NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

August 15, 2005

Department of Taxation and Revenue
P.O. Box 630
Santa Fe, New Mexico 87504-0630

Attention: Oil & Gas Bureau

Re: Certification of a Positive Production Response
Beach Exploration, Inc.
West High Lonesome Unit Waterflood Project

Dear Secretary Goodwin:

Enclosed is a copy of a Division Certification that was issued on August 15, 2005. This document certifies that a positive production response has occurred within the West High Lonesome Unit Waterflood Project that is currently operated by Beach Exploration, Inc.. In addition, this positive production response has occurred within the five year time limit as described within the *"New Mexico Enhanced Oil Recovery Act"*. The Division has determined that fifteen (15) wells within the certified area producing from the High Lonesome (Queen) Pool are eligible for the recovered oil tax rate. These wells are shown on the Division Certification.

For your convenience, we have also enclosed a summary page showing all pertinent data. If additional information is required, please advise.

Sincerely,

Mark E. Fesmire, P.E.
Director

MEF/drc

Xc: EOR-58

POSITIVE PRODUCTION RESPONSE DATA
WEST HIGH LONESOME UNIT WATERFLOOD PROJECT

NAME OF PROJECT

West High Lonesome Unit Waterflood Project

OPERATOR

Beach Exploration, Inc.
800 N. Marienfeld
Suite 200
Midland, Texas 79701-3382

POOL

High Lonesome (Queen) Pool

OCD ORDER NO. APPROVING PROJECT & DATE

R-11674, October 19, 2001

PROJECT AREA

Township 16 South, Range 29 East, NMPM

Section 17:	S/2 NW/4, SW/4, W/2 SE/4
Section 18:	Lots 2 through 4, S/2 NE/4, SE/4, SE/4 NW/4, E/2 SW/4
Section 19:	E/2 NW/4, NE/4
Section 20:	W/2 NW/4, NE/4 NW/4, NW/4 NE/4

DATE WATER INJECTION COMMENCED

October, 2002

DATE CERTIFIED PROJECT TO TAXATION & REVENUE

June 9, 2004

DATE POSITIVE PRODUCTION RESPONSE OCCURRED

April 1, 2003

CURRENT NUMBER OF WELLS WITHIN PROJECT AREA

Injection—12
Production—15

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

August 15, 2005

Beach Exploration, Inc.
800 N. Marienfeld
Suite 200
Midland, Texas 79701-3382

Re: Certification of Positive Production Response
West High Lonesome Unit Waterflood Project

Dear Ms. LeMond:

Pursuant to your request dated October 1, 2004, please be advised that the Division hereby certifies that a positive production response occurred within the West High Lonesome Unit Waterflood Project on April 1, 2003.

The Division has further determined that fifteen (15) wells within the subject waterflood project, described below, are eligible for the recovered oil tax rate.

Beach Exploration, Inc. shall notify the Division:

(a) of the change in status of any of the producing wells shown on Exhibit "A";

(b) in the event new producing wells are drilled within the project area; and

(c) of changes in operations within the project area which may affect the certification and resulting tax rate granted herein.

Well Name & Number	API Number	WellLocation
WHLPSU No. 4	30-015-25527	Unit E, 17-16S-29E
WHLPSU No. 6	30-015-25788	Unit K, 17-16S-29E
WHLPSU No. 12	30-015-02752	Unit K, 17-16S-29E
WHLPSU No. 11	30-015-25528	Unit L, 17-16S-29E
WHLPSU No. 18	30-015-25580	Unit N, 17-16S-29E
WHLPSU No. 10	30-015-25468	Unit I, 18-16S-29E
WHLPSU No. 9	30-015-25572	Unit J, 18-16S-29E

Well Name & Number	**API Number**	**WellLocation**
WHLPSU No. 8	30-015-25646	Unit K, 18-16S-29E
WHLPSU No. 20	30-015-32259	Unit B, 19-16S-29E
WHLPSU No. 19	30-015-02758	Unit C, 19-16S-29E
WHLPSU No. 24	30-015-25462	Unit F, 19-16S-29E
WHLPSU No. 26	30-015-24131	Unit H, 19-16S-29E
WHLPSU No. 22	30-015-25364	Unit D, 20-16S-29E
WHLPSU No. 2	30-015-26035	Unit G, 18-16S-29E
WHLPSU No. 16	30-015-24345	Unit P, 18-16S-29E

The Division Director shall notify the Secretary of the New Mexico Taxation and Revenue Department of the certification granted herein.

Sincerely,

Mark E. Fesmire, P.E.
Director

Xc: File-EOR-58

Beach Exploration, Inc.

October 1, 2004

RECEIVED

OCT 0 4 2004

OIL CONSERVATION DIVISION

Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Attention: Mr. David Catanach

Re: Application
West High Lonesome Unit Waterflood Project
OCD Order No. R-11674
Certification Date – October 1, 2002

Gentlemen:

Beach Exploration, Inc., as operator of the West High Lonesome Unit Waterflood Project, received Certification of Enhanced Oil Recovery Project for Recovered Oil Tax Rate for the above reference West High Lonesome Unit by your letter dated June 9, 2004.

Accordingly, Beach Exploration, Inc. respectfully submits to you the enclosed Application for an order certifying a positive production response for the subject waterflood project.

Please let me know if you have any questions or require any additional information regarding the enclosed.

Thank you for your consideration.

Very truly yours,

Julie B. LeMond

/jbl
Enclosure

800 N. MARIENFELD ◦ SUITE 200 ◦ MIDLAND, TX 79701-3382 ◦ OFFICE (432) 683-6226 ◦ FAX (432) 683-1038

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

APPLICATION OF BEACH EXPLORATION, INC. FOR CERTIFICATION OF A POSITIVE PRODUCTION RESPONSE EDDY COUNTY, NEW MEXICO.

APPLICATION

Beach Exploration, Inc. applies for an order certifying a positive production response for a Waterflood project, and in support thereof, states:

1. Applicant is operator of the West High Lonesome Unit, which covers the following state and federal lands in Eddy County, New Mexico:

Township 16 South, Range 29 East, N.M.P.M.
Section 17: S/2 NW/4, SW/4, and W/2 SE/4
Section 18: Lots 2-4, S/2 NE/4, SE/4, SE/4 NW/4,and E/2 SW/4
Section 19: E/2 NW/4,and NE/4
Section 20: W/2 NW/4, NE/4 NW/4, and NW/4 NE/4

2. Applicant has instituted a waterflood project for the West High Lonesome Unit, which was certified as an Enhanced Oil Recovery project by the Division on October 1, 2002, 2004.

3. Applicant seeks certification of a positive production response for all wells in the West High Lonesome Unit. In support thereof, attached are the following:

(a) Exhibits A, B, and C: Copies of the Division Order Nos. R-11673, R-11674, and R-11674-A, approving the West High Lonesome Unit and the waterflood project for the unit.

(b) Exhibits D and E: A plat of the West High Lonesome Unit, showing all injection and producing wells in the unit, and a listing of all wells in the unit.

(c) Exhibits F and G: Production and injection data for wells in the West High Lonesome Unit, in both graphical and tabular form.

4. The entire unit area is benefiting from enhanced recovery operations, and all producing wells in the unit are eligible for certification for the credit.

5. Applicant requests that approval of the positive production response be effective as of April 1, 2003.

6. The granting of this application is in the interests of conservation and the prevention of waste.

WHEREFORE, applicant requests that the Division certify that a positive production response has occurred in the Waterflood Project for the West High Lonesome Unit.

Respectfully submitted,

Beach Exploration, Inc.

EXHIBIT A

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 12684
ORDER NO. R-11673

APPLICATION OF BEACH EXPLORATION INC. FOR STATUTORY UNITIZATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on July 12, 2001, at Santa Fe, New Mexico before Examiner David R. Catanach.

NOW, on this 19th day of October, 2001, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.

(2) Division Cases No. 12684 and 12685 were consolidated at the time of the hearing for the purpose of testimony.

(3) The applicant, Beach Exploration, Inc. ("Beach"), seeks: (i) the statutory unitization, pursuant to the Statutory Unitization Act, Sections 70-7-1 through 70-7-21, NMSA 1978, of 1156.60 acres, more or less, of state and federal lands, being a portion of the High Lonesome (Queen) Pool, Eddy County, New Mexico, and to be known as the West High Lonesome Unit, hereinafter sometimes referred to as the "Unit Area"; and (ii) approval of the Unit Agreement and the Unit Operating Agreement, which were submitted in evidence as applicant's Exhibits No. 2 and 3, respectively, in this case.

(4) Beach proposes to institute an enhanced oil recovery project for the secondary recovery of oil and gas from the Unitized Formation, hereinafter more specifically defined, within the Unit Area. This secondary recovery project is the subject of companion Case No. 12685.

(5) Mr. Bill Taylor and Mr. Harvey Taylor ("the Taylors"), working interest owners in the SE/4 NW/4 of Section 19, Township 16 South, Range 29 East, NMPM, being Tract No. 11 of the proposed West High Lonesome Unit, appeared at the hearing, cross examined Beach's witnesses and made a statement at the conclusion of the proceedings.

(6) The High Lonesome (Queen) Pool has been reasonably defined by development.

(7) The proposed West High Lonesome Unit consists of eight federal leases and one state lease, and comprises the following-described area in Eddy County, New Mexico:

Township 16 South, Range 29 East, NMPM

Section 17: S/2 NW/4, SW/4, W/2 SE/4
Section 18: Lots 2 through 4, S/2 NE/4, SE/4, SE/4 NW/4, E/2 SW/4
Section 19: E/2 NW/4, NE/4
Section 20: W/2 NW/4, NE/4 NW/4, NW/4 NE/4

(8) Beach proposed that the Unitized Formation comprise the Penrose Sand member of the Queen formation, as fully described within its West High Lonesome Unit Agreement as follows:

> ""Unitized Formation" shall mean that interval underlying the Unit Area, the vertical limits of which extend from an upper limit described as 1,570 feet (+2,017 feet) below mean sea level or as the top of the Penrose Sand member of the Queen Formation as found in Beach Exploration, Inc.'s (originally drilled by Rosewood Resources, Inc.) Rosewood "18" State # 1 well (located 1,650 feet FSL and 330 feet FWL of Section 18, T-16-S, R-29-E, Eddy County, New Mexico) as recorded on the Dresser Atlas Densilog/Neutron Gamma Ray Log recorded on March 12, 1987, said log being measured from a kelly drive bushing elevation of 3,587 feet above sea level. The lower limit shall be described as 1,810 feet (+1,839) below mean sea level or at the base of the Penrose Sand member of the Queen Formation as found in Beach Exploration, Inc.'s (originally drilled by Utah Unit Oil Company) Isle Federal # 3 well (located at 330 feet FNL and 2,310 feet FWL of Section 20, T-16-S, R-29-E, Eddy County, New Mexico) as recorded on the Schlumberger Gamma Ray – Neutron Log recorded on August 21, 1955, said log being measured from 1 foot above ground level elevation of 3,649 feet above sea level."

(9) There are 12 tracts within the West High Lonesome Unit that are owned by 32 working interest owners and 65 royalty and overriding royalty interest owners.

(10) As of the hearing date, 94% of the working interest owners and 96.5% of the royalty and overriding royalty interest owners within the Unit Area have voluntarily agreed to pool their interests by executing a ratification and joinder of the Unit Agreement and Unit Operating Agreement.

(11) Beach has made a reasonable effort to locate all interest owners within the Unit Area, but has been unable to locate certain working and overriding royalty interest owners.

(12) With the exception of the Taylors, no interest owner appeared at the hearing.

(13) The applicant presented evidence indicating that the individual tract participation and allocation of production within the proposed West High Lonesome Unit was determined by dividing the ultimate primary recovery for each tract by the ultimate primary recovery for all tracts within the Unit Area. The ultimate primary recovery for each tract within the Unit Area was determined by adding: i) the cumulative production for that tract as of April, 2000; ii) the remaining primary recovery for that tract; and iii) the proved undeveloped primary reserves for that tract.

(14) As of the hearing date, the Taylors have not agreed to voluntarily participate in the West High Lonesome Unit. According to statements made at the hearing, the Taylors do not oppose the proposed West High Lonesome Unit or the proposed secondary recovery operations that Beach plans to implement within the Unit Area. The Taylors do oppose, however, certain provisions contained within the Unit Agreement and the Unit Operating Agreement, including the proposed 200% penalty to be assessed against non-consenting working interest owners, and the proposed overhead rates for drilling and producing operations within the Unit Area.

(15) The provisions contained within the West High Lonesome Unit Agreement and the West High Lonesome Unit Operating Agreement stipulating a 200% non-consent penalty and allowing Beach to recover overhead rates of $3500.00 per month while drilling and $375.00 per month while producing are not unreasonable. In addition, these provisions have been agreed to by 94% of the working interest owners within the Unit Area.

(16) The unitized management, operation and further development of the Unitized Formation within the Unit Area is reasonably necessary in order to effectively carry on secondary recovery operations and should result in the recovery of an additional 558,000

barrels of secondary reserves that would otherwise not be recovered, thereby preventing waste.

(17) The statutory unitization of the Unitized Formation within the Unit Area in accordance with the plan embodied in the Unit Agreement and the Unit Operating Agreement will prevent waste and protect correlative rights, and the terms and conditions of the Unit Agreement and the Unit Operating Agreement, including, but not limited to, the participation formula contained in the Unit Agreement, are fair, reasonable, equitable and in accordance with the Statutory Unitization Act. All of the conditions necessary for the entry of an order, as provided in NMSA Sec 70-7-6, exist.

(18) The proposed unitized method of secondary recovery operations within the Unit Area is feasible and will result with reasonable probability in the recovery of substantially more oil and gas from the unitized portion of the pool than would otherwise be recovered without unitization.

(19) The estimated additional costs of such operations will not exceed the estimated value of the additional oil recovered plus a reasonable profit.

(20) Statutory unitization and adoption of applicant's proposed unitized method of operation will benefit the working interest and royalty interest owners within the proposed secondary recovery project area.

(21) Beach has obtained preliminary approval of the West High Lonesome Unit from both the Commissioner of Public Lands for the State of New Mexico and the United States Bureau of Land Management.

(22) The operator has made a good faith effort to secure voluntary unitization of the Unitized Formation within the Unit Area.

(23) The Unit Agreement and the Unit Operating Agreement, applicant's Exhibits No. 2 and 3 in this case, should be incorporated by reference into this order

(24) The West High Lonesome Unit Agreement and the West High Lonesome Unit Operating Agreement provide for unitization and unit operation upon terms and conditions that are fair, reasonable and equitable, and include:

(a) an allocation to the separately owned tracts in the unit area of all oil and gas that is produced from the unit area and that is saved, being the production that is not used in the conduct of unit operations or not unavoidably lost;

(b) a provision for the credits and charges to be made in the adjustment among the owners in the unit area for their respective investments in wells, tanks, pumps, machinery, materials and equipment contributed to the unit operations;

(c) a provision governing how the costs of unit operations including capital investments shall be determined and charged to the separately owned tracts and how such costs shall be paid, including a provision specifying when, how and by whom such costs shall be charged to the owners, or the interests of such owners, and how their interests may be sold and the proceeds applied to the payment of their costs;

(d) a provision for carrying any working interest owner on a limited, carried or net-profits basis, payable out of production, upon terms and conditions that are just and reasonable and that allow an appropriate charge for interest for such service payable out of production, upon terms and conditions determined by the Division to be just and reasonable;

(e) a provision designating a Unit Operator and providing for supervision and conduct of unit operations, including the selection, removal and substitution of an operator from among the working interest owners to conduct unit operations;

(f) a voting procedure for matters to be decided by the working interest owners under which each working interest owner shall have a voting interest equal to its participation; and

(g) a provision specifying the time when the unit operations shall commence and the manner in which, and the circumstances under which, the operations shall terminate and provision for the settlement of accounts upon such termination.

(25) The statutory unitization of the West High Lonesome Unit Area is in conformity with the above findings, will prevent waste and protect correlative rights of all interest owners within the proposed Unit Area, and should be approved.

IT IS THEREFORE ORDERED:

(1) The application of Beach Exploration, Inc. for the statutory unitization of

1156.60 acres, more or less, of state and federal lands, being a portion of the High Lonesome (Queen) Pool, Eddy County, New Mexico, to be known as the West High Lonesome Unit, is hereby approved pursuant to the Statutory Unitization Act, Sections 70-7-1 through 70-7-21, NMSA 1978.

