046	0.035	0.021	0.033	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U
Benzo(k)fluoranthene	0.42 J	1.9 J	0.046	0.041	0.021	0.032	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U
Benzo(a)pyrene	0.65 J	3.6 J	0.061	0.050	0.028	0.032	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U
Indeno(1,2,3-cd)pyrene	0.49 J	2.5 J	0.03	0.022	0.022	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U
Dibenz(a,h)anthracene	0.044 J	0.27 J	0.02 U	0.02 U	0.020 U	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U
Benzo(g,h,i)perylene	0.52 J	2.7 J	0.029	0.024	0.023	0.020 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U
Total HPAHs	11.64	34.97	3.91	3.00	4.56	3.64	0.02	0.02	0.02	0.02	0.019	0.02	0.02	0.02

NOTE: µg/L = micrograms per liter or parts per billion.
B = detected in method blank at sigificant concentration.
D = the reported result is from a dilution.
J = estimated concentration.
U = not detected at or above the indicated method reporting limit.
i = the MRL/MDL has been elevated due to a chromatographic interference.

TABLE 3
Polycyclic Aromatic Hydrocarbons
Brix Maritime
Portland, Oregon

Sample Designation	MW-7		MW-7		MW-7		MW-7		MW-7		MW-7		MW-7		MW-7		MW-8	
Matrix	Water		Water		Water		Water		Water		Water		Water		Water		Water	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Date Sampled	07/07/03		10/16/03		01/30/04		04/29/04		07/26/04		10/29/04		05/05/05		11/22/05		02/25/05	
LPAHs									**LPAHs**									
Naphthalene	0.02	U	0.02	U	0.02	U	**0.093**		0.019	U	**0.083**		**0.047**		0.02	U	**0.22**	
Acenaphthylene	0.02	U	0.02	U	0.02	U	0.02	U	0.019	U	0.019	U	0.02	U	0.02	U	0.02	U
Acenaphthene	0.02	U	0.02	U	0.02	U	0.02	U	0.019	U	0.019	U	0.02	U	0.02	U	**0.029**	
Dibenzofuran	0.02	U	0.02	U	0.02	U	0.02	U	0.019	U	0.019	U	0.02	U	0.02	U	0.02	U
Fluorene	0.02	U	0.02	U	0.02	U	0.02	U	0.019	U	0.019	U	0.02	U	0.02	U	**0.029**	
Phenanthrene	0.02	U	0.02	U	0.02	U	0.02	U	0.019	U	0.019	U	0.02	U	0.02	U	**0.051**	
Anthracene	0.02	U	0.02	U	0.02	U	0.02	U	0.019	U	0.019	U	0.02	U	0.02	U	**0.037**	
2-Methylnaphthalene	0.02	U	0.02	U	0.02	U	**0.04**		0.019	U	0.041		0.02	U	0.02	U	**0.22**	
Total LPAH	0.02		0.02		0.02		**0.13**		0.019		**0.08**		**0.05**		0.02		**0.59**	
HPAHs									**HPAHs**									
Fluoranthene	0.02	U	0.02	U	0.02	U	0.02	U	0.019	U	0.02	U	0.02	U	0.02	U	**0.032**	
Pyrene	0.02	U	0.02	U	0.02	U	0.02	U	0.019	U	0.02	U	0.02	U	0.02	U	**0.036**	
Benz(a)anthracene	0.02	U	0.02	U	0.02	U	0.02	U	0.019	U	0.02	U	0.02	U	0.02	U	0.02	U
Chrysene	0.02	U	0.02	U	0.02	U	0.02	U	0.019	U	0.02	U	0.02	U	0.02	U	0.02	U
Benzo(b)fluoranthene	0.02	U	0.02	U	0.02	U	0.02	U	0.019	U	0.02	U	0.02	U	0.02	U	**0.020**	
Benzo(k)fluoranthene	0.02	U	0.02	U	0.02	U	0.02	U	0.019	U	0.02	U	0.02	U	0.02	U	0.02	U
Benzo(a)pyrene	0.02	U	0.02	U	0.02	U	0.02	U	0.019	U	0.02	U	0.02	U	0.02	U	**0.024**	
Indeno(1,2,3-cd)pyrene	0.02	U	0.02	U	0.02	U	0.02	U	0.019	U	0.02	U	0.02	U	0.02	U	**0.023**	
Dibenz(a,h)anthracene	0.02	U	0.02	U	0.02	U	0.02	U	0.019	U	0.02	U	0.02	U	0.02	U	0.02	U
Benzo(g,h,i)perylene	0.02	U	0.02	U	0.02	U	0.02	U	0.019	U	0.02	U	0.02	U	0.02	U	**0.029**	
Total HPAHs	0.02		0.02		0.02		0.02		0.02		0.02		0.02		0.02		**0.16**	

NOTE: µg/L = micrograms per liter or parts per billion.
B = detected in method blank at sigificant concentration.
D = the reported result is from a dilution.
J = estimated concentration.
U = not detected at or above the indicated method reporting limit.
i = the MRL/MDL has been elevated due to a chromatographic interference.

Table 4
Volatile Organic Compounds
Brix Maritime
Portland, Oregon

Sample Designation	Matrix	Date Sampled	Dichlorodifluoromethane	Chloromethane	Vinyl Chloride	Bromomethane	Chloroethane	Trichlorofluoromethane	Acetone	1,1-Dichloroethene	Methyl tert-Butyl Ether	Carbon Disulfide	Methylene Chloride	*trans*- 1, 2-dichloroethene	1,1-Dichloroethane	2-Butanone	2,2-Dichloropropane	*cis* -1, 2-dichloroethene	Chloroform	Bromochloromethane	1,1,1-Trichloroethane	1,1-Dichloropropene	Carbon Tetrachloride
MW-1	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-1	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-1	Water	10/16/03	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
MW-1	Water	01/30/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-1	Water	04/29/04	1 U	1 U	1 U	1 U	1 U	1 U	40 U	1 U	1 U	1 U	4 U	1 U	1 U	40 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-1 Dup	Water	04/29/04	1 U	1 U	1 U	1 U	1 U	1 U	40 U	1 U	1 U	1 U	4 U	1 U	1 U	40 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-1	Water	07/26/04	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	50 U	1.3 U	1.3 U	1.3 U	5 U	1.3 U	1.3 U	50 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
MW-1 Dup	Water	07/26/04	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	50 U	1.3 U	1.3 U	1.3 U	5 U	1.3 U	1.3 U	50 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
MW-1	Water	10/29/04	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	50 U	1.3 U	1.3 U	1.3 U	5 U	1.3 U	1.3 U	50 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
MW-1	Water	02/25/05	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
MW-1	Water	05/05/05	2 U	2 U	2 U	2 U	2 U	2 U	80 U	2 U	2 U	2 U	8 U	2 U	2 U	80 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
MW-1 Dup	Water	05/05/05	2 U	2 U	2 U	2 U	2 U	2 U	80 U	2 U	2 U	2 U	8 U	2 U	2 U	80 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
MW-1	Water	08/02/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-1	Water	11/22/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-1	Water	02/16/06	5 U	5 U	5 U	5 U	5 U	5 U	200 U	5 U	5 U	5 U	20 U	5 U	5 U	200 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
MW-2	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	01/30/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	04/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	07/26/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	10/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	05/05/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	11/22/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	07/30/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	01/30/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	04/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	07/26/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	10/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	02/25/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	05/05/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	08/02/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3 Dup	Water	08/02/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	11/22/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3 Dup	Water	11/22/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	01/16/06	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3 Dup	Water	01/16/06	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 4
Volatile Organic Compounds
Brix Maritime
Portland, Oregon

Sample Designation	Matrix	Date Sampled	1,2-Dichloroethane	Benzene	Trichloroethene	1,2-Dichloropropane	Bromodichloromethane	Dibromomethane	2-Hexanone	cis-1,3-Dichloropropene	Toluene	trans 1,3-Dichloropropene	1,1,2-Trichloroethane	4-Methyl-2-pentanone	1,3 Dichloropropane	Tetrachloroethene	Dibromochloromethane	1,2 Dibromoethane	Chlorobenzene	1,1,1,2-Tetrachloroethane	Ethylbenzene	m,p-Xylenes	o-Xylene	Styrene	Bromoform
MW-1	Water	02/28/03	0.5 U	5.7	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	0.71	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	37	50	12	0.5 U	0.5 U
MW-1	Water	07/07/03	0.5 U	1.3	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	1.1	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	11	18	2	0.5 U	0.5 U
MW-1	Water	10/16/03	2.5 U	32 D	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U	13 D	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U	2.5 U	270 D	360 D	110 D	2.5 U	2.5 U
MW-1	Water	01/30/04	0.5 U	4.1	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.96	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	78 D	120	31	0.5 U	0.5 U
MW-1	Water	04/29/04	1 U	5.3 D	1 U	1 U	1 U	1 U	40 U	1 U	2.1 D	1 U	1 U	40 U	1 U	1 U	1 U	4 U	1 U	1 U	120 D	160 D	46 D	1 U	1 U
MW-1 Dup	Water	04/29/04	1 U	4.7 D	1 U	1 U	1 U	1 U	40 U	1 U	1.9 D	1 U	1 U	40 U	1 U	1 U	1 U	4 U	1 U	1 U	110 D	150 D	42 D	1 U	1 U
MW-1	Water	07/26/04	1.3 U	4.0 D	1.3 U	1.3 U	1.3 U	1.3 U	50 U	1.3 U	1.3 U	1.3 U	1.3 U	50 U	1.3 U	1.3 U	1.3 U	5 U	1.3 U	1.3 U	93 D	120 D	29 D	1.3 U	1.3 U
MW-1 Dup	Water	07/26/04	1.3 U	3.9 D	1.3 U	1.3 U	1.3 U	1.3 U	50 U	1.3 U	1.3 U	1.3 U	1.3 U	50 U	1.3 U	1.3 U	1.3 U	5 U	1.3 U	1.3 U	89 D	110 D	28 D	1.3 U	1.3 U
MW-1	Water	10/29/04	1.3 U	4.0 D	1.3 U	1.3 U	1.3 U	1.3 U	50 U	1.3 U	1.3 U	1.3 U	1.3 U	50 U	1.3 U	1.3 U	1.3 U	5 U	1.3 U	1.3 U	82 D	100 D	12 D	1.3 U	1.3 U
MW-1	Water	02/25/05	2.5 U	31 D	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U	2.7	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	10 U	2.5 U	2.5 U	210 D	220 D	26 D	2.5 U	2.5 U
MW-1	Water	05/05/05	2 U	16 D	2 U	2 U	2 U	2 U	80 U	2 U	2.2 D	2 U	2 U	80 U	2 U	2 U	2 U	8 U	2 U	2 U	170 D	170 D	19 D	2 U	2 U
MW-1 Dup	Water	05/05/05	2 U	14 D	2 U	2 U	2 U	2 U	80 U	2 U	2.1 D	2 U	2 U	80 U	2 U	2 U	2 U	8 U	2 U	2 U	160 D	160 D	18 D	2 U	2 U
MW-1	Water	08/02/05	0.5 U	17	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	1.9	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	170 D	180 D	20	0.5 U	0.5 U
MW-1	Water	11/22/05	0.5 U	22	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	1.7	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	170 D	170 D	20	0.5 U	0.5 U
MW-1	Water	02/16/06	5 U	15 D	5 U	5 U	5 U	5 U	200 U	5 U	5.0 U	5 U	5 U	200 U	5 U	5 U	5 U	20 U	5 U	5 U	150 D	160 D	13 D	5 U	5 U
MW-2	Water	02/28/03	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	07/07/03	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	10/16/03	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.86	0.5 U	0.5 U	0.5 U
MW-2	Water	01/30/04	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	04/29/04	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	07/26/04	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	10/29/04	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	05/05/05	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-2	Water	11/22/05	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	07/30/02	0.5 U	0.73	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	14	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.51	3.5	2	0.5 U	0.5 U
MW-3	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	0.63	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	1.2	1.2	0.5 U	0.5 U
MW-3	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.8	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	1.2	1.1	0.5 U	0.5 U
MW-3	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	1.9	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.51	2.5	1.5	0.5 U	0.5 U
MW-3	Water	01/30/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.63	0.73	0.5 U	0.5 U
MW-3	Water	04/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	1.20	1.1	0.5 U	0.5 U
MW-3	Water	07/26/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.98	0.98	0.5 U	0.5 U
MW-3	Water	10/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	1.10	1.0	0.5 U	0.5 U
MW-3	Water	02/25/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	1.30	1.0	0.5 U	0.5 U
MW-3	Water	05/05/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	1.50	1.2	0.5 U	0.5 U
MW-3	Water	08/02/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	1.30	1.1	0.5 U	0.5 U
MW-3 Dup	Water	08/02/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	1.30	1.1	0.5 U	0.5 U
MW-3	Water	11/22/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	1.3	0.89	0.5 U	0.5 U
MW-3 Dup	Water	11/22/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	1.3	0.83	0.5 U	0.5 U
MW-3	Water	01/16/06	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.72	0.50 U	0.5 U	0.5 U
MW-3 Dup	Water	01/16/06	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.67	0.50 U	0.5 U	0.5 U

Table 4
Volatile Organic Compounds
Brix Maritime
Portland, Oregon

Sample Designation	Matrix	Date Sampled	Isopropylbenzene	1,1,2,2-Tetrachloroethane	1,2,3-Trichloropropane	Bromobenzene	n-Propylbenzene	2-Chlorotoluene	4-Chlorotoluene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	1,3-Dichlorobenzene	4-Isopropyltoluene	1,4-Dichlorobenzene	n-Butylbenzene	1,2-Dichlorobenzene	1,2-Dibromo-3-chloropropane	1,2,4-Trichlorobenzene	1,2,3-Trichlorobenzene	Naphthalene	Hexachlorobutadiene
MW-1	Water	02/28/03	19	0.5 U	0.5 U	0.5 U	65 D	2 U	2 U	26	2 U	140 D	10	0.5 U	2 U	0.5 U	21	0.5 U	0.5 U	2 U	2 U	31	2 U
MW-1	Water	07/07/03	31	0.5 U	0.5 U	0.5 U	64 D	2 U	2 U	9.3	2 U	46	8.2	0.5 U	2 U	0.5 U	14	0.5 U	0.5 U	2 U	2 U	22	2 U
MW-1	Water	10/16/03	75 D	2.5 U	2.5 U	10 U	250 D	10 U	10 U	280 D	10 U	1200 D	28 D	2.5 U	10 U	2.5 U	150 Ui	2.5 U	10 U	10 U	10 U	460 D	10 U
MW-1	Water	01/30/04	36	0.5 U	0.5 U	0.5 U	140 D	2 U	2 U	100 D	2 U	510 D	17	0.5 U	2 U	0.5 U	46	0.5 U	0.5 U	2 U	2 U	210 D	2 U
MW-1	Water	04/29/04	54 D	1 U	1 U	1 U	150 D	4 U	4 U	150 D	4 U	590 D	20 D	1 U	4 U	1 U	43 D	1 U	1 U	4 U	4 U	250 D	4 U
MW-1 Dup	Water	04/29/04	52 D	1 U	1 U	1 U	150 D	4 U	4 U	140 D	4 U	570 D	18 D	1 U	4 U	1 U	39 D	1 U	1 U	4 U	4 U	260 D	4 U
MW-1	Water	07/26/04	47 D	1.3 U	1.3 U	1.3 U	160 D	5 U	5 U	130 D	5 U	610 D	18 D	1.3 U	5 U	1.3 U	40 D	1.3 U	1.3 U	5 U	5 U	270 JD	5 U
MW-1 Dup	Water	07/26/04	46 D	1.3 U	1.3 U	1.3 U	160 D	5 U	5 U	120 D	5 U	640 D	18 D	1.3 U	5 U	1.3 U	40 D	1.3 U	1.3 U	5 U	5 U	280 JD	5 U
MW-1	Water	10/29/04	45 D	1.3 U	1.3 U	1.3 U	140 D	5 U	5 U	110 D	5 U	560 D	16 D	1.3 U	5 U	1.3 U	39 D	1.3 U	1.3 U	5 U	5 U	230 D	5 U
MW-1	Water	02/25/05	89 D	2.5 U	2.5 U	2.5 U	350 D	10 U	10 U	160 D	10 U	870 D	39 D	2.5 U	10 U	2.5 U	90 D	2.5 U	2.5 U	10 U	10 U	470 D	10 U
MW-1	Water	05/05/05	87 D	2 U	2 U	8 U	260 D	8 U	8 U	100 D	8 U	530 D	32 D	2 U	8 U	2 U	140 Ui	2 U	8 U	8 U	8 U	280 D	8 U
MW-1 Dup	Water	05/05/05	88 D	2 U	2 U	8 U	250 D	8 U	8 U	96 D	8 U	490 D	31 D	2 U	8 U	2 U	140 Ui	2 U	8 U	8 U	8 U	250 D	8 U
MW-1	Water	08/02/05	69 D	0.5 U	1.1	2 U	220 D	2 U	2 U	140 D	2 U	590 D	28 D	2 U	3.2	0.5 U	62 D	0.5 U	2 U	2 U	2 U	330 D	2 U
MW-1	Water	11/22/05	100 D	0.5 U	0.5 U	2 U	400 D	2 U	2 U	160 D	2.2	780 D	50	0.5 U	4.0	0.5 U	85 D	0.5 U	2 U	2 U	2 U	380 D	2 U
MW-1	Water	02/16/06	38 D	5 U	5 U	20 U	170 D	20 U	20 U	150 D	20 U	670 D	20 U	0.5 U	20 U	5 U	53 D	5 U	20 U	20 U	20 U	340 D	20 U
MW-2	Water	02/28/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-2	Water	07/07/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-2	Water	10/16/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-2	Water	01/30/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-2	Water	04/29/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-2	Water	07/26/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-2	Water	10/29/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-2	Water	05/05/05	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	0.5 U	2 U	0.5 U	2 UJ	0.5 U	2 U	2 U	2 U	2 U	2 U
MW-2	Water	11/22/05	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	2 U
MW-3	Water	07/30/02	0.5 U	0.5 U	0.5 U	0.5 U	2.2	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-3	Water	02/28/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-3	Water	07/07/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-3	Water	10/16/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-3	Water	01/30/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-3	Water	04/29/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-3	Water	07/26/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-3	Water	10/29/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-3	Water	02/25/05	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-3	Water	05/05/05	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	0.5 U	2 U	0.5 U	2 UJ	0.5 U	2 U	2 U	2 U	2 U	2 U
MW-3	Water	08/02/05	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	0.5 U	2 U	0.5 U	2 UJ	0.5 U	2 U	2 U	2 U	2 U	2 U
MW-3 Dup	Water	08/02/05	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	0.5 U	2 U	0.5 U	2 UJ	0.5 U	2 U	2 U	2 U	2 U	2 U
MW-3	Water	11/22/05	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	2 U
MW-3 Dup	Water	11/22/05	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	2 U
MW-3	Water	01/16/06	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	2 U
MW-3 Dup	Water	01/16/06	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	2 U

Table 4
Volatile Organic Compounds
Brix Maritime
Portland, Oregon

Sample Designation	Matrix	Date Sampled	Dichlorodifluoromethane	Chloromethane	Vinyl Chloride	Bromomethane	Chloroethane	Trichlorofluoromethane	Acetone	1,1-Dichloroethene	Methyl tert-Butyl Ether	Carbon Disulfide	Methylene Chloride	*trans*-1, 2-dichloroethene	1,1-Dichloroethane	2-Butanone	2,2-Dichloropropane	*cis*-1, 2-dichloroethene	Chloroform	Bromochloromethane	1,1,1-Trichloroethane	1,1-Dichloropropene	Carbon Tetrachloride
MW-4	Water	07/29/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4 Dup	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4 Dup	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	01/30/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	04/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	07/26/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	10/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4 Dup	Water	02/25/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	05/05/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	08/02/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	11/22/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	02/16/06	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	03/16/06	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-5	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-5 Dup	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-5	Water	01/30/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-5 Dup	Water	01/30/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-5	Water	05/05/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-5	Water	02/16/06	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	01/30/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	04/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	07/26/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	10/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	05/05/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	11/22/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	01/30/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	04/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	07/26/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	10/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	05/05/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	11/22/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-8	Water	02/25/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

NOTE: Water concentrations are in µg/L. Soil concentrations are in µg/kg. U = not detected at or above the indicated method reporting limit. J = estimated concentration.
D = the reported result is from a dilution. i = the MRL/MDL has been elevated due to a chromatographic interference.

Table 4
Volatile Organic Compounds
Brix Maritime
Portland, Oregon

Sample Designation	Matrix	Date Sampled	1,2-Dichloroethane	Benzene	Trichloroethene	1,2-Dichloropropane	Bromodichloromethane	Dibromomethane	2-Hexanone	cis-1,3-Dichloropropene	Toluene	trans 1,3-Dichloropropene	1,1,2-Trichloroethane	4-Methyl-2-pentanone	1,3 Dichloropropane	Tetrachloroethene	Dibromochloromethane	1,2 Dibromoethane	Chlorobenzene	1,1,1,2-Tetrachloroethane	Ethylbenzene	m,p-Xylenes	o-Xylene	Styrene	Bromoform
MW-4	Water	07/29/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	02/28/03	0.5 U	**0.76**	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**2.3**	**1.4**	**1.2**	0.5 U	0.5 U
MW-4	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4 Dup	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	**0.93**	0.5 U	0.5 U	0.5 U
MW-4 Dup	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	**0.94**	0.5 U	0.5 U	0.5 U
MW-4	Water	01/30/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.5**	0.5 U	0.5 U
MW-4	Water	04/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	07/26/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	10/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4 Dup	Water	02/25/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	05/05/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	08/02/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	11/22/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	02/16/06	0.5 U	**4.0**	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**1.4**	**22**	**0.57**	0.5 U	0.5 U
MW-4	Water	03/16/06	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	**0.54**	0.5 U	0.5 U	0.5 U
MW-5	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**15**	**12**	**0.97**	0.5 U	0.5 U
MW-5 Dup	Water	02/28/03	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**16**	**14**	**1.10**	0.5 U	0.5 U
MW-5	Water	01/30/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**1.8**	0.5 U	0.5 U	0.5 U	0.5 U
MW-5 Dup	Water	01/30/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**2.0**	0.5 U	0.5 U	0.5 U	0.5 U
MW-5	Water	05/05/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**17**	0.5 U	0.5 U	0.5 U	0.5 U
MW-5	Water	02/16/06	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	**0.89**	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	**0.74**	0.5 U	0.5 U	0.5 U
MW-6	Water	01/30/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	04/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	07/26/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	10/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	05/05/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-6	Water	11/22/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	07/07/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	10/16/03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	**0.82**	0.5 U	0.5 U	0.5 U
MW-7	Water	01/30/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	04/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	07/26/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	10/29/04	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	05/05/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	11/22/05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-8	Water	02/25/05	0.5 U	**0.54**	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**5.8**	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	**0.86**	0.5 U	0.5 U	0.5 U

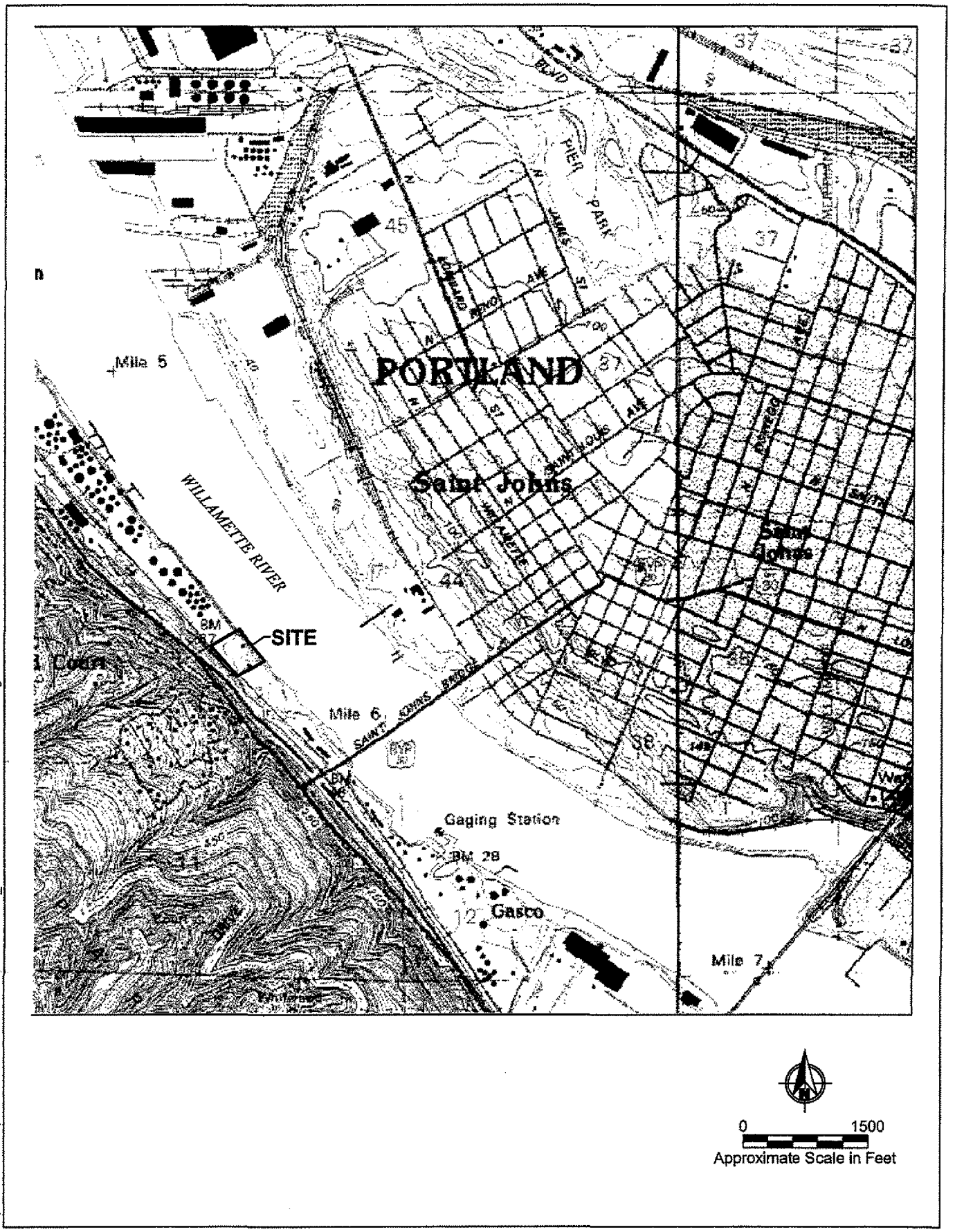
NOTE: Water concentrations are in µg/L. Soil concentrations are in µg/kg. U = not detected at or above the indicated method reporting limit. J = estimated concentration.
D = the reported result is from a dilution. i = the MRL/MDL has been elevated due to a chromatographic interference.

Table 4
Volatile Organic Compounds
Brix Maritime
Portland, Oregon

Sample Designation	Matrix	Date Sampled	Isopropylbenzene	1,1,2,2-Tetrachloroethane	1,2,3-Trichloropropane	Bromobenzene	n-Propylbenzene	2-Chlorotoluene	4-Chlorotoluene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	1,3-Dichlorobenzene	4-Isopropyltoluene	1,4-Dichlorobenzene	n-Butylbenzene	1,2-Dichlorobenzene	1,2-Dibromo-3-chloropropane	1,2,4-Trichlorobenzene	1,2,3-Trichlorobenzene	Naphthalene	Hexachlorobutadiene
MW-4	Water	07/29/02	2 U	0.5 U	0.5 U	0.5 U	2.3	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4	Water	02/28/03	29	0.5 U	0.5 U	0.5 U	35	2 U	2 U	2.2	2 U	3.8	2 U	0.5 U	2 U	0.5 U	3.1	0.5 U	0.5 U	2 U	2 U	45	2 U
MW-4	Water	07/07/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4 Dup	Water	07/07/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4	Water	10/16/03	7.1	0.5 U	0.5 U	0.5 U	5.5	2 U	2 U	2 U	2 U	2 U	4.4	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4 Dup	Water	10/16/03	7.5	0.5 U	0.5 U	0.5 U	6.3	2 U	2 U	2 U	2 U	2 U	4.8	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4	Water	01/30/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4	Water	04/29/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4	Water	07/26/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4	Water	10/29/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4 Dup	Water	02/25/05	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-4	Water	05/05/05	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	0.5 U	2 U	0.5 U	2 UJ	0.5 U	2 U	2 U	2 U	2 U	2 U
MW-4	Water	08/02/05	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	0.5 U	2 U	0.5 U	2 UJ	0.5 U	2 U	2 U	2 U	2 U	2 U
MW-4	Water	11/22/05	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	2 U
MW-4	Water	02/16/06	26	0.5 U	0.5 U	2 U	34	2 U	2 U	8.4	2 U	57	4.7	0.5 U	2 U	0.5 U	4	0.5 U	2 U	2 U	2 U	100 D	2 U
MW-4	Water	03/16/06	2 U	0.5 U	0.5 U	2 U	2.9	2 U	2 U	2 U	2 U	2.2	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	3.7	2 U
MW-5	Water	02/28/03	24	0.5 U	0.5 U	0.5 U	110 D	2 U	2 U	26	2 U	75 D	27	0.5 U	2 U	0.5 U	87 D	0.5 U	0.5 U	2 U	2 U	23	2 U
MW-5 Dup	Water	02/28/03	25	0.5 U	0.5 U	0.5 U	110 D	2 U	2 U	30	2 U	99 D	30	0.5 U	2.3	0.5 U	110 D	0.5 U	0.5 U	2 U	2 U	25	2 U
MW-5	Water	01/30/04	9.7	0.5 U	0.5 U	0.5 U	49	2 U	2 U	2 U	2 U	2 U	38	0.5 U	2 U	0.5 U	82 D	0.5 U	0.5 U	2 U	2 U	2.9	2 U
MW-5 Dup	Water	01/30/04	11	0.5 U	0.5 U	0.5 U	56	2 U	2 U	2 U	2 U	2 U	39	0.5 U	2 U	0.5 U	84 D	0.5 U	0.5 U	2 U	2 U	3.4	2 U
MW-5	Water	05/05/05	50	0.5 U	0.5 U	2 U	140 D	2 U	2 U	2 U	2 U	2 U	41	0.5 U	2 U	0.5 U	120 Ui	0.5 U	2 U	2 U	2 U	8.0	2 U
MW-5	Water	02/16/06	3.4	0.5 U	0.5 U	2 U	16	2 U	2 U	2 U	2 U	2 U	5.9	0.5 U	2 U	0.5 U	16	0.5 U	2 U	2 U	2 U	3.0	2 U
MW-6	Water	07/07/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-6	Water	10/16/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-6	Water	01/30/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-6	Water	04/29/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-6	Water	07/26/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-6	Water	10/29/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-6	Water	05/05/05	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	0.5 U	2 U	0.5 U	2 UJ	0.5 U	2 U	2 U	2 U	2 U	2 U
MW-6	Water	11/22/05	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	2 U
MW-7	Water	07/07/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-7	Water	10/16/03	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-7	Water	01/30/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-7	Water	04/29/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-7	Water	07/26/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-7	Water	10/29/04	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
MW-7	Water	05/05/05	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	0.5 U	2 U	0.5 U	2 UJ	0.5 U	2 U	2 U	2 U	2 U	2 U
MW-7	Water	11/22/05	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	2 U	2 U	2 U	2 U	2 U
MW-8	Water	02/25/05	2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	0.5 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U

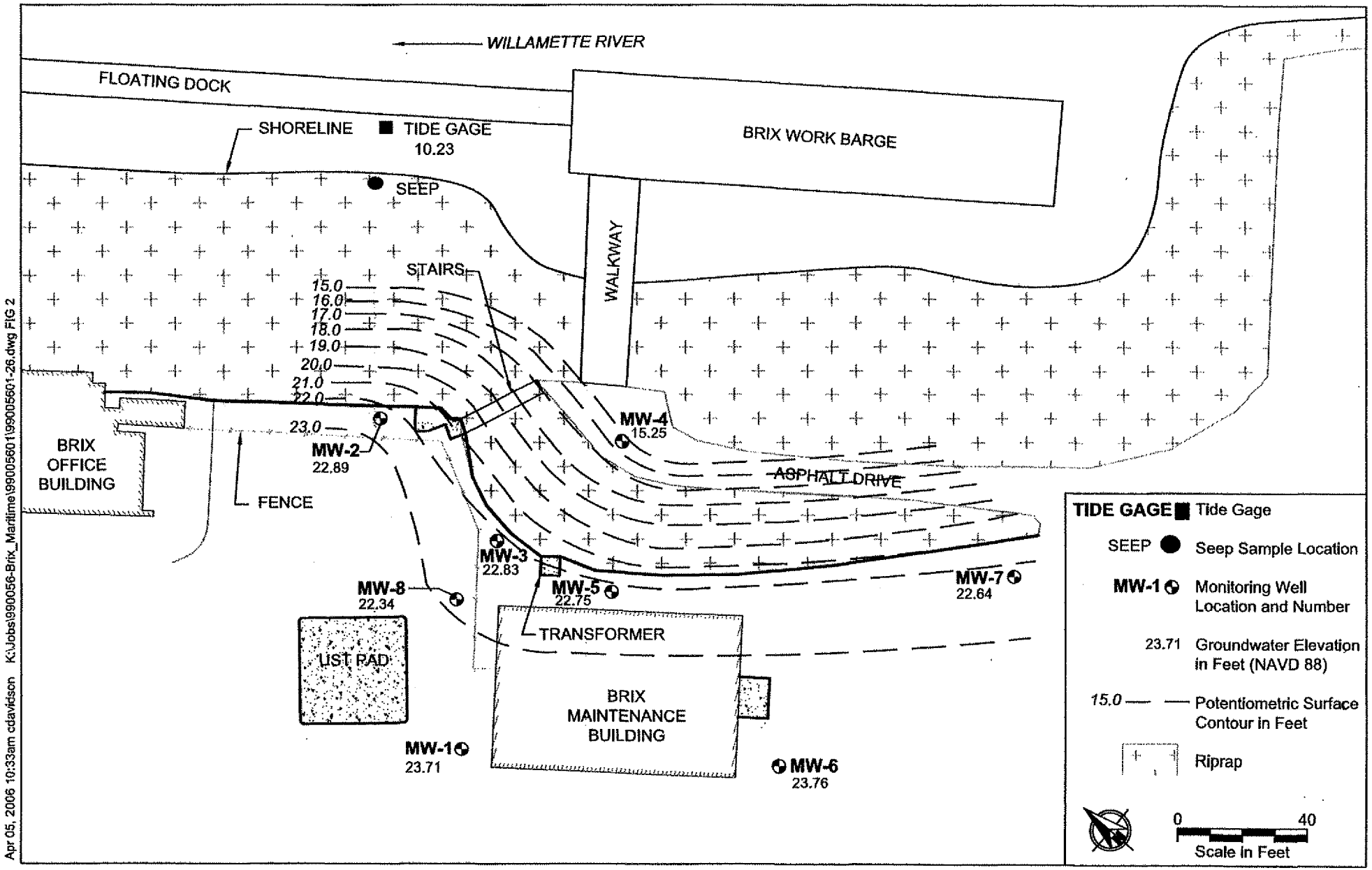
NOTE: Water concentrations are in µg/L. Soil concentrations are in µg/kg. U = not detected at or above the indicated method reporting limit. J = estimated concentration.
D = the reported result is from a dilution. i = the MRL/MDL has been elevated due to a chromatographic interference.

FIGURES



ANCHOR ENVIRONMENTAL, L.L.C.

Figure 1
Site Location Map
Brix Maritime
Portland, Oregon



ANCHOR ENVIRONMENTAL, L.L.C.

Figure 2
Well Location and Potentiometric Surface Map (February 16, 2006)
Brix Maritime
Portland, Oregon

Appendix A
Field Sampling Data Package

ANCHOR ENVIRONMENTAL, L.L.C.

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Phone 503.670.1108
Fax 503.670.1128

Memorandum

To: File 990056-01

From: Kelly R. Titkemeier

Date: February 16, 2006

Re: February 2006 Groundwater Sample Collection at Brix Maritime, Portland, Oregon

OVERVIEW

On February 16, 2006, Anchor measured groundwater elevations in monitoring wells MW-1 through MW-8 and recorded the elevation of the river from the on-site staff gauge. Groundwater samples were collected from monitoring wells MW-1, MW-3, MW-4, and MW-5. Five water samples (including one duplicate sample) were submitted for analysis of VOCs by U.S. Environmental Protection Agency (USEPA) Method 8260; gasoline by NWTPH-Gx; diesel and heavy oils by NWTPH-Dx; and PAHs by USEPA Method 8270-SIM. Trip blanks were submitted for VOC and NWTPH-Gx analyses.

PURGING AND SAMPLING

Before sampling, wells were purged of at least three casing volumes of groundwater until field parameters (temperature, pH, specific conductivity, and dissolved oxygen) stabilized. Temperature, pH, specific conductivity, and dissolved oxygen values were measured and recorded after each casing volume was removed. Field sampling parameters are presented in the attached table.

Each well was purged using a peristaltic pump and pump tubing that was connected to dedicated polyethylene tubing. As purging for each well finished, pumping rates were reduced and samples were collected directly from the pump tubing.

Quality control consisted of collecting and analyzing one duplicate sample from MW-3. Trip blanks were submitted for VOC analysis by USEPA Method 8260 and gasoline by NWTPH-Gx.

SAMPLE HANDLING AND SHIPPING

Five samples and one trip blank were placed in iced shipping containers and transported by courier to Columbia Analytical Services (CAS), Kelso, Washington under chain of custody documentation.

Attachments: Table of Sampling Field Parameters
Water Level Survey
Field Sampling Data Sheets
Chain-of-Custody Documentation

Table
Sampling Field Parameters
Brix Maritime
February 2006

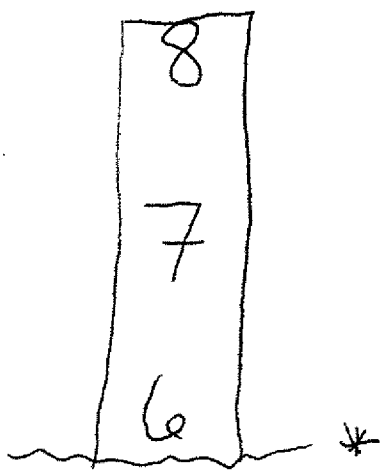
Well	Blind Code	Date Sampled	Depth to Water (feet)	Pore Volumes Purged	Gallons Removed	pH	Specific Conductance µS	Temperature °C	Dissolved Oxygen mg/L
Monitoring Wells									
MW-1	BM-021606-5	2/16/2006	18.10	3	2.1	6.57	236	14.99	0.24
MW-3	BM-021606-3	2/16/2006	19.12	3	3.0	6.59	461	14.23	0.34
MW-4	BM-021606-1	2/16/2006	8.30	3	3.3	6.33	349	14.60	1.65
MW-5	BM-021606-2	2/16/2006	18.91	3	1.8	6.61	353	14.90	0.29
QA/QC									
MW-3 (DUP)	BM-021606-4	2/16/2006	19.12	3	3.0	6.59	461	14.23	0.34

P:\Projects\BRIX\Sampling\T&M 2006\Brix Table_021606

Depth to Water Measurements
Brix Maritime
Portland, Oregon

Anchor Environmental, L.L.C.			Site: Brix Maritime	
			Project No. : 990056-01	
Well	Date (MM/DD/YY)	Time (2400)	DTW (feet)	Comments
MW-1	2/16/06	0949	18.10	hydrocarbon-like odor
MW-2	2/16/06	1015	19.24	
MW-3	2/16/06	1010	19.12	hydrocarbon-like odor
MW-4	2/16/06	1053	8.30	missing a screw
MW-5	2/16/06	1022	18.91	hydrocarbon-like odor
MW-6	2/16/06	1032	17.45	
MW-7	2/16/06	1041	18.31	
MW-8	2/16/06	0958	19.39	
River Gauge	2/16/06	1111	5.9*	
Note: DTW = Depth to Water; DTP = Depth to Product				

no visible sheen along shoreline



Confidential Business Information

00013206

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Brix Maritime **WELL ID:** MW-1

SITE ADDRESS: Portland, Oregon **BLIND ID:** BM-021606-5

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?					TEMPERATURE: °F 35. °C		

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
2/16/06	09:49	22.2	/	18.10	/	4.1	X1	0.67
/ /	:	.	/ .	.	/ .		X3	2.00

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume mL	Preservative (circle)	Ice	Filter	pH	√ (if used)
VOA Glass	2/16/06	14:30	B	6	40 ml	HCl	YES	NO		✓
Amber Glass	2/16/06	14:30	B	2	250, 500, 1L	(None) HCl (H_2SO_4)	YES	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 8

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: 14:02 ORP Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	~~Other~~ ORP	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	B	2.1	6.57	236	14.99	-76.3	0.24	clear colorless
2	B	1.4	6.58	236	14.97	-76.8	0.26	clear colorless
1	B	0.7	6.64	236	14.90	-76.2	0.28	Clear colorless
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Kelly R. Titkemeier (PRINTED NAME)

Kelly R. Titkemeier (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Brix Maritime **WELL ID:** MW-3
SITE ADDRESS: Portland, Oregon **BLIND ID:** BM-021606-3
DUP ID: BM-021606-4 **NA** 1335

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	TEMPERATURE:	°F 34 .	°C				

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
2/16/06	10:10	24.8		19.12		5.68	X1	0.93
/ /	:	.	.	.	.		X3	2.78

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume mL	Preservative [circle]	Ice	Filter	pH	√ [√ if used]
VOA Glass	2/16/06	13:30	B	6	40 ml	HCl	YES	NO		✓
Amber Glass	2/16/06	13:30	B	2	250, 500, 1L	(None) HCl (H_2SO_4)	YES	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 8 16

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: 13 : 03 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	~~Other~~ ORP	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	B	3.0	6.59	461	14.23	-96.7	0.34	clear, colorless
2	B	2.0	6.57	462	14.26	-96.1	0.24	clear, colorless
1	B	1.0	6.57	457	14.32	-95.9	0.29	clear, colorless
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Kelly R. Titkemeier
(PRINTED NAME)

Kelly R Titkemeier
(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Brix Maritime **WELL ID:** MW-4
SITE ADDRESS: Portland, Oregon **BLIND ID:** Bm-021606-1
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER: SUNNY CLOUDY RAIN ? **TEMPERATURE:** °F 32. °C [Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
2/16/06	10:53	14.8	/	8.30	/	6.5	X1	1.06
/ /	:	.	/ .	.	/ .		X3	3.18

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume mL	Preservative [circle]	Ice	Filter	pH	√ [√ if used]
VOA Glass	2/16/06	11:55	B	6	40 ml	HCl	YES	NO		✓
Amber Glass	2/16/06	11:55	B	2	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 8

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: 11:29 ORP Pump/Bailer Inlet Depth:

Meas. [Casing]	Method § [Select A-G]	Purged (gal) [Cumulative Totals]	pH	E Cond (µS)	°F Temp °C [Circle units]	~~Other~~ ORP	Diss O_2 (mg/l)	Water Quality [Clarity, Color]
4		.	.		.		.	
3	B	3.3	6.33	349	14.60	-14.7	1.65	Clear, colorless
2	B	2.2	6.33	350	14.54	-17.9	1.30	Clear, v. lt tan
1	B	1.1	6.37	338	14.47	-22.0	1.24	slightly cloudy lt. tan
0		0.00	.		.		.	

rust-colored floc <2mm in length

SAMPLER: Kelly R. Titkemeier (PRINTED NAME) Kelly R. Titkemeier (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Brix Maritime **WELL ID:** MW-5
SITE ADDRESS: Portland, Oregon **BLIND ID:** BM-021606-2
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER: SUNNY CLOUDY RAIN ? **TEMPERATURE:** °F 34. °C (Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
2/16/06	10:22	22.45	.	18.91	.	3.54	X 1	0.58
/ /	:	.	.	.	.		X 3	1.73

Gal/ft = (dia./2)^2 x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount	Volume mL	Preservative [circle]	Ice	Filter	pH	√ [if used]
VOA Glass	2/16/06	12:55	B	6	40 ml	HCl	YES	NO		✓
Amber Glass	2/16/06	12:55	B	2	250, 500, 1L	(None) HCl (H_2SO_4)	YES	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 8

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: 12:24 ORP Pump/Bailer Inlet Depth:

Meas. [Casing]	Method § [Select A-G]	Purged (gal) [Cumulative Totals]	pH	E Cond (µS)	°F Temp °C [Circle units]	~~Other~~ ORP	Diss O_2 (mg/l)	Water Quality [Clarity, Color]
4		.	.		.		.	
3	B	1.8	6.61	353	14.90	-90.6	0.29	clear, colorless
2	B	1.2	6.62	354	14.90	-90.4	0.30	Clear colorless
1	B	0.6	6.65	353	15.02	-92.3	0.30	clear colorless
0		0.00	.		.		.	

SAMPLER: Kelly R. Titkemeier (PRINTED NAME) Kelly R. Titkemeier (SIGNATURE)

Columbia Analytical Services INC.
An Employee - Owned Company

CHAIN OF CUSTODY

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222x07 • FAX (360) 636-1068

SR#: _____

PAGE 1 OF 1 COC # _____

PROJECT NAME: BRIX MARITIME - PORTLAND, OR
PROJECT NUMBER:
PROJECT MANAGER: JOHN RENDA
COMPANY/ADDRESS: 6650 SW REDWOOD LANE #110
ANCHOR ENVIRONMENTAL, LLC
CITY/STATE/ZIP: PORTLAND, OR 97224
E-MAIL ADDRESS: JRENDA@ANCHORENV.COM
PHONE #: 503-670-1108 x12 FAX #: 503-670-1128
SAMPLER'S SIGNATURE: Kelly R. Titkemeier

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐	Volatile Organics 624☐ (8260☒) 8260LL☐	Hydrocarbons (see below) Gas☒ Diesel☒ ☐ Fuel Fingerprint (FIQ) ☐ NW-HCID Screen	BTEX☐ 8021☐ Oil☐	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCB's Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081A☐ 8141A☐ 8151A☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	PAHS 8310☐ (SIM☒)	Metals, Total or Dissolved (See list below)	Cyanide☐	pH, Cond., Cl, SO4, PO4, F, NO2, NO3, BOD, TSS, TDS (circle) NH3-N, COD, Total-P, TKN, TOC, DOC (circle) NO2+NO3 Hex-Chrom☐	TOX 9020☐ AOX 1650☐ 506☐	NWTPH-GX				REMARKS
BM-021606-1	2/16/06	1155		H_2O	8			X	X						X									
BM-021606-2	↓	1255		↓	↓			X	X						X									
BM-021606-3	↓	1330		↓	↓			X	X						X									
BM-021606-4	↓	1335		↓	↓			X	X						X									
BM-021606-5	↓	1430		↓	↓			X	X						X									
Trip Blank	↓	NA		↓	2			X												X				

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
X II. Report Dup., MS, MSD as required
___ III. Data Validation Report (includes all raw data)
___ IV. CLP Deliverable Report
___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
X Standard (10-15 working days)
___ Provide FAX Results

_____ Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: Kelly R. Titkemeier — Date/Time: 2/17/06 9:00am	Signature: — Date/Time:	Signature: — Date/Time:	Signature: — Date/Time:
Printed Name: Kelly R. Titkemeier — Firm: Anchor Env.	Printed Name: — Firm:	Printed Name: — Firm:	Printed Name: — Firm:

RCOC #1 06/03

Confidential Business Information

00013211

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: Brix Maritime **WELL ID:** MW-4

SITE ADDRESS: Portland, Oregon **BLIND ID:** ~~BRE~~ KRT BM-031606-1

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	CLOUDY	RAIN	?	TEMPERATURE:	°F 42 . °C

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
3/16/06	09:10	14.75	.	8.45	.	6.3	X1	1.03
/ /	:	.	.	.	.		X3	3.08

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√ [√ if used]
VOA Glass	3/16/06	10:00	B	6	40 ml	HCl	YES	NO		✓
Amber Glass	3/16/06	10:00	B	2	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1 KRT	250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:		1 KRT	250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count):

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 09:20 Pump/Bailer Inlet Depth:

Meas. [Casing]	Method § [Select A-G]	Purged (gal) [Cumulative Totals]	pH	E Cond (µS)	°F Temp °C [Circle units]	Other	Diss O_2 (mg/l)	Water Quality [Clarity, Color]
4	B	4.4	6.18	345	13.83	-13.6	1.61	clear, colorless
3	B	3.3	6.18	347	13.88	-13.4	2.00	clear, colorless
2	B	2.2	6.18	348	13.93	-13.1	2.23	clear, colorless
1	B	1.1	6.27	356	14.00	-17.2	5.59	clear, colorless
0		0.00	.		.		.	

Water in monument = rust-colored with a slight sheen. One screw is missing from cover.

SAMPLER: Kelly R. Titkemeier (PRINTED NAME) Kelly R. Titkemeier (SIGNATURE)

Columbia Analytical Services INC.
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CHAIN OF CUSTODY

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222x07 • FAX (360) 636-1068

SR#: _____

PAGE 1 OF 1 COC # _____

PROJECT NAME: BRIX MARITIME
PROJECT NUMBER:
PROJECT MANAGER: JOHN RENDA
COMPANY/ADDRESS: ANCHOR ENVIRONMENTAL, LLC
6650 SW REDWOOD LANE, SUITE 110
CITY/STATE/ZIP: PORTLAND OR 97224
E-MAIL ADDRESS: JRENDA@ANCHORENV.COM
PHONE #: 503-670-1108 x12 FAX #: 503-670-1128
SAMPLER'S SIGNATURE: Kelly R. Tikemeier

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625 ☐ 8270 ☐ 8270LL ☐	Volatile Organics 624 ☐ 8260 ☑ 8021 ☐ BTEX ☐	Hydrocarbons (see below) Gas ☑ Diesel ☑ Oil ☑ ☐ Fuel Fingerprint (FIQ) ☐ NW-HCID Screen	Oil & Grease/TRPH 1664 HEM ☐ 1664 SGT ☐	PCB's Aroclors ☐ Congeners ☐	Pesticides/Herbicides 608 ☐ 8081A ☐ 8141A ☐ 8151A ☐	Chlorophenolics - 8151M Tri ☐ Tetra ☐ PCP ☐	PAHS 8310 ☐ SIM ☑	Metals, Total or Dissolved (See list below)	Cyanide ☐	Hex-Chrom ☐	pH, Cond., Cl, SO4, PO4, F, NO2, NO3, BOD, TSS, TDS (circle) NH3-N, COD, Total-P, TKN, TOC, DOC (circle) NO2+NO3	TOX 9020 ☐ AOX 1650 ☐ 506 ☐					REMARKS
BM-0316006-1	3-16-06	10:00		W	8		✓	✓					✓												
KRT ~~Trip Blank~~	~~3-16-06~~	~~NA~~		~~W~~	~~2~~																				

REPORT REQUIREMENTS

- ___ I. Routine Report: Method Blank, Surrogate, as required
- ✓ II. Report Dup., MS, MSD as required
- ___ III. Data Validation Report (includes all raw data)
- ___ IV. CLP Deliverable Report
- ___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

- ___ 24 hr. ___ 48 hr.
- ___ 5 Day
- ✓ Standard (10-15 working days)
- ___ Provide FAX Results

Requested Report Date _____

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: Kelly R. Tikemeier; Date/Time: 3-17-06 / 0900	Signature; Date/Time	Signature; Date/Time	Signature; Date/Time
Printed Name: Kelly R. Tikemeier; Firm: ANCHOR ENV.	Printed Name; Firm	Printed Name; Firm	Printed Name; Firm

Appendix B
Laboratory Reports

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

March 9, 2006 Service Request No: K0601324

John Renda
Anchor Environmental
6650 SW Redwood Lane
Suite 110
Portland, OR 97224

RE: BRIX Maritime- Portland, Or

Dear John:

Enclosed are the results of the sample(s) submitted to our laboratory on February 17, 2006. For your reference, these analyses have been assigned our service request number K0601324.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3281.

Respectfully submitted,

Columbia Analytical Services, Inc.

Abbie Spielman
Project Chemist

AS/jeb

NELAP Accredited ACIL Seal of Excellence Award 100% Recycled

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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Confidential Business Information

Case Narrative

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Anchor Environmental	**Service Request No.:**	K0601324
Project:	BRIX Maritime	**Date Received:**	2/17/06
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include Laboratory Duplicate (DUP), Matrix/Duplicate Matrix Spike (MS/DMS), and Laboratory Control Sample (LCS).

Sample Receipt

Six water samples were received for analysis at Columbia Analytical Services on 2/17/06. No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Diesel Range Organics by NWTPH-Dx

Sample Notes and Discussion:
Insufficient sample volume was received to perform a Matrix Spike/Matrix Spike Duplicate (MS/MSD). A MS and Laboratory Control Sample/Duplicate Laboratory Control Sample (LCS/DLCS) were analyzed and reported in lieu of the MS/MSD for these samples.

No other anomalies associated with the analysis of these samples were observed.

Gasoline Range Organics by NWTPH-Gx

Elevated Method Reporting Limits:
Sample BM-021606-5 required dilution due to the presence of elevated levels of target analyte. The reporting limits are adjusted to reflect the dilution.

No other anomalies associated with the analysis of these samples were observed.

Volatile Organic Compounds by EPA Method 8260B

Elevated Method Reporting Limits:
Sample BM-021606-5 required dilution due to the presence of elevated levels of target analytes. The reporting limits are adjusted to reflect the dilution.

Initial Calibration Exceptions:
The primary evaluation criterion was exceeded for the following analytes in Initial Calibration (ICAL) ID CAL5049: Dibromochloromethane and Bromoform. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the mean Relative Standard Deviation (RSD) of all analytes in the calibration. The result of the mean RSD calculation was 8.8%. The calibration meets the alternative evaluation criteria. Note that CAS/Kelso policy does not allow the use of averaging if any analyte in the ICAL exceeds 30% RSD.

No other anomalies associated with the analysis of these samples were observed.

Approved by _____ **Date** 3/7/06

Confidential Business Information

Polynuclear Aromatic Hydrocarbons by EPA Method 8270C

Sample Notes and Discussion:
Insufficient sample volume was received to perform a Matrix Spike/Matrix Spike Duplicate (MS/MSD). A MS and Laboratory Control Sample/Duplicate Laboratory Control Sample (LCS/DLCS) were analyzed and reported in lieu of the MS/MSD for these samples.

Elevated Method Reporting Limits:
Samples BM-021606-1 and BM-021606-5 required dilution due to the presence of elevated levels of target analytes. The reporting limits are adjusted to reflect the dilution.

The reporting limit is elevated for Acenaphthylene in samples BM-021606-1, BM-021606-2, and BM-021606-5. The chromatogram indicated the presence of non-target background components. The matrix interference prevented adequate resolution of the target compound at the reporting limit. The results are flagged to indicate the matrix interference.

No other anomalies associated with the analysis of these samples were observed.

Approved by _____ **Date** 3/7/06

Confidential Business Information

Chain of Custody Documentation

Confidential Business Information

Columbia Analytical Services INC.
An Employee - Owned Company

CHAIN OF CUSTODY

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222x07 • FAX (360) 636-1068

SR#: K060152 4

PAGE 1 OF 1 COC #

PROJECT NAME: BRIX MARITIME - PORTLAND, OR
PROJECT NUMBER:
PROJECT MANAGER: JOHN RENDA
COMPANY/ADDRESS: 6650 SW REDWOOD LANE #110
ANCHOR ENVIRONMENTAL, LLC
CITY/STATE/ZIP: PORTLAND, OR 97224
E-MAIL ADDRESS: JRENDA@ANCHORENV.COM
PHONE #: 503-670-1108 x12 FAX#: 503-670-1128
SAMPLER'S SIGNATURE: Kelly R. Tittemeier

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625 ☐ 8270 ☐ 8270LL ☐	Volatile Organics 624 ☐ (8260 ☒) 8021 ☐ BTEX ☐	Hydrocarbons (*see below) Gas ☒ Diesel ☒ ☐ Fuel Fingerprint (FIQ) ☐ NW-HCID Screen ☐ Oil ☐	Oil & Grease/TRPH 1664 HEM ☐ 1664 SGT ☐	PCB's Aroclors ☐ Congeners ☐	Pesticides/Herbicides 608 ☐ 8081A ☐ 8141A ☐ 8151A ☐	Chlorophenolics - 8151M Tri ☐ Tetra ☐ PCP ☐	PAHS 8310 ☐ (SIM ☒)	Metals, Total or Dissolved (See list below)	Cyanide ☐	Hex-Chrom ☐	pH, Cond., Cl, SO4, PO4, F, NO2, NO3, BOD, TSS, TDS (circle)	NH3-N, COD, Total-P, TKN, TOC, DOC (circle) NO2+NO3	TOX 9020 ☐ AOX 1650 ☐ 506 ☐	NUTPH-GX				REMARKS
BM-021606-1	2/16/06	1155		H_2O	8			X	X						X											
BM-021606-2	↓	1255		↓	↓			X	X						X											
BM-021606-3		1330						X	X						X											
BM-021606-4		1335						X	X						X											
BM-021606-5		1430						X	X						X											
Trip Blank	↓	NA		↓	2			X													X					

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
X II. Report Dup., MS, MSD as required
___ III. Data Validation Report (includes all raw data)
___ IV. CLP Deliverable Report
___ V. EDD

INVOICE INFORMATION

P.O. #
Bill To:

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
X Standard (10-15 working days)
___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER:_____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Kelly R. Tittemeier / 2/17/06 9.00am	[signature] / 2/17/06 1500		
Signature / Date/Time	Signature / Date/Time	Signature / Date/Time	Signature / Date/Time
Kelly R. Tittemeier / Anchor Env.	[signature] / CAS		
Printed Name / Firm	Printed Name / Firm	Printed Name / Firm	Printed Name / Firm

RCOC #1 06/03

Confidential Business Information

00013222

Columbia Analytical Services Inc.
Cooler Receipt and Preservation Form

PC #3

Project/Client Anchor Service Request K06 01324

Cooler received on 2-17-06 and opened on 2-17-06 by BW

1. Were custody seals on outside of coolers? Y N
   If yes, how many and where?
2. Were custody seals intact? Y N
3. Were signature and date present on the custody seals? Y N
4. Is the shipper's airbill available and filed? If no, record airbill number: CAS Courier ~~Y~~ N
5. COC#
   Temperature of cooler(s) upon receipt: (°C) -0.2
   Temperature Blank: (°C) 1.0
   Were samples hand delivered on the same day as collection? ~~Y~~ N
6. Were custody papers properly filled out (ink, signed, etc.)? Y N
7. Type of packing material present ICE, foam
8. **Did all bottles arrive in good condition (unbroken)?** Y N
9. Were all bottle labels complete (i.e analysis, preservation, etc.)? Y N
10. Did all bottle labels and tags agree with custody papers? Y N
11. **Were the correct types of bottles used for the tests indicated?** Y N
12. Were all of the preserved bottles received at the lab with the appropriate pH? Y N
13. Were VOA vials checked for absence of air bubbles, and if present, noted below? Y N
14. Were the 1631 Mercury bottles checked for absence of air bubbles, and if present, noted below? ~~Y~~ ~~N~~
15. Did the bottles originate from CAS/K or a branch laboratory? Y N
16. **Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?** ~~Y~~ ~~N~~
17. Was C12/Res negative? ~~Y~~ N

Explain any discrepancies:

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

000 9

NWTPH-Dx

00010

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Diesel and Residual Range Organics

Sample Name:	BM-021606-1 MW-4	**Units:**	ug/L
Lab Code:	K0601324-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	**540**	Y	280	1	02/27/06	02/28/06	KWG0603220	
Residual Range Organics (RRO)	ND	U	550	1	02/27/06	02/28/06	KWG0603220	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	79	50-150	02/28/06	Acceptable
n-Triacontane	87	50-150	02/28/06	Acceptable

Comments:

00011

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Diesel and Residual Range Organics

Sample Name:	BM-021606-2 MW-5	**Units:**	ug/L
Lab Code:	K0601324-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND	U	270	1	02/27/06	02/28/06	KWG0603220	
Residual Range Organics (RRO)	ND	U	540	1	02/27/06	02/28/06	KWG0603220	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	84	50-150	02/28/06	Acceptable
n-Triacontane	88	50-150	02/28/06	Acceptable

Comments:

00012

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Diesel and Residual Range Organics

Sample Name:	BM-021606-3 MW-3	**Units:**	ug/L
Lab Code:	K0601324-003	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	**560**	Z	270	1	02/27/06	02/28/06	KWG0603220	
Residual Range Organics (RRO)	**620**	Z	540	1	02/27/06	02/28/06	KWG0603220	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	77	50-150	02/28/06	Acceptable
n-Triacontane	82	50-150	02/28/06	Acceptable

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Diesel and Residual Range Organics

Sample Name:	BM-021606-4 MW-3 (DUP)	**Units:**	ug/L
Lab Code:	K0601324-004	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	**540**	Z	280	1	02/27/06	02/28/06	KWG0603220	
Residual Range Organics (RRO)	ND	U	550	1	02/27/06	02/28/06	KWG0603220	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	78	50-150	02/28/06	Acceptable
n-Triacontane	83	50-150	02/28/06	Acceptable

Comments:

00014

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Diesel and Residual Range Organics

Sample Name:	BM-021606-5 MW-1	**Units:**	ug/L
Lab Code:	K0601324-005	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	**730**	L	270	1	02/27/06	02/28/06	KWG0603220	
Residual Range Organics (RRO)	ND	U	530	1	02/27/06	02/28/06	KWG0603220	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	86	50-150	02/28/06	Acceptable
n-Triacontane	96	50-150	02/28/06	Acceptable

Comments:

00015

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0603220-3	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND	U	250	1	02/27/06	02/28/06	KWG0603220	
Residual Range Organics (RRO)	ND	U	500	1	02/27/06	02/28/06	KWG0603220	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	80	50-150	02/28/06	Acceptable
n-Triacontane	86	50-150	02/28/06	Acceptable

Comments:

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324

Surrogate Recovery Summary
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: NWTPH-Dx

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2
BM-021606-1	K0601324-001	79	87
BM-021606-2	K0601324-002	84	88
BM-021606-3	K0601324-003	77	82
BM-021606-4	K0601324-004	78	83
BM-021606-5	K0601324-005	86	96
Method Blank	KWG0603220-3	80	86
Lab Control Sample	KWG0603220-1	88	97
Duplicate Lab Control Sample	KWG0603220-2	95	98

Surrogate Recovery Control Limits (%)

Sur1 =	o-Terphenyl	50-150
Sur2 =	n-Triacontane	50-150

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

00017

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Extracted:**	02/27/2006
Sample Matrix:	Water	**Date Analyzed:**	02/28/2006

Lab Control Spike/Duplicate Lab Control Spike Summary
Diesel and Residual Range Organics

Extraction Method:	EPA 3510C	**Units:**	ug/L
Analysis Method:	NWTPH-Dx	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0603220

	Lab Control Sample KWG0603220-1 Lab Control Spike			Duplicate Lab Control Sample KWG0603220-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Diesel Range Organics (DRO)	3150	3200	99	3470	3200	108	56-162	9	30
Residual Range Organics (RRO)	1650	1600	103	1720	1600	107	53-143	4	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00018

NWTPH-Gx

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Gasoline Range Organics

Sample Name:	BM-021606-1 MW-4	**Units:**	ug/L
Lab Code:	K0601324-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics-NWTPH	**1100**	Y	250	1	02/21/06	02/21/06	KWG0603161	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	99	50-150	02/21/06	Acceptable

Comments:

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Gasoline Range Organics

Sample Name:	BM-021606-2 MW-5	**Units:**	ug/L
Lab Code:	K0601324-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics-NWTPH	**890**	H	250	1	02/21/06	02/21/06	KWG0603161	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	99	50-150	02/21/06	Acceptable

Comments:

00021

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Gasoline Range Organics

Sample Name:	BM-021606-3 MW-3	**Units:**	ug/L
Lab Code:	K0601324-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics-NWTPH	ND	U	250	1	02/21/06	02/21/06	KWG0603161	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	99	50-150	02/21/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Gasoline Range Organics

Sample Name:	BM-021606-4 MW-3 (DUP)	**Units:**	ug/L
Lab Code:	K0601324-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics-NWTPH	ND	U	250	1	02/21/06	02/21/06	KWG0603161	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	98	50-150	02/21/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Gasoline Range Organics

Sample Name:	BM-021606-5 MW-1	**Units:**	ug/L
Lab Code:	K0601324-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics-NWTPH	12000	Y	2500	1	02/21/06	02/22/06	KWG0603161	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	99	50-150	02/22/06	Acceptable

Comments:

00024

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Gasoline Range Organics

Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	K0601324-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics-NWTPH	ND	U	250	1	02/21/06	02/21/06	KWG0603161	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	100	50-150	02/21/06	Acceptable

Comments:

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Gasoline Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0603161-3	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics-NWTPH	ND	U	250	1	02/21/06	02/21/06	KWG0603161	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	100	50-150	02/21/06	Acceptable

Comments:

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324

Surrogate Recovery Summary
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: NWTPH-Gx

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
BM-021606-1	K0601324-001	99
BM-021606-2	K0601324-002	99
BM-021606-3	K0601324-003	99
BM-021606-4	K0601324-004	98
BM-021606-5	K0601324-005	99
Trip Blank	K0601324-006	100
BM-021606-2DUP	KWG0603161-1	99
Method Blank	KWG0603161-3	100
Lab Control Sample	KWG0603161-2	105

Surrogate Recovery Control Limits (%)

Sur1 = 1,4-Difluorobenzene 50-150

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

QA/QC Report

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Extracted: 02/21/2006
Date Analyzed: 02/21/2006

Lab Control Spike Summary
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: NWTPH-Gx

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0603161

	Lab Control Sample KWG0603161-2 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Gasoline Range Organics-NWTPH	463	500	93	71-128

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00028

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Extracted:**	02/21/2006
Sample Matrix:	Water	**Date Analyzed:**	02/21/2006

Duplicate Sample Summary
Gasoline Range Organics

Sample Name:	BM-021606-2	**Units:**	ug/L
Lab Code:	K0601324-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx	**Extraction Lot:**	KWG0603161

Analyte Name	MRL	Sample Result	BM-021606-2DUP KWG0603161-1 Duplicate Sample Result	Average	Relative Percent Difference	RPD Limit
Gasoline Range Organics-NWTPH	250	890	900	890	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00029

Volatile Organic Compounds
EPA Method 8260B

00030

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: 02/16/2006
Date Received: 02/17/2006

Volatile Organic Compounds

Sample Name: BM-021606-1 MW-4
Lab Code: K0601324-001

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Chloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Vinyl Chloride	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromomethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Chloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Trichlorofluoromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Acetone	ND	U	20	1	02/28/06	02/28/06	KWG0603355	
1,1-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Methyl tert-Butyl Ether	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Carbon Disulfide	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Methylene Chloride	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
trans-1,2-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1-Dichloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
2-Butanone (MEK)	ND	U	20	1	02/28/06	02/28/06	KWG0603355	
2,2-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
cis-1,2-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Chloroform	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromochloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Carbon Tetrachloride	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Benzene	**4.0**		0.50	1	02/28/06	02/28/06	KWG0603355	
Trichloroethene (TCE)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromodichloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Dibromomethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
2-Hexanone	ND	U	20	1	02/28/06	02/28/06	KWG0603355	
cis-1,3-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Toluene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
trans-1,3-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1,2-Trichloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	02/28/06	02/28/06	KWG0603355	
1,3-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	

Comments:

00031

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: 02/16/2006
Date Received: 02/17/2006

Volatile Organic Compounds

Sample Name: BM-021606-1 MW-4
Lab Code: K0601324-001

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Dibromochloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
Chlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Ethylbenzene	**1.4**		0.50	1	02/28/06	02/28/06	KWG0603355	
m,p-Xylenes	**22**		0.50	1	02/28/06	02/28/06	KWG0603355	
o-Xylene	**0.57**		0.50	1	02/28/06	02/28/06	KWG0603355	
Styrene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromoform	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Isopropylbenzene	**26**		2.0	1	02/28/06	02/28/06	KWG0603355	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2,3-Trichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromobenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
n-Propylbenzene	**34**		2.0	1	02/28/06	02/28/06	KWG0603355	
2-Chlorotoluene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
4-Chlorotoluene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,3,5-Trimethylbenzene	**8.4**		2.0	1	02/28/06	02/28/06	KWG0603355	
tert-Butylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,2,4-Trimethylbenzene	**57**		2.0	1	02/28/06	02/28/06	KWG0603355	
sec-Butylbenzene	**4.7**		2.0	1	02/28/06	02/28/06	KWG0603355	
1,3-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
4-Isopropyltoluene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,4-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
n-Butylbenzene	**4.0**		2.0	1	02/28/06	02/28/06	KWG0603355	
1,2-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,2,4-Trichlorobenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,2,3-Trichlorobenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
Naphthalene	**100**	D	20	10	03/01/06	03/01/06	KWG0603474	
Hexachlorobutadiene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	

Comments:

00032

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: 02/16/2006
Date Received: 02/17/2006

Volatile Organic Compounds

Sample Name: BM-021606-1 MW-4
Lab Code: K0601324-001

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	92	80-119	02/28/06	Acceptable
Toluene-d8	106	83-113	02/28/06	Acceptable
4-Bromofluorobenzene	93	72-114	02/28/06	Acceptable

Comments:

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: 02/16/2006
Date Received: 02/17/2006

Volatile Organic Compounds

Sample Name: BM-021606-2 MW-5
Lab Code: K0601324-002

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Chloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Vinyl Chloride	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromomethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Chloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Trichlorofluoromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Acetone	ND	U	20	1	02/28/06	02/28/06	KWG0603355	
1,1-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Methyl tert-Butyl Ether	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Carbon Disulfide	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Methylene Chloride	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
trans-1,2-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1-Dichloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
2-Butanone (MEK)	ND	U	20	1	02/28/06	02/28/06	KWG0603355	
2,2-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
cis-1,2-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Chloroform	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromochloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Carbon Tetrachloride	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Benzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Trichloroethene (TCE)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromodichloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Dibromomethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
2-Hexanone	ND	U	20	1	02/28/06	02/28/06	KWG0603355	
cis-1,3-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Toluene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
trans-1,3-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1,2-Trichloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	02/28/06	02/28/06	KWG0603355	
1,3-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	

Comments:

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: 02/16/2006
Date Received: 02/17/2006

Volatile Organic Compounds

Sample Name: BM-021606-2 MW-5
Lab Code: K0601324-002

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Dibromochloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
Chlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Ethylbenzene	**0.89**		0.50	1	02/28/06	02/28/06	KWG0603355	
m,p-Xylenes	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
o-Xylene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Styrene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromoform	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Isopropylbenzene	**3.4**		2.0	1	02/28/06	02/28/06	KWG0603355	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2,3-Trichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromobenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
n-Propylbenzene	**16**		2.0	1	02/28/06	02/28/06	KWG0603355	
2-Chlorotoluene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
4-Chlorotoluene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,3,5-Trimethylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
tert-Butylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,2,4-Trimethylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
sec-Butylbenzene	**5.9**		2.0	1	02/28/06	02/28/06	KWG0603355	
1,3-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
4-Isopropyltoluene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,4-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
n-Butylbenzene	**16**		2.0	1	02/28/06	02/28/06	KWG0603355	
1,2-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,2,4-Trichlorobenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,2,3-Trichlorobenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
Naphthalene	**3.0**		2.0	1	02/28/06	02/28/06	KWG0603355	
Hexachlorobutadiene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	

Comments:

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Volatile Organic Compounds

Sample Name:	BM-021606-2 MW-5	**Units:**	ug/L
Lab Code:	K0601324-002	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	80-119	02/28/06	Acceptable
Toluene-d8	109	83-113	02/28/06	Acceptable
4-Bromofluorobenzene	89	72-114	02/28/06	Acceptable

Comments:

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: 02/16/2006
Date Received: 02/17/2006

Volatile Organic Compounds

Sample Name: BM-021606-3 MW-3
Lab Code: K0601324-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Chloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Vinyl Chloride	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromomethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Chloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Trichlorofluoromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Acetone	ND	U	20	1	02/28/06	02/28/06	KWG0603355	
1,1-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Methyl tert-Butyl Ether	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Carbon Disulfide	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Methylene Chloride	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
trans-1,2-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1-Dichloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
2-Butanone (MEK)	ND	U	20	1	02/28/06	02/28/06	KWG0603355	
2,2-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
cis-1,2-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Chloroform	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromochloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Carbon Tetrachloride	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Benzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Trichloroethene (TCE)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromodichloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Dibromomethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
2-Hexanone	ND	U	20	1	02/28/06	02/28/06	KWG0603355	
cis-1,3-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Toluene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
trans-1,3-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1,2-Trichloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	02/28/06	02/28/06	KWG0603355	
1,3-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	

Comments:

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: 02/16/2006
Date Received: 02/17/2006

Volatile Organic Compounds

Sample Name: BM-021606-3 MW-3
Lab Code: K0601324-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Dibromochloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
Chlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Ethylbenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
m,p-Xylenes	**0.72**		0.50	1	02/28/06	02/28/06	KWG0603355	
o-Xylene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Styrene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromoform	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Isopropylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2,3-Trichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromobenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
n-Propylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
2-Chlorotoluene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
4-Chlorotoluene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,3,5-Trimethylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
tert-Butylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,2,4-Trimethylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
sec-Butylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,3-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
4-Isopropyltoluene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,4-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
n-Butylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,2-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,2,4-Trichlorobenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,2,3-Trichlorobenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
Naphthalene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
Hexachlorobutadiene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	

Comments:

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: 02/16/2006
Date Received: 02/17/2006

Volatile Organic Compounds

Sample Name: BM-021606-3 MW-3
Lab Code: K0601324-003

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	92	80-119	02/28/06	Acceptable
Toluene-d8	107	83-113	02/28/06	Acceptable
4-Bromofluorobenzene	88	72-114	02/28/06	Acceptable

Comments:

Analytical Results

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: 02/16/2006
Date Received: 02/17/2006

Volatile Organic Compounds

Sample Name: BM-021606-4 MW-3 (DUP)
Lab Code: K0601324-004

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Chloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Vinyl Chloride	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromomethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Chloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Trichlorofluoromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Acetone	ND	U	20	1	02/28/06	02/28/06	KWG0603355	
1,1-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Methyl tert-Butyl Ether	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Carbon Disulfide	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Methylene Chloride	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
trans-1,2-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1-Dichloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
2-Butanone (MEK)	ND	U	20	1	02/28/06	02/28/06	KWG0603355	
2,2-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
cis-1,2-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Chloroform	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromochloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Carbon Tetrachloride	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Benzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Trichloroethene (TCE)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromodichloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Dibromomethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
2-Hexanone	ND	U	20	1	02/28/06	02/28/06	KWG0603355	
cis-1,3-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Toluene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
trans-1,3-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1,2-Trichloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	02/28/06	02/28/06	KWG0603355	
1,3-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	

Comments:

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: 02/16/2006
Date Received: 02/17/2006

Volatile Organic Compounds

Sample Name: BM-021606-4 MW-3 (DuP)
Lab Code: K0601324-004

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Dibromochloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
Chlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Ethylbenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
m,p-Xylenes	**0.67**		0.50	1	02/28/06	02/28/06	KWG0603355	
o-Xylene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Styrene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromoform	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Isopropylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2,3-Trichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
Bromobenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
n-Propylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
2-Chlorotoluene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
4-Chlorotoluene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,3,5-Trimethylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
tert-Butylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,2,4-Trimethylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
sec-Butylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,3-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
4-Isopropyltoluene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,4-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
n-Butylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,2-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603355	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,2,4-Trichlorobenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
1,2,3-Trichlorobenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
Naphthalene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	
Hexachlorobutadiene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603355	

Comments:

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Volatile Organic Compounds

Sample Name:	BM-021606-4 MW-3 (DUP)	**Units:**	ug/L
Lab Code:	K0601324-004	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	80-119	02/28/06	Acceptable
Toluene-d8	109	83-113	02/28/06	Acceptable
4-Bromofluorobenzene	89	72-114	02/28/06	Acceptable

Comments:

Analytical Results

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: 02/16/2006
Date Received: 02/17/2006

Volatile Organic Compounds

Sample Name: BM-021606-5 MW-1
Lab Code: K0601324-005

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Chloromethane	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Vinyl Chloride	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Bromomethane	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Chloroethane	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Trichlorofluoromethane	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Acetone	ND	U	200	10	02/28/06	02/28/06	kwg0603375	
1,1-Dichloroethene	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Methyl tert-Butyl Ether	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Carbon Disulfide	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Methylene Chloride	ND	U	20	10	02/28/06	02/28/06	kwg0603375	
trans-1,2-Dichloroethene	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
1,1-Dichloroethane	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
2-Butanone (MEK)	ND	U	200	10	02/28/06	02/28/06	kwg0603375	
2,2-Dichloropropane	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
cis-1,2-Dichloroethene	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Chloroform	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Bromochloromethane	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
1,1,1-Trichloroethane (TCA)	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
1,1-Dichloropropene	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Carbon Tetrachloride	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
1,2-Dichloroethane (EDC)	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Benzene	**15**	D	5.0	10	02/28/06	02/28/06	kwg0603375	
Trichloroethene (TCE)	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
1,2-Dichloropropane	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Bromodichloromethane	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Dibromomethane	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
2-Hexanone	ND	U	200	10	02/28/06	02/28/06	kwg0603375	
cis-1,3-Dichloropropene	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Toluene	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
trans-1,3-Dichloropropene	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
1,1,2-Trichloroethane	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
4-Methyl-2-pentanone (MIBK)	ND	U	200	10	02/28/06	02/28/06	kwg0603375	
1,3-Dichloropropane	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	

Comments:

00043

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: 02/16/2006
Date Received: 02/17/2006

Volatile Organic Compounds

Sample Name: BM-021606-5 MW-1
Lab Code: K0601324-005

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Dibromochloromethane	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
1,2-Dibromoethane (EDB)	ND	U	20	10	02/28/06	02/28/06	kwg0603375	
Chlorobenzene	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
1,1,1,2-Tetrachloroethane	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Ethylbenzene	**150**	D	5.0	10	02/28/06	02/28/06	kwg0603375	
m,p-Xylenes	**160**	D	5.0	10	02/28/06	02/28/06	kwg0603375	
o-Xylene	**13**	D	5.0	10	02/28/06	02/28/06	kwg0603375	
Styrene	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Bromoform	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Isopropylbenzene	**38**	D	20	10	02/28/06	02/28/06	kwg0603375	
1,1,2,2-Tetrachloroethane	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
1,2,3-Trichloropropane	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
Bromobenzene	ND	U	20	10	02/28/06	02/28/06	kwg0603375	
n-Propylbenzene	**170**	D	20	10	02/28/06	02/28/06	kwg0603375	
2-Chlorotoluene	ND	U	20	10	02/28/06	02/28/06	kwg0603375	
4-Chlorotoluene	ND	U	20	10	02/28/06	02/28/06	kwg0603375	
1,3,5-Trimethylbenzene	**150**	D	20	10	02/28/06	02/28/06	kwg0603375	
tert-Butylbenzene	ND	U	20	10	02/28/06	02/28/06	kwg0603375	
1,2,4-Trimethylbenzene	**670**	D	200	100	02/28/06	02/28/06	kwg0603375	
sec-Butylbenzene	ND	U	20	10	02/28/06	02/28/06	kwg0603375	
1,3-Dichlorobenzene	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
4-Isopropyltoluene	ND	U	20	10	02/28/06	02/28/06	kwg0603375	
1,4-Dichlorobenzene	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
n-Butylbenzene	**53**	D	20	10	02/28/06	02/28/06	kwg0603375	
1,2-Dichlorobenzene	ND	U	5.0	10	02/28/06	02/28/06	kwg0603375	
1,2-Dibromo-3-chloropropane	ND	U	20	10	02/28/06	02/28/06	kwg0603375	
1,2,4-Trichlorobenzene	ND	U	20	10	02/28/06	02/28/06	kwg0603375	
1,2,3-Trichlorobenzene	ND	U	20	10	02/28/06	02/28/06	kwg0603375	
Naphthalene	**340**	D	20	10	02/28/06	02/28/06	kwg0603375	
Hexachlorobutadiene	ND	U	20	10	02/28/06	02/28/06	kwg0603375	

Comments:

00044

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Volatile Organic Compounds

Sample Name:	BM-021606-5 MW-1	**Units:**	ug/L
Lab Code:	K0601324-005	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	92	80-119	02/28/06	Acceptable
Toluene-d8	98	83-113	02/28/06	Acceptable
4-Bromofluorobenzene	88	72-114	02/28/06	Acceptable

Comments:

Analytical Results

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: 02/16/2006
Date Received: 02/17/2006

Volatile Organic Compounds

Sample Name: Trip Blank
Lab Code: K0601324-006

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Chloromethane	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Vinyl Chloride	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Bromomethane	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Chloroethane	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Trichlorofluoromethane	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Acetone	ND	U	20	1	02/28/06	02/28/06	kwg0603375	
1,1-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Methyl tert-Butyl Ether	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Carbon Disulfide	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Methylene Chloride	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	
trans-1,2-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
1,1-Dichloroethane	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
2-Butanone (MEK)	ND	U	20	1	02/28/06	02/28/06	kwg0603375	
2,2-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
cis-1,2-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Chloroform	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Bromochloromethane	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
1,1-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Carbon Tetrachloride	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Benzene	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Trichloroethene (TCE)	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
1,2-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Bromodichloromethane	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Dibromomethane	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
2-Hexanone	ND	U	20	1	02/28/06	02/28/06	kwg0603375	
cis-1,3-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Toluene	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
trans-1,3-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
1,1,2-Trichloroethane	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	02/28/06	02/28/06	kwg0603375	
1,3-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	

Comments:

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: 02/16/2006
Date Received: 02/17/2006

Volatile Organic Compounds

Sample Name: Trip Blank
Lab Code: K0601324-006

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Dibromochloromethane	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	
Chlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Ethylbenzene	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
m,p-Xylenes	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
o-Xylene	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Styrene	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Bromoform	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Isopropylbenzene	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
1,2,3-Trichloropropane	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
Bromobenzene	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	
n-Propylbenzene	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	
2-Chlorotoluene	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	
4-Chlorotoluene	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	
1,3,5-Trimethylbenzene	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	
tert-Butylbenzene	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	
1,2,4-Trimethylbenzene	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	
sec-Butylbenzene	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	
1,3-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
4-Isopropyltoluene	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	
1,4-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
n-Butylbenzene	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	
1,2-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	kwg0603375	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	
1,2,4-Trichlorobenzene	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	
1,2,3-Trichlorobenzene	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	
Naphthalene	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	
Hexachlorobutadiene	ND	U	2.0	1	02/28/06	02/28/06	kwg0603375	

Comments:

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: 02/16/2006
Date Received: 02/17/2006

Volatile Organic Compounds

Sample Name: Trip Blank
Lab Code: K0601324-006

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	91	80-119	02/28/06	Acceptable
Toluene-d8	98	83-113	02/28/06	Acceptable
4-Bromofluorobenzene	84	72-114	02/28/06	Acceptable

Comments:

00048

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0603355-2

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Chloromethane	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Vinyl Chloride	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Bromomethane	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Chloroethane	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Trichlorofluoromethane	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Acetone	ND	U	20	1	02/27/06	02/27/06	KWG0603355	
1,1-Dichloroethene	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Methyl tert-Butyl Ether	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Carbon Disulfide	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Methylene Chloride	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	
trans-1,2-Dichloroethene	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
1,1-Dichloroethane	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
2-Butanone (MEK)	ND	U	20	1	02/27/06	02/27/06	KWG0603355	
2,2-Dichloropropane	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
cis-1,2-Dichloroethene	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Chloroform	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Bromochloromethane	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
1,1-Dichloropropene	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Carbon Tetrachloride	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Benzene	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Trichloroethene (TCE)	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
1,2-Dichloropropane	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Bromodichloromethane	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Dibromomethane	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
2-Hexanone	ND	U	20	1	02/27/06	02/27/06	KWG0603355	
cis-1,3-Dichloropropene	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Toluene	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
trans-1,3-Dichloropropene	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
1,1,2-Trichloroethane	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	02/27/06	02/27/06	KWG0603355	
1,3-Dichloropropane	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	

Comments:

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0603355-2

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Dibromochloromethane	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	
Chlorobenzene	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Ethylbenzene	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
m,p-Xylenes	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
o-Xylene	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Styrene	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Bromoform	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Isopropylbenzene	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
1,2,3-Trichloropropane	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
Bromobenzene	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	
n-Propylbenzene	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	
2-Chlorotoluene	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	
4-Chlorotoluene	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	
1,3,5-Trimethylbenzene	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	
tert-Butylbenzene	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	
1,2,4-Trimethylbenzene	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	
sec-Butylbenzene	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	
1,3-Dichlorobenzene	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
4-Isopropyltoluene	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	
1,4-Dichlorobenzene	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
n-Butylbenzene	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	
1,2-Dichlorobenzene	ND	U	0.50	1	02/27/06	02/27/06	KWG0603355	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	
1,2,4-Trichlorobenzene	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	
1,2,3-Trichlorobenzene	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	
Naphthalene	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	
Hexachlorobutadiene	ND	U	2.0	1	02/27/06	02/27/06	KWG0603355	

Comments:

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0603355-2

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	80-119	02/27/06	Acceptable
Toluene-d8	107	83-113	02/27/06	Acceptable
4-Bromofluorobenzene	85	72-114	02/27/06	Acceptable

Comments:

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0603375-2

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Chloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Vinyl Chloride	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Bromomethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Chloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Trichlorofluoromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Acetone	ND	U	20	1	02/28/06	02/28/06	KWG0603375	
1,1-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Methyl tert-Butyl Ether	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Carbon Disulfide	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Methylene Chloride	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	
trans-1,2-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
1,1-Dichloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
2-Butanone (MEK)	ND	U	20	1	02/28/06	02/28/06	KWG0603375	
2,2-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
cis-1,2-Dichloroethene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Chloroform	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Bromochloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
1,1-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Carbon Tetrachloride	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Benzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Trichloroethene (TCE)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
1,2-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Bromodichloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Dibromomethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
2-Hexanone	ND	U	20	1	02/28/06	02/28/06	KWG0603375	
cis-1,3-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Toluene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
trans-1,3-Dichloropropene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
1,1,2-Trichloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	02/28/06	02/28/06	KWG0603375	
1,3-Dichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	

Comments:

00052

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0603375-2

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Dibromochloromethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	
Chlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Ethylbenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
m,p-Xylenes	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
o-Xylene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Styrene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Bromoform	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Isopropylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
1,2,3-Trichloropropane	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
Bromobenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	
n-Propylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	
2-Chlorotoluene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	
4-Chlorotoluene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	
1,3,5-Trimethylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	
tert-Butylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	
1,2,4-Trimethylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	
sec-Butylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	
1,3-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
4-Isopropyltoluene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	
1,4-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
n-Butylbenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	
1,2-Dichlorobenzene	ND	U	0.50	1	02/28/06	02/28/06	KWG0603375	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	
1,2,4-Trichlorobenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	
1,2,3-Trichlorobenzene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	
Naphthalene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	
Hexachlorobutadiene	ND	U	2.0	1	02/28/06	02/28/06	KWG0603375	