(2) The West High Lonesome Unit shall comprise the following described 1156.60 acres, more or less, of state and federal lands in Eddy County, New Mexico:

Township 16 South, Range 29 East, NMPM

Section 17: S/2 NW/4, SW/4, W/2 SE/4
Section 18: Lots 2 through 4, S/2 NE/4, SE/4, SE/4 NW/4, E/2 SW/4
Section 19: E/2 NW/4, NE/4
Section 20: W/2 NW/4, NE/4 NW/4, NW/4 NE/4

(3) The Unitized Formation shall comprise the "Penrose" Sand member of the Queen formation, as fully described within the West High Lonesome Unit Agreement as follows:

> ""Unitized Formation" shall mean that interval underlying the Unit Area, the vertical limits of which extend from an upper limit described as 1,570 feet (+2,017 feet) below mean sea level or as the top of the Penrose Sand member of the Queen Formation as found in Beach Exploration, Inc.'s (originally drilled by Rosewood Resources, Inc.) Rosewood "18" State # 1 well (located 1,650 feet FSL and 330 feet FWL of Section 18, T-16-S, R-29-E, Eddy County, New Mexico) as recorded on the Dresser Atlas Densilog/Neutron Gamma Ray Log recorded on March 12, 1987, said log being measured from a kelly drive bushing elevation of 3,587 feet above sea level. The lower limit shall be described as 1,810 feet (+1,839) below mean sea level or at the base of the Penrose Sand member of the Queen Formation as found in Beach Exploration, Inc.'s (originally drilled by Utah Unit Oil Company) Isle Federal # 3 well (located at 330 feet FNL and 2,310 feet FWL of Section 20, T-16-S, R-29-E, Eddy County, New Mexico) as recorded on the Schlumberger Gamma Ray – Neutron Log recorded on August 21, 1955, said log being measured from 1 foot above ground level elevation of 3,649 feet above sea level."

(4) The West High Lonesome Unit Agreement and the West High Lonesome Unit Operating Agreement, which were submitted to the Division at the time of the hearing as Exhibits No. 2 and 3, respectively, are hereby incorporated by reference into this order.

(5) The applicant shall institute a water injection program for the secondary recovery of oil and gas, condensate and all liquefiable hydrocarbons within the Unit Area, such operations being the subject of companion Case No. 12685.

(6) Since the persons owning the required statutory minimum percentage of interest in the Unit Area have approved or ratified the Unit Agreement and the Unit Operating Agreement, the interests of all persons within the Unit Area are hereby unitized whether or not such persons have approved the Unit Agreement or the Unit Operating Agreement in writing.

(7) The applicant shall notify the Division Director in writing of any removal of the applicant as unit operator or substitution as unit operator of any other working interest owner within the Unit Area.

(8) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

DONE in Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Lori Wrotenbery

LORI WROTENBERY
Director

S E A L

EXHIBIT B

STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 12685
ORDER NO. R-11674

APPLICATION OF BEACH EXPLORATION, INC. FOR APPROVAL OF A WATERFLOOD PROJECT AND TO QUALIFY THE PROJECT FOR THE RECOVERED OIL TAX RATE PURSUANT TO THE ENHANCED OIL RECOVERY ACT, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on July 12, 2001, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 19th day of October, 2001, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.

(2) Division Cases No. 12684 and 12685 were consolidated at the time of the hearing for the purpose of testimony.

(3) The applicant, Beach Exploration, Inc. ("Beach"), seeks authority to institute a waterflood project within its West High Lonesome Unit Area (being the subject of companion Case No. 12684) by the injection of water into the Penrose Sand member of the Queen formation, High Lonesome (Queen) Pool, Eddy County, New Mexico, through 18 initial injection wells shown on Exhibit "A" attached to this order.

(4) The applicant further seeks to qualify the waterflood project as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (NMSA 1978 Sections 7-29A-1 through 7-29A-5).

(5) Mr. Bill Taylor and Mr. Harvey Taylor ("the Taylors"), working interest owners in the SE/4 NW/4 of Section 19, Township 16 South, Range 29 East, NMPM, being Tract No. 11 of the West High Lonesome Unit, appeared at the hearing, cross examined Beach's witnesses and made a statement at the conclusion of proceedings.

(6) The Taylors do not oppose the proposed secondary recovery project.

(7) The West High Lonesome Unit is proposed to comprise the following-described acreage in Eddy County, New Mexico:

Township 16 South, Range 29 East, NMPM

Section 17:	S/2 NW/4, SW/4, W/2 SE/4
Section 18:	Lots 2 through 4, S/2 NE/4, SE/4, SE/4 NW/4, E/2 SW/4
Section 19:	E/2 NW/4, NE/4
Section 20:	W/2 NW/4, NE/4 NW/4, NW/4 NE/4

(8) The evidence presented demonstrates that the wells in the project area are in an advanced state of depletion.

(9) During the Phase I portion of the project, the applicant proposes to utilize an 80-acre five-spot injection pattern with 13 injection wells and 14 producing wells.

(10) The applicant testified that the proposed secondary recovery project within the West High Lonesome Unit should result in the recovery of an additional 558,000 barrels of oil that would otherwise not be recovered, thereby preventing waste.

(11) Approval of the proposed waterflood project should result in the recovery of additional hydrocarbons from the Penrose Sand member of the Queen formation within the project area that may otherwise not be recovered, thereby preventing waste, and will not violate correlative rights.

(12) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(13) Injection into the wells shown on Exhibit "A" should be accomplished through 2 3/8 inch internally plastic-lined tubing installed in a packer located within 100 feet of the uppermost injection perforations or casing shoe. The casing-tubing annulus

should be filled with an inert fluid and a gauge or approved leak-detection device should be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

(14) Beach requested that it be authorized to inject into the wells shown on Exhibit "A" at a maximum surface injection pressure of 1100 psi.

(15) The Division normally approves a maximum surface injection pressure based upon a gradient of 0.2 psi per foot to the uppermost injection perforations. Utilizing this gradient, the proposed injection wells would normally be assigned maximum surface injection pressures ranging from 315 psi to 355 psi.

(16) Beach presented no step-rate test data or additional engineering evidence to demonstrate that its proposed maximum surface injection pressure will not cause fracturing of the injection formation or confining strata.

(17) The proposed injection wells or pressurization system should be initially equipped with a pressure control device or acceptable substitute that will limit the surface injection pressure to no more than 341 psi (based upon the average depth of injection for the wells shown on Exhibit "A").

(18) Prior to commencing injection operations, the casing in each well should be pressure tested throughout the interval from the surface down to the proposed packer setting depth to assure the integrity of such casing.

(19) The applicant identified two wells within the "area of review" that may not be adequately plugged so as to confine the injected fluid to the proposed injection interval.

(20) Prior to commencing injection operations into any injection well located within one-half mile of the following-described wells, the applicant should be required to re-enter and re-plug these wells in a manner that is satisfactory to the supervisor of the Division's Artesia District Office:

Well Name & Number	Well Location
George Atkins Iles No. 5	330' FSL & 1650' FEL, Unit O, Section 17, T-16S, R-29E
B. H. Nolan/George Atkins Iles No. 1	330' FSL & 330' FEL, Unit P, Section 17, T-16S, R-29E

(21) The operator should give advance notice to the supervisor of the Division's Artesia District Office of the date and time (i) injection equipment will be installed, (ii) the mechanical integrity pressure tests will be conducted on the proposed injection wells, and (iii) remedial plugging work will be conducted on the Iles Wells No. 1 and 5, so that these operations may be witnessed.

(22) The operator should immediately notify the supervisor of the Division's Artesia District Office of the failure of the tubing, casing or packer in any of the injection wells or the leakage of water, oil or gas from or around any producing or plugged and abandoned well within the project area, and should promptly take all steps necessary to correct such failure or leakage.

(23) The proposed waterflood project should be approved, and the project should be governed by Division Rules No. 701 through 708.

(24) The injection authority granted herein for each well shown on Exhibit "A" should terminate one year after the date of this order if the operator has not commenced injection operations into the well; however, the Division, upon written request by the operator, may grant an extension for good cause.

(25) The evidence presented demonstrates that:

(a) the application for approval of the proposed secondary recovery project has not been prematurely filed either for economic or technical reasons;

(b) the area affected by the proposed project has been so depleted by primary operations that it is prudent to apply secondary recovery techniques to maximize the ultimate recovery of crude oil from the pool; and

(c) the proposed secondary recovery project meets all the criteria for certification by the Division as a qualified "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (NMSA 1978 Sections 7-29A-1 through 7-29A-5).

(26) The approved project area should initially comprise the entire West High Lonesome Unit, as described in Finding No. (7); however, the "project area" and/or the

producing wells eligible for the enhanced oil recovery (EOR) tax rate may be contracted and reduced based upon the evidence presented by the applicant in its demonstration of a positive production response.

(27) To be eligible for the EOR tax rate, the operator should advise the Division of the date water injection commences within the secondary recovery project. At that time, the Division will certify the project to the New Mexico Taxation and Revenue Department.

(28) At such time as a positive production response occurs, and within five years from the date the project was certified to the New Mexico Taxation and Revenue Department, the applicant must apply to the Division for certification of a positive production response. This application shall identify the area benefiting from enhanced oil recovery operations and the specific wells eligible for the EOR tax rate. The Division may review the application administratively or set it for hearing. Based upon the evidence presented, the Division will certify to the New Mexico Taxation and Revenue Department those wells that are eligible for the EOR tax rate.

IT IS THEREFORE ORDERED THAT:

(1) Beach Exploration, Inc., is hereby authorized to institute a waterflood project within its West High Lonesome Unit Area, described below, by the injection of water into the Penrose Sand member of the Queen formation, High Lonesome (Queen) Pool, Eddy County, New Mexico, in the 18 wells shown on Exhibit "A" attached to this order located in Sections 17, 18, 19 and 20, Township 16 South, Range 29 East, NMPM:

Township 16 South, Range 29 East, NMPM

Section 17:	S/2 NW/4, SW/4, W/2 SE/4
Section 18:	Lots 2 through 4, S/2 NE/4, SE/4, SE/4 NW/4, E/2 SW/4
Section 19:	E/2 NW/4, NE/4
Section 20:	W/2 NW/4, NE/4 NW/4, NW/4 NE/4

(2) The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(3) Injection into each of the wells shown on Exhibit "A" shall be accomplished through 2 3/8 inch internally plastic-lined tubing installed in a packer located within 100 feet of the uppermost injection perforations or casing shoe. The

casing-tubing annulus shall be filled with an inert fluid and a gauge or approved leak-detection device shall be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

(4) The injection wells or pressurization system shall be equipped with a pressure control device or acceptable substitute that will limit the surface injection pressure to no more than 341 psi.

(5) The Division Director may administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in the fracturing of the injection formation or confining strata.

(6) Prior to commencing injection operations, the casing in each well shall be pressure tested throughout the interval from the surface down to the proposed packer setting depth to assure the integrity of such casing.

(7) Prior to commencing injection operations into any injection well located within one-half mile of the following-described wells, the applicant shall re-enter and re-plug these wells in a manner that is satisfactory to the supervisor of the Division's Artesia District Office:

Well Name & Number	Well Location
George Atkins Iles No. 5	330' FSL & 1650' FEL, Unit O, Section 17, T-16S, R-29E
B. H. Nolan/George Atkins Iles No. 1	330' FSL & 330' FEL, Unit P, Section 17, T-16S, R-29E

(8) The operator shall give advance notice to the supervisor of the Division's Artesia District Office of the date and time (i) injection equipment will be installed, (ii) the mechanical integrity pressure test will be conducted on the proposed injection wells, and (iii) remedial plugging work will be conducted on the Iles Wells No. 1 and 5, so that these operations may be witnessed.

(9) The operator shall immediately notify the supervisor of the Division's Artesia District Office of the failure of the tubing, casing or packer in any of the injection wells or the leakage of water, oil or gas from or around any producing or plugged and abandoned well within the project area, and shall promptly take all steps necessary to correct such failure or leakage.

(10) The waterflood project is hereby designated the West High Lonesome Unit Waterflood Project, and the applicant shall conduct injection operations in

accordance with Division Rules No. 701 through 708, and shall submit monthly progress reports in accordance with Division Rules No. 706 and 1115.

(11) The injection authority granted herein for each well shown on Exhibit "A" shall terminate one year after the date of this order if the operator has not commenced injection operations into the well; provided, however, the Division, upon written request by the operator, may grant an extension for good cause.

(12) The West High Lonesome Unit Waterflood Project is hereby certified as an "Enhanced Oil Recovery Project." The project area shall initially comprise the entire West High Lonesome Unit, described in Ordering Paragraph No. (1), provided however, the project area and/or the producing wells eligible for the enhanced oil recovery (EOR) tax rate may be contracted and reduced based upon the evidence presented by the applicant in its demonstration of a positive production response.

(13) To be eligible for the EOR tax rate, the operator shall advise the Division of the date and time water injection commences within the secondary recovery project. At that time, the Division will certify the project to the New Mexico Taxation and Revenue Department.

(14) At such time as a positive production response occurs, and within five years from the date the project was certified to the New Mexico Taxation and Revenue Department, the applicant must apply to the Division for certification of a positive production response. This application shall identify the area benefiting from enhanced oil recovery operations and the specific wells eligible for the EOR tax rate. The Division may review the application administratively or set it for hearing. Based upon the evidence presented, the Division will certify to the New Mexico Taxation and Revenue Department those wells that are eligible for the EOR tax rate.

(15) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Lori Wrotenbery

LORI WROTENBERY
Director

SEAL

Exhibit "A"
Division Order No. R-11674
West High Lonesome Unit Waterflood Project
Approved Injection Wells

Well Name & Number	API Number	Well Location	Injection Interval	Packer Depth
Exxon Federal "A" No. 1	30-015-25983	2310' FNL & 330' FEL, Unit H, Section 18, T-16S, R-29E	1,714'-1,728'	1,664'
Exxon Federal "A" No. 2	30-015-26035	2310' FNL & 1650' FEL, Unit G, Section 18, T-16S, R-29E	1,702'-1,722'	1,652'
Exxon Federal "A" No. 3	30-015-26123	2410' FNL & 1932' FWL, Unit F, Section 18, T-16S, R-29E	1,645'-1,655'	1,595'
Exxon Federal No. 1	30-015-24345	660' FSL & 660' FEL, Unit P, Section 18, T-16S, R-29E	1,722'-1,756'	1,672'
Exxon Federal No. 2	30-015-25375	330' FSL & 1650' FEL, Unit O, Section 18, T-16S, R-29E	1,713'-1,750'	1,663'
Exxon Federal No. 6	30-015-25672	560' FSL & 2035' FWL, Unit N, Section 18, T-16S, R-29E	1,708'-1,727'	1,658'
Rosewood State "18" No. 1	30-015-25733	1650' FSL & 330' FWL, Unit L, Section 18, T-16S, R-29E	1,576'-1,596'	1,526'
Shiloh Federal No. 3	30-015-25527	2310' FNL & 988' FWL, Unit E, Section 17, T-16S, R-29E	1,730'-1,758'	1,680'
Shiloh Federal No. 4	30-015-25606	2210' FNL & 1650' FWL, Unit F, Section 17, T-16S, R-29E	1,752'-1,764'	1,702'
Iles Federal No. 2	30-015-02752	1650' FSL & 2310' FWL, Unit K, Section 17, T-16S, R-29E	1,700'-1,812'	1,650'
Iles Federal No. 3	30-015-02759	330' FNL & 2310' FWL, Unit C, Section 20, T-16S, R-29E	1,590'-1,820'	1,580'
Iles Federal No. 4	30-015-01438	1650' FSL & 2310' FEL, Unit J, Section 17, T-16S, R-29E	1,740'-1,800'	1,717'
Iles Federal No. 8	30-015-25788	2310' FSL & 1950' FWL, Unit K, Section 17, T-16S, R-29E	1,740'-1,764'	1,690'
Renee Federal No. 1	30-015-25363	660' FSL & 330' FWL, Unit M, Section 17, T-16S, R-29E	1,729'-1,750'	1,679'
Renee Federal No. 3	30-015-25495	1650' FNL & 330' FWL, Unit E, Section 20, T-16S, R-29E	1,774'-1,793'	1,724'
Federal "19" No. 1	30-015-25392	660' FNL & 660' FEL, Unit A, Section 19, T-16S, R-29E	1,746'-1,772'	1,696'
Big Mac Federal No. 1	30-015-02758	660' FNL & 3300' FEL, Unit C, Section 19, T-16S, R-29E	1,683'-1,699'	1,633'
Coastal Federal No. 1	30-015-25304	1980' FNL & 1980' FEL, Unit G, Section 19, T-16S, R-29E	1,747'-1,797'	1,697'

EXHIBIT C

STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 13127
ORDER NO. R-11674-A

APPLICATION OF BEACH EXPLORATION, INC. TO INCREASE THE MAXIMUM SURFACE INJECTION PRESSURE WITHIN THE WEST HIGH LONESOME (PENROSE SAND) UNIT WATERFLOOD PROJECT, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on August 7, 2003, at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 24th day of November, 2003, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and the subject matter.

(2) By Order No. R-11673 issued in Case No. 12684 on October 19, 2001, the Division, upon application of Beach Exploration, Inc., approved statutory unitization of portions of the High Lonesome-Queen Pool, Eddy County, New Mexico, called the West High Lonesome Unit. The Unitized Formation within this Unit is comprised of the "Penrose" sand member of the Queen formation extending from approximately 1,576 feet subsurface to approximately 1,820 feet subsurface.

(3) By Order No. R-11674 issued in Case No. 12685 on October 19, 2001, the Division, upon application of Beach Exploration, Inc., authorized the institution of a waterflood project within the West High Lonesome Unit Area located in portions of Township 16 South, Range 29 East, NMPM, High Lonesome-Queen Pool, Eddy County, New Mexico, by the injection of water into the Penrose member of the Queen formation through eighteen injection wells located in Sections 16, 18, 19 and 20.