Comments:

00053

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0603375-2

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	88	80-119	02/28/06	Acceptable
Toluene-d8	97	83-113	02/28/06	Acceptable
4-Bromofluorobenzene	85	72-114	02/28/06	Acceptable

Comments:

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0603474-2

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Chloromethane	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Vinyl Chloride	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Bromomethane	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Chloroethane	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Trichlorofluoromethane	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Acetone	ND	U	20	1	03/01/06	03/01/06	KWG0603474	
1,1-Dichloroethene	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Methyl tert-Butyl Ether	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Carbon Disulfide	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Methylene Chloride	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
1,1-Dichloroethane	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
2-Butanone (MEK)	ND	U	20	1	03/01/06	03/01/06	KWG0603474	
2,2-Dichloropropane	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
cis-1,2-Dichloroethene	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Chloroform	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Bromochloromethane	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
1,1-Dichloropropene	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Carbon Tetrachloride	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Benzene	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Trichloroethene (TCE)	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
1,2-Dichloropropane	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Bromodichloromethane	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Dibromomethane	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
2-Hexanone	ND	U	20	1	03/01/06	03/01/06	KWG0603474	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Toluene	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
1,1,2-Trichloroethane	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	03/01/06	03/01/06	KWG0603474	
1,3-Dichloropropane	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	

Comments:

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0603474-2

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Dibromochloromethane	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	
Chlorobenzene	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Ethylbenzene	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
m,p-Xylenes	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
o-Xylene	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Styrene	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Bromoform	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Isopropylbenzene	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
1,2,3-Trichloropropane	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
Bromobenzene	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	
n-Propylbenzene	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	
2-Chlorotoluene	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	
4-Chlorotoluene	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	
1,3,5-Trimethylbenzene	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	
tert-Butylbenzene	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	
1,2,4-Trimethylbenzene	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	
sec-Butylbenzene	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	
1,3-Dichlorobenzene	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
4-Isopropyltoluene	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	
1,4-Dichlorobenzene	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
n-Butylbenzene	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	
1,2-Dichlorobenzene	ND	U	0.50	1	03/01/06	03/01/06	KWG0603474	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	
1,2,4-Trichlorobenzene	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	
1,2,3-Trichlorobenzene	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	
Naphthalene	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	
Hexachlorobutadiene	ND	U	2.0	1	03/01/06	03/01/06	KWG0603474	

Comments:

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0603474-2	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	80-119	03/01/06	Acceptable
Toluene-d8	100	83-113	03/01/06	Acceptable
4-Bromofluorobenzene	86	72-114	03/01/06	Acceptable

Comments:

00057

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
BM-021606-1	K0601324-001	92	106	93
BM-021606-2	K0601324-002	94	109	89
BM-021606-3	K0601324-003	92	107	88
BM-021606-4	K0601324-004	94	109	89
BM-021606-5	K0601324-005	92	98	88
Trip Blank	K0601324-006	91	98	84
Method Blank	KWG0603355-2	94	107	85
Method Blank	KWG0603375-2	88	97	85
Method Blank	KWG0603474-2	94	100	86
Batch QC	K0601178-031	97	105	88
Batch QCMS	KWG0603355-3	96	112	97
Batch QCDMS	KWG0603355-4	100	113	94
Lab Control Sample	KWG0603355-1	99	110	96
Lab Control Sample	KWG0603375-1	95	102	91
Lab Control Sample	KWG0603474-1	96	103	93

Surrogate Recovery Control Limits (%)

Sur1 =	Dibromofluoromethane	80-119
Sur2 =	Toluene-d8	83-113
Sur3 =	4-Bromofluorobenzene	72-114

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

00058

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Extracted:**	02/27/2006
Sample Matrix:	Water	**Date Analyzed:**	02/27/2006

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0601178-031	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0603355

		Batch QCMS KWG0603355-3 Matrix Spike			Batch QCDMS KWG0603355-4 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
1,1-Dichloroethene	ND	11.3	10.0	113	11.4	10.0	114	76-143	1	30
Benzene	ND	11.8	10.0	118	11.8	10.0	118	75-130	0	30
Trichloroethene (TCE)	10	22.0	10.0	115	21.6	10.0	112	69-132	2	30
Toluene	ND	11.3	10.0	113	11.2	10.0	112	72-132	1	30
Chlorobenzene	ND	10.2	10.0	102	9.77	10.0	98	78-117	4	30
1,2-Dichlorobenzene	ND	9.35	10.0	94	9.41	10.0	94	77-117	1	30
Naphthalene	ND	9.22	10.0	92	9.41	10.0	94	56-155	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00059

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Extracted: 02/27/2006
Date Analyzed: 02/27/2006

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0603355

	Lab Control Sample KWG0603355-1 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Dichlorodifluoromethane	9.57	10.0	96	45-171
Chloromethane	10.1	10.0	101	53-135
Vinyl Chloride	11.0	10.0	110	67-130
Bromomethane	10.4	10.0	104	36-158
Chloroethane	11.2	10.0	112	62-125
Trichlorofluoromethane	10.5	10.0	105	66-126
Acetone	61.1	50.0	122	70-127
1,1-Dichloroethene	9.07	10.0	91	76-129
Methyl tert-Butyl Ether	9.77	10.0	98	63-132
Carbon Disulfide	19.6	20.0	98	62-138
Methylene Chloride	11.0	10.0	110	65-127
trans-1,2-Dichloroethene	9.63	10.0	96	81-121
1,1-Dichloroethane	10.6	10.0	106	76-117
2-Butanone (MEK)	55.0	50.0	110	69-132
2,2-Dichloropropane	6.26	10.0	63	63-142
cis-1,2-Dichloroethene	10.2	10.0	102	83-118
Chloroform	9.67	10.0	97	76-121
Bromochloromethane	10.5	10.0	105	80-125
1,1,1-Trichloroethane (TCA)	9.00	10.0	90	72-132
1,1-Dichloropropene	9.51	10.0	95	72-118
Carbon Tetrachloride	9.50	10.0	95	66-146
1,2-Dichloroethane (EDC)	11.2	10.0	112	74-121
Benzene	10.2	10.0	102	78-121
Trichloroethene (TCE)	9.99	10.0	100	79-119
1,2-Dichloropropane	10.5	10.0	105	76-116
Bromodichloromethane	10.7	10.0	107	74-130
Dibromomethane	10.5	10.0	105	76-123
2-Hexanone	44.6	50.0	89	67-127
cis-1,3-Dichloropropene	9.57	10.0	96	79-123
Toluene	9.77	10.0	98	76-122
trans-1,3-Dichloropropene	7.64	10.0	76	70-117
1,1,2-Trichloroethane	10.3	10.0	103	76-120
4-Methyl-2-pentanone (MIBK)	52.4	50.0	105	70-128
1,3-Dichloropropane	10.5	10.0	105	77-121
Tetrachloroethene (PCE)	8.08	10.0	81	72-124
Dibromochloromethane	9.30	10.0	93	72-133

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00060

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Extracted: 02/27/2006
Date Analyzed: 02/27/2006

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0603355

Analyte Name	Lab Control Sample KWG0603355-1 Lab Control Spike Result	Expected	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	9.53	10.0	95	75-120
Chlorobenzene	9.05	10.0	91	79-113
1,1,1,2-Tetrachloroethane	9.24	10.0	92	72-133
Ethylbenzene	8.69	10.0	87	84-122
m,p-Xylenes	16.9	20.0	84	83-125
o-Xylene	8.39	10.0	84	83-122
Styrene	9.41	10.0	94	83-127
Bromoform	8.26	10.0	83	63-149
Isopropylbenzene	7.24	10.0	72	72-114
1,1,2,2-Tetrachloroethane	9.19	10.0	92	70-122
1,2,3-Trichloropropane	9.52	10.0	95	73-125
Bromobenzene	8.40	10.0	84	80-121
n-Propylbenzene	8.52	10.0	85	78-124
2-Chlorotoluene	8.55	10.0	86	82-126
4-Chlorotoluene	8.41	10.0	84	80-122
1,3,5-Trimethylbenzene	8.33	10.0	83	78-132
tert-Butylbenzene	8.26	10.0	83	76-126
1,2,4-Trimethylbenzene	8.64	10.0	86	74-138
sec-Butylbenzene	8.60	10.0	86	72-133
1,3-Dichlorobenzene	8.42	10.0	84	81-116
4-Isopropyltoluene	7.73	10.0	77	62-132
1,4-Dichlorobenzene	8.67	10.0	87	80-113
n-Butylbenzene	7.99	10.0	80	51-138
1,2-Dichlorobenzene	8.67	10.0	87	81-113
1,2-Dibromo-3-chloropropane	8.79	10.0	88	63-124
1,2,4-Trichlorobenzene	8.42	10.0	84	61-135
1,2,3-Trichlorobenzene	8.48	10.0	85	66-131
Naphthalene	8.88	10.0	89	53-157
Hexachlorobutadiene	7.17	10.0	72	66-132

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00061

Confidential Business Information

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Extracted: 02/28/2006
Date Analyzed: 02/28/2006

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0603375

	Lab Control Sample KWG0603375-1 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Dichlorodifluoromethane	9.16	10.0	92	45-171
Chloromethane	9.46	10.0	95	53-135
Vinyl Chloride	11.1	10.0	111	67-130
Bromomethane	9.52	10.0	95	36-158
Chloroethane	10.9	10.0	109	62-125
Trichlorofluoromethane	10.2	10.0	102	66-126
Acetone	47.2	50.0	94	70-127
1,1-Dichloroethene	8.70	10.0	87	76-129
Methyl tert-Butyl Ether	7.58	10.0	76	63-132
Carbon Disulfide	19.1	20.0	96	62-138
Methylene Chloride	10.2	10.0	102	65-127
trans-1,2-Dichloroethene	9.23	10.0	92	81-121
1,1-Dichloroethane	9.88	10.0	99	76-117
2-Butanone (MEK)	42.8	50.0	86	69-132
2,2-Dichloropropane	6.94	10.0	69	63-142
cis-1,2-Dichloroethene	9.58	10.0	96	83-118
Chloroform	9.05	10.0	91	76-121
Bromochloromethane	9.01	10.0	90	80-125
1,1,1-Trichloroethane (TCA)	8.78	10.0	88	72-132
1,1-Dichloropropene	9.12	10.0	91	72-118
Carbon Tetrachloride	9.39	10.0	94	66-146
1,2-Dichloroethane (EDC)	9.47	10.0	95	74-121
Benzene	9.69	10.0	97	78-121
Trichloroethene (TCE)	9.12	10.0	91	79-119
1,2-Dichloropropane	9.59	10.0	96	76-116
Bromodichloromethane	9.67	10.0	97	74-130
Dibromomethane	8.71	10.0	87	76-123
2-Hexanone	37.3	50.0	75	67-127
cis-1,3-Dichloropropene	8.37	10.0	84	79-123
Toluene	9.07	10.0	91	76-122
trans-1,3-Dichloropropene	7.68	10.0	77	70-117
1,1,2-Trichloroethane	9.34	10.0	93	76-120
4-Methyl-2-pentanone (MIBK)	39.8	50.0	80	70-128
1,3-Dichloropropane	9.77	10.0	98	77-121
Tetrachloroethene (PCE)	8.86	10.0	89	72-124
Dibromochloromethane	8.97	10.0	90	72-133

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00062

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Extracted: 02/28/2006
Date Analyzed: 02/28/2006

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0603375

	Lab Control Sample KWG0603375-1 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	8.63	10.0	86	75-120
Chlorobenzene	9.51	10.0	95	79-113
1,1,1,2-Tetrachloroethane	9.45	10.0	95	72-133
Ethylbenzene	9.35	10.0	94	84-122
m,p-Xylenes	18.8	20.0	94	83-125
o-Xylene	9.03	10.0	90	83-122
Styrene	10.0	10.0	100	83-127
Bromoform	7.64	10.0	76	63-149
Isopropylbenzene	8.15	10.0	82	72-114
1,1,2,2-Tetrachloroethane	8.82	10.0	88	70-122
1,2,3-Trichloropropane	8.76	10.0	88	73-125
Bromobenzene	9.19	10.0	92	80-121
n-Propylbenzene	9.99	10.0	100	78-124
2-Chlorotoluene	9.70	10.0	97	82-126
4-Chlorotoluene	9.68	10.0	97	80-122
1,3,5-Trimethylbenzene	9.65	10.0	97	78-132
tert-Butylbenzene	9.73	10.0	97	76-126
1,2,4-Trimethylbenzene	10.1	10.0	101	74-138
sec-Butylbenzene	10.2	10.0	102	72-133
1,3-Dichlorobenzene	9.43	10.0	94	81-116
4-Isopropyltoluene	9.10	10.0	91	62-132
1,4-Dichlorobenzene	9.48	10.0	95	80-113
n-Butylbenzene	9.56	10.0	96	51-138
1,2-Dichlorobenzene	9.40	10.0	94	81-113
1,2-Dibromo-3-chloropropane	7.50	10.0	75	63-124
1,2,4-Trichlorobenzene	9.11	10.0	91	61-135
1,2,3-Trichlorobenzene	8.28	10.0	83	66-131
Naphthalene	8.33	10.0	83	53-157
Hexachlorobutadiene	8.30	10.0	83	66-132

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00063

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Extracted: 03/01/2006
Date Analyzed: 03/01/2006

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0603474

	Lab Control Sample KWG0603474-1 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Dichlorodifluoromethane	8.68	10.0	87	45-171
Chloromethane	12.3	10.0	123	53-135
Vinyl Chloride	10.1	10.0	101	67-130
Bromomethane	7.92	10.0	79	36-158
Chloroethane	10.1	10.0	101	62-125
Trichlorofluoromethane	9.80	10.0	98	66-126
Acetone	46.3	50.0	93	70-127
1,1-Dichloroethene	8.88	10.0	89	76-129
Methyl tert-Butyl Ether	7.86	10.0	79	63-132
Carbon Disulfide	19.0	20.0	95	62-138
Methylene Chloride	10.4	10.0	104	65-127
trans-1,2-Dichloroethene	9.13	10.0	91	81-121
1,1-Dichloroethane	9.97	10.0	100	76-117
2-Butanone (MEK)	42.5	50.0	85	69-132
2,2-Dichloropropane	6.88	10.0	69	63-142
cis-1,2-Dichloroethene	9.47	10.0	95	83-118
Chloroform	9.12	10.0	91	76-121
Bromochloromethane	9.44	10.0	94	80-125
1,1,1-Trichloroethane (TCA)	8.67	10.0	87	72-132
1,1-Dichloropropene	9.17	10.0	92	72-118
Carbon Tetrachloride	9.05	10.0	91	66-146
1,2-Dichloroethane (EDC)	9.36	10.0	94	74-121
Benzene	9.80	10.0	98	78-121
Trichloroethene (TCE)	9.03	10.0	90	79-119
1,2-Dichloropropane	9.36	10.0	94	76-116
Bromodichloromethane	10.1	10.0	101	74-130
Dibromomethane	8.89	10.0	89	76-123
2-Hexanone	35.3	50.0	71	67-127
cis-1,3-Dichloropropene	8.83	10.0	88	79-123
Toluene	9.16	10.0	92	76-122
trans-1,3-Dichloropropene	7.58	10.0	76	70-117
1,1,2-Trichloroethane	9.40	10.0	94	76-120
4-Methyl-2-pentanone (MIBK)	40.8	50.0	82	70-128
1,3-Dichloropropane	9.76	10.0	98	77-121
Tetrachloroethene (PCE)	8.63	10.0	86	72-124
Dibromochloromethane	9.37	10.0	94	72-133

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00064

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Extracted: 03/01/2006
Date Analyzed: 03/01/2006

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0603474

	Lab Control Sample KWG0603474-1 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	8.89	10.0	89	75-120
Chlorobenzene	9.44	10.0	94	79-113
1,1,1,2-Tetrachloroethane	9.34	10.0	93	72-133
Ethylbenzene	9.06	10.0	91	84-122
m,p-Xylenes	18.3	20.0	91	83-125
o-Xylene	8.82	10.0	88	83-122
Styrene	9.53	10.0	95	83-127
Bromoform	8.14	10.0	81	63-149
Isopropylbenzene	7.86	10.0	79	72-114
1,1,2,2-Tetrachloroethane	8.98	10.0	90	70-122
1,2,3-Trichloropropane	8.60	10.0	86	73-125
Bromobenzene	8.80	10.0	88	80-121
n-Propylbenzene	9.44	10.0	94	78-124
2-Chlorotoluene	9.16	10.0	92	82-126
4-Chlorotoluene	8.92	10.0	89	80-122
1,3,5-Trimethylbenzene	9.13	10.0	91	78-132
tert-Butylbenzene	8.99	10.0	90	76-126
1,2,4-Trimethylbenzene	9.30	10.0	93	74-138
sec-Butylbenzene	9.61	10.0	96	72-133
1,3-Dichlorobenzene	8.88	10.0	89	81-116
4-Isopropyltoluene	8.66	10.0	87	62-132
1,4-Dichlorobenzene	9.05	10.0	91	80-113
n-Butylbenzene	9.20	10.0	92	51-138
1,2-Dichlorobenzene	8.88	10.0	89	81-113
1,2-Dibromo-3-chloropropane	7.42	10.0	74	63-124
1,2,4-Trichlorobenzene	8.62	10.0	86	61-135
1,2,3-Trichlorobenzene	8.14	10.0	81	66-131
Naphthalene	8.29	10.0	83	53-157
Hexachlorobutadiene	8.14	10.0	81	66-132

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00065

Polynuclear Aromatic Hydrocarbons
EPA Method 8270C

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Polynuclear Aromatic Hydrocarbons

Sample Name:	BM-021606-1 MW-4	**Units:**	ug/L
Lab Code:	K0601324-001	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**72**	D	0.40	20	02/21/06	02/27/06	KWG0602897	
2-Methylnaphthalene	**12**	D	0.40	20	02/21/06	02/27/06	KWG0602897	
Acenaphthylene	ND	Ui	0.032	1	02/21/06	02/24/06	KWG0602897	
Acenaphthene	**0.23**		0.020	1	02/21/06	02/24/06	KWG0602897	
Dibenzofuran	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Fluorene	**0.064**		0.020	1	02/21/06	02/24/06	KWG0602897	
Phenanthrene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Anthracene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Fluoranthene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Pyrene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benz(a)anthracene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Chrysene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(b)fluoranthene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(k)fluoranthene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(a)pyrene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Dibenz(a,h)anthracene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(g,h,i)perylene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	53	24-111	02/24/06	Acceptable
Fluoranthene-d10	52	26-123	02/24/06	Acceptable
Terphenyl-d14	46	25-146	02/24/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Polynuclear Aromatic Hydrocarbons

Sample Name:	BM-021606-2 MW-5	**Units:**	ug/L
Lab Code:	K0601324-002	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.40**		0.020	1	02/21/06	02/24/06	KWG0602897	
2-Methylnaphthalene	**0.32**		0.020	1	02/21/06	02/24/06	KWG0602897	
Acenaphthylene	ND	Ui	0.077	1	02/21/06	02/24/06	KWG0602897	
Acenaphthene	**0.49**		0.020	1	02/21/06	02/24/06	KWG0602897	
Dibenzofuran	**0.056**		0.020	1	02/21/06	02/24/06	KWG0602897	
Fluorene	**0.28**		0.020	1	02/21/06	02/24/06	KWG0602897	
Phenanthrene	**0.75**		0.020	1	02/21/06	02/24/06	KWG0602897	
Anthracene	**0.24**		0.020	1	02/21/06	02/24/06	KWG0602897	
Fluoranthene	**1.3**		0.020	1	02/21/06	02/24/06	KWG0602897	
Pyrene	**1.9**		0.020	1	02/21/06	02/24/06	KWG0602897	
Benz(a)anthracene	**0.14**		0.020	1	02/21/06	02/24/06	KWG0602897	
Chrysene	**0.20**		0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(b)fluoranthene	**0.033**		0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(k)fluoranthene	**0.032**		0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(a)pyrene	**0.032**		0.020	1	02/21/06	02/24/06	KWG0602897	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Dibenz(a,h)anthracene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(g,h,i)perylene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	67	24-111	02/24/06	Acceptable
Fluoranthene-d10	74	26-123	02/24/06	Acceptable
Terphenyl-d14	65	25-146	02/24/06	Acceptable

Comments:

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Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Polynuclear Aromatic Hydrocarbons

Sample Name:	BM-021606-3 MW-3	**Units:**	ug/L
Lab Code:	K0601324-003	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.034**		0.020	1	02/21/06	02/24/06	KWG0602897	
2-Methylnaphthalene	**0.11**		0.020	1	02/21/06	02/24/06	KWG0602897	
Acenaphthylene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Acenaphthene	**0.038**		0.020	1	02/21/06	02/24/06	KWG0602897	
Dibenzofuran	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Fluorene	**0.032**		0.020	1	02/21/06	02/24/06	KWG0602897	
Phenanthrene	**0.10**		0.020	1	02/21/06	02/24/06	KWG0602897	
Anthracene	**0.029**		0.020	1	02/21/06	02/24/06	KWG0602897	
Fluoranthene	**0.21**		0.020	1	02/21/06	02/24/06	KWG0602897	
Pyrene	**0.35**		0.020	1	02/21/06	02/24/06	KWG0602897	
Benz(a)anthracene	**0.021**		0.020	1	02/21/06	02/24/06	KWG0602897	
Chrysene	**0.027**		0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(b)fluoranthene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(k)fluoranthene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(a)pyrene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Dibenz(a,h)anthracene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(g,h,i)perylene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	63	24-111	02/24/06	Acceptable
Fluoranthene-d10	64	26-123	02/24/06	Acceptable
Terphenyl-d14	49	25-146	02/24/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Polynuclear Aromatic Hydrocarbons

Sample Name:	BM-021606-4 MW-3 (DUP)	**Units:**	ug/L
Lab Code:	K0601324-004	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.035**		0.020	1	02/21/06	02/24/06	KWG0602897	
2-Methylnaphthalene	**0.12**		0.020	1	02/21/06	02/24/06	KWG0602897	
Acenaphthylene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Acenaphthene	**0.038**		0.020	1	02/21/06	02/24/06	KWG0602897	
Dibenzofuran	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Fluorene	**0.033**		0.020	1	02/21/06	02/24/06	KWG0602897	
Phenanthrene	**0.11**		0.020	1	02/21/06	02/24/06	KWG0602897	
Anthracene	**0.030**		0.020	1	02/21/06	02/24/06	KWG0602897	
Fluoranthene	**0.21**		0.020	1	02/21/06	02/24/06	KWG0602897	
Pyrene	**0.36**		0.020	1	02/21/06	02/24/06	KWG0602897	
Benz(a)anthracene	**0.021**		0.020	1	02/21/06	02/24/06	KWG0602897	
Chrysene	**0.028**		0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(b)fluoranthene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(k)fluoranthene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(a)pyrene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Dibenz(a,h)anthracene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(g,h,i)perylene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	66	24-111	02/24/06	Acceptable
Fluoranthene-d10	67	26-123	02/24/06	Acceptable
Terphenyl-d14	51	25-146	02/24/06	Acceptable

Comments:

Confidential Business Information

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	02/16/2006
Sample Matrix:	Water	**Date Received:**	02/17/2006

Polynuclear Aromatic Hydrocarbons

Sample Name:	BM-021606-5 MW-1	**Units:**	ug/L
Lab Code:	K0601324-005	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**200**	D	1.0	50	02/21/06	02/27/06	KWG0602897	
2-Methylnaphthalene	**52**	D	1.0	50	02/21/06	02/27/06	KWG0602897	
Acenaphthylene	ND	Ui	0.099	1	02/21/06	02/24/06	KWG0602897	
Acenaphthene	**0.18**		0.020	1	02/21/06	02/24/06	KWG0602897	
Dibenzofuran	**0.041**		0.020	1	02/21/06	02/24/06	KWG0602897	
Fluorene	**0.21**		0.020	1	02/21/06	02/24/06	KWG0602897	
Phenanthrene	**0.61**		0.020	1	02/21/06	02/24/06	KWG0602897	
Anthracene	**0.15**		0.020	1	02/21/06	02/24/06	KWG0602897	
Fluoranthene	**1.0**		0.020	1	02/21/06	02/24/06	KWG0602897	
Pyrene	**2.7**		0.020	1	02/21/06	02/24/06	KWG0602897	
Benz(a)anthracene	**0.14**		0.020	1	02/21/06	02/24/06	KWG0602897	
Chrysene	**0.23**		0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(b)fluoranthene	**0.028**		0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(k)fluoranthene	**0.022**		0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(a)pyrene	**0.022**		0.020	1	02/21/06	02/24/06	KWG0602897	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Dibenz(a,h)anthracene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(g,h,i)perylene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	65	24-111	02/24/06	Acceptable
Fluoranthene-d10	72	26-123	02/24/06	Acceptable
Terphenyl-d14	63	25-146	02/24/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0602897-4	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
2-Methylnaphthalene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Acenaphthylene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Acenaphthene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Dibenzofuran	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Fluorene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Phenanthrene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Anthracene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Fluoranthene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Pyrene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benz(a)anthracene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Chrysene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(b)fluoranthene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(k)fluoranthene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(a)pyrene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Dibenz(a,h)anthracene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	
Benzo(g,h,i)perylene	ND	U	0.020	1	02/21/06	02/24/06	KWG0602897	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	65	24-111	02/24/06	Acceptable
Fluoranthene-d10	65	26-123	02/24/06	Acceptable
Terphenyl-d14	66	25-146	02/24/06	Acceptable

Comments:

00072

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
BM-021606-1	K0601324-001	53	52	46
BM-021606-2	K0601324-002	67	74	65
BM-021606-3	K0601324-003	63	64	49
BM-021606-4	K0601324-004	66	67	51
BM-021606-5	K0601324-005	65	72	63
Method Blank	KWG0602897-4	65	65	66
Batch QC	K0601311-004	72	76	75
Batch QCMS	KWG0602897-1	69	74	64
Lab Control Sample	KWG0602897-2	73	79	70
Duplicate Lab Control Sample	KWG0602897-3	74	78	70

Surrogate Recovery Control Limits (%)

Sur1 =	Fluorene-d10	24-111
Sur2 =	Fluoranthene-d10	26-123
Sur3 =	Terphenyl-d14	25-146

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

00073

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K0601324
Project:	BRIX Maritime- Portland, Or	**Date Extracted:**	02/21/2006
Sample Matrix:	Water	**Date Analyzed:**	02/24/2006

Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0601311-004	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0602897

Analyte Name	Sample Result	Batch QCMS KWG0602897-1 Matrix Spike Result	Expected	%Rec	%Rec Limits
Naphthalene	ND	2.06	2.45	84	27-109
2-Methylnaphthalene	ND	1.96	2.45	80	23-116
Acenaphthylene	ND	2.19	2.45	89	34-116
Acenaphthene	ND	2.16	2.45	88	30-117
Dibenzofuran	ND	1.97	2.45	80	20-134
Fluorene	ND	2.03	2.45	83	28-130
Phenanthrene	ND	2.06	2.45	84	36-120
Anthracene	ND	1.90	2.45	78	28-122
Fluoranthene	ND	2.13	2.45	87	32-134
Pyrene	ND	2.40	2.45	98	27-135
Benz(a)anthracene	ND	2.02	2.45	82	28-131
Chrysene	ND	2.21	2.45	90	30-130
Benzo(b)fluoranthene	ND	2.17	2.45	89	26-138
Benzo(k)fluoranthene	ND	2.18	2.45	89	27-135
Benzo(a)pyrene	ND	2.17	2.45	89	16-140
Indeno(1,2,3-cd)pyrene	ND	2.13	2.45	87	21-143
Dibenz(a,h)anthracene	ND	1.91	2.45	78	24-139
Benzo(g,h,i)perylene	ND	2.43	2.45	99	26-132

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00074

Client: Anchor Environmental
Project: BRIX Maritime- Portland, Or
Sample Matrix: Water

Service Request: K0601324
Date Extracted: 02/21/2006
Date Analyzed: 02/24/2006

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0602897

	Lab Control Sample KWG0602897-2 Lab Control Spike			Duplicate Lab Control Sample KWG0602897-3 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	2.21	2.50	88	2.37	2.50	95	32-124	7	30
2-Methylnaphthalene	2.12	2.50	85	2.27	2.50	91	19-133	7	30
Acenaphthylene	2.34	2.50	94	2.51	2.50	100	36-128	7	30
Acenaphthene	2.31	2.50	92	2.48	2.50	99	36-126	7	30
Dibenzofuran	2.14	2.50	86	2.28	2.50	91	10-167	6	30
Fluorene	2.21	2.50	88	2.37	2.50	95	41-130	7	30
Phenanthrene	2.30	2.50	92	2.43	2.50	97	43-129	5	30
Anthracene	2.17	2.50	87	2.31	2.50	92	36-131	6	30
Fluoranthene	2.37	2.50	95	2.49	2.50	100	45-139	5	30
Pyrene	2.74	2.50	110	2.92	2.50	117	38-143	6	30
Benz(a)anthracene	2.28	2.50	91	2.39	2.50	96	45-131	5	30
Chrysene	2.52	2.50	101	2.64	2.50	106	47-132	5	30
Benzo(b)fluoranthene	2.59	2.50	104	2.70	2.50	108	51-135	4	30
Benzo(k)fluoranthene	2.57	2.50	103	2.75	2.50	110	46-139	7	30
Benzo(a)pyrene	2.52	2.50	101	2.70	2.50	108	40-138	7	30
Indeno(1,2,3-cd)pyrene	2.39	2.50	95	2.48	2.50	99	35-148	4	30
Dibenz(a,h)anthracene	2.13	2.50	85	2.20	2.50	88	42-143	3	30
Benzo(g,h,i)perylene	2.75	2.50	110	2.90	2.50	116	42-139	5	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00075

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 (360) 636-1068 fax

Columbia Analytical Services INC
An Employee - Owned Company

March 29, 2006 Service Request No: K0602148

John Renda
Anchor Environmental
6650 SW Redwood Lane
Suite 110
Portland, OR 97224

RE: BRIX Maritime

Dear John:

Enclosed are the results of the sample(s) submitted to our laboratory on March 17, 2006. For your reference, these analyses have been assigned our service request number K0602148.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3281.

Respectfully submitted,

Columbia Analytical Services, Inc.

Abbie Spielman
Project Chemist

AS/jeb

NELAP Accredited ACIL Seal of Excellence Award 100% Recycled

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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

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Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Confidential Business Information

Case Narrative

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Anchor Environmental	**Service Request No.:**	K0602148
Project:	BRIX Maritime	**Date Received:**	3/17/06
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include Laboratory Duplicate (DUP), Matrix/Duplicate Matrix Spike (MS/DMS), and Laboratory Control Sample (LCS).

Sample Receipt

One water samples was received for analysis at Columbia Analytical Services on 3/17/06. No discrepancies were noted upon initial sample inspection. The sample was received in good condition and consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

Diesel Range Organics by NWTPH-Dx

No anomalies associated with the analysis of these samples were observed.

Gasoline Range Organics by NWTPH-Gx

No anomalies associated with the analysis of these samples were observed.

Volatile Organic Compounds by EPA Method 8260B

Surrogate Exceptions:
The control criteria were exceeded for the Toluene-d8 surrogate in Batch QC samples MS KWG0605080-3, DMS KWG0605080-4, and LCS KWG0605080-1. The associated matrix spike recoveries of target compounds were in control, indicating the analysis was in control. The surrogate outlier is flagged accordingly. No further corrective action was appropriate.

Lab Control Sample Exceptions:
The advisory criterion was exceeded for Acetone in Laboratory Control Sample (LCS) KWG0605080-1. As per the CAS/Kelso Standard Operating Procedure (SOP) for this method, these compounds are not included in the subset of analyte used to control the analysis. The recovery information reported for these analyte is for advisory purposes only (i.e. to provide additional detail related to the performance of each individual compound). No further corrective action was required.

Initial Calibration Exceptions:
The primary evaluation criterion was exceeded for the following analytes in Initial Calibration (ICAL) ID CAL5049: Dibromochloromethane and Bromoform. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the mean Relative Standard Deviation (RSD) of all analytes in the calibration. The result of the mean RSD calculation was 8.8%. The calibration meets the alternative evaluation criteria. Note that CAS/Kelso policy does not allow the use of averaging if any analyte in the ICAL exceeds 30% RSD.

No other anomalies associated with the analysis of these samples were observed.

Approved by [signature] Date 4/10/07

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Polynuclear Aromatic Hydrocarbons by EPA Method 8270C

Sample Notes and Discussion:
Insufficient sample volume was received to perform a Matrix Spike/Matrix Spike Duplicate (MS/MSD). A MS and Laboratory Control Sample/Duplicate Laboratory Control Sample (LCS/DLCS) were analyzed and reported in lieu of the MS/MSD for these samples.

No other anomalies associated with the analysis of these samples were observed.

Approved by [signature] Date 4/7/06

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Chain of Custody Documentation

00007

Columbia Analytical Services INC.
An Employee - Owned Company

CHAIN OF CUSTODY

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222x07 • FAX (360) 636-1068

SR#: K060214K

PAGE 1 OF 1 COC #

PROJECT NAME: BRIX MARITIME
PROJECT NUMBER:
PROJECT MANAGER: JOHN RENDA
COMPANY/ADDRESS: ANCHOR ENVIRONMENTAL, LLC
6650 SW REDWOOD LANE, SUITE 110
CITY/STATE/ZIP: PORTLAND OR 97224
E-MAIL ADDRESS: JRENDA@ANCHORENV.COM
PHONE #: 503-670-1108 x12 FAX#: 503-670-1128
SAMPLER'S SIGNATURE: Kelly R. Tikkemeier

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625 ☐ 8270 ☐ 8270LL ☐	Volatile Organics 624 ☐ 8260 ☑	Hydrocarbons (see below) Gas ☑ 8021 ☐ BTEX ☐ Diesel ☑ Fuel Fingerprint (FIQ) NW-HCID Screen ☐ Oil ☑	Oil & Grease/TRPH 1664 HEM ☐ 1664 SGT ☐	PCB's Aroclors ☐ Congeners ☐	Pesticides/Herbicides 608 ☐ 8081A ☐ 8141A ☐ 8151A ☐	Chlorophenolics - 8151M Tri ☐ Tetra ☐ PCP ☐	PAHS 8310 ☐ SIM ☑	Metals, Total or Dissolved (See list below)	Cyanide ☐	Hex-Chrom ☐	pH, Cond., Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS (circle)	NH_3-N, COD, Total-P, TKN, TOC, DOC (circle) NO_2+NO_3	TOX 9020 ☐ AOX 1650 ☐ 506 ☐						REMARKS
Bm-031606-1	3-16-06	10:00	1	W	8			✓	✓					✓												
KRT ~~Trip Blank~~	~~3-16-06~~	~~NA~~		~~W~~	~~2~~																					

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
✓ II. Report Dup., MS, MSD as required
___ III. Data Validation Report (includes all raw data)
___ IV. CLP Deliverable Report
___ V. EDD

INVOICE INFORMATION

P.O. # ___
Bill To: ___

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
✓ Standard (10-15 working days)
___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER:_____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: Kelly R. Tikkemeier — Date/Time: 3-17-06 10:00	Signature: [illegible] — Date/Time: 3/17/06	Signature — Date/Time	Signature — Date/Time
Printed Name: Kelly R. Tikkemeier — Firm: ANCHOR ENV.	Printed Name: [illegible] — Firm: CAS	Printed Name — Firm	Printed Name — Firm

RCOC #1 06/03

Columbia Analytical Services Inc.
Cooler Receipt and Preservation Form

PC HJ

Project/Client Achor Service Request K06 02148

Cooler received on 3/17/06 and opened on 3/17/06 by BW

1. Were custody seals on outside of coolers? Y N
   If yes, how many and where? 1 Front
2. Were custody seals intact? Y N
3. Were signature and date present on the custody seals? Y N
4. Is the shipper's airbill available and filed? If no, record airbill number: CAS Y N
5. COC#
   Temperature of cooler(s) upon receipt: (°C) 04
   Temperature Blank: (°C) NP
   Were samples hand delivered on the same day as collection? Y N
6. Were custody papers properly filled out (ink, signed, etc.)? Y N
7. Type of packing material present ICE, styrafoam insert
8. **Did all bottles arrive in good condition (unbroken)?** Y N
9. Were all bottle labels complete (i.e analysis, preservation, etc.)? Y N
10. Did all bottle labels and tags agree with custody papers? Y N
11. **Were the correct types of bottles used for the tests indicated?** Y N
12. Were all of the preserved bottles received at the lab with the appropriate pH? Y N
13. Were VOA vials checked for absence of air bubbles, and if present, noted below? Y N
14. Were the 1631 Mercury bottles checked for absence of air bubbles, and if present, noted below? Y N
15. Did the bottles originate from CAS/K or a branch laboratory? Y N
16. **Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?** Y N
17. Was C12/Res negative? Y N

Explain any discrepancies:

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

Confidential Business Information

Diesel & Residual Range Organics

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0602148
Project:	BRIX Maritime	**Date Collected:**	03/16/2006
Sample Matrix:	Water	**Date Received:**	03/17/2006

Diesel and Residual Range Organics

Sample Name:	BM-031606-1	**Units:**	ug/L
Lab Code:	K0602148-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND	U	280	1	03/20/06	03/23/06	KWG0604534	
Residual Range Organics (RRO)	ND	U	550	1	03/20/06	03/23/06	KWG0604534	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	112	50-150	03/23/06	Acceptable
n-Triacontane	124	50-150	03/23/06	Acceptable

Comments:

Confidential Business Information

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148
Date Collected: NA
Date Received: NA

Diesel and Residual Range Organics

Sample Name: Method Blank
Lab Code: KWG0604534-4

Units: ug/L
Basis: NA

Extraction Method: EPA 3510C
Analysis Method: NWTPH-Dx

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Diesel Range Organics (DRO)	ND	U	250	1	03/20/06	03/21/06	KWG0604534	
Residual Range Organics (RRO)	ND	U	500	1	03/20/06	03/21/06	KWG0604534	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	98	50-150	03/21/06	Acceptable
n-Triacontane	108	50-150	03/21/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148

Surrogate Recovery Summary
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: NWTPH-Dx

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2
BM-031606-1	K0602148-001	112	124
Batch QCDUP	KWG0604534-1	84	90
Method Blank	KWG0604534-4	98	108
Batch QC	K0602109-002	99	104
Lab Control Sample	KWG0604534-2	97	109

Surrogate Recovery Control Limits (%)

Sur1 =	o-Terphenyl	50-150
Sur2 =	n-Triacontane	50-150

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K0602148
Project:	BRIX Maritime	**Date Extracted:**	03/20/2006
Sample Matrix:	Ground water	**Date Analyzed:**	03/21/2006

Duplicate Sample Summary
Diesel and Residual Range Organics

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0602109-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	NWTPH-Dx	**Extraction Lot:**	KWG0604534

Analyte Name	MRL	Sample Result	Batch QCDUP KWG0604534-1 Duplicate Sample Result	Average	Relative Percent Difference	RPD Limit
Diesel Range Organics (DRO)	250	ND	ND	ND	-	30
Residual Range Organics (RRO)	500	ND	ND	ND	-	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00014

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Ground water

Service Request: K0602148
Date Extracted: 03/20/2006
Date Analyzed: 03/21/2006

Lab Control Spike Summary
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: NWTPH-Dx

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0604534

	Lab Control Sample KWG0604534-2 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Diesel Range Organics (DRO)	3940	3200	123	56-162
Residual Range Organics (RRO)	1860	1600	116	53-143

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00015

NWTPH-Gx

00016

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0602148
Project:	BRIX Maritime	**Date Collected:**	03/16/2006
Sample Matrix:	Water	**Date Received:**	03/17/2006

Gasoline Range Organics

Sample Name:	BM-031606-1	**Units:**	ug/L
Lab Code:	K0602148-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics-NWTPH	ND	U	250	1	03/22/06	03/22/06	KWG0604874	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	104	50-150	03/22/06	Acceptable

Comments:

00017

Client:	Anchor Environmental	**Service Request:**	K0602148
Project:	BRIX Maritime	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Gasoline Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0604874-3	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	NWTPH-Gx		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics-NWTPH	ND	U	250	1	03/22/06	03/22/06	KWG0604874	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	106	50-150	03/22/06	Acceptable

Comments:

00018

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148

Surrogate Recovery Summary
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: NWTPH-Gx

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
BM-031606-1	K0602148-001	104
Batch QCDUP	KWG0604874-1	104
Method Blank	KWG0604874-3	106
Batch QC	K0602153-003	104
Lab Control Sample	KWG0604874-2	110

Surrogate Recovery Control Limits (%)

Sur1 = 1,4-Difluorobenzene 50-150

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

00019

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148
Date Extracted: 03/22/2006
Date Analyzed: 03/22/2006

Duplicate Sample Summary
Gasoline Range Organics

Sample Name: Batch QC
Lab Code: K0602153-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: NWTPH-Gx

Level: Low
Extraction Lot: KWG0604874

Analyte Name	MRL	Sample Result	Batch QCDUP KWG0604874-1 Duplicate Sample Result	Average	Relative Percent Difference	RPD Limit
Gasoline Range Organics-NWTPH	250	ND	ND	ND	-	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Anchor Environmental	**Service Request:**	K0602148
Project:	BRIX Maritime	**Date Extracted:**	03/22/2006
Sample Matrix:	Water	**Date Analyzed:**	03/22/2006

Lab Control Spike Summary
Gasoline Range Organics

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	NWTPH-Gx	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0604874

	Lab Control Sample KWG0604874-2 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Gasoline Range Organics-NWTPH	480	500	96	71-128

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00021

Volatile Organic Compounds
EPA Method 8260B

Confidential Business Information

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0602148
Project:	BRIX Maritime	**Date Collected:**	03/16/2006
Sample Matrix:	Water	**Date Received:**	03/17/2006

Volatile Organic Compounds

Sample Name:	BM-031606-1	**Units:**	ug/L
Lab Code:	K0602148-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Chloromethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Vinyl Chloride	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Bromomethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Chloroethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Trichlorofluoromethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Acetone	ND	U	20	1	03/27/06	03/27/06	KWG0605080	
1,1-Dichloroethene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Methyl tert-Butyl Ether	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Carbon Disulfide	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Methylene Chloride	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,1-Dichloroethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
2-Butanone (MEK)	ND	U	20	1	03/27/06	03/27/06	KWG0605080	
2,2-Dichloropropane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
cis-1,2-Dichloroethene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Chloroform	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Bromochloromethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,1-Dichloropropene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Carbon Tetrachloride	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Benzene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Trichloroethene (TCE)	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,2-Dichloropropane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Bromodichloromethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Dibromomethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
2-Hexanone	ND	U	20	1	03/27/06	03/27/06	KWG0605080	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Toluene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,1,2-Trichloroethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	03/27/06	03/27/06	KWG0605080	
1,3-Dichloropropane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	

Comments:

00023

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148
Date Collected: 03/16/2006
Date Received: 03/17/2006