(4) Order No. R-11674 required two wells previously plugged to be re-entered and re-plugged in a manner satisfactory to the supervisor of the Division's Artesia District Office. These wells had been plugged in the 1940's and 1950's, with 10-sack cement plugs after the casing had been recovered.

(5) As required prior to injection, these two wells were re-entered and re-plugged under supervision of the Artesia District Office in June of 2002, to protect ground water and prevent migration of injection water out of zone.

(6) Order No. R-11674 also limited the surface injection pressure on all injection wells to no more than 341 psi, which equates to a gradient of 0.20 psi per foot of depth to the average uppermost injection perforation.

(7) Beach Exploration, Inc. applied administratively (Reference No. pkrv0306434432) on March 4, 2003, to increase allowable injection pressures on injection wells within their West High Lonesome (Penrose Sand) Unit waterflood project. The application was set for hearing by the Division in order for the applicant to provide testimony pertinent to its application.

(8) In this case, the applicant, Beach Exploration, Inc., seeks an order increasing the allowable surface injection pressure on each of the eighteen existing injection wells within the West High Lonesome (Penrose Sand) Unit waterflood project to 1,100 psi.

(9) The applicant presented the following engineering testimony.

(a) To limit injection pressure, appropriate pump bypasses must be in place and working properly. For short periods of time, this equipment was not working properly and surface injection pressure increased, at which time the waterflood began to respond. Conversely, when injection pressures were again limited, the waterflood production dropped off.

(b) Due to the reservoir being tighter than expected, each injection well is only able to inject approximately 35 barrels per day at the currently allowed 341 psi surface injection pressure.

(c) Within this waterflood, initial in-situ free gas volume is calculated at 1.6 million barrels. An injection rate of at least 200 barrels per day per injection well for 21 months is required to fill up this pore volume, to reach peak waterflood response, and to achieve acceptable economics.

(d) The six step rate tests run in April and July of 2003 on this waterflood project, show fracture pressures ranging from 830 to 1,220 psi. The average surface fracture pressure is 978 psi, which reflects an average surface gradient of 0.57 psi per foot and an average bottom hole gradient of 1.01 psi per foot (friction being negligible at these low rates). Similarly, on the offsetting Red Lake Unit (also Penrose sand), the average surface fracture pressure measured in 1991 was 935 psi.

(e) These fracture pressures roughly equate to the pressure resulting from a gradient of overburden rocks (red beds, anhydrites, and salt). This relationship implies that vertical and horizontal stresses are approximately equal and that some wells will fracture horizontally and some will fracture vertically.

(f) The injection formation is bounded top and bottom by thick, dense, anhydritic dolomites and shales. These rocks are normally "higher stress" than the reservoir rock and therefore provide resistance to vertical fracture migration.

(g) In 1992, using rock mechanic properties obtained by running a "full wave sonic" log, Halliburton created a processed (interpreted) "frac-height" log, which indicated that at 200 psi over fracture pressure (in wells which fracture vertically), the injection water will fracture up approximately 35 feet and down approximately 135 feet.

(h) Injection profile logs were run in 1992 on four Penrose wells in the Red Lake Unit while injecting at 1,500 psi. Within the depths of investigation, no migration was seen more than six feet beyond the perforated interval.

(i) Fracturing either vertically or horizontally is not desirable. Fracturing horizontally will bypass oil and defeat the purpose of the waterflood. Therefore, careful consideration is being given to limiting injection pressures to measured fracture pressure in those wells tending to fracture horizontally. On wells tending to fracture vertically, fracturing up out of zone would lose water and become very expensive. Vertical fracturing is less sensitive to occasional over-pressuring than horizontal fracturing.

(j) The Penrose is a central member of the Queen formation. There are no productive intervals in the Queen either above or below the Penrose. Also, the Seven Rivers and Yates, which are above the Queen, are not productive in this area.

(k) There is a very small and intermittent amount of fresh ground water in this area normally about 75 feet deep. The waterflood is dependent on purchased fresh water until fill-up of the reservoir.

(l) There have been 363,000 barrels of water injected and only 32,000 barrels of fluid withdrawn from the waterflood. This injected water is filling up the pore volume and is not leaving the injected interval.

(m) Surface pipe is normally set at or above the top of the salt, which in this area is at approximately 340 feet. The main challenge in drilling wells in this area is cementing the surface pipe. Up to ten attempts were made on one well using different cements before an adequate cement job was obtained.

(10) The salt section in this area from approximate depths of 340 feet to 700 feet has at least one recorded instance of being charged up with high-pressure salt water. The Brainard Federal Well No. 1 (API 30-015-02761) located in Unit O, Section 20, less than one mile southeast of the West High Lonesome Unit boundary, encountered high flow rates from the surface casing shoe depth while attempting to spot a cement plug during plugging operations. Flow rates were reported at 500 to 800 barrels of salt water per hour from the salt section.

(11) The source of these salt section water problems has not been determined and further investigation should be done. As required while applying for waterflood status in Case 12685, the applicant has completed a comprehensive search for inadequately cemented wells within the area of review of all injection wells and, as a consequence, has re-entered and re-plugged two wells.

(12) By Order No. R-9453-A issued in Case No. 10495 on July 13, 1992, the Division, upon application of Beach Exploration, Inc., authorized an injection pressure increase to a maximum of 1,500 psi for all wells in the Red Lake Unit located in portions of Township 16 South, Ranges 28 and 29 East, NMPM, Eddy County, New Mexico. The Red Lake Unit is an analogous waterflood to the West High Lonesome (Penrose Sand) Unit and contains injection wells in the same formation and at similar depths.

(13) The applicant, through its engineering evidence and testimony, has satisfactorily demonstrated that injection at a higher surface injection pressure is necessary in order to efficiently and effectively waterflood the West High Lonesome (Penrose Sand) Unit and will allow the applicant to recover additional oil reserves, thereby preventing waste.

(14) The applicant has further satisfactorily demonstrated that injection into the injection wells at a surface injection pressure of 1,100 psi will not result in the migration of fluid from the Queen formation and will not pose a threat to underground sources of drinking water in this area.

IT IS THEREFORE ORDERED THAT:

(1) Division Order No. R-11674 is hereby amended to authorize Beach Exploration, Inc. to inject water into eighteen previously approved injection wells (as more fully described on Exhibit "A" of Order No. R-11674) located within the West High Lonesome (Penrose Sand) Unit waterflood project in Sections 16, 18, 19 and 20, Township 16 South, Range 29 East, NMPM, High Lonesome-Queen Pool, Eddy County, New Mexico, at a maximum surface injection pressure of 1,100 psi.

(2) The Division Director shall have the authority to reduce or rescind the surface injection pressure approved herein should it become apparent that the injected fluid is not being adequately confined to the High Lonesome-Queen Pool.

(3) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Lori Wrotenbery

LORI WROTENBERY
Director

SEAL

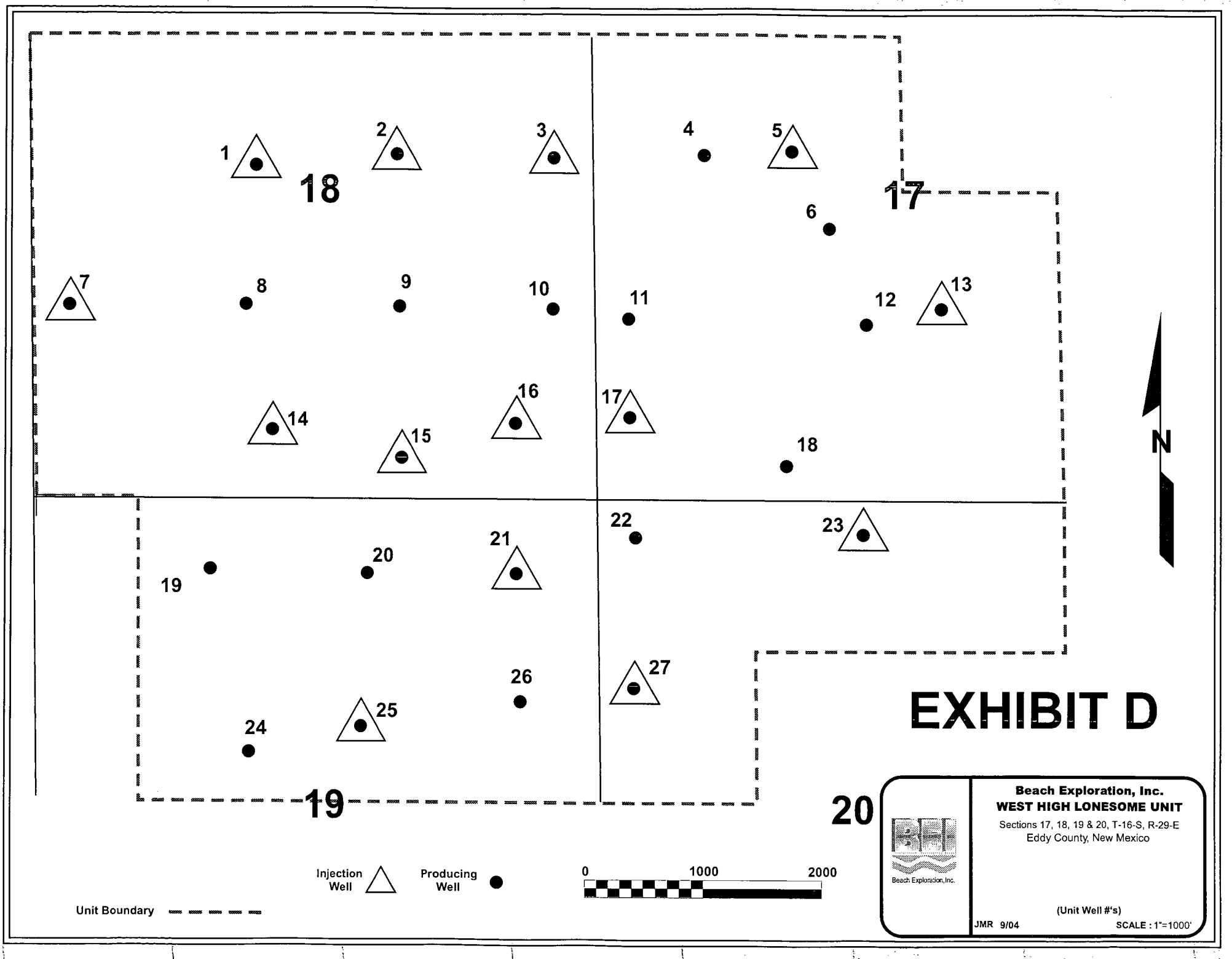

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
18
17
19
20
N
Injection Well
Producing Well
Unit Boundary
0
1000
2000
Beach Exploration, Inc.
WEST HIGH LONESOME UNIT
Sections 17, 18, 19 & 20, T-16-S, R-29-E
Eddy County, New Mexico
(Unit Well #'s)
JMR 9/04
SCALE : 1"=1000'

EXHIBIT D

EXHIBIT E

Beach Exploration, Inc.

West High Lonesome Penrose Sand Unit

High Lonesome Queen Field

Eddy County, New Mexico

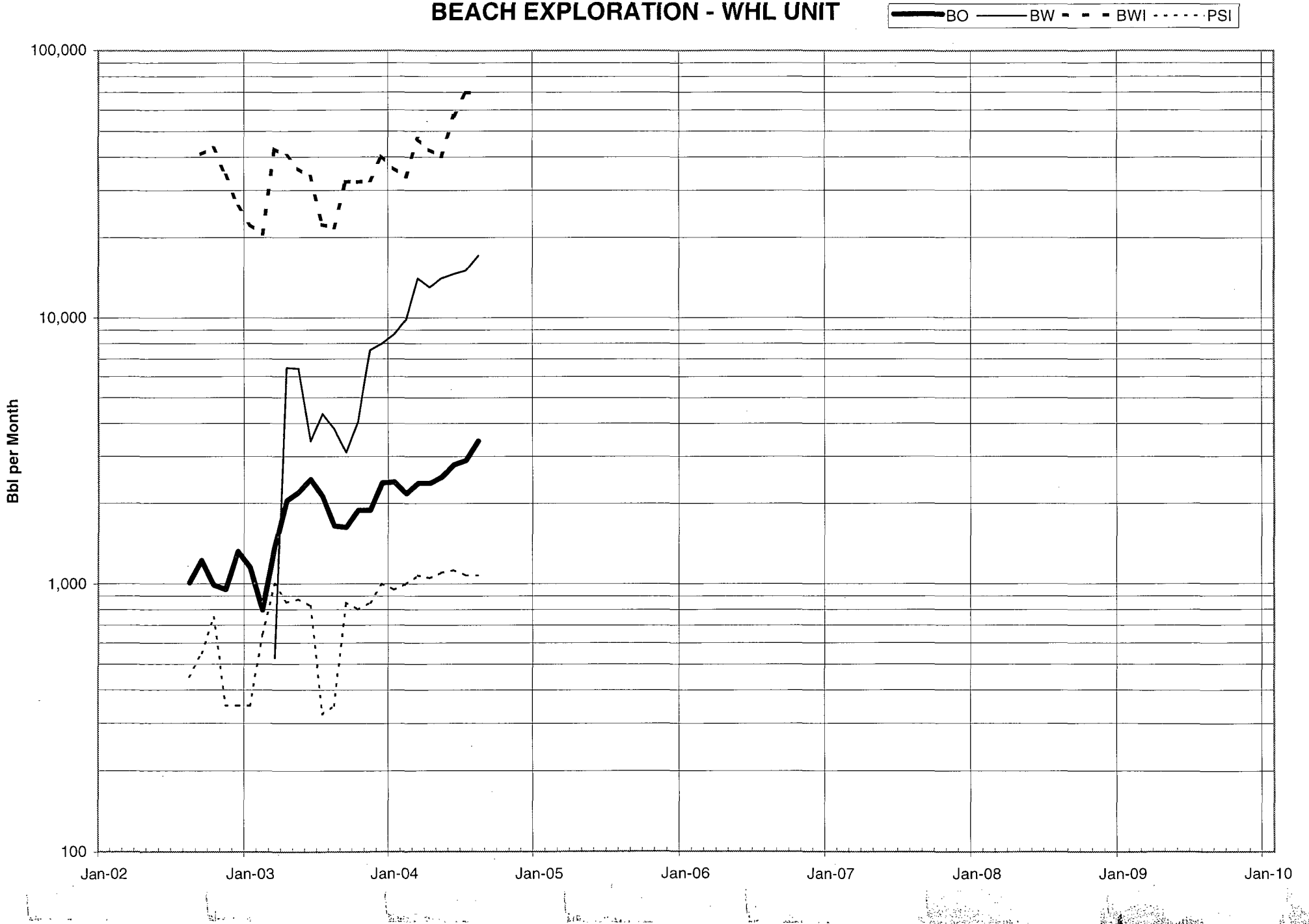
Unit Well Number Designation / Original Well Name and Number

UNIT DESIGNATION	ORIGINAL NAME	FOOTAGE	SEC-UNIT	TWP	RNG
WHLPSU # 1	Exxon A Federal #3	2,410 FNL 1,932 FWL	18-F	16S	29E
WHLPSU # 2	Exxon A Federal #2	2,310 FNL 1,650 FEL	18-G	16S	29E
WHLPSU # 3	Exxon A Federal #1	2,310 FNL 330 FEL	18-H	16S	29E
WHLPSU # 4	Shiloh Federal #3	2,310 FNL 988 FWL	17-E	16S	29E
WHLPSU # 5	Shiloh Federal #4	2,210 FNL 1,650 FWL	17-F	16S	29E
WHLPSU # 6	Iles Federal #8	2,310 FSL 1,950 FWL	17-K	16S	29E
WHLPSU # 7	Rosewood 18 State #1	1,650 FSL 330 FWL	18-L	16S	29E
WHLPSU # 8	Exxon Federal #5	1,650 FSL 1,835 FWL	18-K	16S	29E
WHLPSU # 9	Exxon Federal #4	1,650 FSL 1,650 FEL	18-J	16S	29E
WHLPSU #10	Exxon Federal #3	1,650 FSL 330 FEL	18-I	16S	29E
WHLPSU #11	Renee Federal #4	1,650 FSL 330 FWL	17-L	16S	29E
WHLPSU #12	Iles Federal #2	1,650 FSL 2,310 FWL	17-K	16S	29E
WHLPSU #13	Iles Federal #4	1,650 FSL 2,310 FEL	17-J	16S	29E
WHLPSU #14	Exxon Federal #6	560 FSL 2,035 FWL	18-N	16S	29E
WHLPSU #15	Exxon Federal #2	330 FSL 1,650 FEL	18-O	16S	29E
WHLPSU #16	Exxon Federal #1	660 FSL 660 FEL	18-P	16S	29E
WHLPSU #17	Renee Federal #1	660 FSL 330 FWL	17-M	16S	29E
WHLPSU #18	Iles Federal #7	330 FSL 1,650 FWL	17-N	16S	29E
WHLPSU #19	Big Mac Federal #1	660 FNL 3,300 FEL	19-C	16S	29E
WHLPSU #20	WHLPSU #20	660 FNL 1,980 FEL	19-B	16S	29E
WHLPSU #21	Brainard 19 Federal #1	660 FNL 660 FEL	19-A	16S	29E
WHLPSU #22	Renee Federal #2	330 FNL 330 FWL	20-D	16S	29E
WHLPSU #23	Iles Federal #3	330 FNL 2,310 FWL	20-C	16S	29E
WHLPSU #24	M & W Federal #1	2,210 FNL 1,833 FWL	19-F	16S	29E
WHLPSU #25	Coastal Federal #1	1,980 FNL 1,980 FEL	19-G	16S	29E
WHLPSU #26	Ryan Federal #2	1,780 FNL 660 FEL	19-H	16S	29E
WHLPSU #27	Renee Federal #3	1,650 FNL 330 FWL	20-E	16S	29E