Volatile Organic Compounds

Sample Name: BM-031606-1
Lab Code: K0602148-001

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Dibromochloromethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
Chlorobenzene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Ethylbenzene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
m,p-Xylenes	**0.54**		0.50	1	03/27/06	03/27/06	KWG0605080	
o-Xylene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Styrene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Bromoform	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Isopropylbenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,2,3-Trichloropropane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Bromobenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
n-Propylbenzene	**2.9**		2.0	1	03/27/06	03/27/06	KWG0605080	
2-Chlorotoluene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
4-Chlorotoluene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
1,3,5-Trimethylbenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
tert-Butylbenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
1,2,4-Trimethylbenzene	**2.2**		2.0	1	03/27/06	03/27/06	KWG0605080	
sec-Butylbenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
1,3-Dichlorobenzene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
4-Isopropyltoluene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
1,4-Dichlorobenzene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
n-Butylbenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
1,2-Dichlorobenzene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
1,2,4-Trichlorobenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
1,2,3-Trichlorobenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
Naphthalene	**3.7**		2.0	1	03/27/06	03/29/06	KWG0605151	
Hexachlorobutadiene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	

Comments:

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148
Date Collected: 03/16/2006
Date Received: 03/17/2006

Volatile Organic Compounds

Sample Name: BM-031606-1
Lab Code: K0602148-001

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	106	80-119	03/27/06	Acceptable
Toluene-d8	108	83-113	03/27/06	Acceptable
4-Bromofluorobenzene	90	72-114	03/27/06	Acceptable

Comments:

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0605080-2

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Chloromethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Vinyl Chloride	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Bromomethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Chloroethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Trichlorofluoromethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Acetone	ND	U	20	1	03/27/06	03/27/06	KWG0605080	
1,1-Dichloroethene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Methyl tert-Butyl Ether	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Carbon Disulfide	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Methylene Chloride	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,1-Dichloroethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
2-Butanone (MEK)	ND	U	20	1	03/27/06	03/27/06	KWG0605080	
2,2-Dichloropropane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
cis-1,2-Dichloroethene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Chloroform	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Bromochloromethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,1-Dichloropropene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Carbon Tetrachloride	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Benzene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Trichloroethene (TCE)	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,2-Dichloropropane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Bromodichloromethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Dibromomethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
2-Hexanone	ND	U	20	1	03/27/06	03/27/06	KWG0605080	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Toluene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,1,2-Trichloroethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	03/27/06	03/27/06	KWG0605080	
1,3-Dichloropropane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	

Comments:

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0605080-2

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Dibromochloromethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
Chlorobenzene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Ethylbenzene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
m,p-Xylenes	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
o-Xylene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Styrene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Bromoform	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Isopropylbenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,2,3-Trichloropropane	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
Bromobenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
n-Propylbenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
2-Chlorotoluene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
4-Chlorotoluene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
1,3,5-Trimethylbenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
tert-Butylbenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
1,2,4-Trimethylbenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
sec-Butylbenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
1,3-Dichlorobenzene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
4-Isopropyltoluene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
1,4-Dichlorobenzene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
n-Butylbenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
1,2-Dichlorobenzene	ND	U	0.50	1	03/27/06	03/27/06	KWG0605080	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
1,2,4-Trichlorobenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
1,2,3-Trichlorobenzene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
Naphthalene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	
Hexachlorobutadiene	ND	U	2.0	1	03/27/06	03/27/06	KWG0605080	

Comments:

00027

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0605080-2

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	110	80-119	03/27/06	Acceptable
Toluene-d8	106	83-113	03/27/06	Acceptable
4-Bromofluorobenzene	81	72-114	03/27/06	Acceptable

Comments:

Analytical Results

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0605151-2

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Chloromethane	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Vinyl Chloride	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Bromomethane	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Chloroethane	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Trichlorofluoromethane	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Acetone	ND	U	20	1	03/27/06	03/29/06	KWG0605151	
1,1-Dichloroethene	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Methyl tert-Butyl Ether	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Carbon Disulfide	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Methylene Chloride	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
1,1-Dichloroethane	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
2-Butanone (MEK)	ND	U	20	1	03/27/06	03/29/06	KWG0605151	
2,2-Dichloropropane	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
cis-1,2-Dichloroethene	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Chloroform	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Bromochloromethane	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
1,1-Dichloropropene	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Carbon Tetrachloride	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Benzene	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Trichloroethene (TCE)	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
1,2-Dichloropropane	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Bromodichloromethane	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Dibromomethane	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
2-Hexanone	ND	U	20	1	03/27/06	03/29/06	KWG0605151	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Toluene	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
1,1,2-Trichloroethane	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	03/27/06	03/29/06	KWG0605151	
1,3-Dichloropropane	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	

Comments:

Confidential Business Information

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0605151-2

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Dibromochloromethane	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
1,2-Dibromoethane (EDB)	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	
Chlorobenzene	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Ethylbenzene	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
m,p-Xylenes	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
o-Xylene	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Styrene	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Bromoform	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Isopropylbenzene	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
1,2,3-Trichloropropane	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
Bromobenzene	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	
n-Propylbenzene	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	
2-Chlorotoluene	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	
4-Chlorotoluene	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	
1,3,5-Trimethylbenzene	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	
tert-Butylbenzene	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	
1,2,4-Trimethylbenzene	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	
sec-Butylbenzene	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	
1,3-Dichlorobenzene	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
4-Isopropyltoluene	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	
1,4-Dichlorobenzene	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
n-Butylbenzene	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	
1,2-Dichlorobenzene	ND	U	0.50	1	03/27/06	03/29/06	KWG0605151	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	
1,2,4-Trichlorobenzene	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	
1,2,3-Trichlorobenzene	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	
Naphthalene	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	
Hexachlorobutadiene	ND	U	2.0	1	03/27/06	03/29/06	KWG0605151	

Comments:

Analytical Results

Client:	Anchor Environmental	**Service Request:**	K0602148
Project:	BRIX Maritime	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0605151-2	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	98	80-119	03/29/06	Acceptable
Toluene-d8	99	83-113	03/29/06	Acceptable
4-Bromofluorobenzene	80	72-114	03/29/06	Acceptable

Comments:

Confidential Business Information

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2		Sur3
BM-031606-1	K0602148-001	106	108		90
Method Blank	KWG0605080-2	110	106		81
Method Blank	KWG0605151-2	98	99		80
Batch QC	K0602117-003	113	105		81
Batch QCMS	KWG0605080-3	103	115	*	99
Batch QCDMS	KWG0605080-4	101	114	*	97
Lab Control Sample	KWG0605080-1	102	116	*	99
Lab Control Sample	KWG0605151-1	94	103		95

Surrogate Recovery Control Limits (%)

Sur1 =	Dibromofluoromethane	80-119
Sur2 =	Toluene-d8	83-113
Sur3 =	4-Bromofluorobenzene	72-114

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148
Date Extracted: 03/27/2006
Date Analyzed: 03/27/2006

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name: Batch QC
Lab Code: K0602117-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low
Extraction Lot: KWG0605080

Analyte Name	Sample Result	Batch QCMS KWG0605080-3 Matrix Spike			Batch QCDMS KWG0605080-4 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
1,1-Dichloroethene	ND	10.6	10.0	106	10.6	10.0	106	76-143	0	30
Benzene	ND	12.1	10.0	121	11.7	10.0	117	75-130	3	30
Trichloroethene (TCE)	ND	10.6	10.0	106	10.5	10.0	105	69-132	1	30
Toluene	ND	11.2	10.0	112	10.9	10.0	109	72-132	4	30
Chlorobenzene	ND	9.80	10.0	98	9.64	10.0	96	78-117	2	30
1,2-Dichlorobenzene	ND	8.80	10.0	88	8.90	10.0	89	77-117	1	30
Naphthalene	ND	8.29	10.0	83	8.20	10.0	82	56-155	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148
Date Extracted: 03/27/2006
Date Analyzed: 03/27/2006

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0605080

	Lab Control Sample KWG0605080-1 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Dichlorodifluoromethane	9.18	10.0	92	45-171
Chloromethane	10.8	10.0	108	53-135
Vinyl Chloride	10.8	10.0	108	67-130
Bromomethane	7.11	10.0	71	36-158
Chloroethane	10.8	10.0	108	62-125
Trichlorofluoromethane	10.1	10.0	101	66-126
Acetone	67.7	50.0	135 *	70-127
1,1-Dichloroethene	10.4	10.0	104	76-129
Methyl tert-Butyl Ether	9.42	10.0	94	63-132
Carbon Disulfide	23.3	20.0	116	62-138
Methylene Chloride	12.4	10.0	124	65-127
trans-1,2-Dichloroethene	11.2	10.0	112	81-121
1,1-Dichloroethane	11.5	10.0	115	76-117
2-Butanone (MEK)	53.7	50.0	107	69-132
2,2-Dichloropropane	7.34	10.0	73	63-142
cis-1,2-Dichloroethene	11.2	10.0	112	83-118
Chloroform	10.5	10.0	105	76-121
Bromochloromethane	11.8	10.0	118	80-125
1,1,1-Trichloroethane (TCA)	9.94	10.0	99	72-132
1,1-Dichloropropene	9.94	10.0	99	72-118
Carbon Tetrachloride	10.7	10.0	107	66-146
1,2-Dichloroethane (EDC)	10.9	10.0	109	74-121
Benzene	11.7	10.0	117	78-121
Trichloroethene (TCE)	10.5	10.0	105	79-119
1,2-Dichloropropane	11.3	10.0	113	76-116
Bromodichloromethane	11.6	10.0	116	74-130
Dibromomethane	11.6	10.0	116	76-123
2-Hexanone	39.7	50.0	79	67-127
cis-1,3-Dichloropropene	10.3	10.0	103	79-123
Toluene	10.9	10.0	109	76-122
trans-1,3-Dichloropropene	7.79	10.0	78	70-117
1,1,2-Trichloroethane	10.3	10.0	103	76-120
4-Methyl-2-pentanone (MIBK)	51.0	50.0	102	70-128
1,3-Dichloropropane	10.6	10.0	106	77-121
Tetrachloroethene (PCE)	9.24	10.0	92	72-124
Dibromochloromethane	10.1	10.0	101	72-133

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148
Date Extracted: 03/27/2006
Date Analyzed: 03/27/2006

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0605080

	Lab Control Sample KWG0605080-1 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	9.61	10.0	96	75-120
Chlorobenzene	9.68	10.0	97	79-113
1,1,1,2-Tetrachloroethane	9.65	10.0	97	72-133
Ethylbenzene	9.08	10.0	91	84-122
m,p-Xylenes	18.2	20.0	91	83-125
o-Xylene	8.41	10.0	84	83-122
Styrene	9.71	10.0	97	83-127
Bromoform	9.60	10.0	96	63-149
Isopropylbenzene	7.28	10.0	73	72-114
1,1,2,2-Tetrachloroethane	9.51	10.0	95	70-122
1,2,3-Trichloropropane	9.01	10.0	90	73-125
Bromobenzene	8.20	10.0	82	80-121
n-Propylbenzene	8.19	10.0	82	78-124
2-Chlorotoluene	8.34	10.0	83	82-126
4-Chlorotoluene	8.19	10.0	82	80-122
1,3,5-Trimethylbenzene	8.03	10.0	80	78-132
tert-Butylbenzene	7.73	10.0	77	76-126
1,2,4-Trimethylbenzene	8.32	10.0	83	74-138
sec-Butylbenzene	8.34	10.0	83	72-133
1,3-Dichlorobenzene	8.42	10.0	84	81-116
4-Isopropyltoluene	7.42	10.0	74	62-132
1,4-Dichlorobenzene	8.58	10.0	86	80-113
n-Butylbenzene	7.54	10.0	75	51-138
1,2-Dichlorobenzene	8.75	10.0	88	81-113
1,2-Dibromo-3-chloropropane	7.06	10.0	71	63-124
1,2,4-Trichlorobenzene	7.51	10.0	75	61-135
1,2,3-Trichlorobenzene	7.61	10.0	76	66-131
Naphthalene	7.19	10.0	72	53-157
Hexachlorobutadiene	6.76	10.0	68	66-132

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148
Date Extracted: 03/27/2006
Date Analyzed: 03/29/2006

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0605151

	Lab Control Sample KWG0605151-1 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Dichlorodifluoromethane	7.04	10.0	70	45-171
Chloromethane	6.81	10.0	68	53-135
Vinyl Chloride	8.61	10.0	86	67-130
Bromomethane	6.04	10.0	60	36-158
Chloroethane	8.62	10.0	86	62-125
Trichlorofluoromethane	8.21	10.0	82	66-126
Acetone	53.8	50.0	108	70-127
1,1-Dichloroethene	8.62	10.0	86	76-129
Methyl tert-Butyl Ether	8.50	10.0	85	63-132
Carbon Disulfide	20.4	20.0	102	62-138
Methylene Chloride	10.1	10.0	101	65-127
trans-1,2-Dichloroethene	9.43	10.0	94	81-121
1,1-Dichloroethane	9.79	10.0	98	76-117
2-Butanone (MEK)	52.2	50.0	104	69-132
2,2-Dichloropropane	6.95	10.0	70	63-142
cis-1,2-Dichloroethene	9.62	10.0	96	83-118
Chloroform	9.11	10.0	91	76-121
Bromochloromethane	10.0	10.0	100	80-125
1,1,1-Trichloroethane (TCA)	8.44	10.0	84	72-132
1,1-Dichloropropene	8.68	10.0	87	72-118
Carbon Tetrachloride	9.09	10.0	91	66-146
1,2-Dichloroethane (EDC)	9.60	10.0	96	74-121
Benzene	9.81	10.0	98	78-121
Trichloroethene (TCE)	8.82	10.0	88	79-119
1,2-Dichloropropane	9.75	10.0	98	76-116
Bromodichloromethane	10.0	10.0	100	74-130
Dibromomethane	9.78	10.0	98	76-123
2-Hexanone	46.2	50.0	92	67-127
cis-1,3-Dichloropropene	8.95	10.0	90	79-123
Toluene	9.21	10.0	92	76-122
trans-1,3-Dichloropropene	8.41	10.0	84	70-117
1,1,2-Trichloroethane	10.8	10.0	108	76-120
4-Methyl-2-pentanone (MIBK)	47.9	50.0	96	70-128
1,3-Dichloropropane	11.0	10.0	110	77-121
Tetrachloroethene (PCE)	8.92	10.0	89	72-124
Dibromochloromethane	10.5	10.0	105	72-133

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00036

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148
Date Extracted: 03/27/2006
Date Analyzed: 03/29/2006

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0605151

	Lab Control Sample KWG0605151-1 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	10.1	10.0	101	75-120
Chlorobenzene	9.90	10.0	99	79-113
1,1,1,2-Tetrachloroethane	9.94	10.0	99	72-133
Ethylbenzene	9.29	10.0	93	84-122
m,p-Xylenes	18.9	20.0	95	83-125
o-Xylene	8.95	10.0	90	83-122
Styrene	10.2	10.0	102	83-127
Bromoform	10.1	10.0	101	63-149
Isopropylbenzene	7.69	10.0	77	72-114
1,1,2,2-Tetrachloroethane	10.5	10.0	105	70-122
1,2,3-Trichloropropane	9.89	10.0	99	73-125
Bromobenzene	9.08	10.0	91	80-121
n-Propylbenzene	9.15	10.0	92	78-124
2-Chlorotoluene	9.30	10.0	93	82-126
4-Chlorotoluene	9.04	10.0	90	80-122
1,3,5-Trimethylbenzene	8.99	10.0	90	78-132
tert-Butylbenzene	8.61	10.0	86	76-126
1,2,4-Trimethylbenzene	9.41	10.0	94	74-138
sec-Butylbenzene	9.32	10.0	93	72-133
1,3-Dichlorobenzene	9.38	10.0	94	81-116
4-Isopropyltoluene	8.43	10.0	84	62-132
1,4-Dichlorobenzene	9.67	10.0	97	80-113
n-Butylbenzene	8.59	10.0	86	51-138
1,2-Dichlorobenzene	9.60	10.0	96	81-113
1,2-Dibromo-3-chloropropane	8.52	10.0	85	63-124
1,2,4-Trichlorobenzene	8.82	10.0	88	61-135
1,2,3-Trichlorobenzene	8.51	10.0	85	66-131
Naphthalene	8.69	10.0	87	53-157
Hexachlorobutadiene	7.79	10.0	78	66-132

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Polynuclear Aromatic Hydrocarbons
EPA Method 8270C

00038

Analytical Results

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148
Date Collected: 03/16/2006
Date Received: 03/17/2006

Polynuclear Aromatic Hydrocarbons

Sample Name: BM-031606-1
Lab Code: K0602148-001

Units: ug/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**2.8**		0.021	1	03/20/06	03/23/06	KWG0604497	
2-Methylnaphthalene	**0.21**		0.021	1	03/20/06	03/23/06	KWG0604497	
Acenaphthylene	ND	U	0.021	1	03/20/06	03/23/06	KWG0604497	
Acenaphthene	**0.087**		0.021	1	03/20/06	03/23/06	KWG0604497	
Dibenzofuran	ND	U	0.021	1	03/20/06	03/23/06	KWG0604497	
Fluorene	ND	U	0.021	1	03/20/06	03/23/06	KWG0604497	
Phenanthrene	ND	U	0.021	1	03/20/06	03/23/06	KWG0604497	
Anthracene	ND	U	0.021	1	03/20/06	03/23/06	KWG0604497	
Fluoranthene	ND	U	0.021	1	03/20/06	03/23/06	KWG0604497	
Pyrene	ND	U	0.021	1	03/20/06	03/23/06	KWG0604497	
Benz(a)anthracene	ND	U	0.021	1	03/20/06	03/23/06	KWG0604497	
Chrysene	ND	U	0.021	1	03/20/06	03/23/06	KWG0604497	
Benzo(b)fluoranthene	ND	U	0.021	1	03/20/06	03/23/06	KWG0604497	
Benzo(k)fluoranthene	ND	U	0.021	1	03/20/06	03/23/06	KWG0604497	
Benzo(a)pyrene	ND	U	0.021	1	03/20/06	03/23/06	KWG0604497	
Indeno(1,2,3-cd)pyrene	ND	U	0.021	1	03/20/06	03/23/06	KWG0604497	
Dibenz(a,h)anthracene	ND	U	0.021	1	03/20/06	03/23/06	KWG0604497	
Benzo(g,h,i)perylene	ND	U	0.021	1	03/20/06	03/23/06	KWG0604497	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	71	24-111	03/23/06	Acceptable
Fluoranthene-d10	77	26-123	03/23/06	Acceptable
Terphenyl-d14	79	25-146	03/23/06	Acceptable

Comments:

Analytical Results

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148
Date Collected: NA
Date Received: NA

Polynuclear Aromatic Hydrocarbons

Sample Name: Method Blank
Lab Code: KWG0604497-3

Units: ug/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	
2-Methylnaphthalene	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	
Acenaphthylene	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	
Acenaphthene	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	
Dibenzofuran	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	
Fluorene	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	
Phenanthrene	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	
Anthracene	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	
Fluoranthene	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	
Pyrene	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	
Benz(a)anthracene	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	
Chrysene	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	
Benzo(b)fluoranthene	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	
Benzo(k)fluoranthene	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	
Benzo(a)pyrene	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	
Dibenz(a,h)anthracene	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	
Benzo(g,h,i)perylene	ND	U	0.020	1	03/20/06	03/23/06	KWG0604497	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	77	24-111	03/23/06	Acceptable
Fluoranthene-d10	82	26-123	03/23/06	Acceptable
Terphenyl-d14	83	25-146	03/23/06	Acceptable

Comments:

QA/QC Report

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
BM-031606-1	K0602148-001	71	77	79
Method Blank	KWG0604497-3	77	82	83
Lab Control Sample	KWG0604497-1	80	87	88
Duplicate Lab Control Sample	KWG0604497-2	81	84	85

Surrogate Recovery Control Limits (%)

Sur1 =	Fluorene-d10	24-111
Sur2 =	Fluoranthene-d10	26-123
Sur3 =	Terphenyl-d14	25-146

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

00041

Client: Anchor Environmental
Project: BRIX Maritime
Sample Matrix: Water

Service Request: K0602148
Date Extracted: 03/20/2006
Date Analyzed: 03/23/2006

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0604497

	Lab Control Sample KWG0604497-1 Lab Control Spike			Duplicate Lab Control Sample KWG0604497-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	2.46	2.50	99	2.38	2.50	95	32-124	3	30
2-Methylnaphthalene	2.28	2.50	91	2.28	2.50	91	19-133	0	30
Acenaphthylene	2.67	2.50	107	2.56	2.50	102	36-128	4	30
Acenaphthene	2.57	2.50	103	2.46	2.50	98	36-126	4	30
Dibenzofuran	2.66	2.50	106	2.54	2.50	101	10-167	5	30
Fluorene	2.68	2.50	107	2.54	2.50	102	41-130	5	30
Phenanthrene	2.75	2.50	110	2.53	2.50	101	43-129	8	30
Anthracene	2.60	2.50	104	2.54	2.50	102	36-131	2	30
Fluoranthene	2.90	2.50	116	2.67	2.50	107	45-139	8	30
Pyrene	2.85	2.50	114	2.66	2.50	107	38-143	7	30
Benz(a)anthracene	2.85	2.50	114	2.65	2.50	106	45-131	7	30
Chrysene	2.88	2.50	115	2.67	2.50	107	47-132	8	30
Benzo(b)fluoranthene	2.95	2.50	118	2.76	2.50	111	51-135	6	30
Benzo(k)fluoranthene	2.83	2.50	113	2.70	2.50	108	46-139	5	30
Benzo(a)pyrene	2.91	2.50	116	2.75	2.50	110	40-138	6	30
Indeno(1,2,3-cd)pyrene	2.93	2.50	117	2.69	2.50	108	35-148	9	30
Dibenz(a,h)anthracene	2.94	2.50	117	2.73	2.50	109	42-143	7	30
Benzo(g,h,i)perylene	2.85	2.50	114	2.68	2.50	107	42-139	6	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00042

Appendix C
Data Validation Review

Anchor Environmental, L.L.C.
1423 3rd Avenue, Suite 300
Seattle, Washington 98101
Phone 206.287.9130
Fax 206.287.9131

Data Validation Review Report

Project: Brix Maritime

Project Number: 990056-01

Date: March 23, 2006

This report summarizes the review of analytical results for five water samples collected on February 16, 2006 at the Brix Maritime site in Portland, Oregon. Samples were collected by Anchor Environmental and submitted to Columbia Analytical Services, Inc. (CAS) in Kelso, Washington. Samples were analyzed for polynuclear aromatic hydrocarbons (PAHs) by U.S. Environmental Protection Agency (USEPA) method 8270C by selective ion monitoring (SIM); volatile organic compounds (VOC) by USEPA 8260B; and gasoline (TPH-Gx) and diesel extended range organics (TPH-Dx) by Washington State Department of Ecology's (Ecology's) Northwest total petroleum hydrocarbon methods (NWTPH).

This data validation report reviews CAS project ID K0601324. Table 1 presents the samples reviewed in this report.

Table 1
Samples Reviewed

Sample ID	Lab ID	Matrix	Analysis Requested
BM-021606-1	K0601324-001	Water	VOC, PAH, TPH-Gx, TPH-Dx
BM-021606-2	K0601324-002	Water	VOC, PAH, TPH-Gx, TPH-Dx
BM-021606-3	K0601324-003	Water	VOC, PAH, TPH-Gx, TPH-Dx
BM-021606-4	K0601324-004	Water	VOC, PAH, TPH-Gx, TPH-Dx
BM-021606-5	K0601324-005	Water	VOC, PAH, TPH-Gx, TPH-Dx
Trip Blank	K0601324-006	Water	VOC, PAH, TPH-Gx, TPH-Dx

Data Validation and Qualifications

The following comments refer to the laboratory's performance in meeting the quality assurance/quality control (QA/QC) guidelines outlined in the data quality objectives section of the Quality Assurance Project Plan (QAPP) and the statement of work. Laboratory

results were reviewed following USEPA guidelines (USEPA 1999; 2004). Unless noted in this report, laboratory results for the samples listed above were within QC criteria.

Laboratory Data Package and Field Documentation

Field documentation was checked for completeness and accuracy. CAS noted at the time of sample receipt that the samples were received in good condition, were cool (1.0° C), and were consistent with the accompanying chain of custody as documented on the Sample Receipt Form.

Holding Times and Sample Preservation

Samples were appropriately preserved and analyses were conducted within holding times. No data were qualified because of improper preservation or exceedance of holding times.

Laboratory Method Blanks

Laboratory method blanks were analyzed at the required frequencies. No analytes were detected in the laboratory method blanks.

Field Quality Control

Field Duplicates

One field duplicate was performed on sample MW-3, and the duplicates were identified as samples BM-021606-3 and BM-021606-4 on the chain of custody. The duplicate results for residual range organics were not calculable due to a non-detectable result (i.e., the data point was below the reporting limit). The TPH-Dx for this same sample set was within the relative percent difference (RPD) criteria of ±25 percent. No data were qualified due to these results.

Surrogate Recoveries

Surrogates were included for all organic analyses. The surrogate recoveries were within the laboratory-specified control limits for all samples.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD)

Matrix spike (MS) and matrix spike duplicate (MSD) samples were analyzed using batch quality control samples and was within designated control limits for the VOC analysis and the PAH analysis. The TPH-Dx utilized an additional laboratory control sample (LCS) for precision and accuracy calculations, while the TPH-Gx used a laboratory duplicate analysis of sample BM-021606-2 along with the LCS. Additional QC was within the laboratory designated control limits. No data were qualified based on this finding.

Laboratory Control Sample (LCS) and LCS Duplicate (LCSD)

LCSs were analyzed at the required frequencies. All sample replicates, LCS, and LCS Duplicates (LCSDs) were within designated laboratory control limits.

Method Reporting Limits

Sample results were reported using the laboratory method reporting limits, and reporting limits were acceptable. The reporting limit of acenaphthylene in three samples (BM-021606-1, BM-021606-2, and BM-021606-5) was raised to account for matrix interference from non-target analytes. Several samples contained contaminants above the reporting limit, which required sample dilutions in order to accurately quantify the level of contaminants. The following samples required dilution:

- BM-021606-5 for TPH-Gx and VOC required a 10x dilution, so reporting limits were raised to account for the sample dilutions. This sample also required a 50x dilution for two PAH analytes. The reporting limits accurately reflect this dilution.
- Sample BM-021606-1 for PAH analysis required a 20x dilution for two analytes. The reporting limit for these two analytes was raised to account for the dilutions made.

Overall Assessment

The data are judged to be acceptable for their intended use without qualification.

Precision, Accuracy, and Completeness

Precision: All precision goals were met.

Accuracy: All accuracy goals were met.

Completeness: Completeness was 100 percent for all data.

REFERENCES

USEPA. 1983. Methods for Chemical Analysis of Water and Wastes. U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio. EPA 600/4 79-020.

USEPA. 1986. Test methods for Evaluating Solid Waste: Physical/Chemical Methods. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. EPA 530/SW-846.

USEPA. 1999. USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. EPA 540/R-99/008. October.

USEPA. 2004. USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation (OSRTI). EPA 540-R-04-004. October 2004.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, WA 98101

RECEIVED
JUN 18 2007
F.H.W.

JUN 15 2007

Brix Maritime Company
Frank Williamson
General Counsel
660 West Ewing Street
Seattle, WA 98119

Re: Portland Harbor Superfund Site, Portland, Oregon
Participation and cooperation in the Site RI/FS

Dear Mr. Williamson:

This letter documents the determination of EPA Region 10 that Brix Maritime has satisfactorily responded to EPA's request for good faith participation and cooperation in the in-water Remedial Investigation and Feasibility Study ("RI/FS") at the Portland Harbor Superfund Site ("Site") being performed by the members of the Lower Willamette Group ("LWG") pursuant to an Administrative Settlement Agreement and Order on Consent, EPA Docket Number CERCLA-10-2001-0240 ("AOC").

EPA requested in an April 28, 2006 letter to Brix that it participate and cooperate in the ongoing RI/FS at the Site that is being conducted by the LWG. The letter stated that Brix could do this by entering into the existing AOC under which the LWG is conducting the RI/FS. EPA confirmed through a written communication dated July 7, 2006, in which EPA provided an extension of time to reach agreement with the LWG, that Brix could make a good faith offer directly to the LWG, and that participation and cooperation in the RI/FS could take the form of an agreement with the LWG that would provide funding for the in-water RI/FS costs.

You have now executed an agreement with the LWG, entitled *LWG-BWG Interim RI/FS Settlement Agreement* ("the Agreement").[1] The provisions of that Agreement include requirements for Brix to provide funding for the ongoing RI/FS.

EPA has reviewed the Agreement. EPA has determined that by signing the Agreement and providing funding for the RI/FS consistent with its terms, Brix will have satisfied the requirements stated in EPA's April 28, 2006 notice letter and related EPA communications to date for good faith participation and cooperation in the RI/FS being

[1] The Blue Water Group (BWG) members include Atlantic Richfield Company; Beazer East, Inc., Brix DeArmond, LLC; Brix Maritime Co., Calbag Metals Co., CertainTeed Corporation, HAJ, Inc. (dba Christenson Oil), Crawford Street Corporation; Exxon Mobil Corporation, FMC Corporation; Front Avenue Corp., Gould Electronics Inc., Hendren Tow Boat Co., Inc., Langley–St. Johns LLC, McCall Oil and Chemical Corp., NL Industries, Northwest Pipe Company, Schnitzer Investment Corp., Schnitzer Steel Industries, Inc., Shaver Transportation Co., Shell Oil Company, and Tube Forgings of America, Inc.

performed at the Site by the LWG pursuant to the AOC. Please note that if your company is a current owner or operator at the Site, an essential component of being a cooperative party is to provide access to your company's property to allow the LWG to conduct RI/FS activities. EPA understands that the terms and conditions of such access will be subject to negotiation with the LWG. If EPA determines that you have unreasonably denied access, EPA will send you a further letter revoking its finding that Brix is a participating and cooperating party.

Neither the Agreement nor this letter constitutes a determination that the funding provided by Brix pursuant to the Agreement constitutes your company's final allocable liability for RI/FS costs. EPA looks forward to Brix's participation in the future allocation process contemplated under the Agreement.

Sincerely,

Daniel D. Opalski, Director
Office of Environmental Cleanup

cc: Leslie Schenck

Oregon
Theodore R. Kulongoski, Governor

Department of Environmental Quality
Northwest Region Portland Office
2020 SW 4th Avenue, Suite 400
Portland, OR 97201-4987
(503) 229-5263
FAX (503) 229-6945
TTY (503) 229-5471

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MAY 08 2006
F.H.W.

May 4, 2006

OVERNIGHT MAIL

Steve T. Scalzo
President
Brix Maritime Towing Company, Inc.
660 W. Ewing Street
Seattle, WA 98119

Frank Williamson
President
Foss Maritime Company
660 W. Ewing Street
Seattle, WA 98119

Re: Portland Harbor Superfund Site

Dear Mr. Scalzo and Mr. Williamson:

As you may know, the U.S. Environmental Protection Agency ("EPA") is requesting that a number of potentially responsible parties ("PRPs") become cooperating parties in the in-water investigation of hazardous substance contamination in Portland Harbor by entering the existing administrative consent order with EPA, and is encouraging the PRPs to participate in the Lower Willamette Group ("LWG"). The LWG has requested that the Oregon Department of Environmental Quality ("DEQ") similarly provide an opportunity to LWG members and other PRPs to enter a state settlement recognizing in-water work performed under EPA's consent order.

You currently might be working with DEQ to investigate and control sources of contamination to the Willamette River from your upland facility. DEQ appreciates your cooperation and intends to maintain our constructive working relationship. Since DEQ is willing to discuss the settlement requested by the LWG regarding in-water work, and intends that any such settlement also provide for reimbursement of outstanding costs incurred by DEQ at Portland Harbor, DEQ is extending this opportunity to you and other PRPs to participate in negotiation of such a settlement.

This letter therefore serves to notify you of your potential liability for remedial action costs incurred by DEQ in connection with hazardous substance contamination of the Portland Harbor in Portland, Oregon, and provides you with DEQ's demand for payment of those costs. This letter further notifies you of an opportunity to enter negotiations with DEQ and other PRPs to settle your obligation to reimburse DEQ's costs and to become a cooperating party in the ongoing environmental investigation and study of cleanup remedies for the Portland Harbor contamination being overseen by EPA.

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The DEQ negotiations will proceed on a short timeline. We therefore request that you give this matter your immediate attention, and, **if you wish to participate in a settlement with DEQ, to please respond by May 19, 2006** in accordance with the instructions set out in this letter.

Background

Investigations of sediments and water quality in the Willamette River within the Portland Harbor area have revealed a broad range of hazardous substance contaminants, including but not limited to petroleum hydrocarbons, polycyclic aromatic hydrocarbons, polychlorinated biphenyls, pentachlorophenol, phthalates, dioxins and furans, DDT and other pesticides, and lead, arsenic, mercury, and other metals. These chemicals have entered the river through releases from upland properties, storm water, and upstream sources as a result of industrial, commercial, and shipping activities, urban and agricultural runoff, and sewer outfalls.

In response to this contamination, DEQ undertook a number of measures for the protection of public health and the environment, including but not limited to site discovery and assessment to locate sources of the contamination, development of a Portland Harbor Sediment Management Plan and Sediment Investigation Work Plan to guide investigation of the sediments contamination, consultation and negotiation with PRPs regarding the design and implementation of the plans, coordination with federal agencies and tribes having interests in the Willamette River, and the entry of cooperative agreements and public outreach necessary to these efforts. DEQ undertook these measures pursuant to its authorities under the state environmental cleanup law, ORS 465.200 *et seq.*, and consistent with Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA" or "Superfund").

On December 1, 2000, EPA placed the lower Willamette River and related sources of contamination to the river on the National Priority List pursuant to CERCLA. The final boundaries of the Portland Harbor Superfund Site will be established by EPA when it selects a final cleanup remedy for the site.

DEQ and EPA have agreed to share responsibility for investigation and cleanup of the Portland Harbor Superfund Site. DEQ is responsible for overseeing the investigation and control of contaminant sources to the harbor. EPA is responsible for overseeing the investigation and cleanup of in-water contamination. Each agency also acts as a support agency to the other agency's efforts. EPA is currently administering the performance of an in-water remedial investigation and feasibility study ("RI/FS"), under an Administrative Order on Consent issued by EPA on September 28, 2001. Ten PRPs are signatories to the consent order with EPA. Those consent order parties, along with a reported four other PRPs, have formed what is called the Lower Willamette Group for the purpose of jointly performing or financing the in-water RI/FS. EPA by separate letter dated April 28, 2006 has requested that other PRPs become cooperating parties by signing the consent order. EPA is also encouraging the PRPs to participate in the LWG.

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Your Potential Liability

Under the state environmental cleanup law, ORS 465.200 *et seq.*, the following persons may be liable for DEQ remedial action costs: an owner or operator of a facility at or during the time of acts or omissions that result in a release of hazardous substances at the facility; a subsequent owner or operator who knew or reasonably should have known of the release when the person became the owner or operator; an owner or operator who obtains actual knowledge of the release and then transfers ownership or operation without disclosing such knowledge; a person who causes, contributes to, or exacerbates contamination; a person who unlawfully hinders or delays investigations and cleanup; a person who obtains actual knowledge of a release and fails to promptly notify DEQ and exercise due care; and a person who fails to take reasonable precautions against a third party's actions. *See* ORS 465.255. This liability may attach to past owners and operators as well as present. The liability generally is strict and joint and several. Similar liability for DEQ remedial action costs may exist under CERCLA. *See* 42 U.S.C. § 9607. Hazardous substances for which liability may exist under the state environmental cleanup law include CERCLA hazardous substances and oil. ORS 465.200(16).

Based on available information, DEQ has reason to believe that hazardous substances have been or are being released at or from the facility(s) located at 9030 NW St. Helens Road, Portland, Oregon, to the Portland Harbor, and that you may be liable for DEQ's remedial action costs under one or more of the grounds enumerated above under the state environmental cleanup law and CERCLA.

The total amount of non-reimbursed past costs incurred by DEQ in connection with remedial activities at Portland Harbor through December 31, 2000 is $1,902,171.31.[1] A summary of these costs is enclosed for you reference as Attachment A to this letter. Pursuant to ORS 465.200 *et seq.* and CERCLA, DEQ makes demand for payment by you of this amount plus all authorized interest.

Settlement Opportunity

As stated above, DEQ intends to commence settlement negotiations with PRPs regarding DEQ's remedial action costs at Portland Harbor and other matters. The settlement would be in the form of a consent judgment entered in state circuit court pursuant to ORS 465.325. The salient provisions of the consent judgment would require that signing PRPs: (a) pay DEQ's outstanding remedial action costs incurred through December 31, 2000; (b) reimburse DEQ's support agency costs under the in-water RI/FS consent order administered by EPA; and (c) perform the in-water RI/FS under the EPA consent order, as demonstrated by a PRP entering the consent order with EPA or otherwise demonstrating that it is helping to fund the RI/FS work (such as through membership in the LWG).

[1] The EPA consent order requires reimbursement by PRP signatories to the consent order of costs incurred by DEQ as support agency after January 26, 2001. Generally consistent with that date and for ease of accounting, DEQ at this time is offering an opportunity to settle its outstanding costs incurred through December 31, 2000.

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In return, DEQ would provide a covenant-not-to-sue, right of contribution, and contribution protection regarding the same matters.

In addition to these benefits of entering a settlement with DEQ, there are advantages to joining the in-water RI/FS work, including a meaningful role in the development of the cleanup alternatives to be evaluated by EPA when it selects a final remedy for the Portland Harbor Superfund Site. Further, DEQ understands that the LWG is beginning the development of an allocation process among PRPs, in lieu of litigation, for determining shares of investigation and cleanup costs. Participating in this process and the LWG may be in your interest.

DEQ understands that the LWG has invited you and other PRPs to an informational meeting to discuss the LWG's activities to date and your potential participation in performing or funding the in-water RI/FS work. DEQ and EPA representatives intend to participate in portions of that meeting.

The DEQ consent judgment negotiations will proceed on a tight timeline. DEQ intends to complete negotiations so that a proposed consent judgment may be issued for public notice and comment this summer of 2006, and the consent judgment entered with the state circuit court by the fall of 2006. Consent judgment negotiations will be confidential, and, in accordance with ORS 465.325(4)(b), a PRP's participation in negotiations shall not be considered an admission of liability.

If you elect to participate in this settlement opportunity, please provide a written letter of your intent to engage in good faith negotiations, by May 19, 2006, mailed to: Kurt Burkholder, Senior Assistant Attorney General, Oregon Department of Justice, 1515 SW 5th Ave., Suite 410, Portland, OR 97201.

For your information, the mailing list enclosed with this letter as Attachment B shows the other PRPs receiving this notice of settlement opportunity from DEQ.

Questions regarding this letter may be directed to Mr. Burkholder at 971-673-1880, or at kurt.burkholder@doj.state.or.us. If you have any questions regarding the EPA consent order, we suggest you contact Elizabeth McKenna at 206-553-0016. Questions regarding participation in the LWG may be directed to David Ashton at 503-944-7090, or William Joyce at 206-957-5951.

Thank you for your attention to this matter.

Sincerely,

Dick Pedersen
Administrator
Northwest Region

Encl.s

Confidential Business Information 00013551

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

URGENT LEGAL MATTER
PRIORITY OVERNIGHT MAIL REQUESTED

April 28, 2006

Steve T. Scalzo
President
Brix Maritime Towing Company, Inc.
660 W. Ewing Street
Seattle, WA 98119

Frank Williamson
President
Foss Maritime Company
660 W. Ewing Street
Seattle, WA 98119

Re: Supplemental Notice of Potential Liability for the Portland Harbor Superfund Site; Portland, Oregon

Dear Mr. Steve T. Scalzo and Mr. Frank Williamson:

The United States Environmental Protection Agency ("EPA") previously contacted your company regarding activities connected with the Portland Harbor Superfund Site (the "Site") located in Portland, Oregon. In our December 2000 correspondence, EPA informed your company and other potentially responsible parties ("PRPs") at the Site that you may be liable for money expended by EPA for response actions at the Site under the Comprehensive Environmental Response, Compensation, and Liability Act, as amended ("CERCLA"), commonly known as the federal Superfund law. At that time, EPA also offered you and other PRPs the opportunity to take action necessary to abate any releases or threats of release of hazardous substances from the Site or to reimburse EPA for response actions undertaken.

EPA is contacting you and your company again to reconfirm your potential responsibility for response costs incurred in the Portland Harbor Superfund Site and to request that you participate in the ongoing studies being undertaken, referred to as the remedial investigation and feasibility study (RI/FS).

In response to the original notice letters issued in 2000, 10 cooperating notice letter recipients entered into an Administrative Order on Consent ("AOC") with EPA for the performance of a RI/FS for the Site. These cooperating parties, along with five other notice letter recipients, have formed a coalition of private and public entities, known as the Lower Willamette Group

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("LWG"), to jointly perform the RI/FS pursuant to the AOC. EPA is now providing you a second opportunity to join in the investigation of the Site.

The parties who signed the AOC have conducted, with EPA oversight, extensive data collection and evaluation efforts. However, more data collection and analysis is required to determine the nature and extent of contamination and evaluate the risks to human health and the environment at the Site. RI/FS and PRP search efforts to date have confirmed your potential liability for the contamination at the Site. Therefore, EPA is again requesting that you become a cooperating party for the RI/FS by participating in the LWG and entering into the AOC. A copy of the AOC is attached for your review.

Explanation of Potential Liability

Under Section 107(a) of CERCLA, PRPs may be held liable for all costs incurred by the EPA (including interest) in responding to any release or threatened release of hazardous substances at the Site, unless the PRP can show any of the statutory defenses to liability. CERCLA PRPs include current and former owners and operators of a facility, as well as persons who arranged for treatment and/or disposal of any hazardous substances found at the Site, and persons who accepted hazardous substances for transport and selected the Site to which the hazardous substances were delivered.

Based on the information that EPA evaluated during the course of its investigation of the Site, EPA believes that you may be liable under Section 107(a) of CERCLA, with respect to the Site, as an owner and/or operator of a facility at the Site. Specifically, EPA has reason to believe that hazardous substances have been and/or are being released from the facility located at 9030 NW St. Helens Road, in Portland, Oregon, into the "study area" for the Portland Harbor Superfund Site, as defined under the AOC.

Settlement Opportunity

As noted earlier, an opportunity exists for you to become a cooperating party. There are advantages to joining the RI/FS process. By joining the RI/FS, you have an ability to shape the investigation and remedial alternatives that will be evaluated when EPA selects a remedy for the Site. Remaining outside of the process limits your opportunity to have a meaningful role in the critical decisions leading up to the development of the Proposed Plan.

Further, the LWG is beginning an allocation discussion in which they will develop a proposed allocation scheme for sharing costs of the RI/FS and remedial action among all identified PRPs. Even if you do not participate in the allocation, it is likely that you will be assigned a share in that process. Accordingly, it would be in your interest to be an active participant to ensure that your interests are fairly represented. Moreover, participating in the cleanup process will facilitate resolution of all viable PRPs' shares of responsibility for investigation and cleanup costs outside of court.

Respondents to the AOC also receive the benefit of obtaining an administrative settlement with EPA for the RI/FS work and costs. Such a settlement confers upon you the right to seek

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contribution from third parties for costs exceeding your fair share to the extent provided by the Superfund law. Through this AOC, you also receive statutory protection from third party lawsuits seeking contribution of their RI/FS costs.

If you choose not to join in the RI/FS by becoming a signatory to the AOC, EPA may take appropriate action which could include any of the following options: EPA may issue a Unilateral Administrative Order ("UAO") to you under Section 106(a) to perform some portion of the RI/FS work. Or, EPA may issue a Unilateral Participate and Cooperate Order requiring you to undertake completion of the RI/FS at the Site in cooperation with the PRPs who are already performing under the AOC. If you refuse to comply with an order issued against you, EPA may pursue civil litigation against you pursuant to Section 106(a) to compel compliance, or EPA may pursue a Section 107 cost recovery claim against you for costs incurred and to be incurred by EPA at the Site. In addition, EPA may pursue civil enforcement against you under Section 311(e) of the Federal Water Pollution Control Act, 33 U.S.C. § 132(e).

We strongly encourage you to contact the LWG to discuss your participation as a cooperating party for the performance or funding of the AOC. You may do so by contacting:

David Ashton
Port of Portland
P.O. Box 3529
121 NW Everett
Portland, OR 97208
(503) 944-7090
david.ashton@portofportland.com

William F. Joyce
Salter Joyce Ziker, PLLC
1601 Fifth Avenue, Suite 2040
Seattle, WA 98101
(206) 9575951
wjoyce@sjzlaw.com

EPA understands that the LWG will soon be issuing an invitation for you and other PRPs to attend an informational meeting to discuss the LWG's past and ongoing activities and your potential participation in performing or funding the RI/FS. EPA representatives intend to participate in portions of such a meeting.

Reply Instructions

EPA asks that you provide a written response to this request for you to become a cooperating party before June 14, 2006. Your written response should be submitted to:

U.S. Environmental Protection Agency
Attn: Elizabeth McKenna, Attorney
Office of Regional Counsel

Confidential Business Information

1200 Sixth Avenue, M/S ORC 158
Seattle, Washington 98101

Contacting Mr. Ashton or William Joyce alone will not be considered a sufficient response to EPA. If a response from you is not received by June 14, 2006, EPA will assume that you have declined this offer to become a signatory to the AOC and EPA may pursue, without further notice to you, one of the options for civil litigation and/or administrative relief, including issuance of a participate and cooperate order requiring you to undertake completion of the RI/FS at the Site in cooperation with the PRPs who are already performing under the AOC.

Questions may be directed to Ms. McKenna by contacting her at (206) 553-0016. At your request, Ms. McKenna will provide you with a standardized "letter of intent" for acknowledging your intent to engage in good faith negotiations to become a cooperating party and become a respondent to the existing AOC.

Sincerely,

Daniel D. Opalski, Director
Office of Environmental Cleanup

Enclosure:

Administrative Order on Consent

Confidential Business Information

Oregon
Theodore R. Kulongoski, Governor

Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390
503-229-5696
TTY 503-229-6993

April 29, 2003

REC'D MAY 2, 2003

CERTIFIED MAIL NO. 7002 3150 0004 8642 7607
RETURN RECEIPT REQUESTED

Brix Maritime Co. Dba Foss Maritime Co.
9030 NW St. Helen Rd.
Portland, Oregon 97231

NOTICE TO OWNERS AND OPERATORS OF DECISION TO LIST CONTAMINATED PROPERTY ON THE CONFIRMED RELEASE LIST (CRL) AND INVENTORY
Foss Maritime/Brix Maritime
9030 NW St. Helens Rd., Portland
ECSI ID NO. # 2364
Expanded Preliminary Assessment 21-NOV-2001

Dear Sir or Madam:

By letter dated February 18, 2003 the Department of Environmental Quality (Department) notified you as an owner or operator of the Foss Maritime/Brix Maritime site of the Department's proposal to add this facility to the Confirmed Release List (CRL) and Inventory. The notice invited comments on the proposed listing. None were received.

Foss Maritime/Brix Maritime meets the criteria for listing, and with this notice the Department is adding it to the CRL and Inventory. Enclosed is the Site Summary Report, which includes the information about the Foss Maritime/Brix Maritime site that will appear on the CRL and Inventory.

The Department will update the CRL and Inventory quarterly and provide copies to area newspapers and to the public upon request. A facility can be removed from the Confirmed Release List and Inventory after all necessary cleanup is completed. We are pleased that you have elected to participate in our Voluntary Cleanup Program to investigate and assess necessary remedial actions for this site. We hope that this cooperative relationship will continue until potential threats from hazardous materials at this site have been eliminated.

As noted in the earlier letter to you, listing your property does not necessarily mean that you are responsible for the contamination, investigation or cleanup. Responsibility for these costs is prescribed

by various provisions in state and federal laws. If you have specific questions about the CRL or Inventory, or want copies of the statute or regulations governing the Department's site assessment, listing, or cleanup processes, please contact Listing Coordinator Kimberlee Van Patten at (503) 229-5256 or at the address shown on the letterhead.

Sincerely,

Charles W. Donaldson
Manager
Emergency Response and Site Assessment

Enclosures: Site Summary Report
cc: Rod Struck; NWR, DEQ
ECSI File # 2364

Environmental Cleanup Site Informat n

Site Summary Report

RECD MAY 2 - 2003

for site #2364 - Foss Maritime/Brix Maritime

State of Oregon Department of Environmental Quality

General Information

Site ID: 2364

Investigative Status: Listed on the CRL/Inventory

Name: Foss Maritime/Brix Maritime

Further Action Priority: High

Aliases/Other Site Names: Brix Maritime
Knappton Corp.
Portland Harbor Sediment Study

Address 9030 NW St. Helens Rd, Portland, 97231

Cerclis #:

NPL Site: No

Region: Northwest Region

Orphan Site: No

Study Area: No

County: Multnomah

Brownfield:

Remedial Action Funding: Owner, operator or other party under agreement, order or consent decree under ORS 465.200 or 465.420

Site Location:

Property

Township/Range/Section: 1.00N, 1.00W, 11

Tax Lots

Latitude: 45deg. 35' 15.70"(45.5877)

Site Size: 4.46 acres

Longitude: -122deg. 46' 16.70"(-122.7713)

Study Areas

Study Area ID	Study Area	Site Association to Study Area
1544	Lower Willamette River Basin Study Area	Suspected contributor to Study Area problem
2068	Portland Harbor Sediments	Suspected contributor to Study Area problem
2339	V.A.- Designated National Estuaries	Suspected contributor to Study Area problem
2340	V.A.- Surface Waters, WQ-Limited for Toxics	Suspected contributor to Study Area problem

Confidential Business Information

00013702

Facilities/Operation

Name: Foss Maritime Company

Comment:

Years Of Operation: 1979 - Current

Operating Status: Active

SIC Codes: 3462 - IRON AND STEEL FORGINGS, 4400 - WATER TRANSPORTATION

Permits

Number	Type	Issued By	Comments
26-93-0009	LUST	DEQ/UST	Knappton Corp/Brooks Maritime

Permits

Number	Type	Issued By	Comments
7374	UST	DEQ/UST	Foss Maritime

Permits

Number	Type	Issued By	Comments
SEE NARRATIVE	Spill	DEQ/Spills	

General Site Description:

Site History:

Contamination: Weston sampling results from the Portland Harbor Sediment Study revealed PAHs, thallium and butylbenzylphthalate in river sediments adjacent to the site. (11/20/01 RGS/VCP) Soil and groundwater sampling performed during the Preliminary Assessment indicated the presence of TPH, benzene, ethylbenzene, xylenes, naphthalene, PAHs, and 1,2,4-trimethylbenzene on-site (12/23/02 RGS/VCP) A pre-remedial investigation was initiated in summer 2002. The monitoring wells were installed. NAPL was observed in one well. Additional wells will be installed.

Manner of Release:

Substances

Substance Name: Benzene

Medium	Substance Data	Evidence	Date	Sample Depth
Groundwater	125 ppb	Laboratory Data	5/29/01	

Confidential Business Information 00013703

Soil	5.2 ppm	Laboratory Data	5/24/01

Date Released:
Quantity Released:
General Comment:
Media Comments:
Release Comments:
Source of Information:

Substance Name: Butyl benzyl phthalate

Medium	Substance Data	Evidence	Date	Sample Depth
Sediment	29 ppb - downstream	Laboratory Data	9/1/97	

Date Released:
Quantity Released:
General Comment:
Media Comments:
Release Comments:
Source of Information:

Substance Name: Naphthalene

Medium	Substance Data	Evidence	Date	Sample Depth
Soil	11.1 ppm	Laboratory Data	5/24/01	
Groundwater	65.1 ppb	Laboratory Data	5/24/01	

Date Released:
Quantity Released:
General Comment:
Media Comments:
Release Comments:
Source of Information:

Substance Name: Polyaromatic hydrocarbons (pah)

Medium	Substance Data	Evidence	Date	Sample Depth
Groundwater	7.445 ppb	Laboratory Data	5/29/01	
Sediment	HPAHs 3907 ppb - downstream	Laboratory Data	9/1/97	
Sediment	LPAH 803 ppb - downstream	Laboratory Data	9/1/97	

Confidential Business Information

00013704

Date Released:
Quantity Released:
General Comment:
Media Comments:
Release Comments:
Source of Information:

Substance Name: Total petroleum hydrocarbons (tph)

Medium	Substance Data	Evidence	Date	Sample Depth
Soil	Up to 53,400 ppm	Laboratory Data	1/26/93	

Date Released:
Quantity Released:
General Comment:
Media Comments:
Release Comments:
Source of Information:

Substance Name: Trimethylbenzene,1,2,4-

Medium	Substance Data	Evidence	Date	Sample Depth
Soil	59.8 ppm	Laboratory Data	5/24/01	
Groundwater	627 ppb	Laboratory Data	5/29/01	

Date Released:
Quantity Released:
General Comment:
Media Comments:
Release Comments:
Source of Information:

Substance Name: Xylenes

Medium	Substance Data	Evidence	Date	Sample Depth
Soil	134.9 ppm	Laboratory Data	5/24/01	
Groundwater	420.4 ppb	Laboratory Data	5/29/01	

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00013705

Date Released:
Quantity Released:
General Comment:
Media Comments:
Release Comments:
Source of Information:

Hazardous Substance/Waste Types:

Media Contamination: On-site soil and groundwater; Willamette River sediments.

Pathways & Other Hazards:

Health Threats: Petroleum contamination documented on-site could threaten on-site workers, as well as ecological receptors in the adjacent Willamette River.

Investigative, Remedial, and Administrative Actions

Action	Start Date	Completion Date	Responsible Staff	Agency	Region	Lead Program
Site added to database	6/8/99 **Comment:**	6/8/99	Janelle Waggy	DEQ	NWR	VCS
Site Screening recommended (EV)	6/8/99 **Comment:**	6/8/99	Stephen Fortuna	DEQ	NWR	SAS
SITE SCORING	11/8/99 **Comment:**	11/8/99	Thomas Gainer	DEQ	NWR	SAS
SITE EVALUATION	11/19/99 **Comment:**	11/19/99	Thomas Gainer	DEQ	NWR	SAS
Insufficient information to list	11/19/99 **Comment:**	11/19/99	Thomas Gainer	DEQ	NWR	SAS

Confidential Business Information

00013706

State Expanded Preliminary Assessment recommended (XPA)	11/19/99	11/19/99	Thomas Gainer	DEQ	NWR	VCS
	Comment:					
Letter Agreement	11/25/99	12/22/99	Eric Blischke	DEQ	NWR	VCS
	Comment:					
EXPANDED PRELIMINARY ASSESSMENT	2/15/00	11/21/01	Rodney Struck	DEQ	NWR	VCS
	Comment:	"Sampling Results Report" dated 9/01.				
NEGOTIATIONS	11/21/01	5/8/02	Rodney Struck	DEQ	NWR	VCS
	Comment:	PH Agreement initiated.				
Remedial Investigation recommended (RI)	11/21/01	11/21/01	Rodney Struck	DEQ	NWR	VCS
	Comment:	Additional investigation needed to determine if pathway to river complete and poses an unacceptable risk				
Consent Order	5/8/02		Rodney Struck	DEQ	NWR	VCS
	Comment:	Voluntary Agreement for Remedial Investigation and Souce Control Measures.				
REMEDIAL INVESTIGATION	5/8/02		Rodney Struck	DEQ	NWR	VCS
	Comment:					
Proposal for Confirmed Release List recommended	10/3/02	10/3/02	Rodney Struck	DEQ	NWR	VCS
	Comment:					
Proposal for Inventory recommended	10/3/02	10/3/02	Rodney Struck	DEQ	NWR	
	Comment:					
Facility proposed for Confirmed Release List	2/20/03	2/20/03	Kim Van Patten	DEQ	NWR	VCS
	Comment:					

Confidential Business Information

00013707

Facility proposed for Inventory	2/20/03	2/20/03	Kim Van Patten	DEQ	NWR	VCS
	Comment:					
Facility placed on Confirmed Release List	4/29/03	4/29/03	Kim Van Patten	DEQ	NWR	vcs
	Comment:					
Facility placed on Inventory	4/29/03	4/29/03	Kim Van Patten	DEQ	NWR	VCS
	Comment:					

Remedial Action: (6/8/99 JMW/SAP) Based on initial sampling results from a river sediment quality study, the Foss Maritime facility has been identified as a potential source of contamination to the Portland Harbor. A Site Assessment Review Notice was sent 3/3/99. Response from Foss Maritime received 4/12/99. A site screening is scheduled (level III priority). (12/21/99 TG/SAP) Strategy Recommendation completed November 1999. An expanded Preliminary Assessment (XPA) at Foss Maritime should be conducted to evaluate sediment contamination, potential upland site contaminant sources and past waste-management practices, and to determine the extent and source(s) of observed sediment contamination at sample station SD052. An XPA is a high priority for follow-up. (4/2/01 RGS/VCP) DEQ has reviewed and commented on the Preliminary Assessment report provided by Foss. DEQ requested a focused sampling investigation. (11/21/01 RGS/VCP) Brix submitted and implemented a work plan for investigating contamination around the current and former USTs. This work occurred with no DEQ oversight. In June 2001, DEQ and Brix representatives met to discuss the results of the UST investigation, which indicated that soil and groundwater had been impacted. DEQ identified several data gaps based on this preliminary review. In September 2001, Brix submitted a report documenting the findings of the UST investigation DEQ determined further action is needed and recommended a Pre-RI under the Portland Harbor Agreement. (12/23/02 RGS/VCP) A Voluntary Agreement for the RI was signed in May, 2002. RI activities began in May and are on-going.

Data Sources: 1) See also Spill files: 95-145, 95-486, 95-1175, 96-222, 96-1679, 96-1403, 97-201, 97-1857, 97-2378, 97-2489, 98-67, 98-75, 98-622, 98-2225, 98-3142. 2) Portland Harbor Sediment Investigation Report, prepared by Roy Weston, Inc. for USEPA, May 1998; 3) Foss Maritime Company's response to DEQ Site Assessment Information Request, March 31, 1999; 4) DEQ LUST Database; DEQ HWIMSy Hazardous Waste Generator Database; DEQ SPINS Spill Database; MetroScan Property Records, Multnomah County, Oregon. 5) "Supplemental Preliminary Assessment Summary Report", Anchor, October 2000; 6) "Work Plan for UST Investigation", Hahn and Associates, May 2001; 7) "Sampling Results Report in Support of the Preliminary Assessment", Anchor, September 2001; 8) DEQ project files

Associated Parties

Confidential Business Information

00013708

Name:	Kim Johannessen	**Organization:**	Johannessen & Assoc.
Title:		**Address:**	5413 Meridian Ave N, Suite C
Phone:	(206) 632-2000		Seattle, WA 98103-6138
Affiliation:	Interested Party	**Last Updated:**	By: JWAGGY On: 11/27/2001
Affiliation Status:	Active		
Party Comment:		**Affiliation Comment:**	Brix legal counsel.

Name:		**Organization:**	Brix Maritime Co Dba Foss Maritime Co
Title:		**Address:**	9030 NW St. Helens Rd.
Phone:	(503) 286-0631		Portland, OR 97231
Affiliation:	Legal Owner	**Last Updated:**	By: JWAGGY On: 06/08/1999
Affiliation Status:	Active		
Party Comment:		**Affiliation Comment:**	

Name:		**Organization:**	Brix Maritime Co Dba Foss Maritime Co
Title:		**Address:**	9030 NW St. Helens Rd.
Phone:	(503) 286-0631		Portland, OR 97231
Affiliation:	Facility Operator	**Last Updated:**	By: JWAGGY On: 06/08/1999
Affiliation Status:	Active		
Party Comment:		**Affiliation Comment:**	

Name:	Frank Williamson	**Organization:**	Foss Maritime
Title:	Assistant General Counsel	**Address:**	660 W Ewing St
Phone:	(206) 281-2800		Seattle, WA 98119-1587
Affiliation:	Contact	**Last Updated:**	By: JWAGGY On: 06/08/1999
Affiliation Status:	Active		
Party Comment:		**Affiliation Comment:**	Environmental contact

Site Ownership:

Projects

Project ID	Name	Start Date	End Date
35636	Brix Maritime Co.	05/08/2002	

Last Update

By: KVANPAT **On:** May 01, 2003

Confidential Business Information

00013709

CERTIFIED MAIL

Oregon DEPARTMENT
ENVIRONMENT
QUALITY

811 SW Sixth Ave.
Portland, OR 97204-139

7002 3150 0004 8642 7614

PORTLAND OR MAY 01 '03

PB METER 7032020

4.65

U.S. POSTAGE

Address Service Requested

DEQ-3A

Confidential Business Information

00013710

State of Oregon Department of Environmental Quality

Environmental Cleanup Site Information
Site Summary Report

for site #2364 - Foss Maritime/Brix Maritime

General Information

Site ID: 2364
Investigative Status: Suspect
Name: Foss Maritime/Brix Maritime
Further Action Priority: High
Aliases/Other Site Names: Brix Maritime
Portland Harbor Sediment Study
Address 9030 NW St. Helens Rd, Portland, 97231
Cerclis #:
NPL Site: No
Region: Northwest Region
Orphan Site: No
Study Area: No
County: Multnomah
Brownfield:
Remedial Action Funding: Owner, operator or other party under agreement, order or consent decree under ORS 465.200 or 465.420
Site Location:

Property

Township/Range/Section: 1.00N, 1.00W, 11
Tax Lots 4.46 acres
Latitude: 45deg. 35' 23.00"(45.5897)
Site Size: 39
Longitude: -122deg. 46' 28.00"(-122.7744)

Study Areas

Study Area ID	Study Area	Site Association to Study Area
1544	Lower Willamette River Basin Study Area	Included within the Study Area but not yet suspected
2068	Portland Harbor Sediments	Included within the Study Area but not yet suspected
2339	V.A.- Designated National Estuaries	Included within the Study Area but not yet suspected
2340	V.A.- Surface Waters, WQ-Limited for Toxics	Included within the Study Area but not yet suspected
2344	V.A.- High-Poverty Census Tracts	Included within the Study Area but not yet suspected

Confidential Business Information
00013725

Facilities/Operation

Name: Foss Maritime Company

Comment:

Years Of Operation: 1979 - Current

Operating Status: Active

SIC Codes: 3462 - IRON AND STEEL FORGINGS, 4400 - WATER TRANSPORTATION

Permits

Number	Type	Issued By	Comments
26-93-0009	LUST	DEQ/UST	Knappton Corp/Brooks Maritime

Permits

Number	Type	Issued By	Comments
7374	UST	DEQ/UST	Foss Maritime

Permits

Number	Type	Issued By	Comments
SEE NARRATIVE	Spill	DEQ/Spills	

General Site Description:

Site History:

Contamination: Weston sampling results from the Portland Harbor Sediment Study revealed PAHs, thallium and butylbenzylphthalate in river sediments adjacent to the site. (11/20/01 RGS/VCP) Soil and groundwater sampling performed during the Preliminary Assessment indicated the presence of TPH, benzene, ethylbenzene, xylenes, naphthalene, PAHs, and 1,2,4-trimethylbenzene on-site. (12/23/02 RGS/VCP) A pre-remedial investigation was initiated in summer 2002. The monitoring wells were installed. NAPL was observed in one well. Additional wells will be installed.

Manner of Release:

Substances

Substance Name: Benzene

Medium	Substance Data	Evidence	Date	Sample Depth
Groundwater	125 ppb	Laboratory Data	5/29/01	
Soil	5.2 ppm	Laboratory Data	5/24/01	

Confidential Business Information

00013726

Date Released:
Quantity Released:
General Comment:
Media Comments:
Release Comments:
Source of Information:

Substance Name: Butyl benzyl phthalate

Medium	Substance Data	Evidence	Date	Sample Depth
Sediment	29 ppb - downstream	Laboratory Data	9/1/97	

Date Released:
Quantity Released:
General Comment:
Media Comments:
Release Comments:
Source of Information:

Substance Name: Naphthalene

Medium	Substance Data	Evidence	Date	Sample Depth
Soil	11.1 ppm	Laboratory Data	5/24/01	
Groundwater	65.1 ppb	Laboratory Data	5/24/01	

Date Released:
Quantity Released:
General Comment:
Media Comments:
Release Comments:
Source of Information:

Substance Name: Polyaromatic hydrocarbons (pah)

Medium	Substance Data	Evidence	Date	Sample Depth
Groundwater	7.445 bbp	Laboratory Data	5/29/01	
Sediment	HPAHs 3907 ppb - downstream	Laboratory Data	9/1/97	
Sediment	LPAH 803 ppb - downstream	Laboratory Data	9/1/97	

Confidential Business Information

00013727

Date Released:
Quantity Released:
General Comment:
Media Comments:
Release Comments:
Source of Information:

Substance Name: Total petroleum hydrocarbons (tph)

Medium	Substance Data	Evidence	Date	Sample Depth
Soil	Up to 53,400 ppm	Laboratory Data	1/26/93	

Date Released:
Quantity Released:
General Comment:
Media Comments:
Release Comments:
Source of Information:

Substance Name: Trimethylbenzene,1,2,4-

Medium	Substance Data	Evidence	Date	Sample Depth
Soil	59.8 ppm	Laboratory Data	5/24/01	
Groundwater	627 ppb	Laboratory Data	5/29/01	

Date Released:
Quantity Released:
General Comment:
Media Comments:
Release Comments:
Source of Information:

Substance Name: Xylenes

Medium	Substance Data	Evidence	Date	Sample Depth
Soil	134.9 ppm	Laboratory Data	5/24/01	
Groundwater	420.4 ppb	Laboratory Data	5/29/01	

Confidential Business Information

00013728

Date Released:

Quantity Released:

General Comment:

Media Comments:

Release Comments:

Source of Information:

Hazardous Substance/Waste Types:

Media Contamination: On-site soil and groundwater; Willamette River sediments.

Pathways & Other Hazards:

Health Threats: Petroleum contamination documented on-site could threaten on-site workers, as well as ecological receptors in the adjacent Willamette River.

Investigative, Remedial, and Administrative Actions

Action	Start Date	Completion Date	Responsible Staff	Agency	Region	Lead Program
Site added to database	6/8/99	6/8/99	Janelle Waggy	DEQ	NWR	VCS
	Comment:					
Site Screening recommended (EV)	6/8/99	6/8/99	Stephen Fortuna	DEQ	NWR	SAS
	Comment:					
SITE SCORING	11/8/99	11/8/99	Thomas Gainer	DEQ	NWR	SAS
	Comment:					
SITE EVALUATION	11/19/99	11/19/99	Thomas Gainer	DEQ	NWR	SAS
	Comment:					
Insufficient information to list	11/19/99	11/19/99	Thomas Gainer	DEQ	NWR	SAS
	Comment:					

Confidential Business Information

00013729

State Expanded Preliminary Assessment recommended (XPA)	11/19/99	11/19/99	Thomas Gainer	DEQ	NWR	VCS
	Comment:					
Letter Agreement	11/25/99	12/22/99	Eric Blischke	DEQ	NWR	VCS
	Comment:					
EXPANDED PRELIMINARY ASSESSMENT	2/15/00	11/21/01	Rodney Struck	DEQ	NWR	VCS
	Comment:	"Sampling Results Report" dated 9/01.				
NEGOTIATIONS	11/21/01	5/8/02	Rodney Struck	DEQ	NWR	VCS
	Comment:	PH Agreement initiated.				
Remedial Investigation recommended (RI)	11/21/01	11/21/01	Rodney Struck	DEQ	NWR	VCS
	Comment:	Additional investigation needed to determine if pathway to river complete and poses an unacceptable risk.				
Consent Order	5/8/02		Rodney Struck	DEQ	NWR	VCS
	Comment:	Voluntary Agreement for Remedial Investigation and Souce Control Measures.				
REMEDIAL INVESTIGATION	5/8/02		Rodney Struck	DEQ	NWR	VCS
	Comment:					
Proposal for Confirmed Release List recommended	10/3/02	10/3/02	Rodney Struck	DEQ	NWR	VCS
	Comment:					
Proposal for Inventory recommended	10/3/02	10/3/02	Rodney Struck	DEQ	NWR	
	Comment:					
Facility proposed for Confirmed Release List	2/20/03	2/20/03	Kim Van Patten	DEQ	NWR	VCS
	Comment:					

Confidential Business Information

00013730

Facility proposed for Inventory	2/20/03	2/20/03	Kim Van Patten	DEQ	NWR	VCS

Comment:

Remedial Action: (6/8/99 JMW/SAP) Based on initial sampling results from a river sediment quality study, the Foss Maritime facility has been identified as a potential source of contamination to the Portland Harbor. A Site Assessment Review Notice was sent 3/3/99. Response from Foss Maritime received 4/12/99. A site screening is scheduled (level III priority). (12/21/99 TG/SAP) Strategy Recommendation completed November 1999. An expanded Preliminary Assessment (XPA) at Foss Maritime should be conducted to evaluate sediment contamination, potential upland site contaminant sources and past waste-management practices, and to determine the extent and source(s) of observed sediment contamination at sample station SD052. An XPA is a high priority for follow-up. (4/2/01 RGS/VCP) DEQ has reviewed and commented on the Preliminary Assessment report provided by Foss. DEQ requested a focused sampling investigation. (11/21/01 RGS/VCP) Brix submitted and implemented a work plan for investigating contamination around the current and former USTs. This work occurred with no DEQ oversight. In June 2001, DEQ and Brix representatives met to discuss the results of the UST investigation, which indicated that soil and groundwater had been impacted. DEQ identified several data gaps based on this preliminary review. In September 2001, Brix submitted a report documenting the findings of the UST investigation. DEQ determined further action is needed and recommended a Pre-RI under the Portland Harbor Agreement. (12/23/02 RGS/VCP) A Voluntary Agreement for the RI was signed in May, 2002. RI activities began in May and are on-going.

Data Sources: 1) See also Spill files: 95-145, 95-486, 95-1175, 96-222, 96-1679, 96-1403, 97-201, 97-1857, 97-2378, 97-2489, 98-67, 98-75, 98-622, 98-2225, 98-3142. 2) Portland Harbor Sediment Investigation Report, prepared by Roy Weston, Inc. for USEPA, May 1998; 3) Foss Maritime Company's response to DEQ Site Assessment Information Request, March 31, 1999; 4) DEQ LUST Database; DEQ HWIMSy Hazardous Waste Generator Database; DEQ SPINS Spill Database; MetroScan Property Records, Multnomah County, Oregon. 5) "Supplemental Preliminary Assessment Summary Report", Anchor, October 2000; 6) "Work Plan for UST Investigation", Hahn and Associates, May 2001; 7) "Sampling Results Report in Support of the Preliminary Assessment", Anchor, September 2001; 8) DEQ project files

Associated Parties

Name:	Kim Johannessen	**Organization:**	Johannessen & Assoc.
Title:		**Address:**	5413 Meridian Ave N, Suite C
Phone:	(206) 632-2000		Seattle, WA 98103-6138
Affiliation:	Interested Party	**Last Updated:**	By: JWAGGY On: 11/27/2001
Affiliation Status:	Active		
Party Comment:		**Affiliation Comment:**	Brix legal counsel.

Confidential Business Information

00013731

Name:		**Organization:**	Brix Maritime Co Dba Foss Maritime Co
Title:		**Address:**	9030 NW St. Helens Rd.
Phone:	(503) 286-0631		Portland, OR 97231
Affiliation:	Legal Owner	**Last Updated:**	By: JWAGGY On: 06/08/1999
Affiliation Status:	Active		
Party Comment:		**Affiliation Comment:**	

Name:		**Organization:**	Brix Maritime Co Dba Foss Maritime Co
Title:		**Address:**	9030 NW St. Helens Rd.
Phone:	(503) 286-0631		Portland, OR 97231
Affiliation:	Facility Operator	**Last Updated:**	By: JWAGGY On: 06/08/1999
Affiliation Status:	Active		
Party Comment:		**Affiliation Comment:**	

Name:	Frank Williamson	**Organization:**	Foss Maritime.
Title:	Assistant General Counsel	**Address:**	660 W Ewing St
Phone:	(206) 281-2800		Seattle, WA 98119-1587
Affiliation:	Contact	**Last Updated:**	By: JWAGGY On: 06/08/1999
Affiliation Status:	Active		
Party Comment:		**Affiliation Comment:**	Environmental contact.

Site Ownership:

Projects

Project ID	Name	Start Date	End Date
35636	Brix Maritime Co.	05/08/2002	

Last Update

By: gmw **On:** August 07, 2002

Confidential Business Information

00013732

Oregon
Theodore R. Kulongoski, Governor

Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390
503-229-5696
TTY 503-229-6993

REC'D FEB 25 2003

February 18, 2003

Brix Maritime Co.
dba Foss Maritime Co.
9030 NW St. Helen Rd.
Portland, Oregon 97231

CERTIFIED MAIL NO. 7001 2510 0003 4989 8010
RETURN RECEIPT REQUESTED

RE: NOTICE TO CURRENT AND/OR PAST OWNERS AND OPERATORS OF PROPOSAL TO ADD CONTAMINATED PROPERTY TO DEQ's CONFIRMED RELEASE LIST (CRL) AND INVENTORY
Foss Maritime/Brix Maritime
9030 NW St. Helens Rd., Portland
ECSI ID No. # 2364
Expanded Preliminary Assessment 21-NOV-2001

Dear Sir or Madam:

The Oregon Legislature has directed the Department of Environmental Quality (Department) to develop and maintain two lists, the Confirmed Release List (CRL) and Inventory, for the purposes of tracking sites with releases of hazardous substances. The CRL includes all sites where releases of hazardous substances have been confirmed. A release is considered to be "confirmed" when the Department documents a release of a hazardous substance that may pose a significant threat to human health or the environment. The Inventory includes those sites with a confirmed release where the Department has determined that additional investigation or cleanup is necessary. Both the CRL and the Inventory are updated quarterly and made available to the public upon request.

This letter is notification that the Department proposes to include the Foss Maritime/Brix Maritime site at 9030 NW St. Helens Rd., Portland on the CRL and Inventory. Because we understand that the information we possess regarding this site may be outdated or incomplete, you have an opportunity to provide any comments you believe will correct or supplement this listing information. All comments must be received by the Department within forty-five (45) days from your receipt of this notice. If you are unable to respond within the initial 45-day comment period, you may request an extension of forty-five (45) days.

The Department reviews and responds to all comments received on listing proposals.

Confidential Business Information

Listing this property does not necessarily mean that you are responsible for the contamination, investigation or cleanup. Various provisions in state and federal laws prescribe responsibility for these activities. The site can be removed from either the CRL or Inventory after all necessary actions are taken to ensure protection of human health and the environment. We appreciate any work you may have done to clean up or investigate this site and hope we can continue to work together to eliminate threats to Oregon from hazardous materials.

Comments and requests for extensions should be sent to:

Oregon Department of Environmental Quality
Site Assessment Program
811 SW 6th Avenue, 8th Floor
Portland, OR 97204

Enclosed, please find several supporting documents that outline current site conditions, explain the listing process, and document how the site meets the listing criteria described in state laws and administrative rules. If you have specific questions about the CRL, Inventory, or site activities, or want copies of the Oregon Environmental Cleanup Law, please contact the Department's listing coordinator Kimberlee Van Patten at (503) 229-5256 or at the address shown above.

Sincerely,

Charles W. Donaldson
Manager
Emergency Response and Site Assessment

Enclosures: 1) Site Summary Report; 2) Fact Sheet; 3) Site-Specific Data Sheet; 4) Oregon Statutes & Rules
cc: Rod Struck; NWR, DEQ
ECSI File #2364

ANCHOR
ENVIRONMENTAL, L.L.C.

6650 SW Redwood Lane, #110
Portland, OR 97224
Phone 503.670.1108
Fax 503 670.1128
www.anchorenv.com

RECEIVED
JAN 15 2003
F.H.W.

January 6, 2003
990056

Rodney G. Struck, R.G.
Oregon Department of Environmental Quality
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201-4987

Re: Progress Report - Fourth Quarter 2002 - Brix Maritime Company, Portland, Oregon

Dear Mr. Struck:

This Progress Report was prepared in accordance with Section II (H) of the Oregon Department of Environmental Quality (DEQ) Voluntary Agreement for Remedial Investigation and Source Control Measures (ECSI 2464 No. LQDVC-NWR-02-03). This Progress Report addresses the quarter ending December 31, 2002 and is divided into the following subject areas.

- Actions Taken During the Previous Quarter
- Actions Scheduled for the Next Quarter
- Data Generated in the Previous Quarter
- Summaries of Problems and Action Taken To Resolve Problems

ACTIONS TAKEN DURING THE PREVIOUS QUARTER

- Water levels were measured in monitoring wells MW-3 and MW-4 in October, November, and December.

ACTIONS SCHEDULED FOR THE NEXT QUARTER

- Water levels will be measured in monitoring wells MW-3 and MW-4 in January, February, and March 2003.
- Monitoring wells MW-1, MW-2, and MW-5 will be installed late January or early February 2003.
- Monitoring wells MW-1, MW-2, and MW-5 will be developed.
- Groundwater samples will be collected from monitoring wells MW-1 through MW-5.

Confidential Business Information

DATA GENERATED IN THE PREVIOUS QUARTER

MONTHLY WATER LEVEL MEASUREMENTS. Water levels were measured in monitoring wells MW-3 and MW-4 on October 30, November 27, and December 30, 2002. Depth–to-water measurements are presented in Table 1. The water table did not show a significant increase in elevation until measured in December 2002, when the elevation increased from the November measurement by 1.3 feet at MW-3 and by 1.6 feet at MW-4. Installation of monitoring wells MW-1, MW-2 and MW-5 will be scheduled for late January/early February 2003.

Free phase petroleum hydrocarbons were detected in monitoring well MW-3 during fourth quarter 2002. The petroleum hydrocarbon thickness was measured with a Solinst model 121 interface meter. In October 2002, the petroleum hydrocarbon thickness was measured at 0.19 feet; in November 2002, the petroleum hydrocarbon thickness was measured at 0.14 feet. No petroleum hydrocarbons were detected by the interface meter when measured in December 2002; however, oil droplets were visible on the probe.

During the October, November, and December 2002 water level measurements, the river bank was inspected for petroleum hydrocarbon seeps or sheens. No seeps or sheens were encountered.

SUMMARIES OF PROBLEMS AND ACTION TAKEN TO RESOLVE PROBLEMS

No problems were encountered.

If you have any questions regarding this Progress Report, please do not hesitate to contact me at (503) 670-1108 (e-mail: jedwards@anchorenv.com).

Sincerely,

John E. Edwards, R.G., C.E.G.
Anchor Environmental, L.L.C.

John J. Renda, R.G.

Cc: Kim Johannessen, Johannessen & Associates, P.S.
David Templeton, Anchor Environmental

P:\Projects\BRIX\Letters and Reports\Progress Report 3-4Q02 doc

Table 1
Depth to Water Measurements
Brix Maritime
Portland, Oregon

Anchor Environmental, L L.C.				Site: Brix Maritime
				Project No. : 990056-01
Well	Date (MM/DD/YY)	Time (2400)	DTW (feet)	Comments
Monitoring Wells				
MW-3	07/29/02	13:00	22.91	
MW-3	08/22/02	7.15	23.50	Oil detected in well, thickness estimated at 0.02 foot
MW-3	09/30/02	7:00	23.37	Oil detected in well, thickness estimated at 0.02 foot
MW-3	10/30/02	15.50	23.68	DTP = 23.49 (0.19 foot thick)
MW-3	11/27/02	16:30	23.30	DTP = 23.16 (0.14 foot thick)
MW-3	12/30/02	16:30	21.99	Oil noted on probe, product too thin to measure with interface probe
MW-4	07/29/02	12:55	11.62	
MW-4	08/22/02	7:25	11.77	
MW-4	09/30/02	6:50	11.94	
MW-4	10/30/02	15:55	12.06	
MW-4	11/27/02	16:35	11.85	
MW-4	12/30/02	16:35	10.24	
River	10/30/02	16.00	2.75	Estimated, gauge marked in 1' increments
River	11/27/02	16:40	3.10	Estimated, gauge marked in 1' increments
River	12/30/02	16:20	7.50	Estimated, gauge marked in 1' increments

Note. DTW = Depth to Water, DTP = Depth to Product

Confidential Business Information

00013740

Oregon
John A Kitzhaber, M D , Governor

Department of Environmental Quality
Northwest Region Portland Office
2020 SW 4th Avenue, Suite 400
Portland, OR 97201-4987
(503) 229-5263
FAX (503) 229-6945
TTY (503) 229-5471

RECEIVED
AUG 29 2002
F.H.W.

August 26, 2002

John Edwards
Anchor Environmental, Inc.
6650 SW Redwood Lane, Suite 110
Portland, Oregon 97224

RE: Non-Aqueous Phase Product
Brix Maritime Site
Portland, Oregon
ECSI No. 2364

Dear John:

This letter documents our August 22, 2002 telephone conversation regarding the discovery of non-aqueous phase liquid (NAPL) at the Brix Maritime facility. Based on our conversation, I understand that the product was detected in monitoring well MW-3 during routine groundwater elevation monitoring activities.

As a result of this discovery, DEQ requested the following activities be performed:

- Collect a sample of the NAPL for fuel fingerprinting. Based on this result, additional analyses may be required (for example, polycyclic aromatic hydrocarbons and volatile organic compounds).
- Inspect the riverfront near MW-3 for potential NAPL seeps.
- Delineate the extent of the NAPL during future well installation activities.

In addition, DEQ requests that Brix obtain monthly product thickness measurements and perform monthly beach inspections and report the results to DEQ within two (2) weeks of the field event. Please provide the results of the NAPL testing and beach inspections within 30-days of this letter. If you have any questions, please call me at (503)229-5562 or email me at rodney.struck@deq.state.or.us.

Sincerely,

Rodney G. Struck, R.G.
Project Manager
Cleanup and Portland Harbor Program

Cc: Kim Johannessen, Johannessen & Associates
David Templeton, Anchor Environmental, Inc., Seattle
Frank Williamson, Foss
Bruce Brody-Heine, DEQ CU/PH
ECSI File No. 2364

ANCHOR
ENVIRONMENTAL, L.L.C.

6650 SW Redwood Lane, #110
Portland, OR 97224
Phone 503 670.1108
Fax 503.670 1128
www.anchorenv.com

RECEIVED
AUG 26 2002
F.H.W.

August 22, 2002
99056.01

Rod Struck, RG
Oregon DEQ
2020 SW Fourth Ave, Suite 400
Portland, Oregon 97201-4987

Re: Free Product Detection in Monitoring Well MW-3, Brix Maritime Facility, Portland, Oregon

Dear Rod:

This letter is documentation of today's phone call when I informed you of Anchor Environmental L.L.C.'s (Anchor's) detection of free product this morning during routine water level monitoring of new well MW-3. We have not yet made an accurate measurement of the free product thickness, but our preliminary assessment is that a very thin layer accumulated in the well since it was installed and sampled in July 2002.

Anchor's field assessment is that this is residual lube oil from the 1993 pipeline release, DEQ file number 26-93-009. John Renda, RG, did a field reconnaissance of the Brix shoreline this morning and did not see any evidence of oil seep or sheen. You agreed that DEQ will not regard this detection as a new release, unless future data indicate otherwise.

Please contact me or John Renda if you have any questions.

Respectfully Submitted,

for

John E. Edwards, RG, CEG
Anchor Environmental, L.L.C.

Cc: Frank Williamson
Kim Johanessen
David Templeton
John Renda

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

DEC 0 8 2000

Reply To
ATTN Of: ORC-158

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

CT Corporation System
601 SW Second Avenue, Suite 2050
Portland, OR 97209

Re: Notice of Potential Liability for the BRIX Maritime facility located at
9030 NW St. Helens
Portland Harbor Superfund Site, Portland, Oregon

To Whom It May Concern:

This letter is to notify you of potential liability, as defined by Section 107(a) of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9607(a), as amended (CERCLA), with respect to the above-referenced Site. Substantially the same letter has been sent to 69 parties, and additional general notice letters may be sent to others. You may receive or have already received notification of potential liability for the Site from the State of Oregon Department of Environmental Quality (DEQ).

NOTICE OF POTENTIAL LIABILITY

The United States Environmental Protection Agency (EPA) in cooperation with DEQ has documented the release or threatened release of hazardous substances, pollutants or contaminants at the Site. EPA and DEQ have spent public funds on actions to investigate and control such releases or threatened releases at the Site.

Under Sections 106(a) and 107(a) of CERCLA, 42 U.S.C. §§ 9606(a) and 9607(a), Section 7003 of the Resource Conservation and Recovery Act, 42 U.S.C. § 6973, as amended (RCRA), and other federal and state laws, a Potentially Responsible Party (PRP) or parties may be ordered to perform response actions deemed necessary by EPA and/or DEQ to protect the public health, welfare, or the environment, and may be liable for all costs incurred by each government in responding to any release or threatened release at the Site. In addition, PRPs may be required to pay for damages to, destruction, of, or loss of natural resources, including the costs of assessing such damages.

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EPA, in cooperation with DEQ, has evaluated information in connection with the investigation of the Site. Based on this information, EPA believes Brix Maritime may be a PRP with respect to this Site. PRPs under CERCLA include current owners and operators of any portion of the Site, prior owners and operators at the time of a release, as well as persons who arranged for disposal or treatment of hazardous substances sent to the Site, or persons who accepted hazardous substances for transport to the Site.

In accordance with CERCLA and other authorities, EPA has already undertaken certain actions and incurred certain costs in response to conditions at the Site. These response actions include the performance of assessments and other activities necessary to include the Site on the CERCLA National Priorities List (NPL) of hazardous waste sites, development of a partnership with DEQ for the investigation and cleanup of the Site, and consultation with federal, state and tribal CERCLA Natural Resource Trustees.

In accordance with EPA and DEQ joint management plans for the Site, EPA will be the lead agency, as defined in CERCLA's implementing regulations, also known as the National Contingency Plan (NCP), for in-water contamination at the Site. DEQ will be the lead agency for upland contamination, although the agencies intend to coordinate all their efforts and may share tasks as they deem appropriate. EPA accordingly anticipates expending additional funds for response activities at the Site.

PRP RESPONSE AND EPA CONTACT PERSON

The next major step EPA anticipates taking is the negotiation of an Administrative Order on Consent with willing PRPs for the performance a Remedial Investigation/Feasibility Study (RI/FS) to determine the nature and extent of in-water contamination at the Site, and to analyze remedial alternatives. EPA may send special notice letters, in accordance with Section 122(e) of CERCLA, 42 U.S.C. § 9622(e), which will provide more information about the Site, and set forth a specific schedule for RI/FS negotiations, or EPA may commence negotiations without special notice at the request of voluntary parties able to demonstrate their capacity to adequately fund and perform the RI/FS. You are encouraged to contact EPA by December 28, 2000, to indicate whether you are interested at this time in volunteering to enter negotiations to perform the RI/FS and to reimburse response costs incurred by EPA and to be incurred by EPA at the Site. EPA expressly reserves the right to issue special notice regardless of how many volunteers respond affirmatively to general notice letters.

Any written response to this letter should be sent to:

U.S. Environmental Protection Agency
Elizabeth McKenna, Attorney
Office of Regional Counsel
1200 Sixth Avenue, M/S ORC 158
Seattle, Washington 98101

This letter is intended solely for notification and information purposes. Nothing in this letter can be relied upon as a final EPA position on any matter.