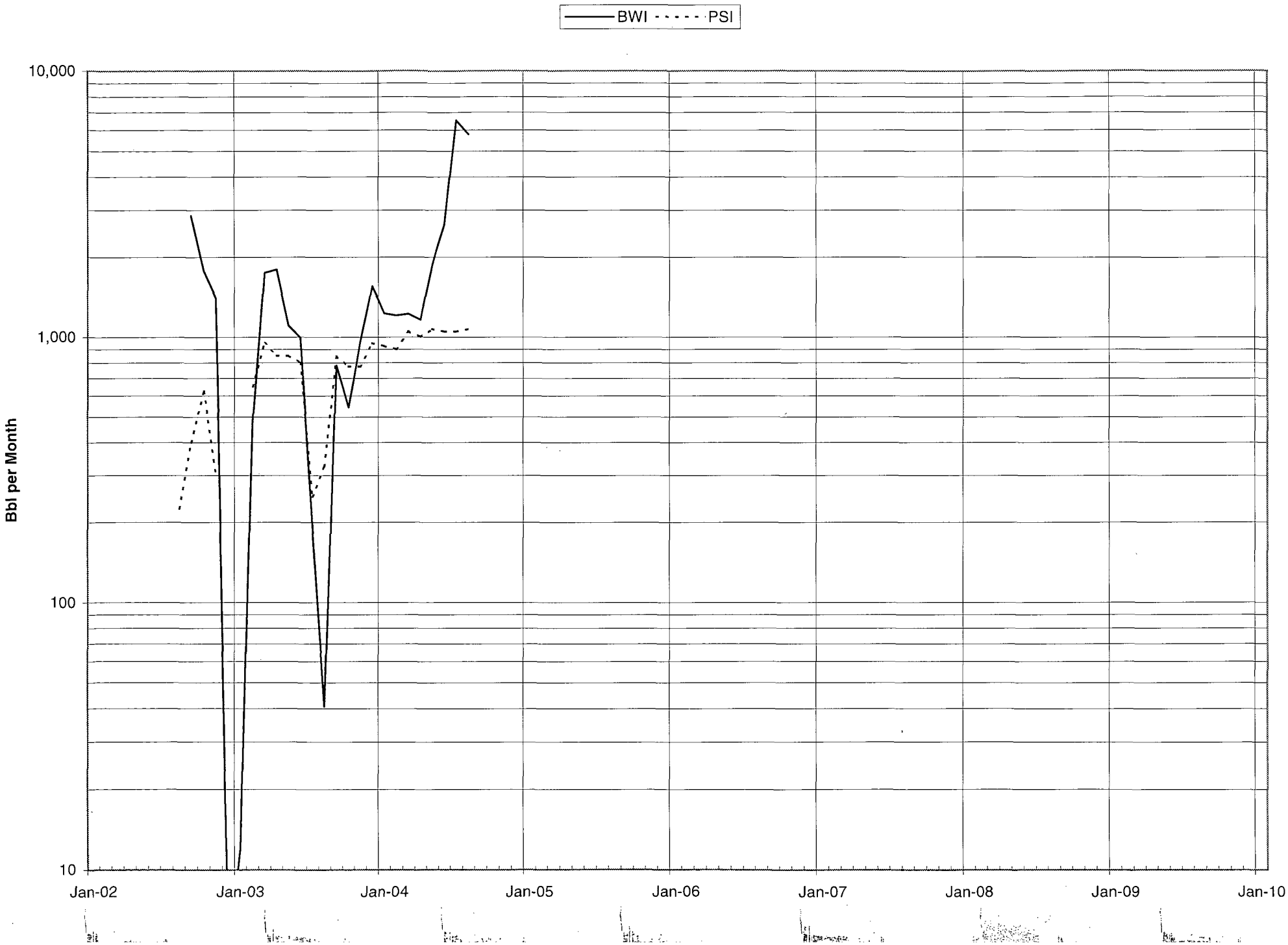
EXHIBIT F

(1 of 30 graphs)