Inquiries by counsel or inquiries of a legal nature should be directed to Elizabeth McKenna, 206-553-0016, or Charles Ordine, 206-553-1504, Office of Regional Counsel. Technical, scope, budget, and other questions for EPA regarding this letter or the Site should be directed to Wallace Reid, 206-553-1728, or Chip Humphrey, 503-326-2678.

Sincerely,

Michael F. Gearheard
Director, Office of Environmental Cleanup

Enclosure: Recipient List

cc: Mike Rosen, DEQ
To Whom It May Concern, 9030 NW St. Helens, Portland OR 97231

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, WA 98101

Reply To
Attn Of: ECL-115

DEC 2 8 2000

Official Representative for
Brix Maritime
660 W Ewing Street
Seattle, WA 98119

Referenced Property Physical Location
9030 NW St Helens Road, Portland, OR

This explanatory letter is being sent to all parties to whom EPA sent general notice letters. We have since heard from some of you and understand there may be a request for a general meeting in mid-January and an extension of our suggested response time from December 28, to late-January. Understanding that Portland Harbor is the first large multi-party Superfund site in Oregon, we thought a letter of explanation of some our of key goals and expectations might be helpful, and could perhaps serve as a substitute for, and be more efficient than, a large meeting. We emphasize that anyone with questions should not hesitate to call one of EPA's project managers, Wallace Reid (206-553-1728) or Chip Humphrey (503-326-2678), or one of EPA's attorneys, Elizabeth McKenna (206-553-0016) or Charles Ordine (206-553-1504).

Our primary reason for preferring this written response in lieu of a meeting is our goal of having a first round of sampling work to occur during the upcoming summer sampling season. If we target August for sampling and calculate backward, we find that delaying negotiations until February could result in missing this sampling opportunity. RI/FS Order negotiations have a 90-day statutory negotiating schedule which has proven challenging at large complex sites in the past. Assuming negotiations begin in mid-January, and that negotiations go smoothly, a signed AOC would be achieved by mid-April. Respondents will then have to prepare and submit a first set of deliverables (Phase I Work Plan of projected sampling, with Sampling and Analysis Plan and Health and Safety Plan). An ambitious submission date would be mid-May. EPA, in coordination with DEQ, federal natural resource trustees (NOAA and the Fish and Wildlife Service) and six Tribes, would then supply comments which would likely necessitate meetings to reach compromises among Respondents and reviewers. This would lead to resubmission of this Phase I Work Plan by mid-July, at the latest, to permit mobilization and sampling in August. Based on our collective experience, we believe any additional negotiating time we can build into this schedule may prove critical to collecting data this summer.

In order to facilitate the foregoing, and to manage the site as efficiently as possible, we hope to use lessons learned over 20 years of experience in Region X with large, multi-party Superfund sites. Among those lessons is that large PRP groups, especially those with members with little or no big-site experience, are inefficient (generating the kind of legal fees Superfund's critics like to cite) frustrating both Respondents and EPA. At the remedy implementation stage this can be unavoidable, but our experience is that formation of a large PRP group at the

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investigation/feasibility stage generally has little if any benefit.. With this approach, EPA recognizes the need to create incentives for participants and assurances for non-participants, allowing entities with more Superfund experience to perform the study with substantial efficiencies.

The Duwamish Superfund Site in Seattle, which shares some similarities with Portland Harbor, can be a useful model for the RI/FS stage of the process. At Duwamish, four out of potentially hundreds of responsible parties have agreed to perform the RI/FS. At Portland Harbor, if EPA had only a small subset of responsible parties come forward to perform the RI/FS, EPA would: 1) defer recovery of all past costs to the remedy implementation stage, 2) emphasize that participation does not mean or imply greater or lesser comparative responsibility, 3) have identification of early action-area candidates as an RI/FS task, but not obligate Respondents to implement early actions, leaving implementation to separate Orders with appropriate parties based on location-specific criteria, and 4) assure non-participant small businesses of prompt notification should their property or interests be uniquely implicated. We emphasize that we are available to discuss these and other negotiable criteria with any party, and that an individual reply to our general notice letter is not required by every recipient.

Certain other key matters deserve emphasis. First, the Superfund process at Portland Harbor (as at Duwamish) interfaces with the listing of anadromous fish species under the federal Endangered Species Act, which species are also the subject of treaties of the United States with recognized sovereign Indian nations. This means EPA consultation and coordination with the species-listing agencies and Tribes regarding remedial decisions will be especially critical. Second, the recipients of this letter and our general notice letter do not represent a complete list of potentially responsible parties, nor do they imply greater responsibility for recipients than non-recipients. Recipients were selected because they were previously noticed in one manner or another by DEQ, or are riparian owners/operators of facilities within the initial EPA six-mile National Priorities List assessment area. Prior riparian owner/operator contributors, as well as non-riparian contributors, undoubtedly exist and are obvious omissions. EPA has not yet conducted the kind of PRP search it normally undertakes for large sites, but will conduct one in the future. PRP search costs would be another cost category EPA would defer to remedy implementation if an efficient RI/FS could be promptly undertaken.

We hope this letter clarifies our intentions. We look forward to hearing from you.

Sincerely,

Wallace Reid
Remedial Project Manager

cc: Mike Rosen, ODEQ
Chip Humphrey, EPA Oregon Ops Office

Due Date: NOVEMBER 30, 1998 **1997-1998** Facility ID Number 006130

OREGON STATE FIRE MARSHAL
HAZARDOUS SUBSTANCE INFORMATION SURVEY

PLEASE TYPE OR PRINT ONLY CHANGES OR ADDITIONS IN THE [BRACKETED] AREAS TO THE RIGHT OR BELOW THE PREPRINTED DATA.

SECTION A **HAZARDOUS SUBSTANCE PRESENCE** Check the correct box to the left.

☒ YES ☐ NO Are there hazardous substances present at this site in reportable quantities? If yes, complete sections A, B, C, and D. If no, complete sections A, B and C. A hazardous substance is any substance for which a Material Safety Data Sheet (MSDS) is required. If a previously reported substance is no longer present, see instructions for Section A.

☐ YES ☒ NO Are there Extremely Hazardous Substances (EHS) at this site that meet the threshold planning quantities?

☐ YES ☒ NO Is this facility subject to the reporting requirements of Section 112(r) of the Clean Air Act?

SECTION B **DEMOGRAPHIC DATA** Complete, correct or add information in the [bracketed] areas.

1. SIC CODE 1: 4449 DEFINITION: WATER TRANSPORT OF FREIGHT, NEC
2. SIC CODE 2: DEFINITION:
3. BUSINESS ACTIVITY: MARINE TRANSPORTATION
4. DUN & BRADSTREET #:
5. MANAGER'S NAME: ED BEALL [LARRY JOHNSON]
6. SEND TO ATTENTION OF:
7. E-MAIL ADDRESS: [rafael@foss.com, larry@foss.com]
8. BUSINESS NAME: FOSS MARITIME CO
9. DEPT OR DIV: ST HELENS RD SITE
10. SITE ADDRESS: 9030 NW ST HELENS RD
CITY: PORTLAND
COUNTY: MULTNOMAH
STATE: OR ZIP CODE: 97203 [97231]
11. MAILING ADDRESS: PO BOX 83018
CITY: PORTLAND
COUNTY: MULTNOMAH
STATE: OR ZIP CODE: 97283
12. BUSINESS PHONE: 503-286-0631
13. NUMBER OF EMPLOYEES AT THIS SITE: 150
14. EMERGENCY ASSISTANCE CONTACT PERSON FOR THIS SITE: RAFAEL CABALLERO
15. EMERGENCY CONTACT PHONES: DAY 503-286-0631 NIGHT 503-286-06[illegible]
16. RESPONSIBLE FIRE DEPARTMENT: PORTLAND FIRE BUREAU

SPECIAL FIRE DEPARTMENT INFORMATION This section is for information the fire service needs to know in case of an emergency.

17. ☐ YES ☒ NO WRITTEN EMERGENCY PLAN. IF YES, LOCATION:
18. ☒ YES ☐ NO AUTOMATIC FIRE SUPPRESSION SYSTEM PRESENT; e.g., sprinklered, halon system, etc.
19. ☐ YES ☒ NO ARE STORAGE BUILDINGS/TANKS/AREAS PLACARDED ACCORDING TO NFPA 704?
20. ☒ YES ☐ NO ARE OTHER TYPES OF PLACARDS USED?

SECTION C **PERSON COMPLETING FORM**
This person will be contacted to answer any questions needing clarification.

1. PRINT NAME: Rafael A. Caballero
2. SIGNATURE (REQUIRED): Rafael A. Caballero
3. DATE SURVEY COMPLETED: 10/6/98

FOSS MARITIME CO
ST HELENS RD SITE
PO BOX 83018
PORTLAND OR 97283

CHEMICAL

1997-1998 OREGON STATE FIRE MARSHAL
HAZARDOUS SUBSTANCE INFORMATION SURVEY

Facility ID Number 006130

SECTION D. SUBSTANCE INFORMATION - TYPE OR PRINT ONLY CHANGES IN THE [BRACKETED] AREAS

MMON NAME/TRADE NAME: ACETYLENE
DOUS INGREDIENT
HEST CONCENTRATION: ACETYLENE

EHS	112(r)	PHYSICAL STATE (USE TABLE I)	UNIT OF MEASURE (USE TABLE II)	AVG. AMT. CODE (USE TABLE III)	MAX. AMT. CODE (USE TABLE III)	AMT. IN CODE (USE TABLE III)	AMT. OUT CODE (USE TABLE III)	NUMBER OF DAYS ON SITE (3 DIGIT NO.)	STORAGE CODE (USE TABLES IV & V)	HAZARD CLASSES (USE TABLE VI)	CAS NO. (IF KNOWN)
		3	3	11	20		20	365	L 2 4	2.1 6.3	0000074-86-2

1 - PURE; 2 - MIXTURE; 1 - NEW; 2 - NO LONGER REPORTABLE

STORAGE LOCATIONS AT SITE: GAS LOCKER, RAMP TO DOCK.

UN/NA NO. (IF KNOWN): 1001

OMMON NAME/TRADE NAME: DIESEL #2
AZARDOUS INGREDIENT
HIGHEST CONCENTRATION: PETROLEUM DISTILLATES

EHS	112(r)	PHYSICAL STATE (USE TABLE I)	UNIT OF MEASURE (USE TABLE II)	AVG. AMT. CODE (USE TABLE III)	MAX. AMT. CODE (USE TABLE III)	AMT. IN CODE (USE TABLE III)	AMT. OUT CODE (USE TABLE III)	NUMBER OF DAYS ON SITE (3 DIGIT NO.)	STORAGE CODE (USE TABLES IV & V)	HAZARD CLASSES (USE TABLE VI)	CAS NO. (IF KNOWN)
		2	2	30	30	30	30	365	B 1 4	3.3 6.4	0068476-34-

1 - PURE; 2 - MIXTURE; 1 - NEW; 2 - NO LONGER REPORTABLE

STORAGE LOCATIONS AT SITE: U/G TANK, UNDER PARKING LOT, IN FRONT OF WAREHOUSE.

UN/NA NO. (IF KNOWN): 1993

COMMON NAME/TRADE NAME: GASOLINE
HAZARDOUS INGREDIENT
IN HIGHEST CONCENTRATION: PETROLEUM DISTILLATES

EHS	112(r)	PHYSICAL STATE (USE TABLE I)	UNIT OF MEASURE (USE TABLE II)	AVG. AMT. CODE (USE TABLE III)	MAX. AMT. CODE (USE TABLE III)	AMT. IN CODE (USE TABLE III)	AMT. OUT CODE (USE TABLE III)	NUMBER OF DAYS ON SITE (3 DIGIT NO.)	STORAGE CODE (USE TABLES IV & V)	HAZARD CLASSES (USE TABLE VI)	CAS NO. (IF KNOWN)
		2	2	20	20			365	B 1 4	3.1 6.3	0008006-61-

1 - PURE; 2 - MIXTURE; 1 - NEW; 2 - NO LONGER REPORTABLE

STORAGE LOCATIONS AT SITE: UNDER PARKING LOT, IN FRONT OF WAREHOUSE

UN/NA NO. (IF KNOWN): 1203

COMMON NAME/TRADE NAME: LUBRICATING OIL
HAZARDOUS INGREDIENT
IN HIGHEST CONCENTRATION: REFINED MINERAL OIL

EHS	112(r)	PHYSICAL STATE (USE TABLE I)	UNIT OF MEASURE (USE TABLE II)	AVG. AMT. CODE (USE TABLE III)	MAX. AMT. CODE (USE TABLE III)	AMT. IN CODE (USE TABLE III)	AMT. OUT CODE (USE TABLE III)	NUMBER OF DAYS ON SITE (3 DIGIT NO.)	STORAGE CODE (USE TABLES IV & V)	HAZARD CLASSES (USE TABLE VI)	CAS NO. (IF KNOWN)
		2	2	30	30	30	30	365	B 1 4	4.5	0064742-65

1 - PURE; 2 - MIXTURE; 1 - NEW; 2 - NO LONGER REPORTABLE

STORAGE LOCATIONS AT SITE: U/G TANK UNDER PARKING LOT, IN FRONT OF WAREHOUSE

UN/NA NO. (IF KNOWN): 1270

CHEMICAL

1997-1998 OREGON STATE FIRE MARSHAL
HAZARDOUS SUBSTANCE INFORMATION SURVEY

Facility ID Number 006130

SECTION C

SUBSTANCE INFORMATION - TYPE OR PRINT ONLY CHANGES IN THE [REDACTED] AREAS

MMON NAME/TRADE NAME: OXYGEN

ZARDOUS INGREDIENT

HIGHEST CONCENTRATION: OXYGEN

EHS	112(r)	PHYSICAL STATE (USE TABLE I)	UNIT OF MEASURE (USE TABLE II)	AVG. AMT. CODE (USE TABLE III)	MAX. AMT. CODE (USE TABLE III)	AMT. IN CODE (USE TABLE III)	AMT. OUT CODE (USE TABLE III)	NUMBER OF DAYS ON SITE (3 DIGIT NO.)	STORAGE CODE (USE TABLES IV & V)	HAZARD CLASSES (USE TABLE VI)	CAS NO. (IF KNOWN)
1 - PURE 2 - MIXTURE		3	3	11	20		20	365	L 2 4	2.2 5.1	0007782-44-7
1 - NEW 2 - NO LONGER REPORTABLE											

STORAGE LOCATIONS AT SITE: GAS LOCKER, RAMP TO DOCK

UN/NA NO. (IF KNOWN): 1072

OMMON NAME/TRADE NAME: PAINT

AZARDOUS INGREDIENT

HIGHEST CONCENTRATION: PETROLEUM DISTILLATES

EHS	112(r)	PHYSICAL STATE (USE TABLE I)	UNIT OF MEASURE (USE TABLE II)	AVG. AMT. CODE (USE TABLE III)	MAX. AMT. CODE (USE TABLE III)	AMT. IN CODE (USE TABLE III)	AMT. OUT CODE (USE TABLE III)	NUMBER OF DAYS ON SITE (3 DIGIT NO.)	STORAGE CODE (USE TABLES IV & V)	HAZARD CLASSES (USE TABLE VI)	CAS NO. (IF KNOWN)
1 - PURE 2 - MIXTURE		2	2	04	10		10	365	F 1 4	3.3 6.3	0064742-47-1
1 - NEW 2 - NO LONGER REPORTABLE											

STORAGE LOCATIONS AT SITE: WAREHOUSE, SOUTH SIDE

UN/NA NO. (IF KNOWN): 1263

OMMON NAME/TRADE NAME: PROPANE

AZARDOUS INGREDIENT

N HIGHEST CONCENTRATION: PROPANE

EHS	112(r)	PHYSICAL STATE (USE TABLE I)	UNIT OF MEASURE (USE TABLE II)	AVG. AMT. CODE (USE TABLE III)	MAX. AMT. CODE (USE TABLE III)	AMT. IN CODE (USE TABLE III)	AMT. OUT CODE (USE TABLE III)	NUMBER OF DAYS ON SITE (3 DIGIT NO.)	STORAGE CODE (USE TABLES IV & V)	HAZARD CLASSES (USE TABLE VI)	CAS NO. (IF KNOWN)
1 - PURE 2 - MIXTURE		3	2	10	10		10	365	L 2 4	2.1 6.3	0000074-98-
1 - NEW 2 - NO LONGER REPORTABLE											

STORAGE LOCATIONS AT SITE: PROPANE LOCKER, WAREHOUSE YA RD; NORTH SIDE

UN/NA NO. (IF KNOW): 1075

PROPANE LOCKER, WAREHOUSE YARD, SOUTH SIDE

COMMON NAME/TRADE NAME:

HAZARDOUS INGREDIENT

IN HIGHEST CONCENTRATION:

EHS	112(r)	PHYSICAL STATE (USE TABLE I)	UNIT OF MEASURE (USE TABLE II)	AVG. AMT. CODE (USE TABLE III)	MAX. AMT. CODE (USE TABLE III)	AMT. IN CODE (USE TABLE III)	AMT. OUT CODE (USE TABLE III)	NUMBER OF DAYS ON SITE (3 DIGIT NO.)	STORAGE CODE (USE TABLES IV & V)	HAZARD CLASSES (USE TABLE VI)	CAS NO. (IF KNOW
1 - PURE 2 - MIXTURE											
1 - NEW 2 - NO LONGER REPORTABLE											

STORAGE LOCATIONS AT SITE

UN/NA NO. (IF KNO

Registration Verification Report '98

DEQ ID No: ORD103014866 Name: Foss Maritime Co

Location: 9030 NW ST HELENS RD

PORTLAND, OR 97231

Current name if different from above: _____

Your Standard Industrial Classification (SIC) code is currently listed as:
4492: Towing and tugboat service

Current code if different: ☐

Your current employee count is listed as 45. Please indicate the correct count if it has changed: ☐

Verify the information in the left column, and make any corrections in the right column:

The owner of Foss Maritime Co is:

Organization: Brix Maritime Co Dba Foss Maritime Co Address: 9030 NW St Helen Rd Portland, OR 97231 Phone: 503 286-0631	Organization: Address: Phone:

The owner of the property on which Foss Maritime Co is located is:

Organization: Brix Maritime Co dba Foss Maritime Co Address: PO Box 83018 Portland, OR 97283 Phone: 503 286-0631	Organization: Address: Phone:

The address for DEQ to send hazardous waste information to Foss Maritime Co is:

Organization: Foss Maritime Co Address: 9030 NW St Helen Rd Portland, OR 97231	Organization: Address:

RECEIVED
JAN 22 1999
Waste Management & Cleanup Division
Department of Environmental Quality

The address for DEQ to send hazardous waste fee invoices for Foss Maritime Co is:

Organization: Foss Maritime Co Address: PO Box 83018 Portland, OR 97283	Organization: Address:

The contact names and phone numbers for Foss Maritime Co are:

Fees:	Rafael Caballero	503 286 0631	Fees:		
Site visits:	Rafael Caballero	503 286 0631	Site visits:		
Forms:	Rafael Caballero	503 286 0631	Forms:		

Hazardous waste generator status:

Foss Maritime Co last reported as a Conditionally Exempt Generator on the 1997 Annual Report

What was the generator status for Foss Maritime Co in 1998?

☐ Large Quantity Generator ☐ Small Quantity Generator ☒ Conditionally Exempt Generator

01/15/1999
1/25/99

1. Has the ownership of this facility changed from what is indicated on the front of this form?
☐ Yes ☒ No (If no, go to question 2)

1a. What was the date of the ownership change? _____

1b. Did the management of this facility change with the ownership?
☐ New management ☐ Same management

1c. Which best describes the conditions of the ownership change?
☐ Sale of business to new owner
☐ Corporate merger
☐ Separation from parent company
☐ Other _____

1d. Indicate one of the following:
☐ I represent the current owner of this facility
☐ I represent the previous owner of this facility

2. Has this facility stopped doing business? ☐ Yes ☒ No (If no, go to question 3)

2a. What was the date of closure? _____

If closure was due to an ownership change, be sure to answer question 1.

3. Has this facility stopped generating hazardous waste? ☐ Yes ☒ No
(Mark "No" if you are still a conditionally exempt small quantity generator.)

3a. What was the date the facility stopped generating hazardous waste? _____

3b. What best describes the reason the facility stopped generating hazardous waste?
☐ Closure (Complete question 2)
☐ Completion of a one-time hazardous waste generation activity
☐ Change in production process
☐ Elimination of hazardous materials/chemicals
☐ Change in business activity
☐ Other _____

Remember: If you were a small or large quantity generator during any part of 1998, you must complete the hazardous waste reporting forms.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Rafael A. Caballero — 1/21/99
Signature — Date

Rafael A. Caballero — Purchasing Manager
Name (please print) — Title

UST COMPLIANCE AND DAILY OPERATIONS RECORDS

C.E.S

PROVIDED BY:
CONTRACT ENVIRONMENTAL SERVIC
2005 SW 198th AVE
ALOHA OR 97006
503/591-9171
TRAINATCES@AOL.COM

linda

From: linda [linda@foss.com]
Sent: Monday, September 25, 2006 2:22 PM
To: 'tim@foss.com'; 'Mike Walker'; 'VC@FOSS.COM'; 'Mark Troutman'
Subject: DEQ Underground Storage Update

I spoke with Greg Toran from DEQ this afternoon, and he has finally agreed to the simple solution for our one sump that lacks a leak detector on the lube oil line. Greg has agreed that we can put a leak detector sensor directly into that sump, provided that we do annual line testing – which we already have set up.

DEQ has given us 30 days from today to complete the installation and I have already contacted our service provider and discussed the matter with him. He will get started on the project as soon as possible.

- Linda

Confidential Business Information

linda

From: TORAN Greg [TORAN.Greg@deq.state.or.us]
Sent: Monday, September 25, 2006 2:50 PM
To: linda@foss.com
Cc: Janeene Norris
Subject: FW:

Linda hi,

I know you had people checking to see what options might be for the addition of a true leak detector on your low pressure new oil product line. Finding a leak detector for such use is not common place at this point in time. I am passing on two options, the decision of how to correct this is up to you, as long as it meets rule and code. Please read this very carefully and call if you have questions.

Your UST equipment and documentation was first rate, other than the missing Line Leak Detector. DEQs initial inspection is complete, you will be receiving a field citation in the mail for the missing Line Leak Detector. Be sure and pay the field citation within 30 days, I can allow more time to coordinate corrections if you like. Remember, these are possible options (below) and DEQ is not limiting you to these possibilities.

Option 1

- I know of a representative (Alex) with Northwest Pump who did check with Vaporless manufacturing, and the word back to me is that this is a possible market and they could provide you with what you need, a lower pressure Line Leak Detector for new oil.

Here is some contact information for both Northwest Pump, and Vaporless. Vaporless makes a very good product by the way. You can ask for Janeene with Northwest Pump in Portland. (227-PUMP)

http://www.nwpump.com/Locations/portland.asp?menu=3,13&ID=16

http://www.vaporless.com/

Option 2

- Your other option, I did get approval for allowing use of sump sensors connected with your Automatic Tank Gauge along with Line Tightness Testing for the oil tank line, on an annual basis. This would be a sensor in all sumps for the new oil tank. ***(Be careful here, you would need to use a sump sensor that has been evaluated and approved for use with new oil.)***

Before installing anything, your UST Service Provider (or your company) must provide DEQ with written notice, and a phone call (to me) 3 WORKING days prior to beginning, I will assign a job number and schedule DEQ inspection.

Here is the web link to the 30 day notice, you can send this back by FAX or email, no need to allow 30 days, send it anytime prior to the 3 day notice. I want to be involved and double check everything going in.

http://www.deq.state.or.us/wmc/pubs/forms/tank/USTModificationorAddition30DayNotice.pdf

Compliance Inspection Details for Fac ID: 7374 -- FOSS MARITIME, 9030 NW SAINT HELENS RD, POR...

Delete | New | Print...

Inspections: 1 Record(s)

Type	Initial Date	Complete Date	Status	Inspector
SOC	05/19/2006	09/25/2006	COMPLETE	Toran, Greg

Inspection Details

Inspection Type: SOC
Inspection Date: 05/19/2006
Insp Compit: 09/25/2006
Insp Status: COMPLETE
Inspector: Toran, Greg
Contact Name: Linda Brown
Contact Phone: 503-978-6546
Group or Area: Add

Results

Significant Operational Compliance

Tank Cor Pro Pas: Yes
Tank LD Pass: Yes
Piping Cor Pro Pas: No
Piping LD Pass: No
Spill Pro Pass: Yes
Overfill Pass: Yes
SOC RP Initial: FAIL
SOC RD Initial: FAIL
RP Follow-up:
RD Follow-up:

Docs Requested ☑
Docs Due Date: 09/20/2006
Docs Received ☐
Passing Insp: No
Compliance Verified Dt:
Enforcement ☑
Suspected Release ☐
Initial Letter Sent ☑
Compliance Letter Sent ☐

Comments: New oil drawn through suction pump which then goes to a pressure side higher than atmospheric pressure. Underground portion of new oil piping is environ until it reaches a transition sump. At the transition sump the line becomes wrapped and

Close | Help | Save

Last Updated
By: GTORAN On: 09/25/2006

Start | UST - GT... | U:\UST ... | A1340 vi... | D1a & F... | U:\UST ... | Inbox - ... | Complia...

Gregory Toran
Environmental Specialist
DEQ Northwest Region UST Section
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201
PH 503-229-5496

9/25/2006

FAX 503-229-6945
CEL 871-563-7364

Jeff
for your info!
- linda

linda

From: TORAN Greg [TORAN.Greg@deq.state.or.us]
Sent: Wednesday, October 25, 2006 4:23 PM
To: linda
Cc: TORAN Greg
Subject: 7374 Foss

Linda hi,

I think Foss is past the compliance date for corrections. Please send a written schedule for completion on addition of the sump sensor if that was the method chosen to correct the violation. I can push this out another 30 days.

The system must be installed by an electrician and programmed and confirmed in writing as operational by someone approved by the manufacturer of the Automatic Tank Gauge. Northwest Pump and Mascott are 2 companies in this area that come to mind, they both have UST Service Provider licenses.

So let me know who will be making the corrections and when it will be completed.

Gregory Toran
Environmental Specialist
DEQ Northwest Region UST Section
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201
PH 503-229-5496
FAX 503-229-6945
CEL 971-563-7364

Fax'd 10/26/06
- 0805

Confidential Business Information

linda

From: linda [linda@foss.com]
Sent: Thursday, October 26, 2006 8:06 AM
To: 'TORAN Greg'
Cc: 'pikesunlimited@yahoo.com'
Subject: RE: 7374 Foss

Hi Greg. I've been in contact numerous times over the last two weeks with Jeff Pike pushing to get this project finished. He told me yesterday that he had sent an email to you bringing you up to date on the progress, but I don't have copies of his email.

The bottom line is that he has spoken a few times with the company you recommended, Advantage Petroleum, and they have NEVER followed through and contacted me. Jeff and I have given up on them, and he said he is going to do the installation himself in conjunction with our electrical contractor – Tice Electric – and Mascott. Jeff also told me that in his email to you he would outline the project and the communication problems and that he would request a bit more time. Sounds to me like something has been lost in translation here.

Anyway, Jeff was here on site yesterday to do a last minute check of things and the electrical contractor is meeting up with us this morning to go over what needs to be done. I know that Jeff ordered a part from Mascott, but I'm afraid I don't know many more details than that.

I am forwarding a copy of your email to Jeff so that he can supply you with the written schedule and all the nitty gritty details.

Thanks for your patience.

- Linda Brown / Foss Maritime Company

From: TORAN Greg [mailto:TORAN.Greg@deq.state.or.us]
Sent: Wednesday, October 25, 2006 4:23 PM
To: linda
Cc: TORAN Greg
Subject: 7374 Foss

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Gregory Toran
Environmental Specialist
DEQ Northwest Region UST Section
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201
PH 503-229-5496
FAX 503-229-6945
CEL 971-563-7364

linda

From: TORAN Greg [TORAN.Greg@deq.state.or.us]
Sent: Thursday, October 26, 2006 8:37 AM
To: linda
Cc: TORAN Greg
Subject: RE: 7374 Foss

Linda,

Jeff likes to leave voicemail messages which he did.....

I need to tell him that for enforcement issues, phone calls don't cut it, because in front of a hearings officer it's their phone notes against mine and I don't play that game.

As with most things DEQ needs to have this in writing with a schedule since it's gone out beyond 30 days.

Sorry about your experience with Advantage, I will ask them about that.

I think your plan of using Jeff, Tice, and Mascott is fine. I just need a completion date and it should be within 30 days of today.

No need to be alarmed Linda, this is just the process and things only get rough when tank owners refuse to comply, and I know you folks won't do that!

I can accept these emails as your written plan, I only need the anticipated completion date. ☺

Gregory Toran

-----Original Message-----
From: linda [mailto:linda@foss.com]
Sent: Thursday, October 26, 2006 8:06 AM
To: TORAN Greg
Cc: pikesunlimited@yahoo.com
Subject: RE: 7374 Foss

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- Linda Brown / Foss Maritime Company

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Sent: Wednesday, October 25, 2006 4:23 PM
To: linda
Cc: TORAN Greg
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Environmental Specialist
DEQ Northwest Region UST Section
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201
PH 503-229-5496
FAX 503-229-6945
CEL 971-563-7364

linda

From: Jeff Pike [pikesunlimited@yahoo.com]
Sent: Thursday, October 26, 2006 1:19 PM
To: linda@foss.com
Subject: Update on Foss install

Hi Greg,
I called and spoke to Matt and Ted at Advantage no respone back to Linda. I know they our swamped. On 25th I went to the site layed out saw cuts. Picked up sensor, Mascott called rep will work with oil. Today 26th . we placed the saw cuts and placed cable in cut. Tiec Electric handling inside connection and conduit. Mascott to be on site for final start up and hook up tomarrow. 27th.
I did not get a install 30 day thought Advantage would perform work.
We should be done with the project on the 27th
Jeff Pike
Sent to greg. Mascott said thay will be ther tomarrow.we should have done this a month ago. thanks Jeff

---

Get your email and more, right on the new Yahoo.com

linda

From: TORAN Greg [TORAN.Greg@deq.state.or.us]
Sent: Thursday, October 26, 2006 1:30 PM
To: Jeff Pike
Cc: linda@foss.com
Subject: RE: Update on Foss install

Thanks Jeff,

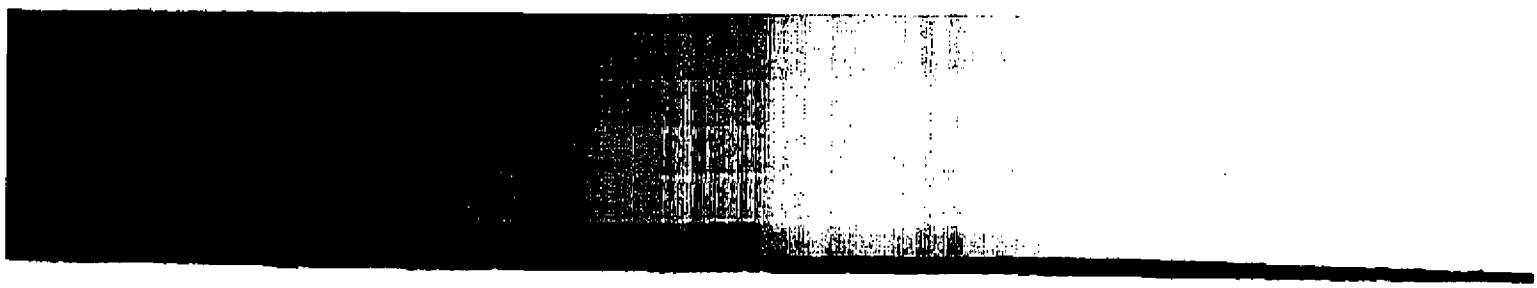
Be sure that Mascott send DEQ either a written letter (email or FAX) from the manufacturer approving the use of the sensor in new oil, **or** a copy of a written third party evaluation for the sensor giving the same approval.

Gregory Toran

-----Original Message-----
From: Jeff Pike [mailto:pikesunlimited@yahoo.com]
Sent: Thursday, October 26, 2006 1:16 PM
To: TORAN Greg
Subject: Update on Foss install

Hi Greg,
I called and spoke to Matt and Ted at Advantage no respone back to Linda. I know they our swamped. On 25th I went to the site layed out saw cuts. Picked up sensor, Mascott called rep will work with oil. Today 26th . we placed the saw cuts and placed cable in cut. Tiec Electric handling inside connection and conduit. Mascott to be on site for final start up and hook up tomarrow. 27th.
I did not get a install 30 day thought Advantage would perform work.
We should be done with the project on the 27th
Jeff Pike

Do you Yahoo!?
Everyone is raving about the all-new Yahoo! Mail.



Pike's Unlimited
Address 1
Address 2
Address 3

Phone Number
Fax Number

Web Address
Email

Fax Transmittal Form

To: Greg Toran
Name:
CC: Linda Brown
Phone:
Fax: 503-229-6945

From: Jeff Pike
Date Sent: Nov 3 2006

Number of Pages:2

Message: Greg
Here is the compliance letter for Foss. I will have Mascot fax you the Manufactures letter.

Thanks Jeff

CC Linda Brown. Foss Maritime

PIKE'S UNLIMITED

3258 Cascade Hwy NE
Silverton, OR 97381
Phone Number 503-873-4139

November 3, 2006

Foss Maritime/DEQ
Linda brown / Greg Toran
9030 NW St Helene RD 97231
Portland, OR 97283

Dear Linda,

During a site inspection performed, by the DEQ It was Discovered that he 30 weight oil line was deficient in leak detection. Greg Toran found the deficient and Requested that the problem be addressed and the line be brought into compliance. After researching the problem It was decided to place a Sensor in the transfer sump to provided early detection of a release. This application is the best method available at this time. Mascott Equipment was contacted to provide the senor. The sensor will react to oil and is compatible to the Incon 1,001 ATG system which is in place.

Pike's Unlimited gathered a team of Sub contractors to perform the install. Tice Electric installed the electrical connection and above ground wire. Pike's Unlimited installed the below ground cable and the access boot into the sump. Mascott Equipment installed the sensor and tied the sensor to the ATG. The system was tested By a manufactures Tech and was found to be working properly. Mascott equipment is to provide documentation from the sensor manufacture that the sensor will work properly in the applied environment.

Sincerely,

Jeff Pike

Mascott EQUIPMENT

435 NE Hancock St
Portland, OR 97212
(503) 282-2587
(800) 452-5019
Fax: (503) 288-9664

6530 5TH Place S
Seattle, WA 98108
(206) 763-7867
(800) 481-7311
Fax: (206) 763-9006

200 S 20th Ave
Pasco, WA 99301
(509) 543-2018
(888) 450-7867
Fax: (509) 543-2051

Fax

To: Linda Co: Foss

Fax: 503-735-4976 Date:

From: Adam E-mail:

Re: ULS Sensor

☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Transmitting 3 page(s) including this cover page. If transmission is incomplete please call (503) 282-2587.

I faxed this to Greg
this should show that the
sensor has been installed and
is working.

Mascott EQUIPMENT CO. Since 1950

SERVICE ORDER

117141

[X] PORTLAND
435 N.E. HANCOCK
PORTLAND, OR 97212
503-282-2587

[ ] TRICITIES
200 S. 20TH AVE.
PASCO, WA 99301
509-543-2018

[ ] SEATTLE
6530 5TH PLACE SOUTH
SEATTLE, WA 98108
206-763-7867

ACCOUNT NUMBER: 830

JOB SITE

ORDER DATE: 10/27/06
JOB PHONE: 503-286-0631
WORK ORDERED BY: Linda Brown

SOLD TO: Foss Maritime
JOB NAME: Same
ADDRESS: 9030 NW St Helens Rd
ADDRESS:
CITY: Portland STATE: OR 97231
CITY: STATE:

CUSTOMER P.O. NUMBER: Linda
TECHNICIAN: Adam
MFG AUTHORIZATION (if necessary):

MODEL: TS-1001 SERIAL NUMBER: 55789 MODEL: SERIAL NUMBER:

PROBLEM REPORTED: Connect [illegible]

MATERIAL USED

QTY	PM	PART NUMBER	DESCRIPTION	PRICE	AMOUNT
1	1	IN 400	Soul pack		

TIME ARRIVED: 12:40 AM (PM) (circle one) TIME DEPARTED: 1:30 AM (PM) (circle one) Customer initials:

WORK DESCRIPTION: Installed [illegible] Sensor & tested okay

WARRANTY [ ] COMPLETE [X] PENDING [ ]

SERVICEMAN: [signature]

DATE COMPLETED: 10/27/06

TERMS: NET 10TH PROX

PRINT CUSTOMER NAME:

CUSTOMER AUTHORIZED SIGNATURE: Linda L Brown

CHARGES	QTY	RATE	AMOUNT
STANDARD LABOR	1		
OVERTIME LABOR			
TRAVEL TIME	1	trip	
MILEAGE	20		
TOTAL MATERIAL			
ENVIRONMENTAL FEE	1		
SALES TAX			
TOTAL AMOUNT DUE			

FOSS MARITIME
9930 NW ST HELENS RD
P. O. BOX 83018
PORTLAND OREGON 97231
1-503-286-0631

2006/12/06 14:00

SENSOR ALARMS

2006/10/27 13:23
STANDARD SENSOR
LUB OIL SUMP
SENSOR NO. 4

2006/05/01 10:27
STANDARD SENSOR
N DIES SUMP
SENSOR NO. 1

2006/05/01 10:25
STANDARD SENSOR
S DIES SUMP
SENSOR NO. 2

2006/05/01 10:24
STANDARD SENSOR
30 WT SUMP
SENSOR NO. 3

ULS
Sensor
Tested
10/27/06
Okay
GB

USC 12/6/06

linda

From: TORAN Greg [TORAN.Greg@deq.state.or.us]
Sent: Wednesday, December 06, 2006 12:13 PM
To: TORAN Greg; linda@foss.com
Cc: Jeff Pike; Adam Davis
Subject: RE: 7374 Foss UST corrections

Linda,

Sorry to keep harping on you about this! The third party evaluation provided from Carnegie Mellon, does not mention "new oil" as a product compatible with the sensor.

I need to see the something in writing from Carnegie Mellon such as the full evaluation or the protocol, or something in writing from the manufacturer to verify this use as valid. Also, the screen printout from Mascott mentions sensor installed and tested and does not in anyway confirm proper operation. I am sorry but Division 150 tank rule is very clear about record requirements.

- Written confirmation from the manufacturer or the third party evaluator to verify compatibility and proper function in 30w new oil.
- Confirmation of proper installation from a company certified to do install and startup by the manufacturer of the Automatic Tank Gauge. (Perhaps this was Mascott)

Providing tank owners with good records is required (from the Division 150 rule)

An owner and permittee must maintain records that demonstrate compliance with the requirements of this rule for the remaining operating life of the UST system. Records must include a description of the work, date performed, name and address of the company that performed the work, equipment model number (as appropriate), ***test results****, modification application and checklist and any other related data. An owner and permittee must make all records for UST system modifications and additions available for review by the department upon request.*

Gregory Toran

-----Original Message-----
From: TORAN Greg
Sent: Friday, December 01, 2006 6:34 PM
To: 'linda@foss.com'
Cc: 'Jeff Pike'
Subject: 7374 Foss UST corrections

Linda hi,

The DEQ received a letter by FAX from Pike's Unlimited indicating the sump sensor installation is

complete.

By December 7, 2006, please provide additional documentation for the recent install of the sump sensor for the new oil line including:

- The model number of the sensor.
- Written confirmation from the manufacturer or the third party evaluator to verify compatibility and proper function in 30w new oil.
- Confirmation of proper installation from a company certified to do install and startup by the manufacturer of the Automatic Tank Gauge. (Perhaps this was Mascott)

Providing tank owners with good records is required (from the Division 150 rule)

An owner and permittee must maintain records that demonstrate compliance with the requirements of this rule for the remaining operating life of the UST system. Records must include a description of the work, date performed, name and address of the company that performed the work, equipment model number (as appropriate), test results, modification application and checklist and any other related data. An owner and permittee must make all records for UST system modifications and additions available for review by the department upon request.

Following submittal of these records, maintain the sensor and test the new oil line annually to remain in compliance with the line leak detector requirements for the new oil system. The DEQ has allowed the use of a sump sensor and annual testing due to the difficulty in acquiring a true leak detector for the lower pressure new oil line.

Let me know if you have any questions!

Gregory Toran
Environmental Specialist
DEQ Northwest Region UST Section
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201
PH 503-229-5496
FAX 503-229-6945
CEL 971-563-7364

linda

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Subject: 7374 Foss UST corrections

Linda hi,

The DEQ received a letter by FAX from Pike's Unlimited indicating the sump sensor installation is complete.

By December 7, 2006, please provide additional documentation for the recent install of the sump sensor for the new oil line including:

- The model number of the sensor.
- Written confirmation from the manufacturer or the third party evaluator to verify compatibility and proper function in 30w new oil.
- Confirmation of proper installation from a company certified to do install and startup by the manufacturer of the Automatic Tank Gauge. (Perhaps this was Mascott)

Providing tank owners with good records is required (from the Division 150 rule)

An owner and permittee must maintain records that demonstrate compliance with the requirements of this rule for the remaining operating life of the UST system. Records must include a description of the work, date performed, name and address of the company that performed the work, equipment model number (as appropriate), test results, modification application and checklist and any other related data. An owner and permittee must make all records for UST system modifications and additions available for review by the department upon request.

Following submittal of these records, maintain the sensor and test the new oil line annually to remain in compliance with the line leak detector requirements for the new oil system. The DEQ has allowed the use of a sump sensor and annual testing due to the difficulty in acquiring a true leak detector for the lower pressure new oil line.

Let me know if you have any questions!

Gregory Toran
Environmental Specialist
DEQ Northwest Region UST Section
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201
PH 503-229-5496
FAX 503-229-6945

Confidential Business Information

CEL 971-563-7364

linda

From: TORAN Greg [TORAN.Greg@deq.state.or.us]
Sent: Thursday, December 07, 2006 7:53 AM
To: Adam Davis
Cc: linda@foss.com
Subject: RE: 7374 Foss UST corrections

Thank you Adam!

-----Original Message-----
From: Adam Davis [mailto:adavis@mascottec.com]
Sent: Thu 12/7/2006 7:29 AM
To: TORAN Greg
Cc: linda@foss.com
Subject: Re: 7374 Foss UST corrections

Greg I have a copy of the hand written work order that says the sensor was tested and was working and a copy of the alarm report that shows the "lub oil sump " went into alarm when tested on 10/27/06 .I will fax you this. I have contacted Incon and I'm waiting for a response to see if I can get something in writing that says the ULS float switch sensor will work in new 30wt motor oil.

----- Original Message -----
From: TORAN Greg <mailto:TORAN.Greg@deq.state.or.us>
To: TORAN Greg <mailto:TORAN.Greg@deq.state.or.us> ; linda@foss.com
Cc: Jeff Pike <mailto:pikesunlimited@yahoo.com> ; Adam Davis <mailto:adavis@mascottec.com>
Sent: Wednesday, December 06, 2006 12:12 PM
Subject: RE: 7374 Foss UST corrections

Linda,

Sorry to keep harping on you about this! The third party evaluation provided from Carnegie Mellon, does not mention "new oil" as a product compatible with the sensor.

I need to see the something in writing from Carnegie Mellon such as the full evaluation or the protocol, or something in writing from the manufacturer to verify this use as valid. Also, the screen printout from Mascott mentions sensor installed and tested and does not in anyway confirm proper operation. I am sorry but Division 150 tank rule is very clear about record requirements.