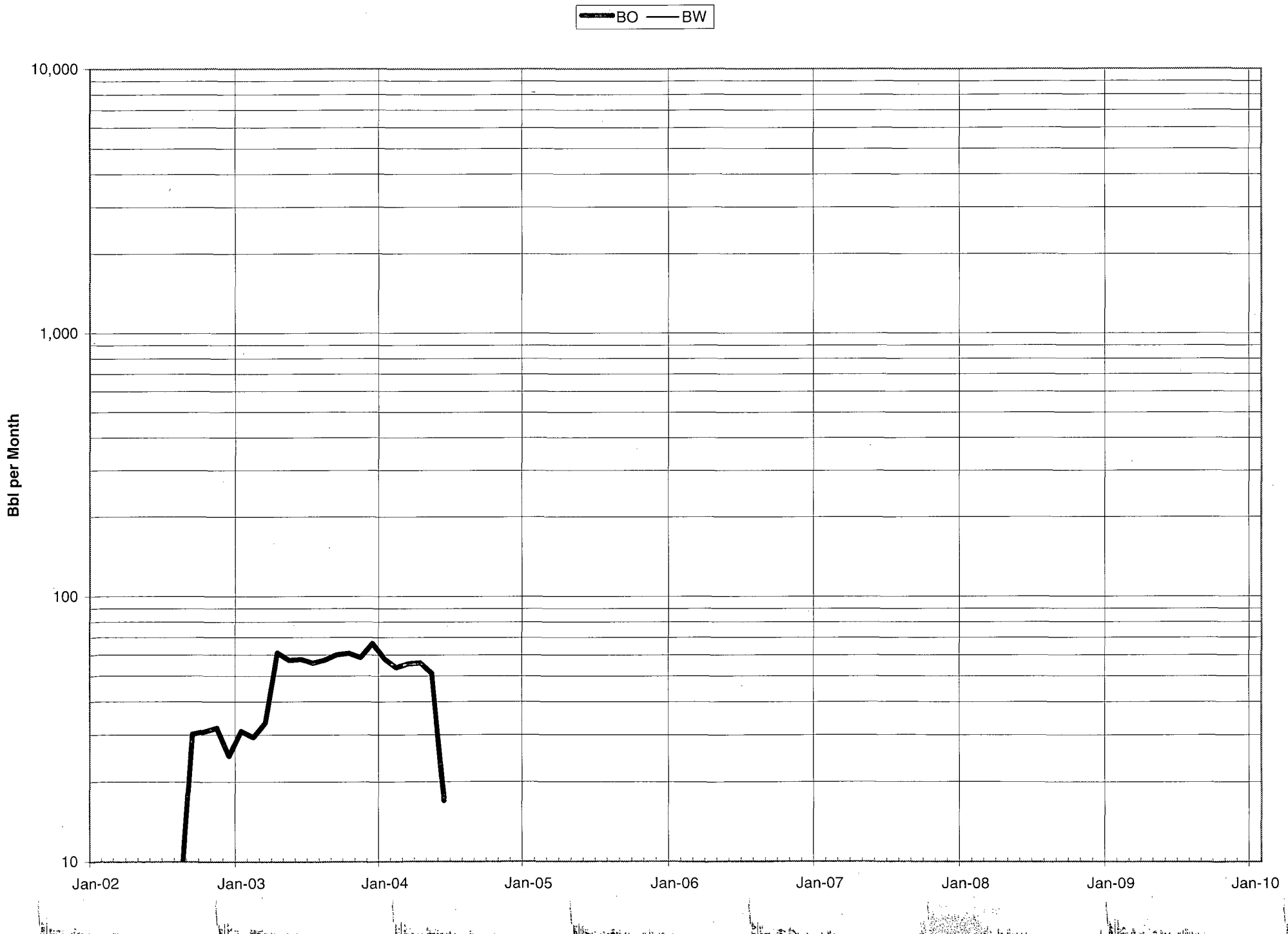
BEACH EXPLORATION - WHL UNIT



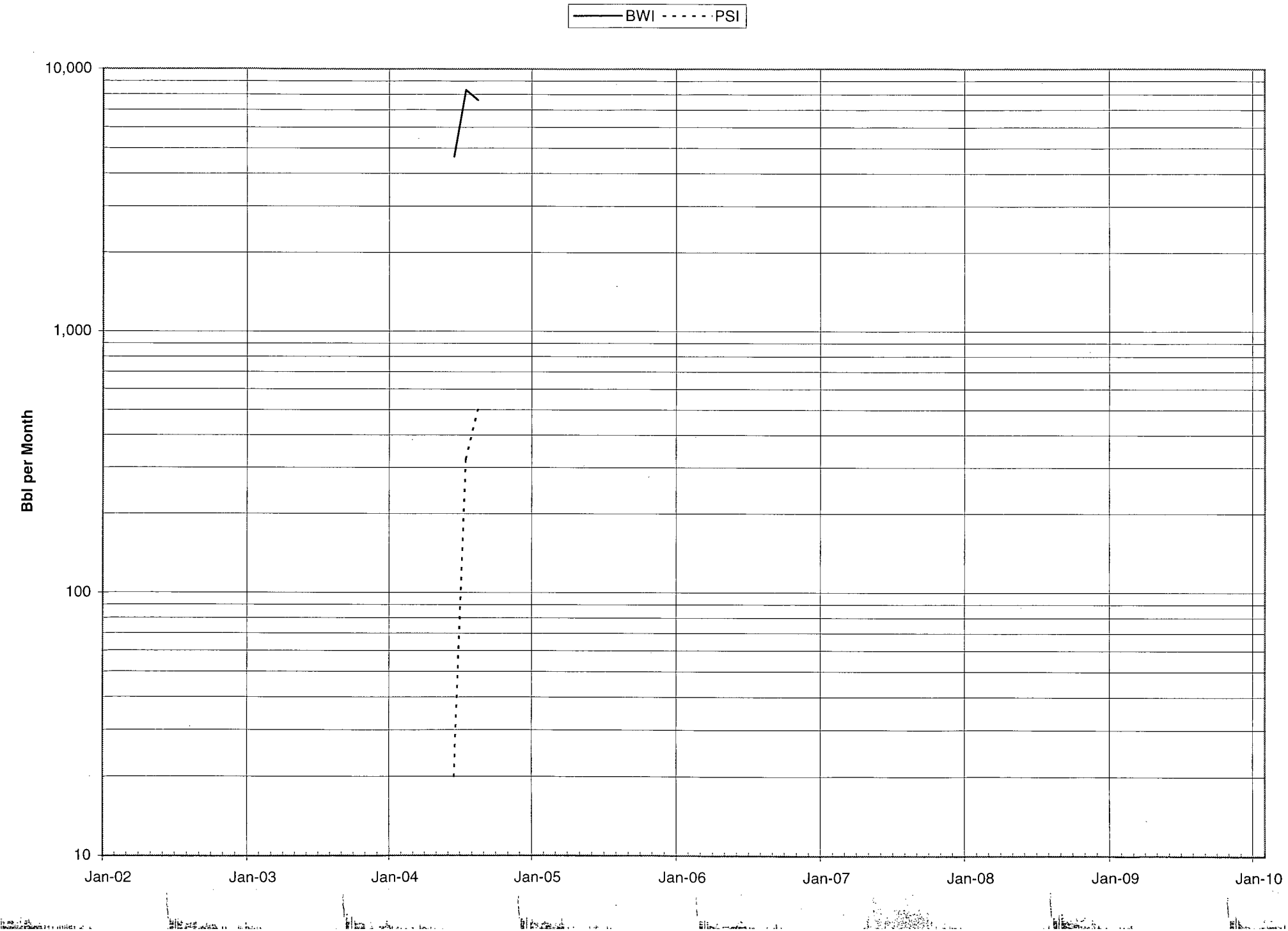
WHL #1


BWI
PSI
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

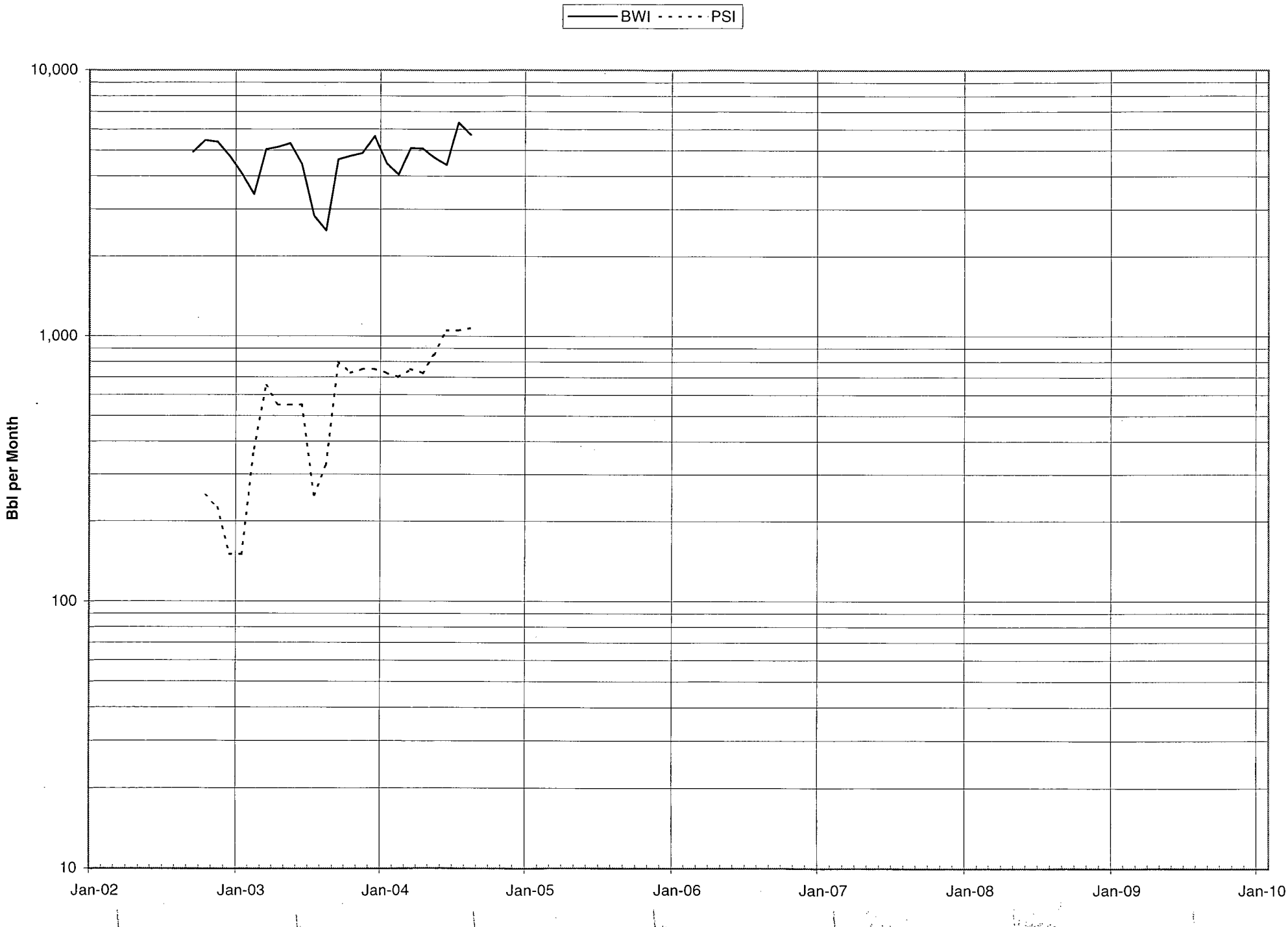
WHL #2


BO
BW
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

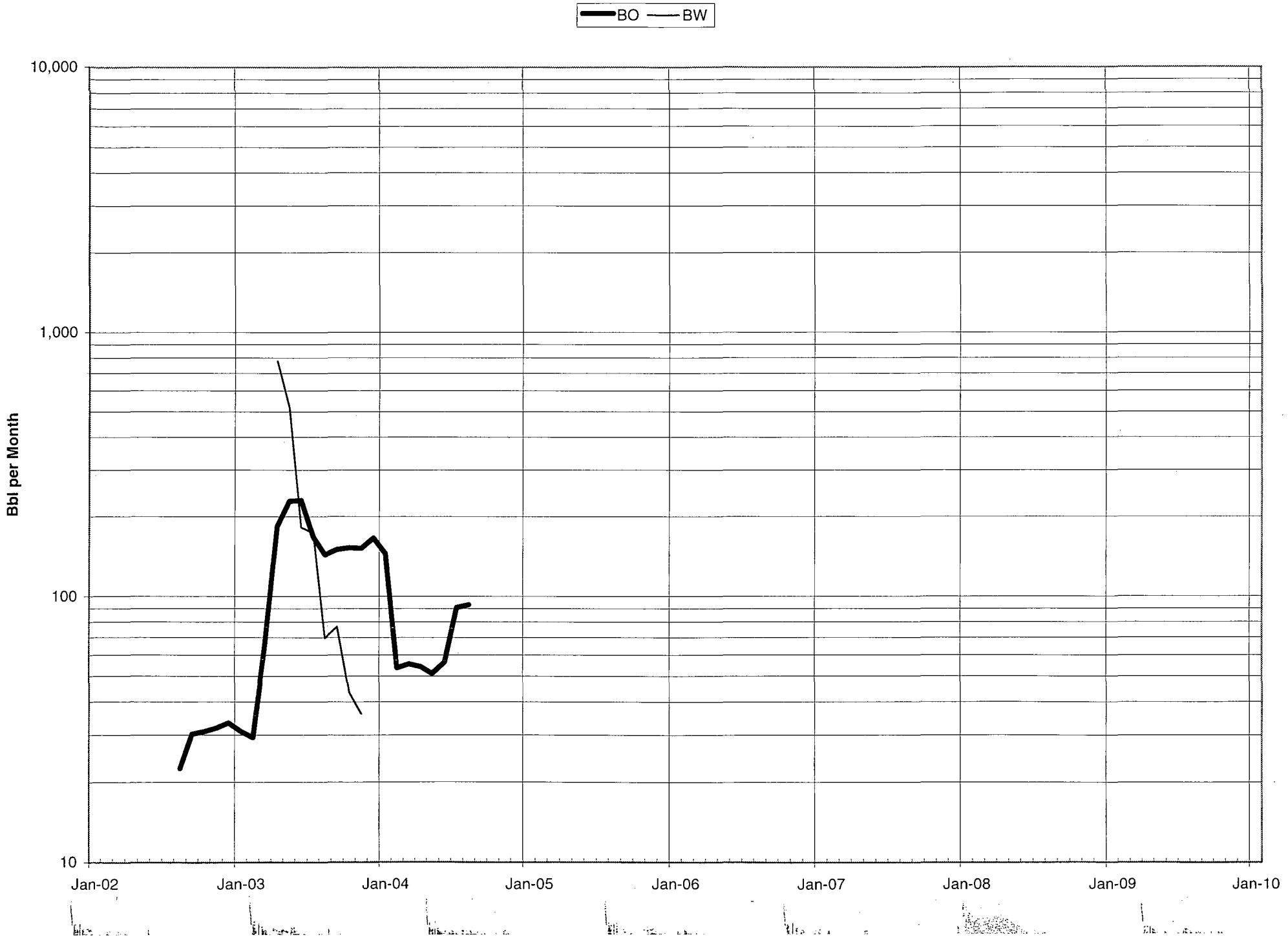
WHL #2


BWI
PSI
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

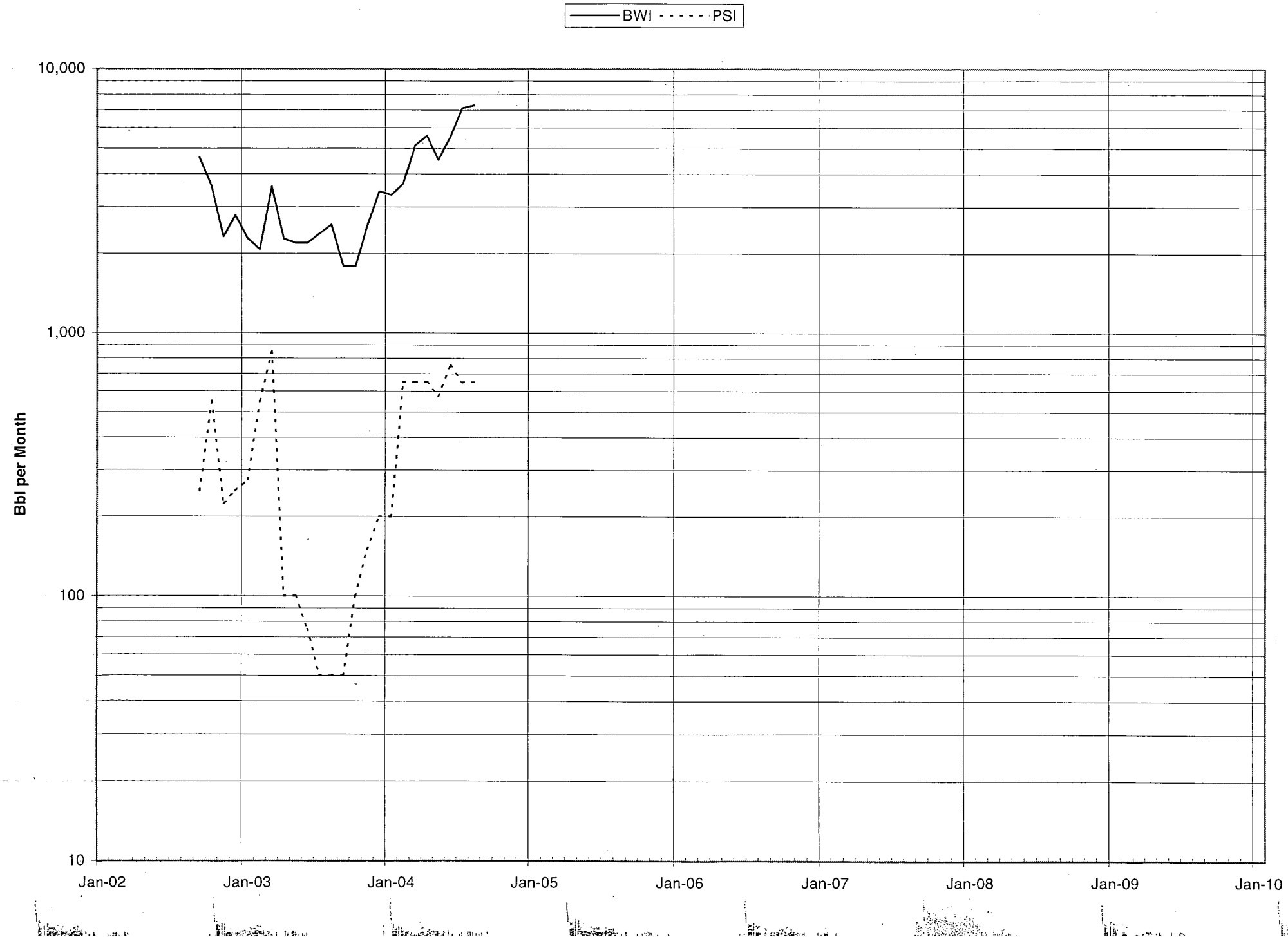
WHL #3


BWI
PSI
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

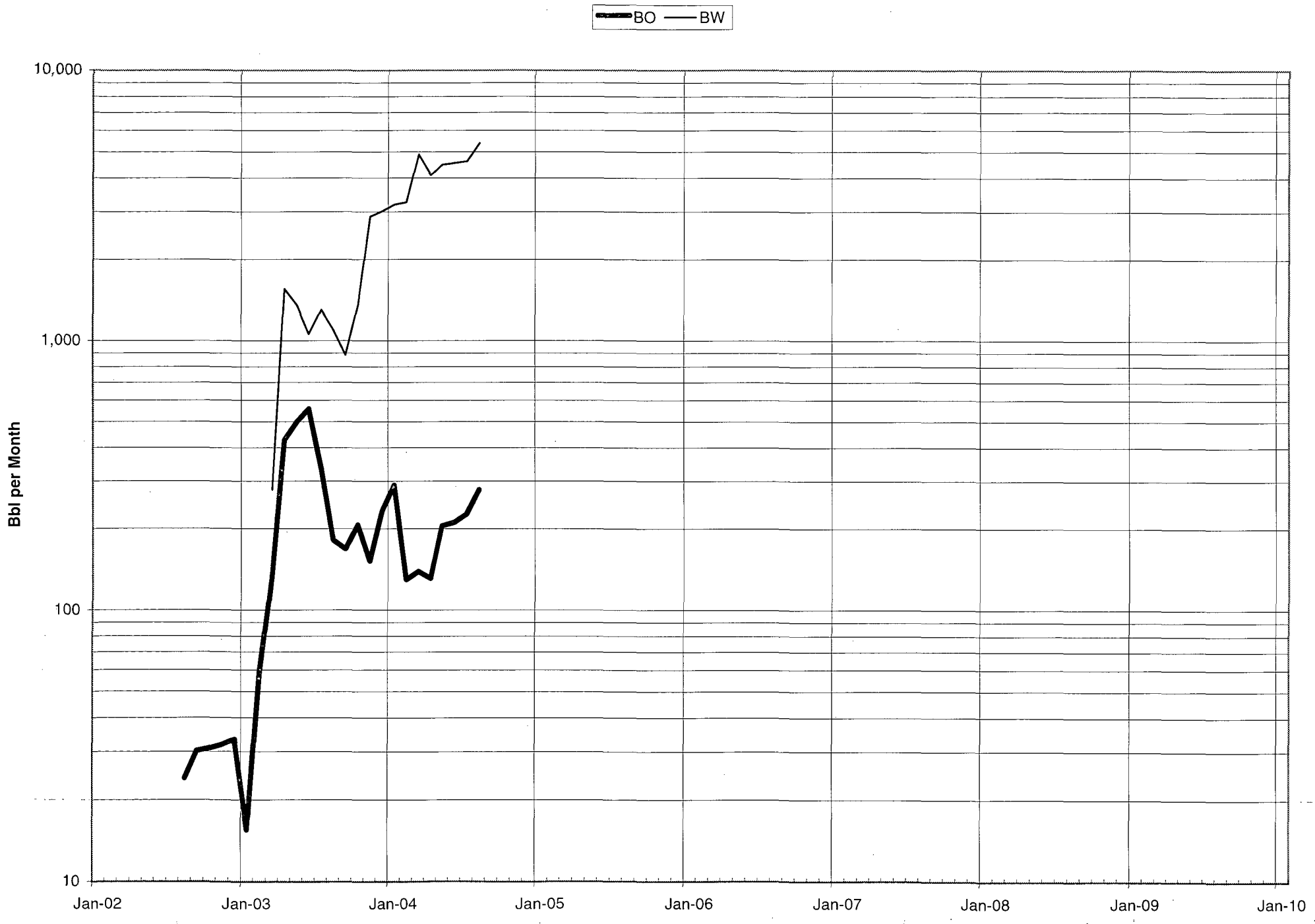
WHL #4


BO
BW
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

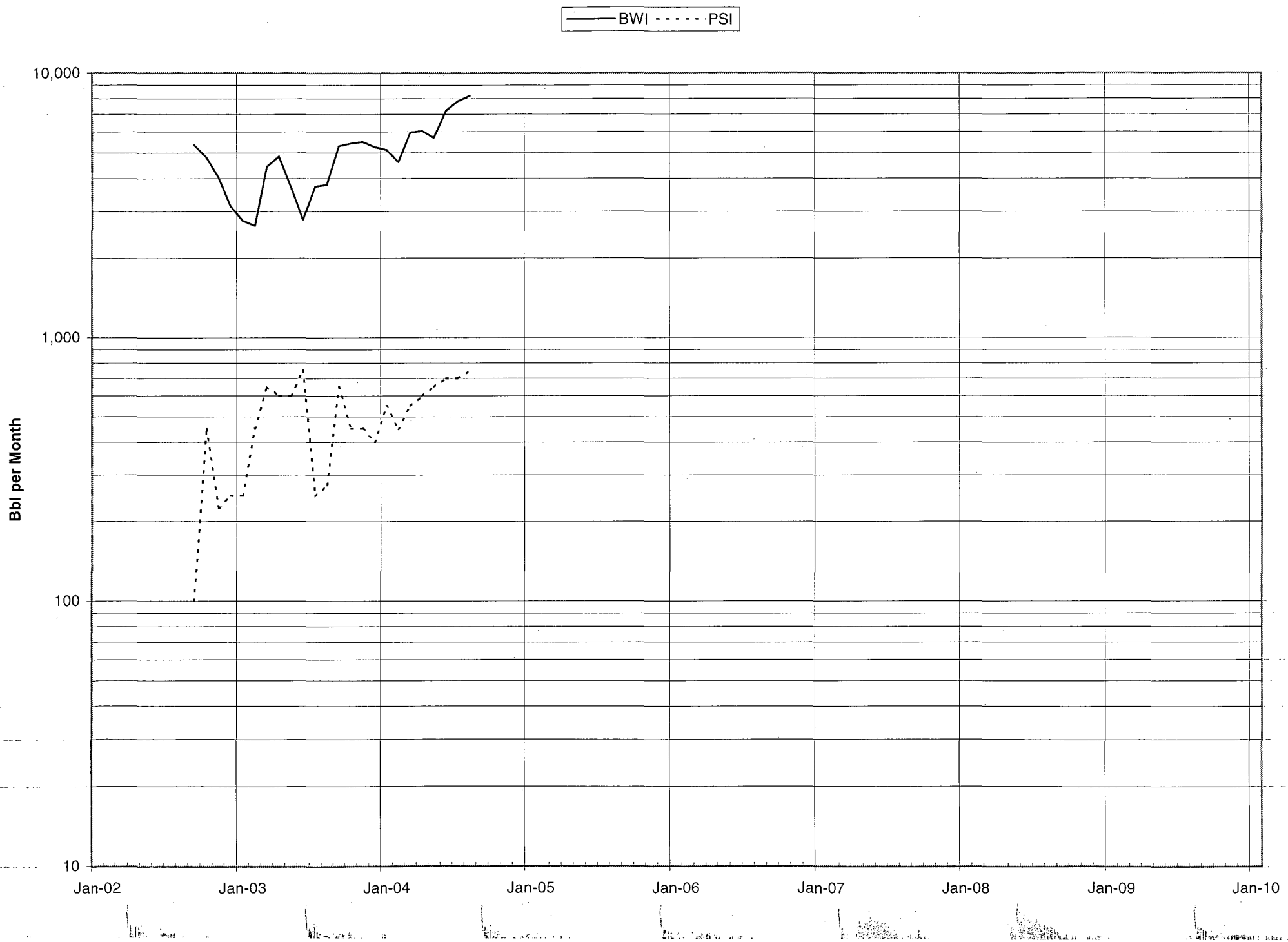
WHL #5


BWI
PSI
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

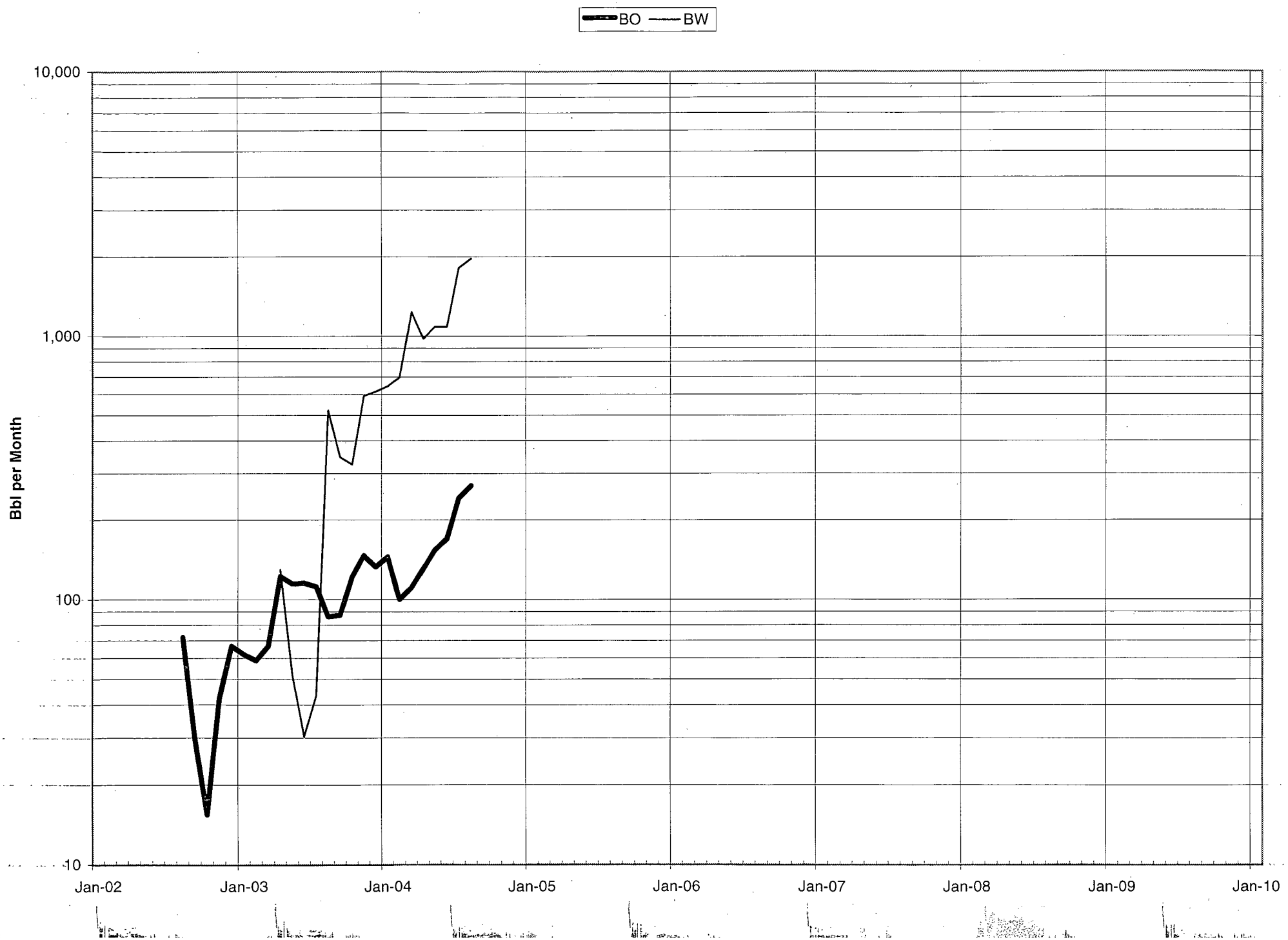
WHL #6


BO
BW
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

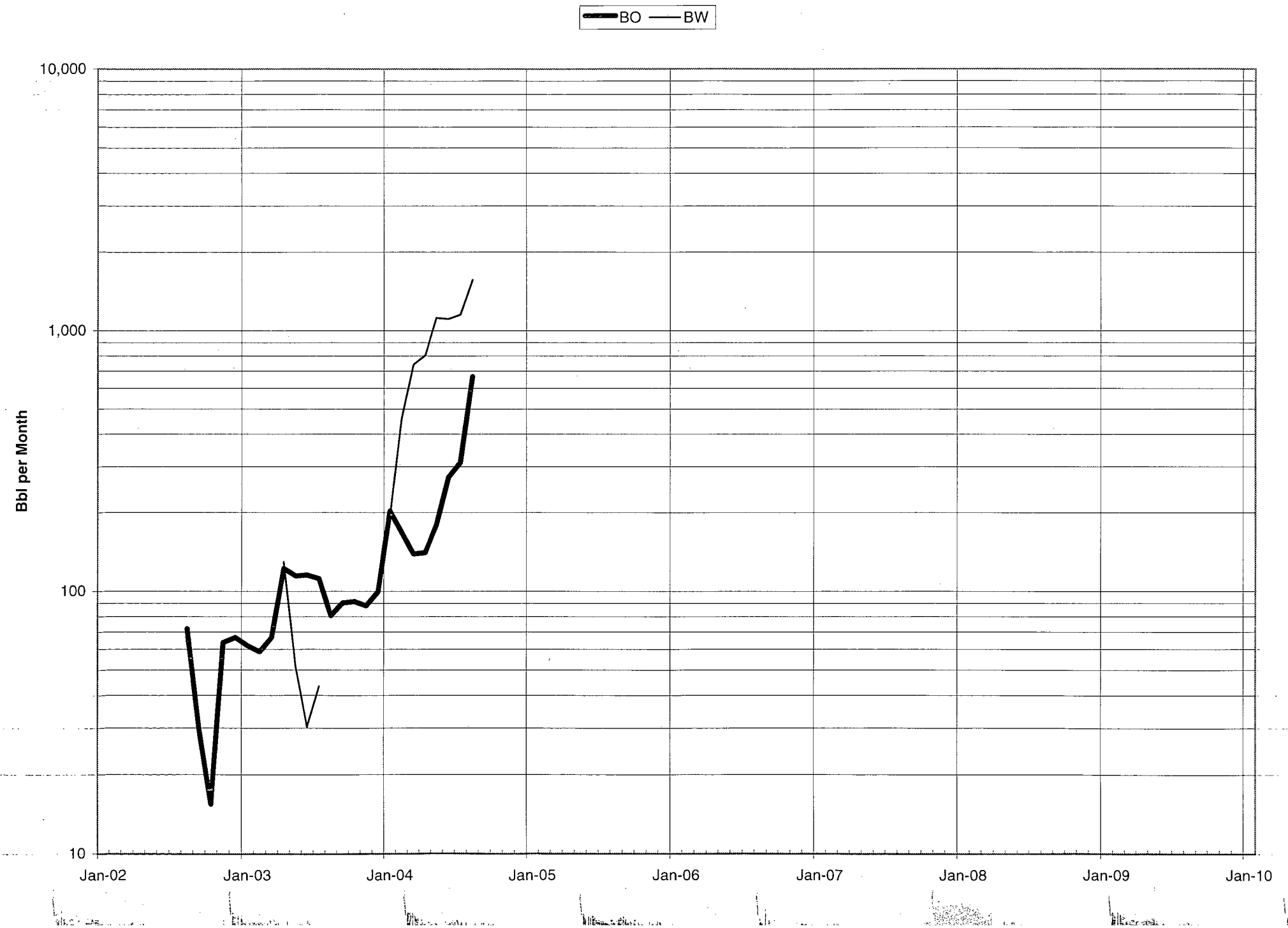
WHL #7


BWI
PSI
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

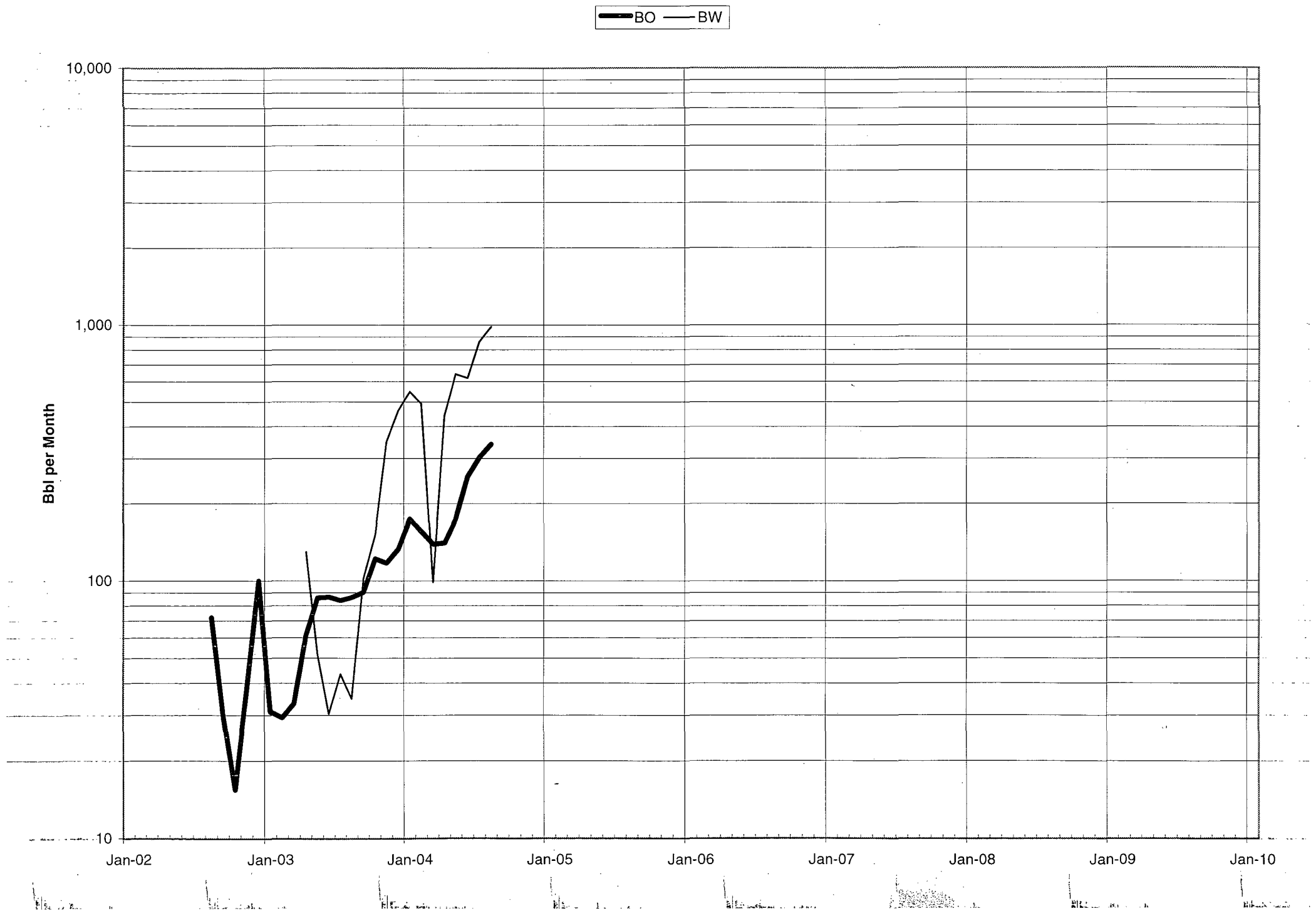
WHL #8


BO
BW
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

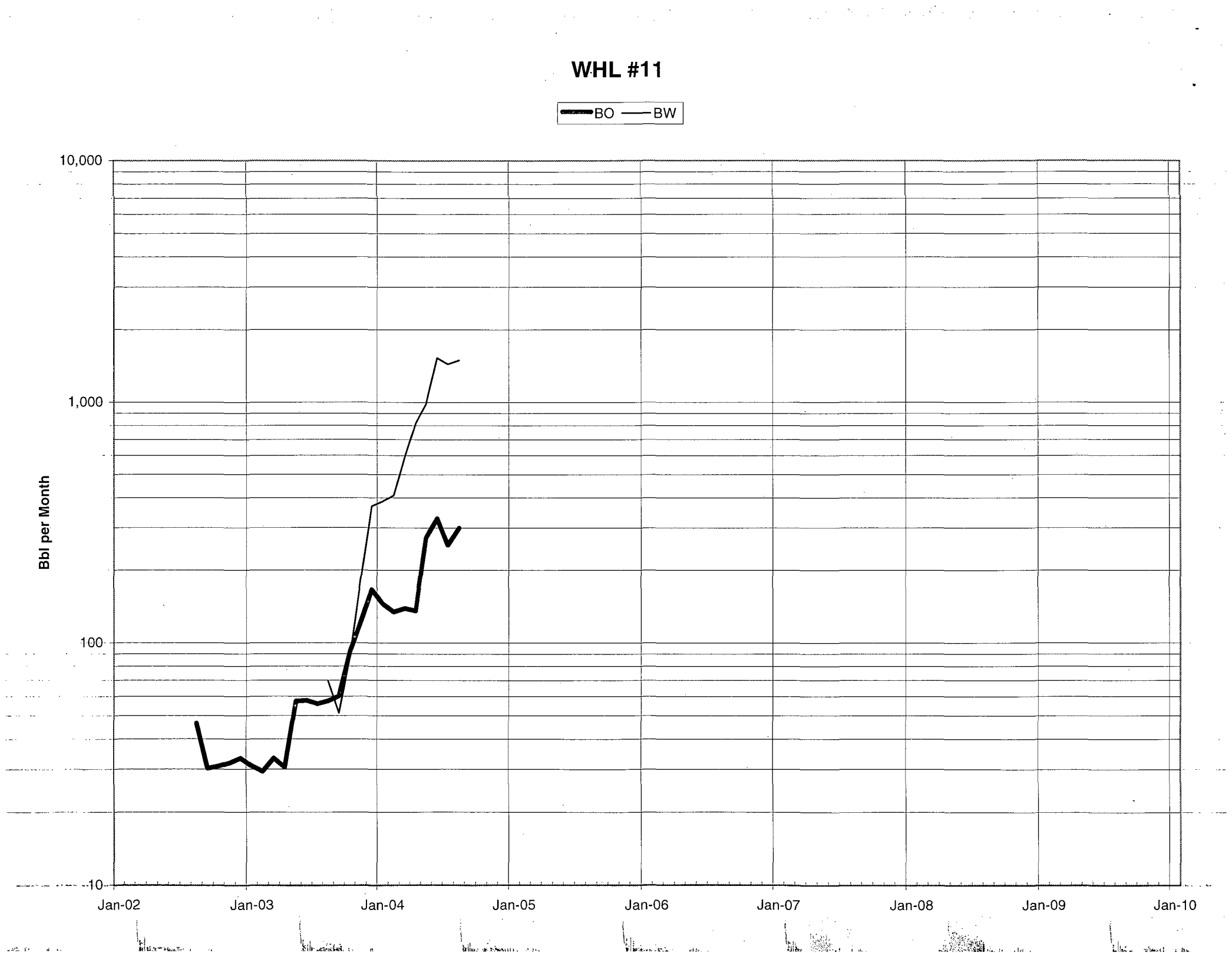
WHL #9


BO
BW