*** Written confirmation from the manufacturer or the third party evaluator to verify compatibility and proper function in 30w new oil.**

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* Confirmation of proper installation from a company certified to do install and startup by the manufacturer of the Automatic Tank Gauge. (Perhaps this was Mascott)

Providing tank owners with good records is required (from the Division 150 rule)

An owner and permittee must maintain records that demonstrate compliance with the requirements of this rule for the remaining operating life of the UST system. Records must include a description of the work, date performed, name and address of the company that performed the work, equipment model number (as appropriate), test results, modification application and checklist and any other related data. An owner and permittee must make all records for UST system modifications and additions available for review by the department upon request.

Gregory Toran

-----Original Message-----
From: TORAN Greg
Sent: Friday, December 01, 2006 6:34 PM
To: 'linda@foss.com'
Cc: 'Jeff Pike'
Subject: 7374 Foss UST corrections

Linda hi,

The DEQ received a letter by FAX from Pike's Unlimited indicating the sump sensor installation is complete.

Confidential Business Information

By December 7, 2006, please provide additional documentation for the recent install of the sump sensor for the new oil line including:

* The model number of the sensor.

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Following submittal of these records, maintain the sensor and test the new oil line annually to remain in compliance with the line leak detector requirements for the new oil system. The DEQ has allowed the use of a sump sensor and annual testing due to the difficulty in acquiring a true leak detector for the lower pressure new oil line.

Let me know if you have any questions!

Gregory Toran

Environmental Specialist

DEQ Northwest Region UST Section

2020 SW 4th Avenue, Suite 400

Portland, Oregon 97201

Confidential Business Information

00013966

PH 503-229-5496

FAX 503-229-6945

CEL 971-563-7364

Confidential Business Information 00013967

linda

From: TORAN Greg [TORAN.Greg@deq.state.or.us]
Sent: Thursday, January 04, 2007 3:00 PM
To: Bob Baxter
Cc: ADAM DAVIS; SCHEEL Mitch; linda@foss.com
Subject: RE: Foss sensor 7374

Bob & Adam,

Oh my.....here's a little background on how we got here.....

During inspection, we found a new oil product line drawn by suction pump, which then changed to a pressure system on the back side of the suction pump. As you know, pressurized lines are required to have line leak detectors.

Because the new oil system was unusual and required more than just plugging in a leak detector, DEQ allowed Foss the option of having systems and or actual leak detectors modified for this purpose, or allow for the monitoring of the line in containment with a sensor along with yearly line testing.

Allowing a pressurized line to be monitored by a stand alone sump sensor is not allowed by rule, however in this case because of the difficulty in adding a leak detector to this type of system, and the unlikely possibility of environmental harm, we followed the portion of the rule allowing other methods by Department discretion.

However, I was real specific in telling everyone (in writing) to be careful, and to make sure the sensor chosen was approved for use in new oil. I was hoping that the approval would be sought out first before the work was completed because I was unsure if the manufacturer or the third party evaluator would agree to sign off on the use.

You know how things go, I need to see something in writing. If Incon as the manufacturer is willing to back up the use verbally, let them also do so in writing.

As a regulator for the State, I am unable to participate in and approve of what would be third party testing, so I will have to decline on your offer and bring this back to Incon to back this up this claim. Have them send me a letter or an email either way.

I would like to do it your way, but I hope you understand my position here. DEQ like most States, has deferred approvals on leak detection devices to manufacturers and third parties.

We have to wrap this up soon because I am way over on time allowed for compliance corrections. I realize that this was unusual, but all the same we have to get this approved or to the end of it. On my end I have time limits on compliance and if not met, I am required to do formal enforcement against the tank owner.

Gregory Toran
Environmental Specialist
DEQ Northwest Region UST Section
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201
PH 503-229-5496
FAX 503-229-6945

CEL 971-563-7364

-----Original Message-----
From: Bob Baxter [mailto:bbaxter@mascottec.com]
Sent: Thursday, January 04, 2007 12:27 PM
To: TORAN Greg
Cc: ADAM DAVIS
Subject: Foss sensor

Good day Greg, We have a Incon sensor at Foss Maritime in a sump for a motor oil tank that is in question. Prior to the units installation Jeff Pike (the installer) asked me to check with Incon to assure compatibility. I called Incon and inquired about compatibility & functionality, I was verbally assured by Incon that the unit would work for the application. Upon learning their was DEQ issue I contacted Incon for documentation... Incon has no specific third party approval for this application.

Adam Davis & I feel this unit will work in the application & would be willing to do a demonstration/ test to show the unit will work.

If this is acceptable let me know what time would be good for you to set this up

Thank you for your time

Bob Baxter

linda

From: Bob Baxter [bbaxter@mascottec.com]
Sent: Friday, January 05, 2007 11:32 AM
To: linda
Cc: ADAM DAVIS; Jeff Pike
Subject: Re: Sensor letter from Greg Toran

Good Morning Linda, I am searching for a similar product with a 3rd part approval for motor oil... I have been selling these products for over a decade & have never seen a 3rd party approval for this specific product. That being said the equipment you have in place works & will do the job required. Greg is asking for documentation for a solution he endorsees, yet the paper work is not available.

Jeff Pike & I are planning on visiting your site on Monday to test the system. We will also explore any other possible solutions.

Incon will not provide documentation for a third party approval that dose not exist for legal reasons. I have asked Incon for a letter stating they do not have any reason to think the unit will not work, and that the reason for not having the it certified as third party is due cost. Mascott will issue full credit for the existing sensor, IF Mr. Toran will not bless the existing setup.

Bob Baxter
Mascott Equipment
503-282-2587

----- Original Message -----
From: linda
To: bbaxter@mascottec.com ; adavis@mascottec.com ; pikesunlimited@yahoo.com
Sent: Thursday, January 04, 2007 3:55 PM
Subject: Sensor letter from Greg Toran

Gentlemen, as you can guess, I am not happy with the way this is going. I relied on you as my vendors to provide us with adequate equipment and keep Foss Maritime Company compliant with DEQ.

Please correct this matter in whatever way necessary to keep Foss Maritime Company from being fined.

Linda Brown / Marine Buyer - CSR
Foss Maritime Co. / Portland
Phone: 503-978-6546
Fax: 503-735-4976
E-mail: linda@foss.com

linda

From: TORAN Greg [TORAN.Greg@deq.state.or.us]
Sent: Friday, January 12, 2007 6:11 PM
To: linda@foss.com
Cc: ADAM DAVIS; Jeff Pike
Subject: 7374 Foss

I am accepting the documentation for the sensor function test. Please send color copies of the photos by mail, email, or by some other method where the photos are clear. The black and white FAX copies did not come through very clear.

A letter will go out within two weeks to document compliance. Thank you for all the efforts, don't forget the photos for my file.

Gregory Toran
Environmental Specialist
DEQ Northwest Region UST Section
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201
PH 503-229-5496
FAX 503-229-6945
CEL 971-563-7364

Confidential Business Information

Linda Richards

CONTRACT ENVIRONMENTAL SERVICE

C.E.S

2005 SW 198th Ave
Aloha, OR 97006

Phone: (503)591-9171
Fax: (503)642-2051
E-mail: trainatces@aol.com

Cynthia Ells

CONTRACT ENVIRONMENTAL SERVICE

C.E.S

2005 SW 198th Ave
Aloha, OR 97006

Phone: (503)259-2961
Fax: (503)642-2051
E-mail: ces2cyn@aol.com

Pike's Unlimited, LLC.

TESTING

LINE LEAK DETECTION
CATHODIC PROTECTION
Available Day or Night

Phone: 503-873-8070
Cell: 503-302-9144
pikesunlimited@yahoo.com

Jeff Pike
3258 Cascade Hwy. NE
Silverton, OR 97381

Financial Responsibility Verification Form
Complete and Submit With UST Invoice

DEQ

State of Oregon
Department of
Environmental
Quality

Beginning July 1, 2008, DEQ will issue an annual "Certificate to Operate" to permittees of underground storage tanks. In order to receive fuel deliveries in Oregon, you must have a valid operating certificate.

Conditions for issuance of annual "Certificate to Operate"

- Payment of annual UST fees—invoice enclosed.
- Proof of compliance with Financial Responsibility (FR) — complete and return FR compliance information requested below.
- Pay any civil penalty due pursuant to an order of the department.

Verification of Financial Responsibility (FR)

DEQ may request submission of a copy of the FR mechanism identified below. You must also retain a copy of your mechanism at your UST site or place of business.

If you use Insurance (please print information)

Insurance Company Name on Policy: Indian Harbor Ins. Co.

Policy Number: PEC0024676

Date coverage begins: 11/1/07

Date coverage ends: 11/1/08

Name of insurance agency selling policy: Benfield Corporate Risk

Name of insurance agent selling policy: Helen Eichmann

Agent's phone number: 917-637-4800

If you self-insure (please print information)

Date of Chief Financial Officer Letter: _____

Date coverage begins: _____

Date coverage ends: _____

Other mechanisms

Guarantee—check here: _____

Surety Bond—check here: _____

Trust Fund—check here: _____

Local Government bond test—check here: _____

Local Government financial test check here: _____

DEQ Facility ID #: 7374 Facility Name: Foss Maritime Co.

[signature] Frank Williams [illegible]

Signature of permittee/owner Print Name Date

If more than one facility is covered by this mechanism, attach a list of those facilities to this page. At a minimum the list must contain the DEQ Facility Names and Facility Numbers as shown on the invoices.

If you do not have a current FR mechanism, please provide us with an explanation:

_____

_____

_____

Table of Contents

1 DEQ OPERATING PERMITS

2 UST SYSTEM INFORMATION

3 TANK & LINE UPGRADES & REPAIRS

4 FINANCIAL RESPONSIBILITY

5 CATHODIC PROTECTION & TESTING

6 TANK LEAK DETECTION & TESTING

7 LINE LEAK DETECTION & TESTING

8 VAPOR RECOVERY EQUIPMENT & TESTING

9 EMERGENCY RESPONSE PLAN – EMPLOYEE TRAINING SHEET & FORMS

10 INCIDENT REPORTS

11 SCHEDULE AND CHECK LIST FOR ROUTING MAINTENANCE

12

1

operation permit
operator permit

www.deq.state.or.us
OAR rule book available at web site

REGISTRATION CERTIFICATES

Must have one of these:

NWGLDE
ational orkg roup eak ejection quipment

- **Installation** - OAR 340-150-0160
- **Operation** - OAR 340-150-0163
- **Change-in-service:**
  - Change to non-regulated product or decommission - OAR 340-150-0166
  - Temporary closure – OAR 340-150-0167
  - Permanent closure – OAR 340-150-0168
  - Modification of registration certificate – OAR 340-150-0052
    - Change in ownership of property or UST
    - Change in designated permittee

Registration certificate must be on site along with all of the appropriate paperwork that goes along with the general requirements and the certificate specific requirements.

Notification before work begins: Applications must be submitted at least 30 days before work begins for the following permits. Scheduled date must be confirmed 3 days prior to work beginning.

- Installation
- Change-in-service: 30 Day notice 3day verify of changes coming
  - Decommission
  - Change to non-regulated product
  - Temporary closure
  - Permanent closure
- UST component modifications now called New components
  Repairs New rules

After field work notifications:

- Installation checklist and certificate of compliance must be submitted and approved before an Operation certificate will be issued, and records kept for the operating life of the UST system.
- Change in service checklist and site assessment report must be submitted within 30 days, and records kept for 3 years or if sold to new owner.
- Temporary closure – Change-in-service or permanent closure checklist and site assessment report must be submitted, and records kept for 3 years or if sold to new owner.
- Permanent closure checklist and site assessment report must be submitted within 30 days, and records kept for 3 years or if sold to new owner.
- UST component modification checklist must be submitted within 30 days of completion and records kept for the remaining operating life of the UST system.

REGISTRATION CERTIFICATE

or

PERMIT

Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229 -6652

UNDERGROUND STORAGE TANK PROGRAM

GENERAL PERMIT OPERATING CERTIFICATE

ISSUED TO:
Foss Maritime Company
Raphael Caballero
9030 NW St. Helens Road
PO Box 83018
Portland, OR 97283-0018

OPERATING CERTIFICATE NUMBER: 26 - 7374 – 1998 - OPER

FACILITY NAME AND LOCATION:

Knappton Corporation
9030 NW St. Helens Road
Portland, OR 97203

TANK OWNER: Foss Maritime Company

PERMITTEE: Foss Maritime Company

REGISTRATION TYPE: Operate
Regulated Substance Delivery Authorized

TANK PERMIT NO:	TANK ID NO:	TANK SIZE:	TANK CONTENTS:
AEFG	1	20,000 gallons	Diesel
AEFH	2	20,000 gallons	Diesel
AEGK	4	6,000 gallons	New Oil

Issued in accordance with the provisions of ORS Chapter 466.706 to 466.835, 466.994 and 466.995 and OAR 340-150-0001 to -0166 and ORS 465.200 to 465.455 and 465.990 and OAR 340-122-0205 to -0360.

The Oregon Department of Environmental Quality issues this operating certificate with the understanding that the permittee will operate in accordance with the conditions and requirements of the general permit to operate an underground storage tank pursuant to OAR 340-150-0163. This operating certificate remains valid until such time as a modified registration form is received by the department or the department suspends or revokes the operating certificate for failure by the permittee to comply with the conditions and requirements of the general permit to operate or applicable statutes or rules.

ISSUE DATE: 12/23/1998

Michael H. Kortenhof, Manager
UST Compliance and Cleanup Program
Waste Management and Cleanup Division

Regulated Substance Delivery Authorized

Vendor # 158916

State of Oregon

Department of Environmental Quality

INVOICE

2008 ANNUAL FEE FOR UNDERGROUND STORAGE TANKS

B6224, 53708

For information about this invoice, please contact Dawn Ismerio:
(503) 229-5812 or toll free in Oregon (800) 452-4011
[TTY (503) 229-6993]

Invoice Number: UST08-01145
Invoice Date: 01/14/2008
Invoice Due Date: 02/28/2008

To: Linda Brown
Foss Maritime Company
9030 NW Saint Helens Rd
Portland, OR 97231-1127

For Facility Number: 7374
FOSS MARITIME
9030 NW SAINT HELENS RD
PORTLAND, OR 97231

1/14/08

Operating Certificate Number: 26-7374-1998-OPER

Tank Numbers	Description	Fee Amount
AEFG AEFH AEGK	3 Tank(s) at $135.00 ea =	$405.00
	AMOUNT DUE:	**$405.00**

- **The annual UST compliance fee for 2008 is $135 per tank compartment.** Even if the tank is out of use the $135 fee is owed each year until the tank is permanently decommissioned. This fee was established by the 2007 Oregon State Legislature.
- Tanks are not permanently decommissioned until the Department has received the UST Decommissioning Checklist and Site Assessment Report which is due within 30 days after decommissioning.
- This invoice must be paid by the due date shown. If the fee is not paid the operating certificate may be terminated. In order to receive fuel deliveries in the State of Oregon, you must have a valid operating certificate.
- **A late fee of $35.00 will be applied to the unpaid balance if full payment is not received by the due date.**
- Every facility that dispenses fuel to a vehicle or container must have a trained UST System Operator.
- **Please complete and sign the enclosed Financial Responsibility Verification Form and return it with your invoice.**
- Please leave a message on the toll free in Oregon UST HELPLINE (1-800-742-7878) if you would like to discuss UST program issues. Your call will be returned by the next business day. If you are calling from outside of Oregon please contact Steve Paiko at (503) 229-6652.

- - - - - - - - - - - - Please detach at perforation and return this portion with payment - - - - - - - - - - - -

Remit and make checks payable to:

Dept. of Environmental Quality
Attn: Business Office
811 SW Sixth Avenue
Portland, OR 97204-1390

Facility Name: FOSS MARITIME
Facility Number: 7374
Address ID: 387358

Check box if your address has changed and complete back of invoice: ☐

Check box if the facility has been sold and complete back of invoice: ☐

Invoice Due Date: 02/28/2008
Amount Due: $405.00
Invoice Number: UST08-01145
Amount Enclosed: ☐

Please enclose your Financial Responsibility Verification Form with this invoice.

State of Oregon

Department of Environmental Quality

INVOICE

2005 ANNUAL FEE FOR UNDERGROUND STORAGE TANKS

B6585.53708
$ 2/28/5

For information about this invoice, please contact Dawn Gomez:
(503) 229-5812 or toll free in Oregon (800) 452-4011
[TTY (503) 229-6993]

Invoice Number: UST05-01243
Invoice Date: 02/01/2005
Invoice Due Date: 03/15/2005

To: Stuart Sanborn
Foss Maritime Company
~~PO Box 83018~~ 9030 NW ST HELENS RD
Portland, OR ~~97283-0018~~ 97231

For Facility Number: 7374

FOSS MARITIME
9030 NW ST HELENS RD
PORTLAND, OR 97230

Operating Certificate Number: 26-7374-1998-OPER

Tank Numbers	Description	Fee Amount
AEFG AEFH AEGK	3 Tank(s) at $85.00 ea =	$255.00

AMOUNT DUE: **$255.00**

- **The annual UST compliance fee for 2005 is $85 per tank compartment.** Even if the tank is out of use the $85 fee is owed each year until the tank is permanently decommissioned. This fee was established by the 2001 Oregon State Legislature.
- Tanks are not permanently decommissioned until the Department has received the UST decommissioning checklist and the UST site assessment report which is due within 30 days after decommissioning.
- This invoice must be paid by the due date shown. If the fee is not paid the operating certificate may be terminated. In order to receive fuel deliveries in the State of Oregon, you must have a valid operating certificate.
- **A late fee of $35.00 will be applied to the unpaid balance if full payment is not received at the Department by the due date.**
- Every facility that dispenses fuel to a vehicle or container must have a trained UST System Operator.
- Please leave a message on the toll free in Oregon UST HELPLINE (1-800-742-7878) if you would like to discuss your fee assessment, a change in ownership, the operator training requirement or other issues. Your call will be returned by the next business day. If you are calling from outside of Oregon please contact Steve Paiko at (503) 229-6652.

- - - - - - - - - - - Please detach at perforation and return this portion with payment - - - - - - - - - - -

UST SYSTEM OPERATORS / GENERAL REQUIREMENTS

The permittee must designate and individual as UST system operator for each UST facility and require that individual to complete training by February 1, 2004.

If the permittee does not designate a specific person as the UST system operator then the **permittee is** the UST system operator.

Operators designated after February 1, 2004 must complete training within 90 days of designation unless operator has previously completed training and has a copy of verification maintained at the facility.

Verification may include a copy of the certificate of training completion signed by the UST system operator along with any examination results, or a list of persons who attend a training session as submitted by the training vendor. The list must include

- UST system operator's name and signature
- Date training was completed
- Name, site address and the DEQ's UST facility identification number for facility the system operator serves
- Confirmation statement by the training vendor that the training session as conducted using the DEQ's system operator training manual.

The permittee must permanently retain each certificate of completion signed by the UST system operator on file at the UST facility, including a copy of any examination results, or available upon request by DEQ

Inspections

At the time of a scheduled compliance inspection, the UST system operator must be prepared to:

- Display, demonstrate and provide specifications for mechanical and structural UST components.
- Specific records, warranties, receipts and testing results that establish compliance with requirements for operation and maintenance of the UST system must also be provided.
- System manuals should be on hand to refer to while operating the equipment.
- Copies of records pertaining to release detection for tanks and piping, testing of any and all devises as required by rule, repairs and maintenance activities.
- As built drawing of the UST system.

If any of these requirements cannot be met, DEQ recommends that a licensed UST service provider or equipment vendor be hired to assist during the inspection. DEQ expects arrangements for any such assistance be made prior to scheduled inspection date.

Compliance inspections will require uninterrupted attention and assistance for the entire time. Access will be required into all UST system hatch covers, man ways, sump covers and other entry points. All necessary keys and tools to provide access should be readily available at the time of inspection.

UST SYSTEM OPERATOR CERTIFICATE

CERTIFICATE OF COMPLETION

This certificate is awarded for successful completion of the UST Operator Training Class

Linda Brown

CONTRACT ENVIRONMENTAL SERVICE

James Richards 5/11/06
Signature Date

Yvette Hilton Ells 5/11/06
Signature Date

Linda Richards 5-11-06
Signature Date

C.E.S

CERTIFICATE OF COMPLETION

This certificate is awarded for successful completion of the UST Operator Training Class

Andrew Van Curen

CONTRACT ENVIRONMENTAL SERVICE

James Richards	5/11/06
Signature	Date
Cynthia Hilton Ellis	5/11/06
Signature	Date
Linda Richards	5-11-06
Signature	Date

C.E.S

Confidential Business Information

2

Installation specifics
Tank specifics
Piping specifics

2

I. SPILL AND OVERFILL PROTECTION

A. APPLICABILITY

Spill and overfill prevention equipment is not required if the UST system is filled by deposits of a regulated substance of no more than 25 gallons at one time (a waste oil tank may be one example).

B. SPILL PREVENTION

Spill prevention equipment must be installed, operated and maintained such that it will prevent the release of a regulated substance to the environment when the product transfer hose is detached from the fill pipe (e.g., a spill catchment basin or spill "bucket").

C. OVERFILL PREVENTION

- The permittee must install, operate and maintain overfill prevention equipment and follow fill procedures that prevents any of the fittings located on top of the UST from being exposed to a regulated substance due to overfilling, and:
  - Automatically shuts off flow into the UST when the UST is no more than 95-percent full; or
  - Alerts the person depositing the regulated substance into the UST when the UST is no more than 90-percent full by restricting the flow into the tank or by triggering a high-level alarm.
- For all UST systems installed or overfill equipment replaced after March 1, 2003, allowing for visual verification that the overfill equipment functions properly is required. For overfill equipment installed before March 1, 2003, the permittee must be able to demonstrate that the equipment functions properly by any method deemed acceptable by the Department.
- The permittee must also:
  - Measure the volume of regulated substance in each UST to confirm that the volume available is greater than the volume of the regulated substance to be deposited (e.g., transferred) into the UST before each deposit is made.
  - Develop and implement procedures to ensure that each deposit of a regulated substance into the UST is monitored constantly to prevent overfilling and spilling.

D. CODES AND STANDARDS

The following codes and procedures (*Appendix C* of Division 150) may be used to comply with spill and overfill protection requirements:

- Transfer procedures described in National Fire Protection Association Publication 385 (1990).
- Further guidance on spill and overfill prevention appears in:
  - American Petroleum Institute Publication 1621 (1993), "Recommended Practice for Bulk Liquid Stock Control at Retail Outlets."
  - National Fire Protection Association Standard 30 (2000), "Flammable and Combustible Liquids Code."

• UST SYSTEM INFORMATION

- AS BUILT DRAWINGS
- EQUIPMENT LIST
- PICTURES
- GUARANTEES AND CERTIFICATIONS
- PERMITS

ANY AND ALL PERTINENT INFORMATION AVAILABLE ABOUT YOUR UNDERGROUND TANK SYSTEM AS IT WAS INSTALLED.

- IF NONE OF THE ABOVE ARE AVAILABLE
  - PERSONAL DRAWING OF THE SITE AND MOST PROBABLE PIPING RUN
  - ANY INFORMATION YOU MAY HAVE OBTAINED ABOUT YOUR SYSTEM
  - LIST OF PRESENT EQUIPMENT

MUCH INFORMATION ABOUT YOUR SYSTEM CAN BE GATHERED FROM:

- CONTRACTORS WHO HAVE WORKED ON THE SYSTEM
- TESTING COMPANIES WHO HAVE DONE WORK FOR YOU
- PREVIOUS OWNERS

THE DEQ ALSO HAS RECORDS PERTAINING TO YOUR SITE AND SYSTEM

PACIFIC NORTHWEST SERVICES, INC.
Convenience Store & Petroleum
Design & Construction

December 14, 1998

Foss Maritime
Attn: Mr. Rafael Caballero
P.O. Box 83018
Portland, Or. 97231-0018

RE: Fuel System Information

Dear Rafael,

Attached is the information you have requested:

1) Pipe test certification letter from PNS
2) Electrical inspection sign off card
3) Fire permit with sign off by Fire Marshal
4) Certification on flex hoses per USCG requirements
5) Copy of site plans used in permitting

Thank you once again for allowing us to work for you. Please feel free to call on us if we can be of further service.

Sincerely,

Brian Van Wagner
Pacific Northwest Services, Inc.

P.O. Box 1579 • Longview, WA 98632
Phone: (360) 425-6955 • Fax: (360) 425-6984 • E-Mail: pacnwsvcs@kalama.com
WA LIC #PACIFNS034OQ OR CCB #0119656

PACIFIC NORTHWEST SERVICES, INC.
Convenience Store & Petroleum
Design & Construction

December 14, 1998

Foss Maritime
Attn: Mr. Rafael Caballero
P.O. Box 83018
Portland, Or. 97231-0018

RE: Fuel Upgrade Certifications

Dear Rafael,

Thank you for choosing Pacific Northwest Services, Inc. to do your underground storage tank upgrade. This letter is to certify that the fuel piping installed aboveground at your facility was pressure tested and approved by the City of Portland Fire Marshal, Doug Friant, and passed at 1-1/2 times the operating pressure. The pressure test was performed on 11/4/98 held for 24 hrs and passed by the Fire Marshal on 11/5/98. The working pressure of the system is 50 psi and the test pressure was 75 psi. Attached is the City of Portland Fire permit with appropriate signatures.

Sincerely,

Brian Van Wagner
Pacific Northwest Services, Inc.

P.O. Box 1579 • Longview, WA 98632
Phone: (360) 425-6955 • Fax: (360) 425-6984 • E-Mail: pacnwsvcs@kalama.com
WA LIC #PACIFNS034OQ OR CCB #0119656

503-222-9446
Wats 1-800-452-1045
FAX – 503-222-9449
E-MAIL PIPCOHOSE@AOL.COM

PETERSON INDUSTRIAL PRODUCTS, INC.

2300 N.W. 29th Ave. P.O. Box 10917 Portland, Oregon 97296-0917

November 9, 1998

NW Pump
2800 NW 31st
Portland, OR 97210

Subject Test Papers
Sales Order: 265080

Peterson Industrial Products hereby certifies that on 10/28/98 the following hoses were tested and inspected for defects and/or leaks:

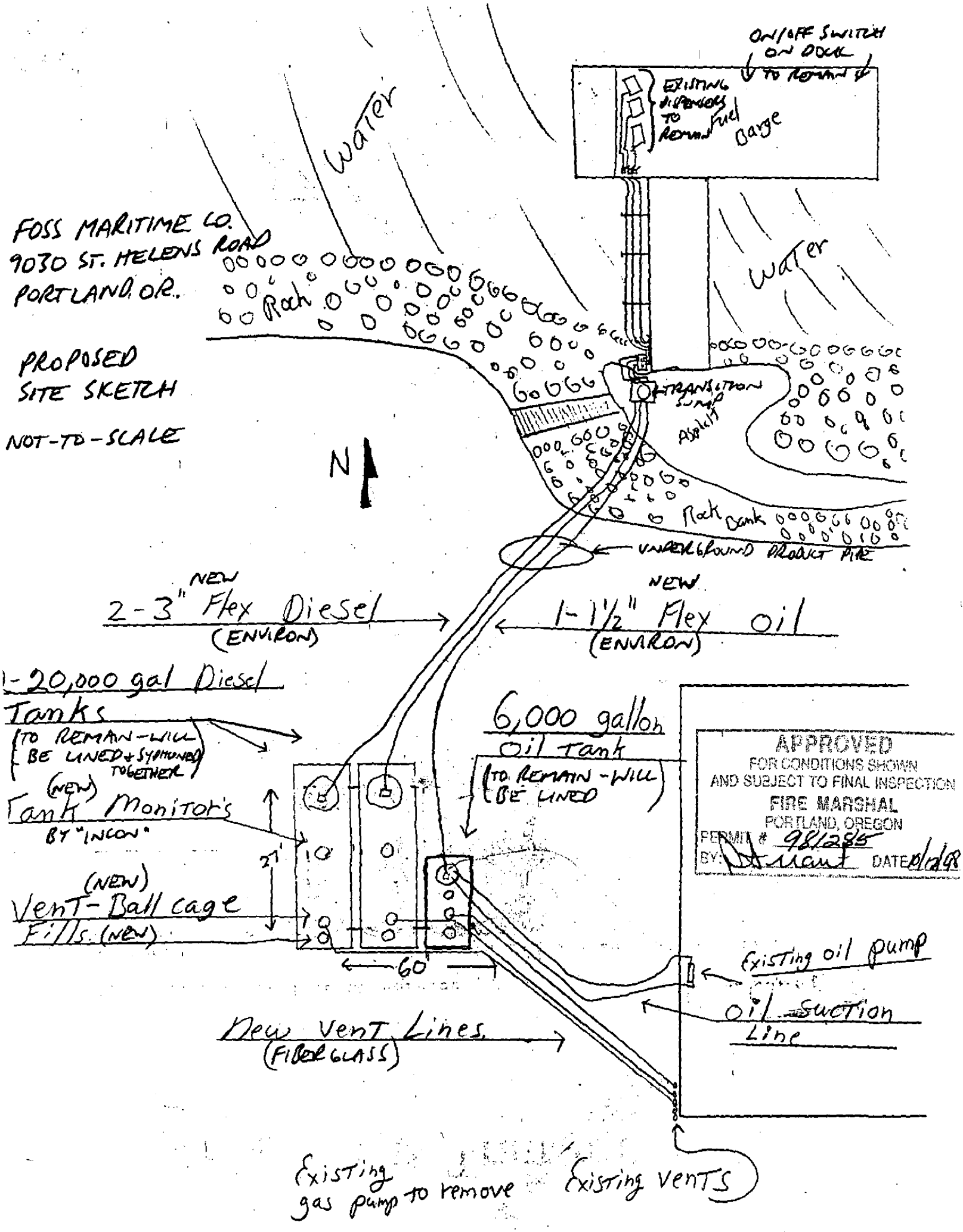
CODE NO.	DESCRIPTION	PSI
P-10288-1M	3" x 71" Dayco MxF Scovill- Cat. 7216	225
P-10288-2M	3" x 71½" MxF Scovill - Cat. 7216	225
P-10288-3M	3" x 17'8" Dayco MxF Scovill - Cat 7216	225
P-10288-4M	3" x 17'7" Dayco MxF Scovill - Cat. 7216	225
P-10288-5M	2" x 17'10¼" Dayco MxF Scovill Cat. 7216	225
P-10288-6M	2" x 70½" Dayco MxF Scovill - Cat 7216	225

Hose passed. No hose to fitting separation leaks and/or defects.

CERTIFIED BY:

PETERSON INDUSTRIAL PRODUCTS, INC.

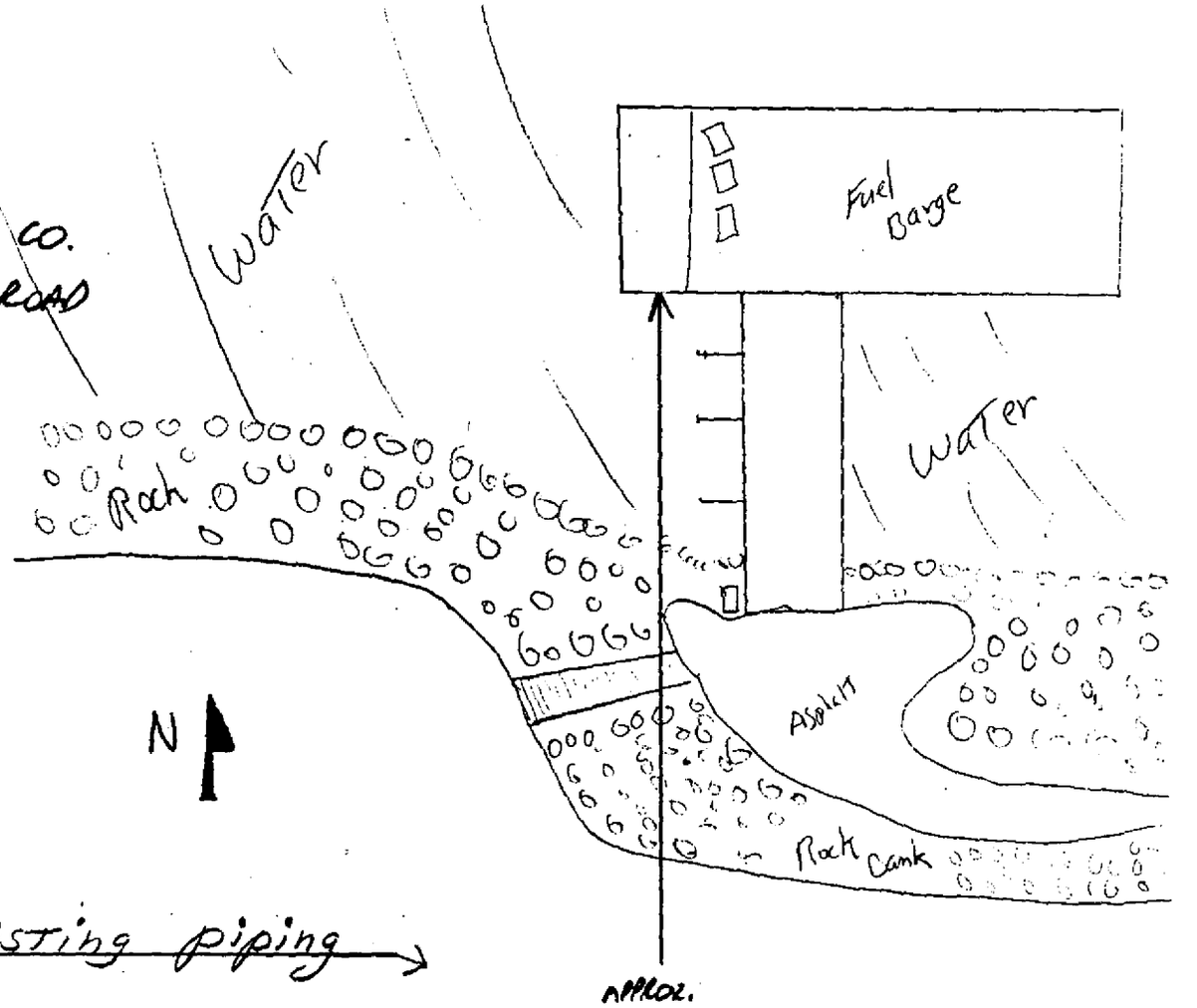
RECEIVED
NOV 13 1998


ON/OFF SWITCH ON DOCK TO REMAIN
EXISTING DISPENSERS TO REMAIN
Fuel Barge
Water
Water
FOSS MARITIME CO.
9030 ST. HELENS ROAD
PORTLAND, OR.
PROPOSED SITE SKETCH
NOT-TO-SCALE
Rock
TRANSITION SUMP
Asphalt
N
Rock Bank
UNDERGROUND PRODUCT PIPE
NEW
2-3" Flex Diesel
(ENVIRON)
NEW
1-1½" Flex oil
(ENVIRON)
1-20,000 gal Diesel Tanks
(TO REMAIN-WILL BE LINED + SYPHONED TOGETHER)
6,000 gallon oil Tank
(TO REMAIN-WILL BE LINED)
(NEW) Tank Monitor's
BY "INCON"
27'
(NEW) Vent-Ball cage Fills (NEW)
60'
APPROVED
FOR CONDITIONS SHOWN
AND SUBJECT TO FINAL INSPECTION
FIRE MARSHAL
PORTLAND, OREGON
PERMIT # 981285
BY:
DATE 10/12/98
Existing oil pump
oil suction Line
New Vent Lines
(FIBERGLASS)
Existing gas pump to remove
Existing vents

FOSS MARITIME CO.
9030 ST. HELENS ROAD
PORTLAND, OR.

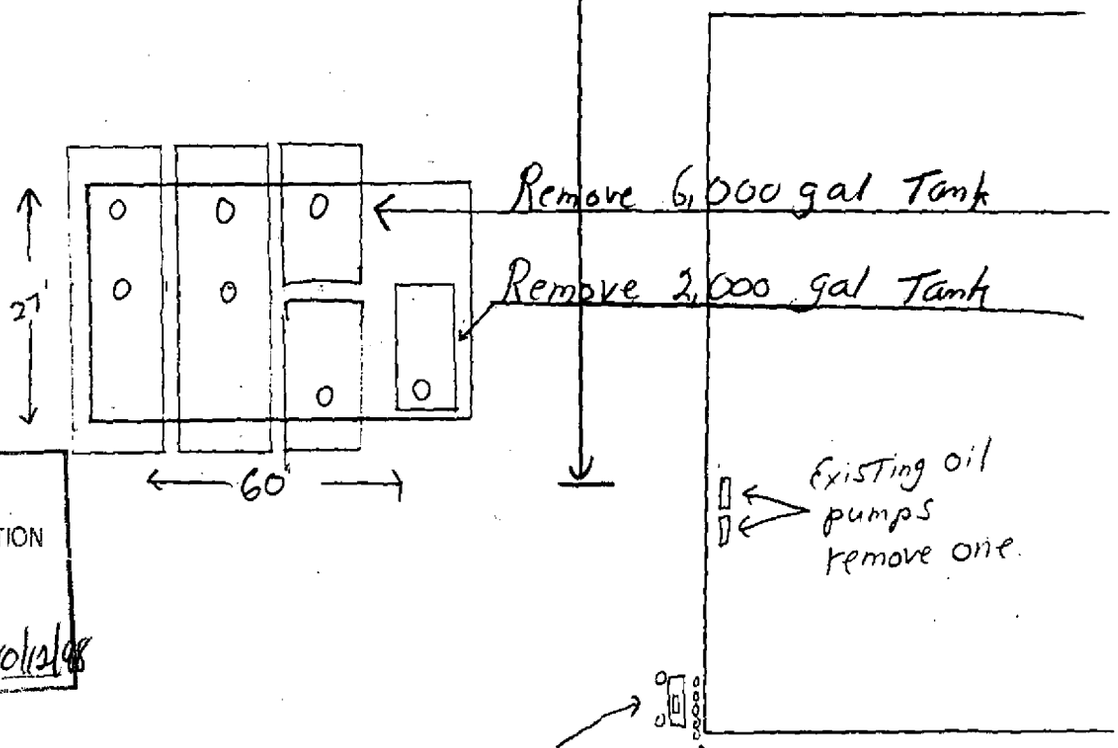
EXISTING
SITE SKETCH

NOT-TO-SCALE



Remove Existing piping

APPROX. 200'



APPROVED
FOR CONDITIONS SHOWN
AND SUBJECT TO FINAL INSPECTION
FIRE MARSHAL
PORTLAND, OREGON
PERMIT # 981285
BY: [illegible] DATE 10/12/98

Confidential Business Information

City of Portland
FIRE PREVENTION DIVISION
55 S.W. Ash Street
Portland, OR 97204 Phone: ~~248-0203~~ 223-3770

PERMIT NUMBER T981285
FEE AMOUNT $1870.95
CODE 19d(2), 19c

Subject to the compliance with the ordinances of the City of Portland, permission is hereby granted for the installation of:

___ NEW INSTALLATION X ADDITION ___ ALTERATION ___ REPAIR X REMOVE

X LIQUIDS/TANKS ___ L.P.G. ___ COMPRESSED GASES ___ DRY CLEANING PLANTS ___ PAINT SPRAY BOOTHS

Located at 9030 NW ST. HELENS ROAD - FOSS MARITIME CO.

Contractor PACIFIC NORTHWEST SERVICES, INC

Permit Issued 10-13 19 98 Fire Marshal DOUG FRIANT

By ___

INSPECTION RECORD:	DATE	INSPECTOR	OTHER
APPROVE TANK/CYLINDER LOCATION			DECOMMISSION OK D Friant 10/16/98
APPROVE PIPING AND VALVES			
PRESSURE TEST WITNESSED			
OK TO COVER			

FINAL APPROVAL
11/5/98 Doug Friant
DATE INSPECTOR

NOTE: Keep card conspicuously posted on premises until job is completed and final inspection made. Request for final must be made within 14 days after completion of work.

Permit valid for 180 days only

Date 10-13 19 98 Cash ___ Check 4532 & 4661

T2295

Received of PACIFIC NORTHWEST SERVICES, INC

The sum of ONE THOUSAND EIGHT HUNDRED SEVENTY DOLLARS & 95/100 $ 1870.95

300.151 Rev. 4-89 By [signature]

City of Portland, Oregon
BUREAU OF BUILDINGS
Electrical Section

Date 11/9/98 Permit No. ___

Address 9030 NW ST Helens

THE ELECTRICAL WIRING IN THE Underground

___ PORTION OF THIS BUILDING HAS BEEN INSPECTED AND MAY BE COVERED after plumbing and building construction have been approved for cover.

[signature]
ELECTRICAL INSPECTOR

PACIFIC NORTHWEST SERVICES, INC.
Convenience Store & Petroleum
Design & Construction

PROPOSAL

September 9, 1998

Foss Maritime
ATTN: Mr. Rafael Caballero
P.O. Box 83018 (97283-0018)
Portland, OR. 97231

Exhibit "A"

Phone: (503) 286-0631
Fax: (503) 735-4976

UNDERGROUND STORAGE TANK UPGRADE / NEW PIPE INSTALLATION
Portland, OR.

Scope of Work

-To furnish and supply all labor and equipment necessary to upgrade two (2) 20,000 gallon diesel tanks and one (1) 6,000 gallon oil tank (i.e. install tank monitor, two (2) 5 h.p. high-flow turbines with leak detectors and ball valves, turbine sumps, manways, new product pipe, spill buckets, float vent valves, etc.).

-To decommission and haul off one (1) 6,000 gallon and one (1) 2,000 gallon underground storage tanks (U.S.T.s).

-To supervise and coordinate owner-furnished cathodic protection and tank lining.

This Proposal Includes

-The required 30 day and 3 day notices to the Department of Environmental Quality (D.E.Q.).

-To provide up to $ 1,900.00 for the City of Portland Fire permit (includes plan review fees).

-To provide necessary equipment to upgrade tanks and piping to 1998 E.P.A. standards see Mascott Equipment quote # 0069841.

-To supply a security fence to secure work areas.

-Level "D" Personal Protective Equipment only, the writing and implementation of a site specific health and safety plan and site employees with a minimum of forty (40) hours of OSHA-/WISHA-approved training in hazardous waste operations.

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WA LIC #PACIFNS034OQ OR CCB #0119656

Demolition / Tank Decommissioning

-To remove haul-off and dispose of one (1) existing 27' X 60' X 9" thick tank slab and any asphalt necessary to complete this scope of work.

-To triple-rinse tanks to be removed.

-This proposal includes four (4) soil samples, analyzed for TPH-HCID, to fulfill Oregon D.E.Q. requirements for a non-contaminated, dry excavation.

-This proposal provides removal of underground pipes from the tanks to the limits of the excavation. Remaining piping will be cut and capped. Vent piping will be removed along with bollards and one (1) gasoline pump.

-To remove above ground steel product pipe on the ramp and in the fueling area.

Tank Upgrade / Re-pipe

-To furnish all labor and equipment necessary to excavate to the top of existing tanks.

-To furnish and install two (2) 3" high-flow double-wall flexible product pipes (for diesel) and one (1) 1 ½" double-wall flexible product pipe (for oil) and associated pipe fittings (approximately 110' each run).

-To furnish and install one (1) syphon line between the two 20,000 gallon tanks.

-To furnish and install one (1) transition sump and manway at the top of the hill where pipe will transition from flexible pipe to steel pipe.

-To furnish and install two (2) 3" (for diesel) and one (1) 2" (for oil) steel product pipes from transition sump to the fueling area. Ball valves will be installed for each line on both sides of the ramp. Two (2) 3" by-pass pressure relief valves will also be furnished and installed.

-To furnish and install single-wall fiberglass vent piping.

-Furnish and install one (1) INTS1000 Incon Tank Monitor with (3) probes and console to meet EPA tank testing and inventory control requirements. (Console to be installed in Rafael's office.)