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

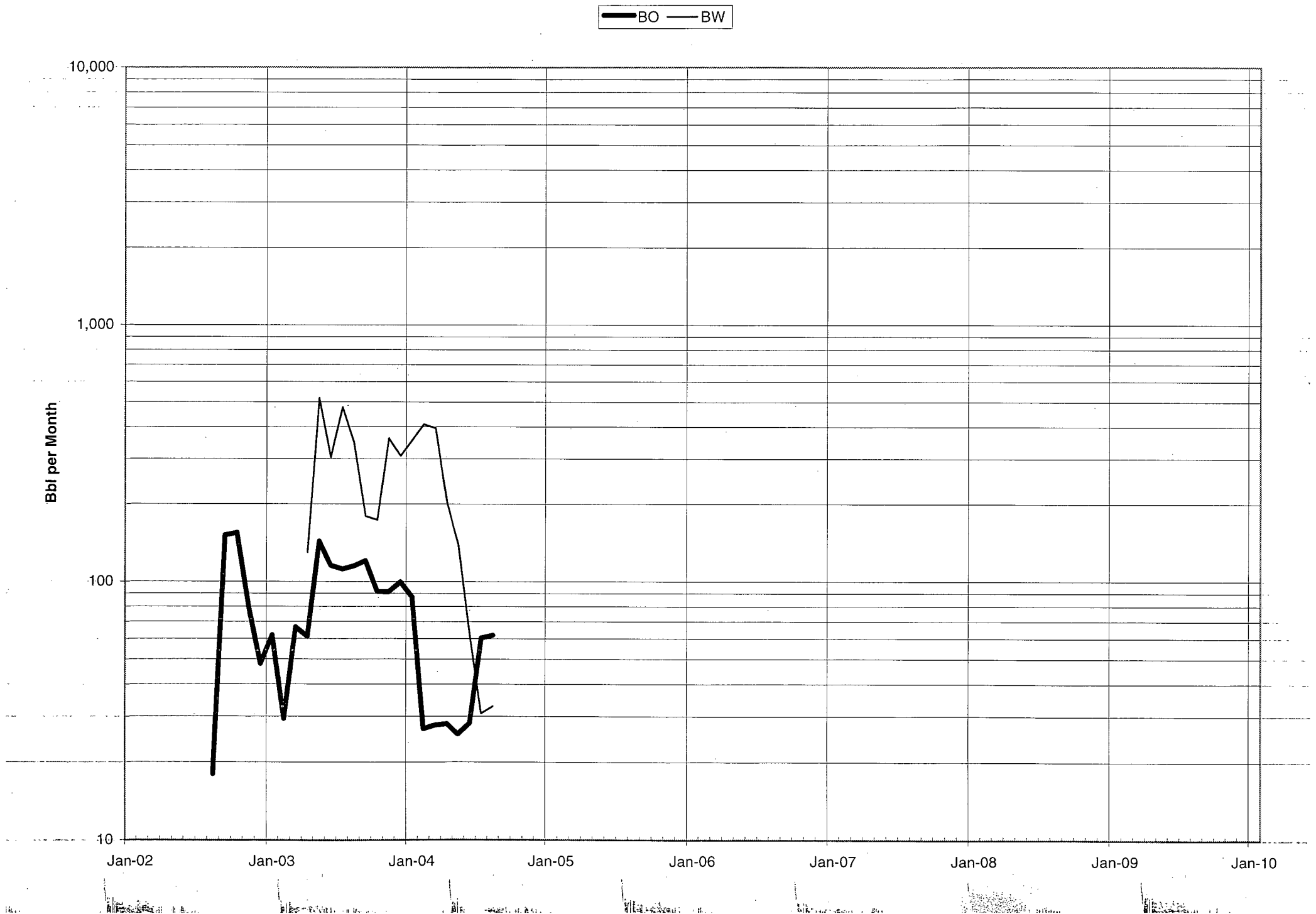
WHL #10


BO
BW
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

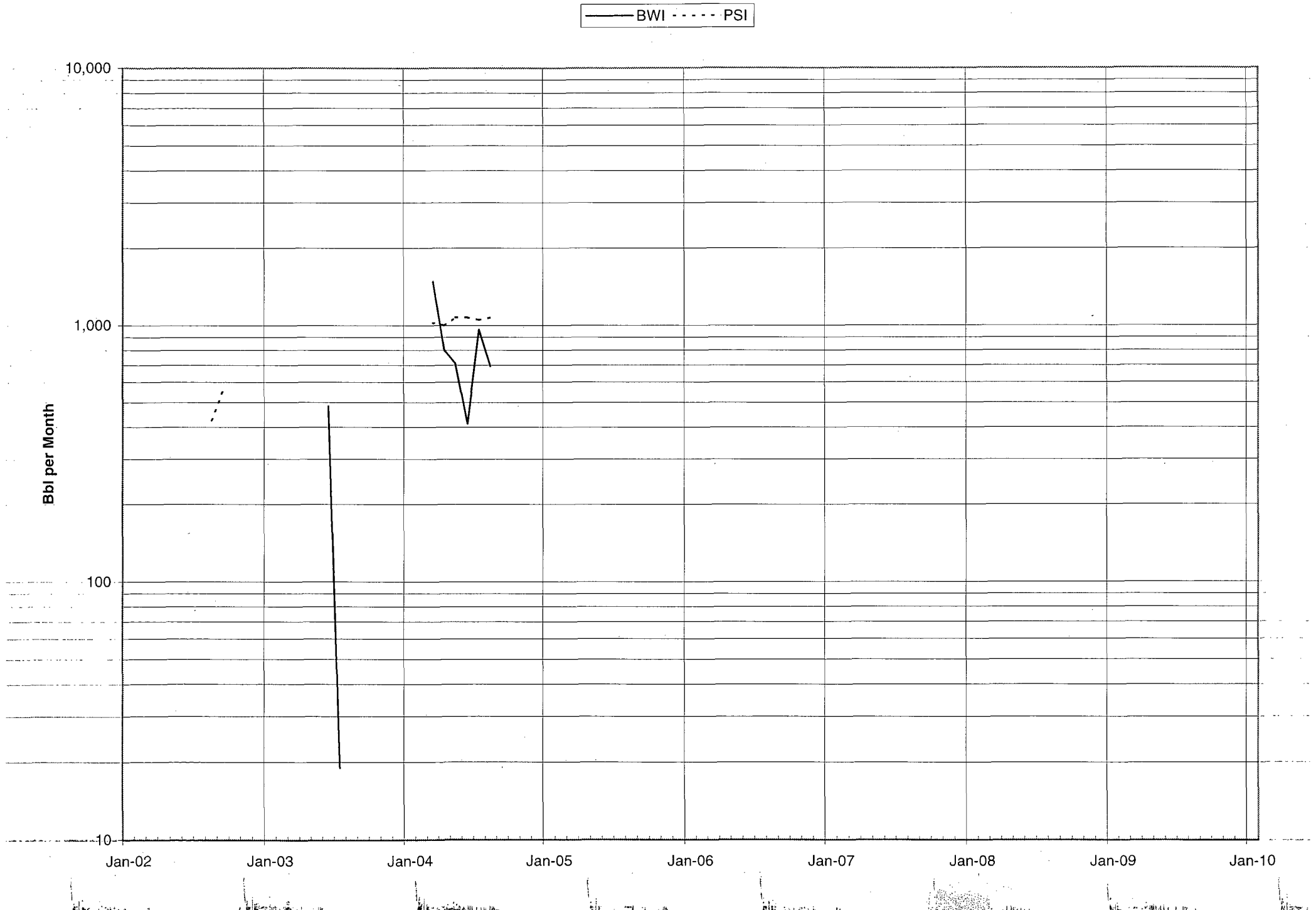
WHL #11


BO
BW
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

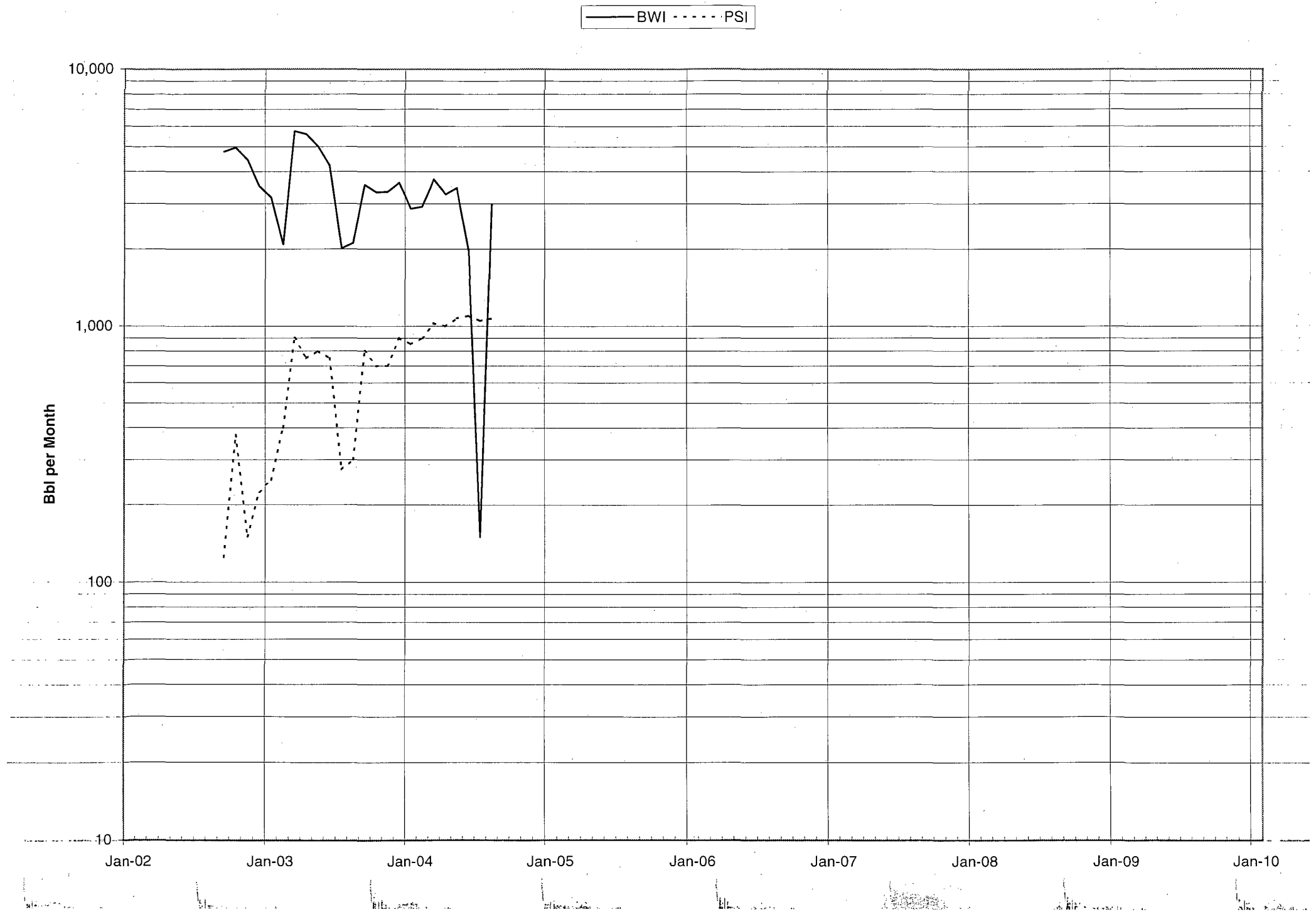
WHL #12


BO
BW
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

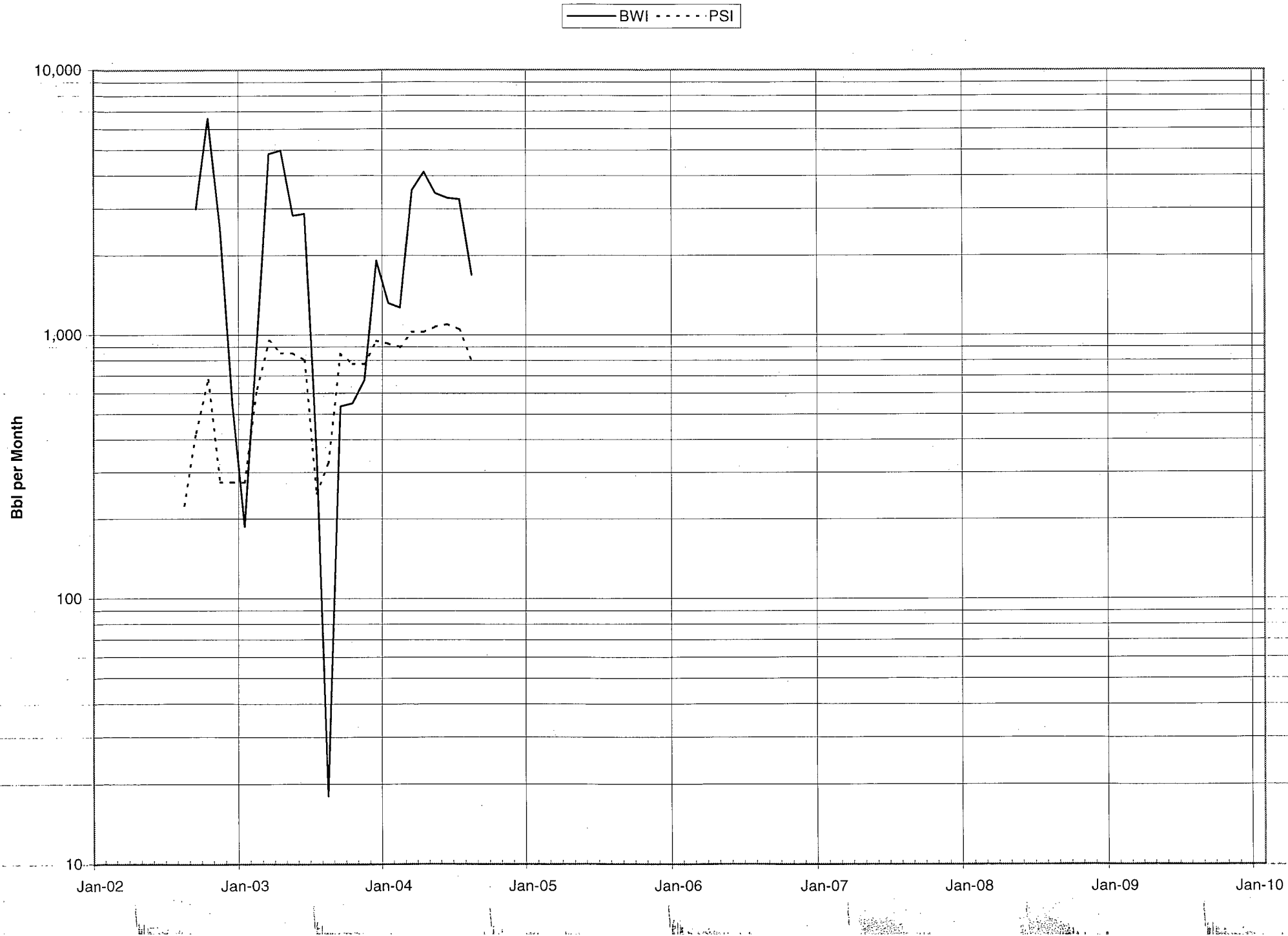
WHL #13


BWI
PSI
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

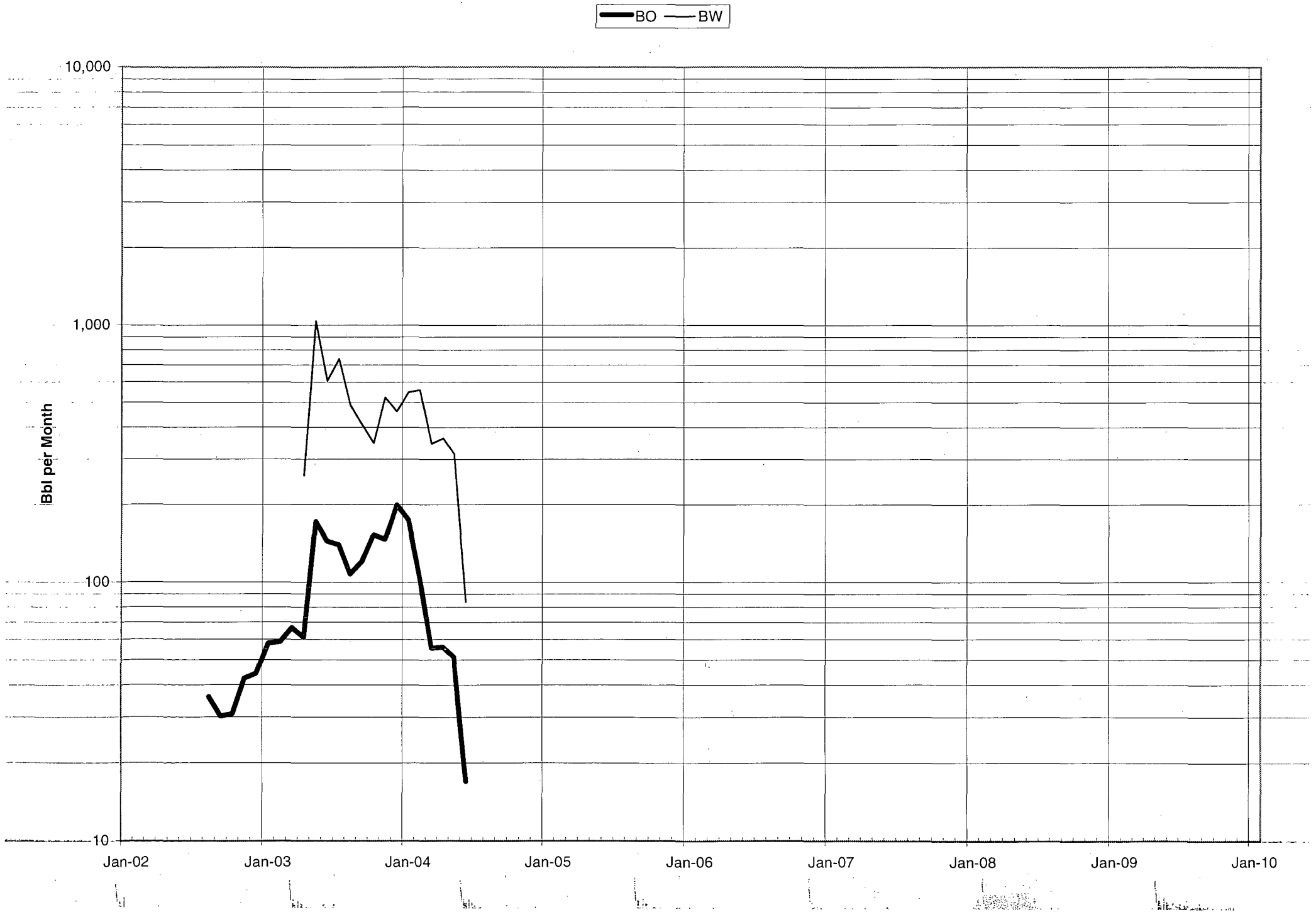
WHL #14


BWI
PSI
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