-To furnish electrician to wire the upgraded fuel system, including new tank monitor with three (3) probes and four (4) sump sensors, over-fill alarm and two (2) 5 h.p. high-flow turbines. The existing conduits to be reused to the dock and existing turbines. (Three phase power will be required to run 5 h.p. turbine. It is assumed that three phase power is available at the existing electrical panel.) Electrician will furnish electrical permit for this scope of work.

-To paint exposed steel piping that does not already have factory coatings.

-Purge new fuel system.

-Backfill and compaction of excavations with pea gravel and crushed rock to subgrade.

-Form, place and finish one (1) 32' X 39' X 9" thick tank slab with #4 rebar placed 12" o.c. Concrete shall be 3,500 p.s.i.

-To replace asphalt removed to complete this scope of work with one (1) 3" lift.

Exclusions

-Portland Fire Permit cost over $ 1,900.00

-This proposal is for the removal of unlined, bare steel tanks of the sizes specified above. The removal of any other type / size of tank would be at additional cost to this proposal.

-Water Sampling / Dewatering of Excavations.

-Removal / replacement of contaminated soil.

-It is assumed that tank openings "bungs" are sufficient in size and quantity to complete this scope of work. If additional bungs are required, they can be added at additional cost to this proposal.

-Additional services/costs incurred due to unknown underground conditions including, but not limited to below grade hardpan (subsurface rock, granite, basalt, shale), sloping, shoring, sloughing, contaminated soil and/or water, high water table (dewatering), tank hold-down slabs/anchor logs, buried objects, pipe, conduit, water/sewer/gas lines, underground utilities or other similar conditions.

Total Project Cost: **$ 85,512.00**

Terms:

Payment is due in full upon receipt of invoice. Prices in this proposal are valid for 30 days. A 10% deposit may be required upon acceptance of proposal.

Mr. Caballero, thank you for the opportunity to quote this project to you. We are looking forward to working with you and hope your project is a successful one. Please call us toll free at (888) 575-6955 if we can be of further assistance.

Sincerely,

Mike Todd
Pacific Northwest Services, Inc.

Customer Acceptance Signature Date

Mascott Equipment Co., Inc.
Service Station • Industrial • Petroleum Dispensing Equipment
435 N.E. Hancock • Portland, Oregon 97212
(503) 282-2587
Toll Free (800) 547-7413

MEMBER PEI

QUOTE NO. REPRINT 006981
PAGE 1
DATE 09/09/98

SHIP TO
TEMP
PACIFIC NORTHWEST SERVICES INC
C/O FOSS MARITIME
PORTLAND, OR

BILL TO
2150
PACIFIC NORTHWEST SERVICES INC
1035-A VANDERCOOK WAY
PO BOX 1579
LONGVIEW, WA 98632

REFERENCE #	EXPIRES	SLSP	TERMS	WH	FREIGHT	SHIP VIA
EQUIPMENT	02/28/98	B/E	NET 10TH	01	PREPAID	BEST WAY

QUOTED BY: JSH QUOTED TO: MIKE TODD

ITEM	DESCRIPTION	ORDERED	UM	PRICE	UM	EXTENSION
	TANK FILL ASSEMBLY UPGRADE					
OPW1C-2100	SPILL CONTAINER, 5 GALLON	3	EA	229.50	EA	688.50
MR419-4"X12'	DROP TUBE, ALUMINUM	3	EA	42.97	EA	128.91
OPW634TT-7085	FILL CAP, 4" TIGHT DURATUFF	3	EA	18.60	EA	55.80
OPW633T-8075	4"X4" ADAPTOR, H.C. ALUM	3	EA	25.46	EA	76.38
	TANK VENTING/VAPOR ASSEMBLY					
OPW104A-1200	MANHOLE, 12" CI W/SKIRT	3	EA	38.85	EA	116.55
OPW233V-4420	EXTRACTOR FITTING, 4" X 2"	3	EA	70.31	EA	210.93
OPW53VM-0060	VALVE, FLOAT VENT 2"X 6"	3	EA	30.75	EA	92.25
OPW116-7085	PIPE CAP, 4" DURATUFF	3	EA	17.81	EA	53.43
OPW23-0033	VENT, TANK 2" ALUM	3	EA	12.11	EA	36.33
	TURBINE AREA UPGRADE					
ENMBS3645	SUMP, TANK 38"HT/45"BASE	3	EA	382.50	EA	1147.50
OPW06110-3710	MANHOLE, 37"OD X 10"S,*POMECO*	3	EA	262.50	EA	787.50
ENTFA6060	ADAPTER, 6" TANK MOUNTING	2	EA	202.50	EA	405.00
RJP500R4-2K	TURBINE, 5HP 3 PHASE 240 GPM	2	EA	2524.50	EA	5049.00
RJ116058-5	LEAK DETECTOR, FX1DV/DSL/VENTD	2	EA	263.70	EA	527.40
ENFEB6300	BOOT, 3" FLEX ENTRY - FRP PIPE	4	EA	19.80	EA	79.20
ENFEB3075	BOOT, 3/4" ENTRY RIGID CONDUIT	4	EA	18.00	EA	72.00
ENTFA4090	ADAPTER, 4" TANK FITTING	1	EA	81.00	EA	81.00
ENFEB6300	BOOT, 3" FLEX ENTRY - FRP PIPE	3	EA	19.80	EA	59.40
MR691-2"	VALVE, BALL - BRASS	3	EA	34.77	EA	104.31
	ENIVRON 3" FLEXIBLE PIPING					
ENGFP3300	PIPING, 3" GEOFLEX DOUBLE WALL	250	EA	20.00	EA	5000.00
ENPCA0300	COUPLING, PIPE FEMALE THREAD	4	EA	63.75	EA	255.00

MERCHANDISE	MISC.	TAX	FREIGHT	TOTAL
				CONTINUED

AL FORMAN: _____

* ACCEPTED FOR PURCHASE SIGNATURE: _____ DATE: _____

HE TERMS AND CONDITIONS AS SET FORTH ON THE REVERSE SIDE HEREOF SHALL APPLY TO THIS SALE. FAX (503) 288-9664

FORM #3146

Mascott Equipment Co., Inc.
Service Station • Industrial • Petroleum Dispensing Equipment
435 N.E. Hancock · Portland, Oregon 97212
(503) 282-2587
Toll Free (800) 547-7413

MEMBER PEI

QUOTE NO. REPRINT 006981
PAGE 2
DATE 09/09/98

SHIP TO
TEMP
PACIFIC NORTHWEST SERVICES INC
C/O FOSS MARITIME
PORTLAND, OR

BILL TO
2150
PACIFIC NORTHWEST SERVICES INC
1035-A VANDERCOOK WAY
PO BOX 1579
LONGVIEW, WA 98632

REFERENCE #	EXPIRES	SLSP	TERMS	WH	FREIGHT	SHIP VIA
EQUIPMENT	02/28/98	B/E	NET 10TH	01	PREPAID	BEST WAY

QUOTED BY: JSH QUOTED TO: MIKE TODD

ITEM	DESCRIPTION	ORDERED	UM	PRICE	UM	EXTENSION
ENFTB0300	3" TEST BOOTS	4	EA	10.20	EA	40.80
ENMAF3300	ADAPTER, 3" MALE NPT X ENVIRON	4	EA	51.00	EA	204.00
ENGTT3836	TEST TUBE, 3/8"X 36"	2	EA	14.40	EA	28.80
MR691-3"	BALL VALVE, 3" 1/4 TURN BRASS	6	EA	146.62	EA	879.72
ENGFP2150	PIPING, 1-1/2" DW - GEOFLEX II	130	EA	9.00	EA	1170.00
MR174AL-1-1/2"	VALVE, 1.5" PRESS RELIEF	1	EA	146.63	EA	146.63
	PIPING/TRANSITION SUMPS					
ENSBS3030	SUMP, IN-LINE 27"RISER/30"BASE	1	EA	355.50	EA	355.50
OPW06110-3710	MANHOLE, 37"OD X 10"S,*POMECO*	1	EA	262.50	EA	262.50
ENFEB6300	BOOT, 3" FLEX ENTRY - FRP PIPE	4	EA	19.80	EA	79.20
MR174AL-3"	VALVE, 3"BYPASS/PRESS. RELIEF	2	EA	298.43	EA	596.86
ENFEB6150	BOOT, 1-1/2" ENTRY GEOFLEX	2	EA	18.90	EA	37.80
	INCON TANK MONITORING SYSTEM					
INTS1000/2P	PANEL, 2 CHANNEL W/PRINTER	1	EA	1595.00	EA	1595.00
INTSPLL2-125	PROBE, 10' DIA. - LIQUID LEVEL	2	EA	1075.00	EA	2150.00
INTSP-IDF4	KIT, 4" DIESEL FLOAT NEW STYLE	3	EA	50.00	EA	150.00
INTSP-K4A	KIT, INSTALLATION LEVEL PROBES	3	EA	75.00	EA	225.00
INTSP-ULS	SENSOR, SUMP FLOAT SWITCH	3	EA	109.00	EA	327.00
MR318-18"X12"	MANHOLE, 18" X 12" SKIRT	3	EA	76.76	EA	230.28
INTSPLL2-101	PROBE, 8'DIA. - LIQUID LEVEL	1	EA	975.00	EA	975.00
	NOTE: SYSTEM STARTUP BY ASR IS MANDATED BY MANUFATURER FOR WARRANTY CERTIFICATION. START UP BY MASCOTT ASR TO CONFIRM ELECTRICAL HOOKUP AS SPECIFIED PERFORM BASIC PROGRAMMING, AND PROVIDE INSTRUCTION AS TO SYSTEM USE. CHARGES ARE BASED ON A $54/HOUR, .50/MILE TIME AND TRAVEL AND WHERE APPLICABLE FOOD AND LODGING EXPENSE.					

SALESMAN: _____

MERCHANDISE	MISC.	TAX	FREIGHT	TOTAL
				CONTINUED

* ACCEPTED FOR PURCHASE SIGNATURE: _____ DATE: _____

THE TERMS AND CONDITIONS AS SET FORTH ON THE REVERSE SIDE HEREOF SHALL APPLY TO THIS SALE. FAX (503) 288-966

Mascott Equipment Co., Inc.
Service Station • Industrial • Petroleum Dispensing Equipment
435 N.E. Hancock - Portland, Oregon 97212
(503) 282-2567
Toll Free (800) 547-7413

MEMBER PEI

QUOTE NO. REPRINT 006981
PAGE 3
DATE 09/09/98

SHIP TO
TEMP
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PORTLAND, OR

BILL TO
2150
PACIFIC NORTHWEST SERVICES INC
1035-A VANDERCOOK WAY
PO BOX 1579
LONGVIEW, WA 98632

REFERENCE #	EXPIRES	SLSP	TERMS	WH	FREIGHT	SHIP VIA
EQUIPMENT	02/28/98	B/E	NET 10TH	01	PREPAID	BEST WAY

QUOTED BY: JSH QUOTED TO: MIKE TODD

ITEM	DESCRIPTION	ORDERED	UM	PRICE	UM	EXTENSION
	ESTIMATE START UP $400.00 ADDITIONS PER YOUR REQUEST					
ES3"X144"MXM	FLEX CONNECTOR, SS BRAID MXU	2	EA	495.00	EA	990.00
ES3"X60"MXM	FELX CONNECTOR, SS MXU	2	EA	275.00	EA	550.00
ES1-1/2"X144"MX	FLEX CONNECTOR, SS MXU	1	EA	225.00	EA	225.00
ES1-1/2"X60"MXM	FLEX CONNECTOR, SS MXU	1	EA	140.00	EA	140.00

MERCHANDISE	MISC.	TAX	FREIGHT	TOTAL
26385.48	.00	.00	.00	26385.48

ESMAN: _____

PRICES VALID FOR 30 DAYS FROM LISTED DATE.

CCEPTED FOR PURCHASE SIGNATURE: _____ DATE: _____

TERMS AND CONDITIONS AS SET FORTH ON THE REVERSE SIDE HEREOF SHALL APPLY TO THIS SALE. FAX (503) 288-966

Confidential Business Information

Foss Maritime Company
9030 N.W. St. Helens Rd., P.O. Box 83018
Portland, OR 97283-0018
Telephone: (503) 286-0631 Fax: (503) 286-1775

Check No. - 318699
Check Date - 12/18/98

318698

Invoice Number	Date	Description	Gross	Discount	Net
096002	112596		37,395.32		37,395.
			37,395.32		37,395.

DETACH STATEMENT BEFORE DEPOSITI

THE FACE OF THIS DOCUMENT HAS A GREEN BACKGROUND—NOT A WHITE BACKGROUND

Foss Maritime Company
9030 N.W. ST. HELENS RD., P.O. BOX 83018
PORTLAND, OR 97283-0018
TELEPHONE: (503) 286-0631 • FAX: (503) 286-1775

First Union National Bank
Chapel Hill, North Carolina

66-156
531

318698

CHECK NO. 00318698

DATE	AMOUNT
12/18/98	****37,395.32

285544

VOID IF NOT CASHED IN 60 DAYS

PAY

THIRTY SEVEN THOUSAND THREE HUNDRED NINETY FIVE AND 32/100 ************************

TO THE ORDER OF:

PACIFIC NORTHWEST SERVICES INC.
P.O. BOX 1579
LONGVIEW WA 98632

NOT NEGOTIABLE

BY _____
AUTHORIZED SIGNATURES

⑈318698⑈ ⑆053101561⑆ 2079900001455⑈

PACIFIC NORTHWEST SERVICES, INC.
Convenience Store & Petroleum
Design & Construction

Invoice

DATE	INVOICE #
11/25/98	1096-00-2

BILL TO	SITE ADDRESS
FOSS MARITIME ATTN: MR. RAFAEL CABALLERO P.O. BOX 83018 (97283-0018) PORTLAND, OR 97231	FOSS MARITIME 9030 N.W. ST. HELENS RD. PORTLAND, OR 97231

81989

TERMS
Due on receipt

DESCRIPTION	AMOUNT
SCOPE OF WORK: FURNISH AND SUPPLY ALL LABOR AND EQUIPMENT NECESSARY TO UPGRADE TWO 20,000 TALLON DIESEL TANKS AND ONE 6,000 GALLON OIL TANK. CONTRACT AMOUNT $85,512.00.	
FINAL BILLING 100% COMPLETE $85,512.00 LESS PREVIOUS AMOUNT BILLED TO DATE -$51,307.20 CONTRACT AMOUNT DUE THIS INVOICE	34,204.80T
CHANGE ORDER #1 (SEE ATTACHED BACK-UP)	578.24T
CHANGE ORDER #2 (SEE ATTACHED BACK-UP)	1,519.78T
CHANGE ORDER #3 (SEE ATTACHED BACK-UP)	1,092.50T
Out-of-state sale, exempt from sales tax	0.00

INVOICE CODING FORM

Voucher No 150363 Approved By: _____

Vendor No. 285544 Inv No 1096002

Gross Amt 3739532 Inv Date 11 25 98 Co # G/L Date

PO/Ref # 81989 CK # Due Date Tax Amt

Taxable Amt Tax Code Tax Area

Center (Job)	Object (Cost Type)	Subsidiary (Cost Code)	Subledger/ JDE Workorder	Typ	Amount	Explanation 2
C98509			98509			

BATCH NO 174150
ENTERED 12-18-98 DATE INITIALS
POSTED 12/22/98 DATE CH INITIALS

$37,395.32

F4 (Fold Area) Alt Payee # Units UM Taxable (Y/N)

FM 1564 (3/97) 12-18

Confidential Business Information

00014004

PACIFIC NORTHWEST SERVICES, INC.
Change Order Authorization

CUSTOMER: Foss Maritime
C/O #: 1
CONTACT: Rafael Caballero
JOB #: 1096
ADDRESS: 9030 St Helens Rd
DATE: 11/6/98
FOREMAN: Garrett Hale

DESCRIPTION OF CHANGES AUTHORIZED:

To Repipe Between Meter & Hose Reels To give More Flow

Reason for changes:

QUANTITY	DESCRIPTION	EACH	TOTAL
3	brs Cabor	$35.00	$105.00
8	Nipples, 2" x 4"	9.49	75.92
2	2" Unions	21.61	43.22
6	2" - 90°s	12.30	24.60
2	2 x 1½ Reducing 90°s	13.53	27.06
2	18" x 2" Steel Swivel Flexs	108.91	217.82
2	1½ x Shoulder Nipples	4.60	9.20
			502.82

PNS REPRESENTATIVE: 11/6/98 Date

Sub Total: 502.82

Profit ~~Sales Tax~~: 15 % $ 75.42

CUSTOMER REPRESENTATIVE: Date

Total C/O: $ 578.24

PACIFIC NORTHWEST SERVICES, INC.
Change Order Authorization

CUSTOMER: Foss Maritime
C/O #: #2
CONTACT: Rafael Caballero
JOB #: 1096
ADDRESS: 9070 St Helens Rd.
Ptld. Or 97231
DATE: 11/6/98
FOREMAN: Gabriel Hale

DESCRIPTION OF CHANGES AUTHORIZED:
To Clean up Over fill Contaminant & Haul off.

Reason for changes:

QUANTITY	DESCRIPTION	EACH	TOTAL
1	hr Back Hoe	40.00	40.00
1	Hr Labor	35.00	35.00
2	Trucks 1 Hr	68.00	136.00
21.79	Tons To TPST	45.00	980.55
2	Soil Samples HCID + TPHD	65.00	130.00

PNS REPRESENTATIVE: Date
CUSTOMER REPRESENTATIVE: Date

Sub Total: 1321.55
Profit ~~Sales Tax~~: 15 % $ 198.23
Total C/O: $ 1519.78

Confidential Business Information

PACIFIC NORTHWEST SERVICES, INC.
Change Order Authorization

CUSTOMER: Foss Maritime
C/O #: 3
CONTACT: Rafael
JOB #: 1096
ADDRESS: 9030 St Helens Rd.
DATE: 11/12/98
FOREMAN: Gorrell Hale

DESCRIPTION OF CHANGES AUTHORIZED: Over lay on Lower Ramp & flip By Main Build (Trip Hazard)

Reason for changes:

QUANTITY	DESCRIPTION	EACH	TOTAL
240 sq ft	Over lay		$950.00

PNS REPRESENTATIVE: 11/12/98 Date

CUSTOMER REPRESENTATIVE: A Caballero 11/12/98 Date

Sub Total: $950.00
Profit
~~Sales Tax~~: 15 % $ 142.50
Total C/O: $ 1092.50

Foss Maritime Company
P O R E C E I V E R

Page - 1
Date - 12/18/98
Receiver - 81989-OP
Supplier - 285544

Receipt Date - 12/18/98

SHIP PACIFIC NORTHWEST SERVICES INC.
FROM P.O. BOX 1579
LONGVIEW WA 98632

(360) 425-6955

SHIP TO
FOSS MARITIME COMPANY
9030 N.W. ST. HELENS ROAD
PORTLAND OR 97231

Ordered - 10/07/98 Reference -
Requested - 10/07/98 Delivery -

Taken By - MIKE TODD

Ordered By
RAFAEL CABALLERO

Account/Item Number	Description	UM	Ordered	Unit Cost	Extension	Tx	Line	Open	Rec'd
C98509.16387.1000	Final Billing	EA	1	37,395.3200	37395.32	N	5.000	1	-----
WO#: 00098509	Underground Tank Upgrade								

37395.32

Foss Maritime Company
9030 N.W. St. Helens Rd., P.O. Box 83018
Portland, OR 97283-0018
Telephone: (503) 286-0631 Fax: (503) 286-1775

Check No. - 318030
Check Date - 11/19/98

318030

Stub 1 of 1

Invoice Number	Date	Description	Gross	Deductions	Amount
1096001	102398		51,307.20		51,307.
			51,307.20		51,307.

DETACH STATEMENT BEFORE DEPOSIT.

THE FACE OF THIS DOCUMENT HAS A GREEN BACKGROUND—NOT A WHITE BACKGROUND

Foss Maritime Company
9030 N.W. ST. HELENS RD., P.O. BOX 83018
PORTLAND, OR 97283-0018
TELEPHONE: (503) 286-0631 • FAX: (503) 286-1775

First Union National Bank
Chapel Hill, North Carolina

66-156
531

318030

CHECK NO. 00318030

DATE	AMOUNT
11/19/98	$****51,307.20

285544

VOID IF NOT CASHED IN 60 DAYS

PAY

FIFTY ONE THOUSAND THREE HUNDRED SEVEN AND 20/100 **********

TO THE ORDER OF:

PACIFIC NORTHWEST SERVICES INC.
P.O. BOX 1579
LONGVIEW WA 98632

NOT NEGOTIABLE

BY _____
AUTHORIZED SIGNATURES

⑈318030⑈ ⑆053101561⑆ 2079900001455⑈

CH

PACIFIC NORTHWEST SERVICES, INC.
Convenience Store & Petroleum
Design & Construction

Invoice

DATE	INVOICE #
10/23/98	1096-00-1

REC'D OCT 23 1998

BILL TO	SITE ADDRESS
FOSS MARITIME ATTN: MR. RAFAEL CABALLERO P.O. BOX 83018 (97283-0018) PORTLAND, OR 97231	FOSS MARITIME 9030 N.W. ST. HELENS RD. PORTLAND, OR 97231

TERMS
Due on receipt

DESCRIPTION	AMOUNT
SCOPE OF WORK: FURNISH AND SUPPLY ALL LABOR AND EQUIPMENT NECESSARY TO UPGRADE TWO 20,000 GALLON DIESEL TANKS AND ONE 6,000 GALLON OIL TANK. CONTRACT AMOUNT $85,512.00	
PROGRESS BILLING THROUGH 10/30/98 - 60% COMPLETE	51,307.20T
Out-of-state sale, exempt from sales tax	0.00

INVOICE CODING FORM

Voucher No 146775 Approved By: [signature]

Vendor No. 285544 Inv No 1096001

Gross Amt 51307.20 Inv Date 102398 Co # G/L Date

PO/Ref # 81989 CK # Due Date Tax Amt

Taxable Amt Tax Code Tax Area

Center (Job)	Object (Cost Type)	Subsidiary (Cost Code)	Subledger/ JDE Workorder	Typ	Amount	Explanation 2
C 98509			98509	W	20	Price diff

BATCH NO XP0468
ENTERED 11-17-98 DATE INITIALS
POSTED 11/19/98 DATE CH INITIALS

C C [signature]
F4 (Fold Area) Alt Payee # Units UM Taxable (Y/N)
FM 1564 (3/97) 11-12

CUSTOMER SATISFACTION IS OUR NUMBER ONE GOAL! Total $51,307.20

P.O. Box 1579 • Longview, WA 98632
Phone: (360) 425-6955 • Fax: (360) 425-6984 • E-Mail: pacnwsvcs@kalama.com
WA LIC #PACIFNS034OQ OR CCB #0119656

Foss Maritime Company
P O R E C E I V E R

Page - 1
Date - 11/12/98
Receiver - 81989-OP
Vendor No.- 285544

Receipt Date - 11/12/98

SHIP PACIFIC NORTHWEST SERVICES INC.
FROM P.O. BOX 1579
LONGVIEW WA 98632

360 425-6955

SHIP FOSS MARITIME COMPANY
TO 9030 N.W. ST. HELENS ROAD
PORTLAND OR 97231

Ordered - 10/07/98 Reference -
Requested - 10/07/98 Delivery -

Taken By - MIKE TODD

Ordered By
RAFAEL CABALLERO

Account/Item Number	Description	Um	Ordered	Unit Cost	Extension	Tx	Line	OPEN	Rec'd
C98509.16387.1000	Progress Billing	EA	1	51,307.0000	51307.00	N	3.000	1	-----
WO#: 00098509	Underground Tank Upgrade								

This billing is for 60% completion.

51307.00

s Maritime Company
N.W. ST. HELENS RD., P.O. BOX 83018
LAND, OR 97283-0018

Check No. - 317985
Check Date - 11/18/98

317985

Stub 1 of 1

INVOICE NUMBER	DATE	DESCRIPTION	GROSS	DEDUCTIONS	AMOUNT PAID
214	102998		12.350.00		12.350.0
			12,350.00		12.350.0

DETACH STATEMENT BEFORE DEPOSITIN

First Union National Bank
Chapel Hill, North Carolina

317985 66-156 / 531

CHECK NO. 00317985

Foss Maritime Company

9030 N.W. ST. HELENS RD., P.O. BOX 83018
PORTLAND, OR 97283-0018
TELEPHONE: (503) 286-0631 • FAX: (503) 286-1775

285704

DATE	AMOUNT
11/18/98	****12.350.00

VOID IF NOT CASHED IN 60 DAYS

Y
LVE THOUSAND THREE HUNDRED FIFTY AND 00/100 **********

THE ORDER OF:

ULRICH INDUSTRIAL COATING CO.
P.O. BOX 772
HILLSBORO OR 97123

FOSS MARITIME COMPANY

BY _____ MP

NON NEGOTIABLE

BY _____ MP
AUTHORIZED SIGNATURES

⑈317985⑈ ⑆053101561⑆ 2079900001455⑈

P.O. 82062 fa

Ulrich
INDUSTRIAL COATINGS COMPANY

INVOICE

October 29, 1998

Foss Maritime Co.
ATTN: Mr. Rafael Caballero
P.O. Box 83018
Portland, OR 97283-0018
Ph: (503) 286-0631

Invoice No. 98214

Amount Due: $12,350.00

****

JOB SITE: Foss Maritime
9030 NW St. Helens Road
Portland, Oregon

****

Cleaning, inspection, sandblasting and installation of a Bridgeport Chemical GA27G epoxy lining system to the entire interiors of two (2) 20,000 gallon and one (1) 6,000 gallon underground fuel storage tanks per proposal dated 2-27-98;

Tank Cleaning & Inspection		$14,910.00
Tank Lining		9,940.00
Additional 6" bungs	(2 @ $250.00/each)	500.00
		$25,350.00
Deposit on Account	(Check No. 317321)	(13,000.00)
BALANCE DUE THIS INVOICE		$12,350.00

INVOICE CODING FORM

Voucher No 146726 Approved By: _____

Vendor No. 285704 Inv No 98214

Gross Amt 12350.00 Inv Date 10 29 98 Co # G/L Date

PO/Ref # 82062 CK # Due Date Tax Amt

Taxable Amt Tax Code Tax Area

Center (Job)	Object (Cost Type)	Subsidiary (Cost Code)	Subledger/ JDE Workorder	Typ	Amount	Explanation 2
C98509			98509	14		
					BATCH NO	170468
					ENTERED	11-17-98
					DATE	INITIALS
					POSTED	1/19/98 CH
					DATE	INITIALS

F4 (Fold Area) Alt Payee # Units

FM 1564 (3/97) 11-12

Ulrich

CA-710246 OR-103254 WA-ULRICIC066QH

FAX: (503) 648-6075

Confidential Business Information

00014013

Ulrich
INDUSTRIAL COATINGS COMPANY

INVOICE

October 29, 1998

Foss Maritime Co.
ATTN: Mr. Rafael Caballero
P.O. Box 83018
Portland, OR 97283-0018
Ph: (503) 286-0631

Invoice No. 98214

Amount Due: $12,350.00

****

JOB SITE: Foss Maritime
9030 NW St. Helens Road
Portland, Oregon

****

Cleaning, inspection, sandblasting and installation of a Bridgeport Chemical GA27G epoxy lining system to the entire interiors of two (2) 20,000 gallon and one (1) 6,000 gallon underground fuel storage tanks per proposal dated 2-27-98;

Tank Cleaning & Inspection		$14,910.00
Tank Lining		9,940.00
Additional 6" bungs	(2 @ $250.00/each)	500.00
		$25,350.00
Deposit on Account	(Check No. 317321)	(13,000.00)
	BALANCE DUE THIS INVOICE	$12,350.00

A 20 year written guarantee and invoicing for installation of cathodic protection system will follow.

TERMS: Balance Due Upon Receipt of Invoice. On Balances PAST DUE A SERVICE CHARGE OF 1 1/2% Per Month, Which Is An ANNUAL PERCENTAGE RATE OF 18%, Will Be Charged.

We appreciate Your Business. THANK YOU.

Ulrich Industrial Coatings Company *P.O. Box 772* *CA-710246* *Hillsboro, OR 97123* *OR-103254* *Ph: (503) 648-9587* *WA-ULRICIC066QH* *FAX: (503) 648-6075*

Confidential Business Information

Foss Maritime Company
P O R E C E I V E R

Page - 1
Date - 11/12/98
Receiver - 82062-OP
Vendor No.- 285704

Receipt Date - 11/12/98

SHIP ULRICH INDUSTRIAL COATING CO.
FROM P.O. BOX 772
HILLSBORO OR 97123

503 648-9587

SHIP TO
FOSS MARITIME COMPANY
9030 N.W. ST. HELENS ROAD
PORTLAND OR 97231

Ordered - 10/13/98 Reference -
Requested - 10/13/98 Delivery -

Taken By - BOB ULRICH

Ordered By
RAFAEL CABALLERO

Account/Item Number	Description	Um	Ordered	Unit Cost	Extension	Tx	Line	OPEN	Rec'd
C98509.16387.1000	Progress Billing	EA	1	12,350.0000	12350.00	N	5.000	1	-----
WO#: 00098509	Underground Tank Upgrade								

12350.00

317321

:s Maritime Company
N.W. ST. HELENS RD., P.O. BOX 83018
LAND, OR 97283-0018

Check No. - 317321
Check Date - 10/16/98

INVOICE NUMBER	DATE	DESCRIPTION	GROSS	STUB DISCOUNTS	DEDUCTIONS	AMOUNT PAID
T	10/15		13.000.00			13.000.0

DETACH STATEMENT BEFORE DEPOSITI

First Union National Bank
Chapel Hill, North Carolina

317321 66-156 / 531

Foss Maritime Company

9030 N.W. ST. HELENS RD., P.O. BOX 83018
PORTLAND, OR 97283-0018
TELEPHONE: (503) 286-0631 • FAX: (503) 286-1775

285704

CHECK NO. 00317321

DATE	AMOUNT
10/16/98	$****13.000.00

VOID IF NOT CASHED IN 60 DAYS

.Y

RTEEN THOUSAND AND 00/100 **********

THE ORDER OF:

ULRICH INDUSTRIAL COATING CO.
P.O. BOX 772
HILLSBORO. OR 97123

FOSS MARITIME COMPANY

BY _____ MP

NON NEGOTIABLE

BY _____ MP
AUTHORIZED SIGNATURES

⑈317321⑈ ⑆053101561⑆ 2079900001455⑈

CHECK REQUEST / INVOICE CODING FORM

☐ FOSS ☐ PSW ☐ CSR ☐ OTHER

REQUESTED BY: [illegible] APPROVED BY: [illegible]

VENDOR NO 285704 INV NO Dn Pmt GROSS AMT 1300000

DISC AMT INV DATE 10/15/98 CO NO G/L DATE

Po

~~TAX AMT~~ 82062 TAXABLE AMT TAX CODE TAX AREA

CHECK NUMBER CHECK DATE 10/16/98 VOUCHER NO 143127

CHECK TO BE: ☐ MAILED ☐ RETURN TO REQUESTOR ☐ BANK DEPOSIT

INVOICE DISTRIBUTION

Center (Job)	Object (Cost Type)	Subsidary (Cost Code)	Subledger / JDE Workorder	Type	Amount
C98509					1300000
a c Amber					

BATCH NO 166549

ENTERED 10-15-98 DATE m INITIALS

POSTED 10/16/98 DATE CH INITIALS

10-16-98

PAY TO: Ulrich Industrial Coating

VENDOR NAME

STREET ADDRESS

CITY STATE ZIP

REASON FOR REQUESTED DISBURSEMENT Down Payment

FM 1646 (REV. 3/97)

Confidential Business Information

00014017

Foss Maritime Company
P O R E C E I V E R

Page - 1
Date - 10/13/98
Receiver - 82062-OP
Vendor No.- 285704

Receipt Date - 10/13/98

SHIP ULRICH INDUSTRIAL COATING CO.
FROM P.O. BOX 772
HILLSBORO OR 97123

SHIP TO FOSS MARITIME COMPANY
9030 N.W. ST. HELENS ROAD
PORTLAND OR 97231

503 648-9587

Ordered - 10/13/98 Reference -
Requested - 10/13/98 Delivery -

Taken By - BOB ULRICH

Ordered By
RAFAEL CABALLERO

Account/Item Number	Description	Um	Ordered	Unit Cost	Extension	Tx	Line	OPEN	Rec'd
C98509.16387.1000 WO#: 00098509	Lining Tank as per your Underground Tank Upgrade quote of 2/27/98.	EA	1	20,750.0000	20750.00	N	1.000	1	-----
C98509.16387.1000 WO#: 00098509	Downpayment Underground Tank Upgrade	EA	1	13,000.0000	13000.00	N	2.000	1	-----
C98509.16387.1000 WO#: 00098509	Year 2000 Compliance Underground Tank Upgrade	EA	1	.0000	.00	N	3.000	1	-----

CK Req 10-13-98

Year 2000 compliance: Notwithstanding anything else to contrary contained herein, Vendor warrants that the airs and any systems utilized in performance hereunder will be Year 2000 compliant. Year 2000 compliance is defined as functionality that is not affected by dates prior to, during, and after the year 2000, in particular:

1. No value for a current date will cause any interruption in operation;

2. Date-Based functionality must behave consistently for dates prior to, during and after the year 2000;

3. In all interfaces and data storage, the century in any date must be specified either explicity or by unambiguous algorithms or inferential rules; and

4. The year 2000 must be recognized as a Leap Year.

Failure to be Year 2000 compliant shall not be deemed a force majeure event or a justified reason for non-performance hereunder.

33750.00

ss Maritime Company
N.W. ST. HELENS RD., P.O. BOX 83018
LAND, OR 97283-0018

Check No. - 317720
Check Date - 11/05/98

317720

Stub 1 of 1

INVOICE NUMBER	DATE	DESCRIPTION	GROSS	DEDUCTIONS	AMOUNT PAID
33896	10/22		4.26	.09	4.1

DETACH STATEMENT BEFORE DEPOSITIN

First Union National Bank
Chapel Hill, North Carolina

317720 66-156 / 531

CHECK NO. 00317720

Foss Maritime Company
9030 N.W. ST. HELENS RD., P.O. BOX 83018
PORTLAND, OR 97283-0018
TELEPHONE: (503) 286-0631 • FAX: (503) 286-1775

105401

DATE	AMOUNT
11/05/98	$**********4.17

VOID IF NOT CASHED IN 60 DAYS

Y

R AND 17/100 **********

THE ORDER OF:

GRINNELL CORPORATION
DEPT. LA #21225
PASADENA. CA 91185-1225

FOSS MARITIME COMPANY

BY _____ MP

NON NEGOTIABLE

BY _____ MP
AUTHORIZED SIGNATURES

⑈317720⑈ ⑆053101561⑆ 2079900001455⑈

CH

Grinnell CORPORATION

INVOICE	DATE	PAGE
54-0233896	10/22/98	1 OF

SHIP TO WILL CALL
3240 N.W. 29TH AV
PORTLAND,OR.
97210

SOLD TO FOSS MARITIME *CH
P.O. BOX 83018
PORTLAND, OR 97283

PLEASE ADDRESS ALL CORRESPONDENCE TO
GRINNELL CORPORATION 503 223-7101
3240 N.W. 29TH AV
PORTLAND,OR. 97210

PLEASE REMIT TO
GRINNELL CORPORATION
DEPT. LA # 21225
PASADENA, CA. 91185-1225

REC'D OCT 26 1998

IPPING ORDER NO.	JOB NAME	DATE ENTERED	CUSTOMER'S PURCHASE ORDER NUMBER	CUST. NO.	SOURCE CODE	SALES TAX EXEMPT	BRANCH CODE	S'MAN
0253		10/21/98	82182	41897		YES	154	98

SHIP DATE	SHIPPED FROM - VIA	PPD	PPD CHG.	COLL	SHIPPING OR B/L NUMBER	SHIP CODE	JOB NUMBER
10/21/98	W/C		X			12	

DER Q	QTY. ORDERED	QTY. SHIPPED	BACK ORDERED	ITEM NUMBER	ITEM DESCRIPTION	DISCOUNT	U/M	LIST PRICE	FACTOR	NET
					-50					
1	1.0	1.0		0310-00080-7	1/2	BLK MI 90 ELL	E	1.5700	.50000	.79
2	1.0	1.0		0312-50800-5	G463 1/2	150 BLK MI UNION	E	6.9400	.50000	3.47
					SUB-TOTAL:					4.26
					ORDER HAS BEEN COMPLETED.					

INVOICE CODING FORM

Voucher No 145302 Approved By:

Vendor No. 105401 Inv No. 54-0233896

Gross Amt 4.26 Inv Date 10 22 98 Co # G/L Date

PO/Ref # 82182 CK # Due Date Tax Amt

Taxable Amt Tax Code Tax Area

Center (Job)	Object (Cost Type)	Subsidiary (Cost Code)	Subledger/ JDE Workorder	Typ	Amount	Explanation 2
C98509			98509			
					BATCH NO	168843
					ENTERED 11-4-98	
					DATE	INITIALS
					POSTED 11/5/98	CH
					DATE	INITIALS

F4 (Fold Area) Alt Payee # Units
FM 1564 (3/97) 11-4

% 10th & 25th NET 45 UNLESS OTHERWISE SPECIFIED.
INTEREST WILL BE CHARGED ON ALL PAST DUE ACCOUNTS.

DISCOUNT OF $ 0.0852

IF PAID BY 11/25/98

TOTAL DUE ▶ 4.26

359751

OTWITHSTANDING ANY INCONSISTENT ADDITIONAL OR DIFFERENT TERMS CONTAINED IN UR PURCHASE ORDER OR OTHER DOCUMENTS SUPPLIED BY YOU. THIS SALE IS PRESSLY CONDITIONED UPON YOUR AGREEMENT TO THE TERMS AND CONDITIONS OVE AND ON THE REVERSE SIDE HEREOF.

A tyco INTERNATIONAL LTD. COMPANY

Confidential Business Information

Check No. - 317673
Check Date - 11/03/98

317673

s Maritime Company
N.W. ST. HELENS RD., P.O. BOX 83018
LAND, OR 97283-0018

Stub 1 of 1

INVOICE NUMBER	DATE	DESCRIPTION	GROSS	DEDUCTIONS	AMOUNT PAI
733759	10/21		49.24	.99	48.

DETACH STATEMENT BEFORE DEPOSITI

First Union National Bank
Chapel Hill, North Carolina

317673 66-156 / 531

CHECK NO. 00317673

Foss Maritime Company
9030 N.W. ST. HELENS RD., P.O. BOX 83018
PORTLAND, OR 97283-0018
TELEPHONE: (503) 286-0631 • FAX: (503) 286-1775

105401

DATE	AMOUNT
11/03/98	$********48.25

VOID IF NOT CASHED IN 60 DAYS

Y
TY EIGHT AND 25/100 **********

THE ORDER OF:

GRINNELL CORPORATION
DEPT. LA #21225
PASADENA, CA 91185-1225

FOSS MARITIME COMPANY

BY _____ MP

NON NEGOTIABLE

BY _____ MP
AUTHORIZED SIGNATURES

⑈317673⑈ ⑆053101561⑆ 2079900001455⑈

CH

Grinnell CORPORATION

INVOICE	DATE	PAGE
54-0233759	10/21/98	1 OF 1

SHIP TO WILL CALL
3240 N.W. 29TH AV
PORTLAND,OR.

97210

SOLD TO FOSS MARITIME *UB
ATTN: ACCOUNTS PAYABLE
P.O. BOX 83018

PORTLAND, OR 97213

PLEASE ADDRESS ALL CORRESPONDENCE TO
GRINNELL CORPORATION 503 223-7101
3240 N.W. 29TH AV
PORTLAND,OR. 97210

PLEASE REMIT TO
GRINNELL CORPORATION
DEPT. LA # 21225
PASADENA, CA. 91185-1225

REC'D OCT 23 1998

SHIPPING ORDER NO.	JOB NAME	DATE ENTERED	CUSTOMER'S PURCHASE ORDER NUMBER	CUST. NO.	SOURCE CODE	SALES TAX EXEMPT	BRANCH CODE	S'MAN
50114		10/20/98	82165	14551		YES	154	98

SHIP DATE	SHIPPED FROM - VIA	PPD	PPD CHG.	COLL	SHIPPING OR B/L NUMBER	SHIP CODE	JOB NUMBER
10/20/98	WAITING		X			12	

ORDER NO.	QTY ORDERED	QTY SHIPPED	BACK ORDERED	ITEM NUMBER	ITEM DESCRIPTION	DISCOUNT	U/M	LIST PRICE	FACTOR	NET
					-60					
1	1.0	1.0		0390-01354-8	GR-7401 4 PTD E GSKT RIDGLOK CPLG		E	49.7000	.40000	19.88
2	1.0	1.0		0390-01544-4	GR-7052 4 BLK GRVD 22-1/2 ELBOW		E	73.4000	.40000	29.36
					SUB-TOTAL:					49.24
					ORDER HAS BEEN COMPLETED.					

INVOICE CODING FORM

Voucher No 144092 Approved By:

Vendor No. 105401 Inv No 540233759

Gross Amt 4924 Inv Date 10 21 98 Co # G/L Date

PO/Ref # 82165 CK # Due Date Tax Amt

Taxable Amt Tax Code Tax Area

Center (Job)	Object (Cost Type)	Subsidiary (Cost Code)	Subledger/ JDE Workorder	Typ	Amount	Explanation 2
C98509	16387	1000	98509	W	06	Price diff

BATCH NO 167417
ENTERED 10 23 98 M
DATE INITIALS
POSTED 10/26/98 CH
DATE INITIALS

CC [illegible]
F4 (Fold Area) Alt Payee # Units UM Taxable (Y/N)
FM 1564 (3/97) 11-17

2% 10th & 25th NET 45 UNLESS OTHERWISE SPECIFIED.
INTEREST WILL BE CHARGED ON ALL PAST DUE ACCOUNTS.

DISCOUNT OF $ 0.9848

IF PAID BY 11/25/98

TOTAL DUE 49.24

359596

OTWITHSTANDING ANY INCONSISTENT ADDITIONAL OR DIFFERENT TERMS CONTAINED IN OUR PURCHASE ORDER OR OTHER DOCUMENTS SUPPLIED BY YOU, THIS SALE IS XPRESSLY CONDITIONED UPON YOUR AGREEMENT TO THE TERMS AND CONDITIONS BOVE AND ON THE REVERSE SIDE HEREOF.

A tyco INTERNATIONAL LTD. COMPANY

Confidential Business Information

00014022

Foss Maritime Company
P O R E C E I V E R

Page - 1
Date - 10/20/98
Receiver - 82165-OP
Vendor No.- 105401

Receipt Date - 10/20/98

SHIP GRINNELL CORPORATION
FROM DEPT. LA #21225
PASADENA CA 91185-1225

SHIP TO
FOSS MARITIME COMPANY
9030 N.W. ST. HELENS ROAD
PORTLAND OR 97231

Ordered - 10/20/98 Reference -
Requested - 10/20/98 Delivery -

Taken By - DWAYNE

Ordered By
RAFAEL CABALLERO

Account/Item Number	Description	Um	Ordered	Unit Cost	Extension	Tx	Line	OPEN	Rec'd
C98509.16387.1000 WO#: 00098509	GR-7401 4 PTD E GSK RIDGLOK Underground Tank Upgrade COUPLING	EA	1	19.8800	19.88	N	1.000	1	-----
C98509.16387.1000 WO#: 00098509	GR-7052 4 BLK GRVD 22-1/2 Underground Tank Upgrade ELBOW	EA	1	29.3000	29.30	N	2.000	1	-----
					49.18				