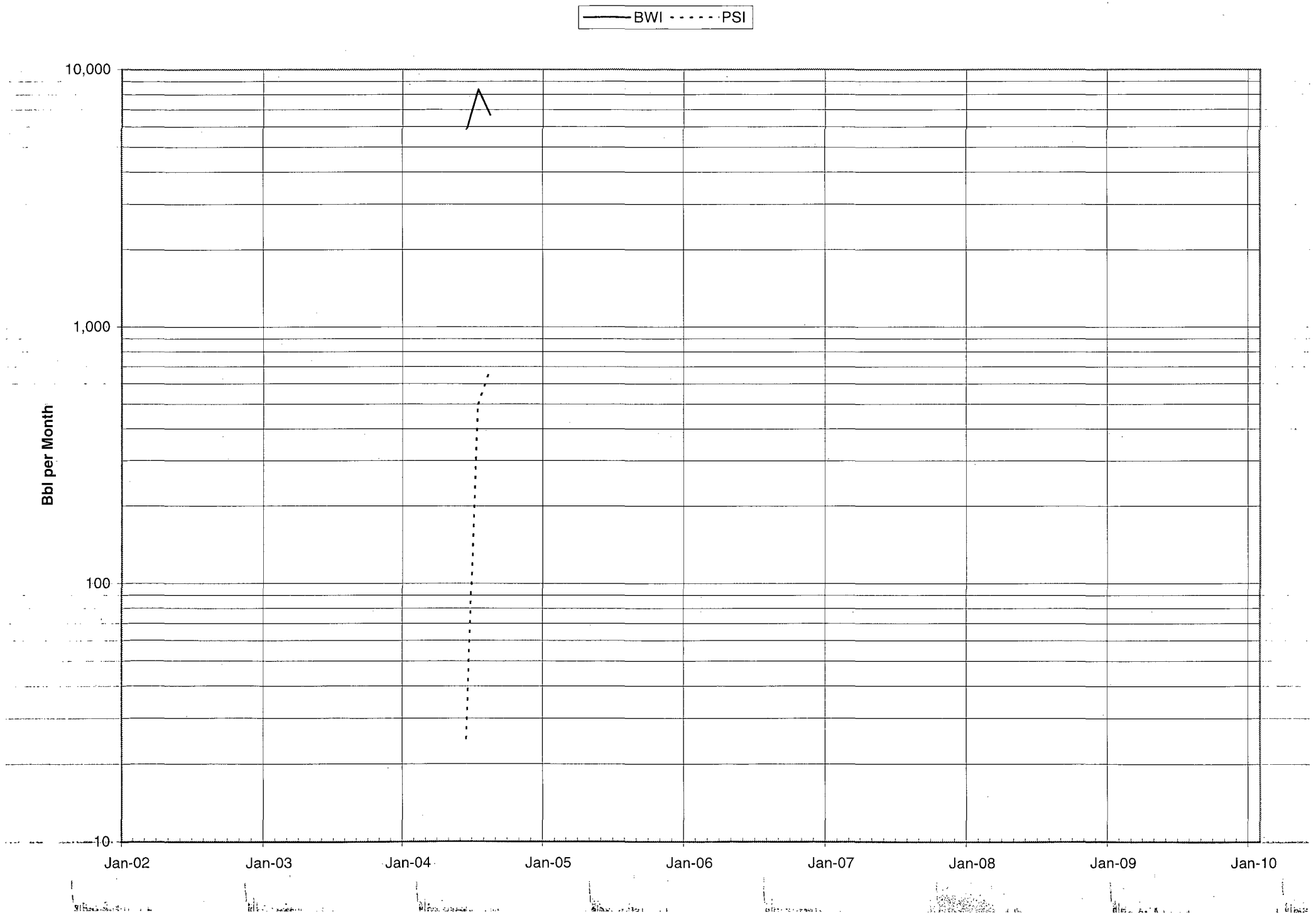
WHL #15


BWI
PSI
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

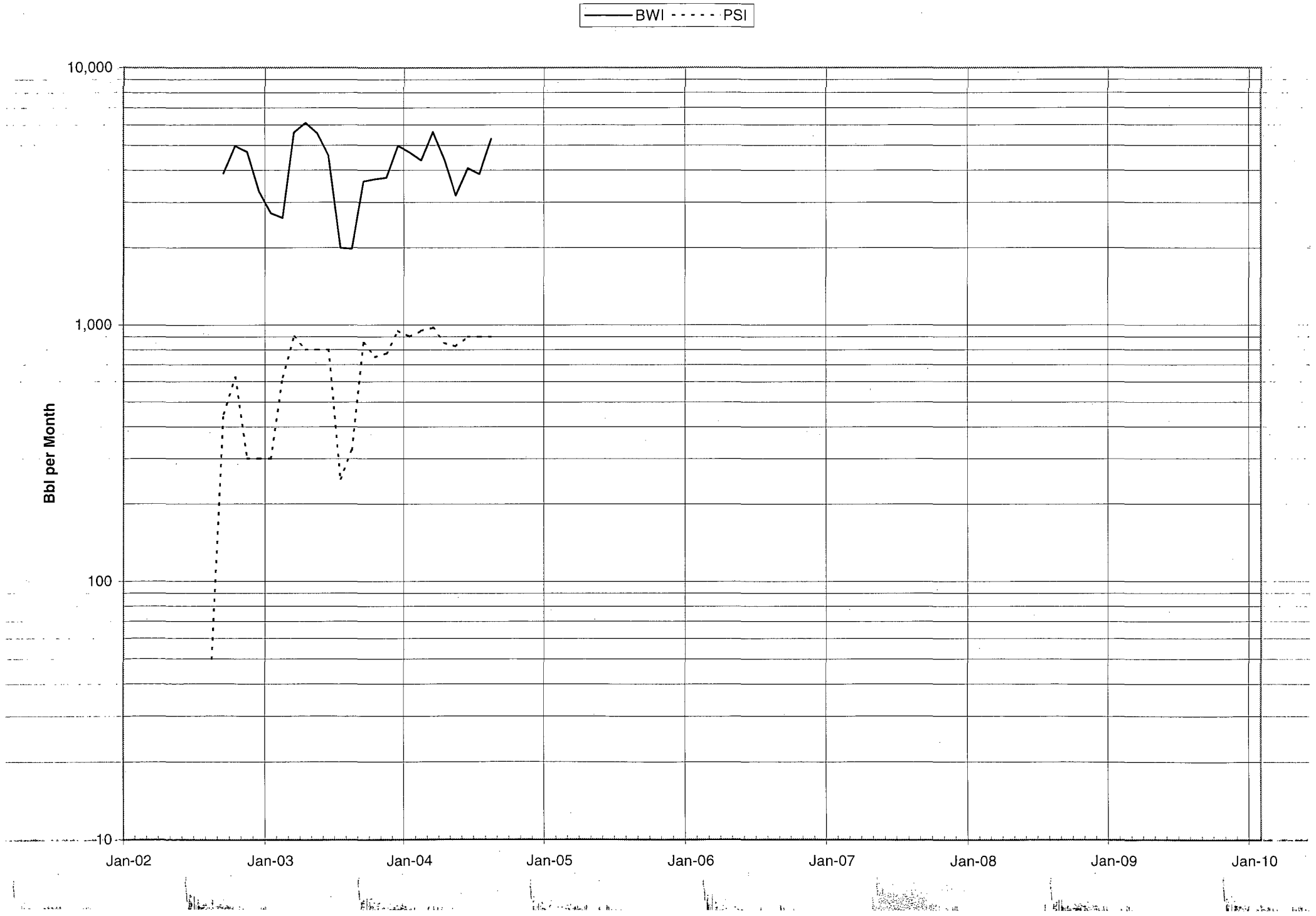
WHL #16


BO
BW
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

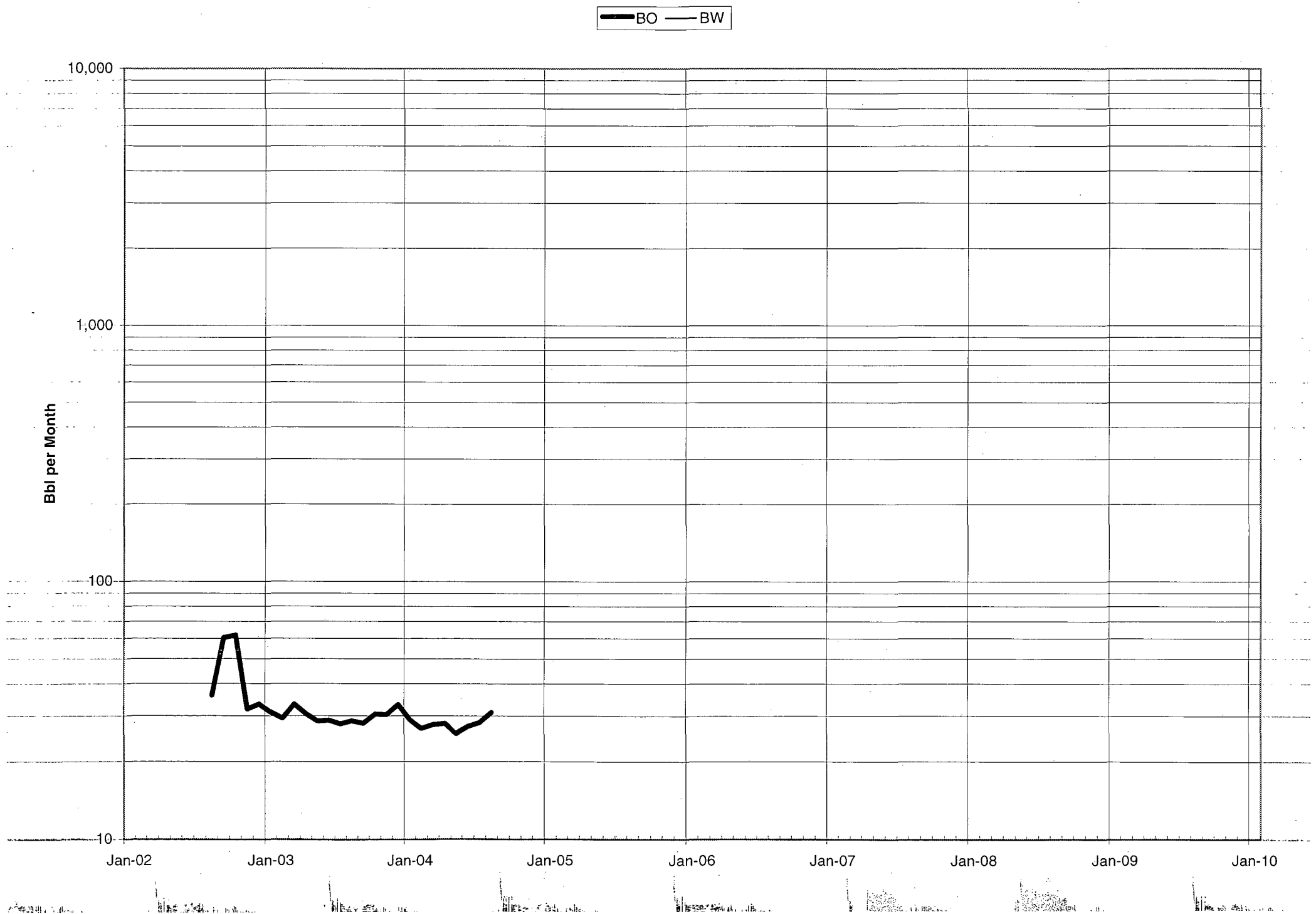
WHL #16


BWI
PSI
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

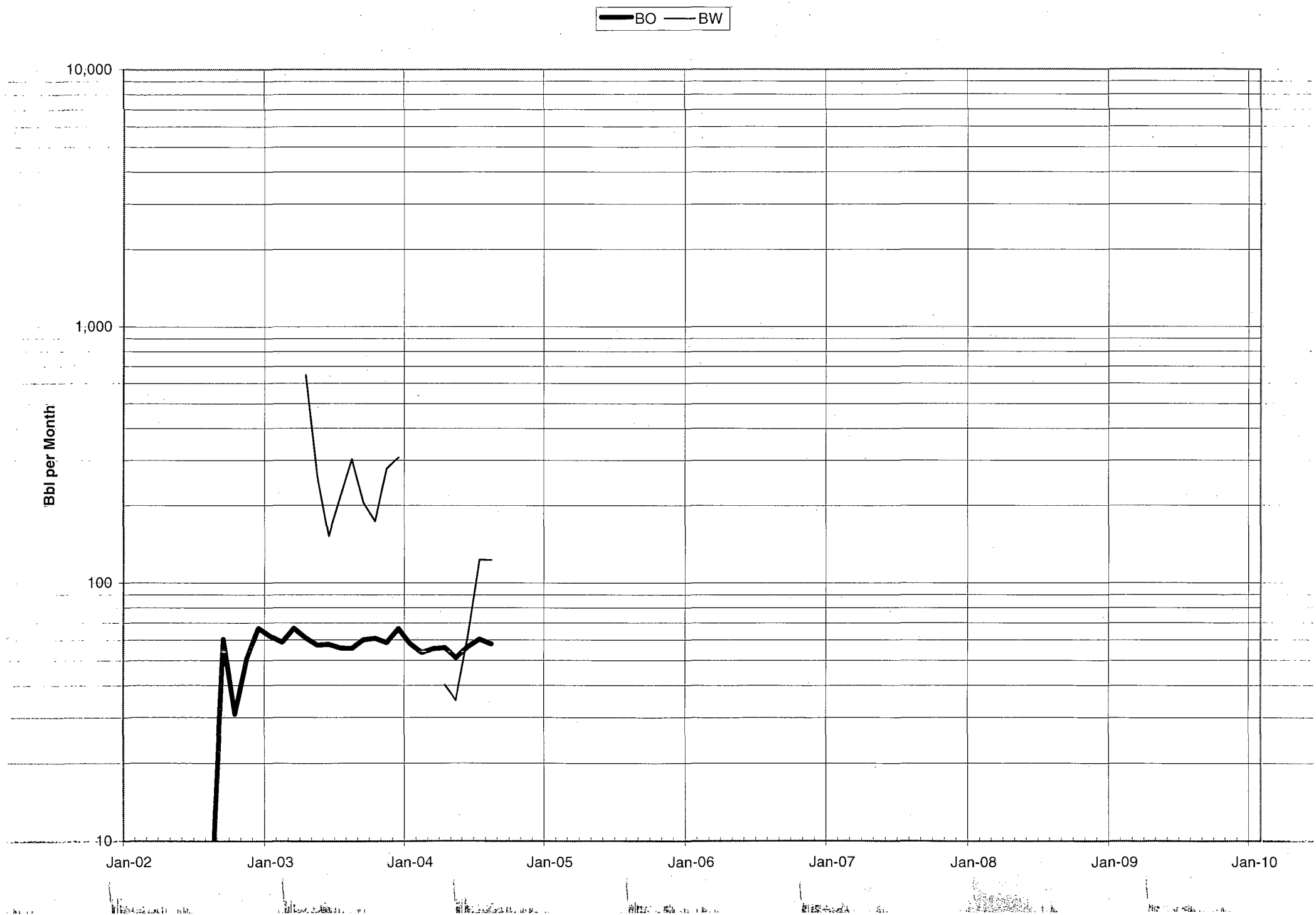
WHL #17


BWI
PSI
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

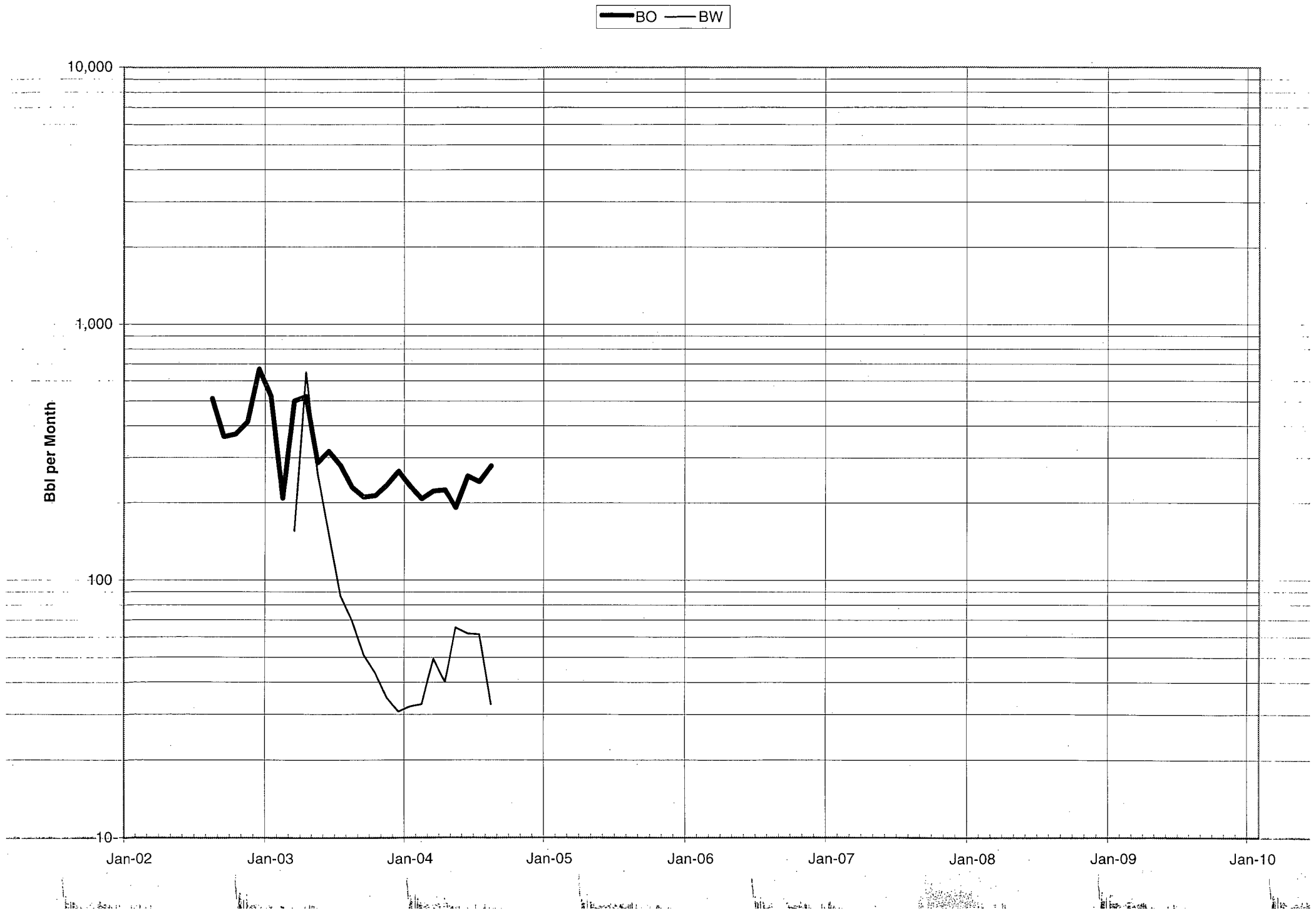
WHL #18


BO
BW
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

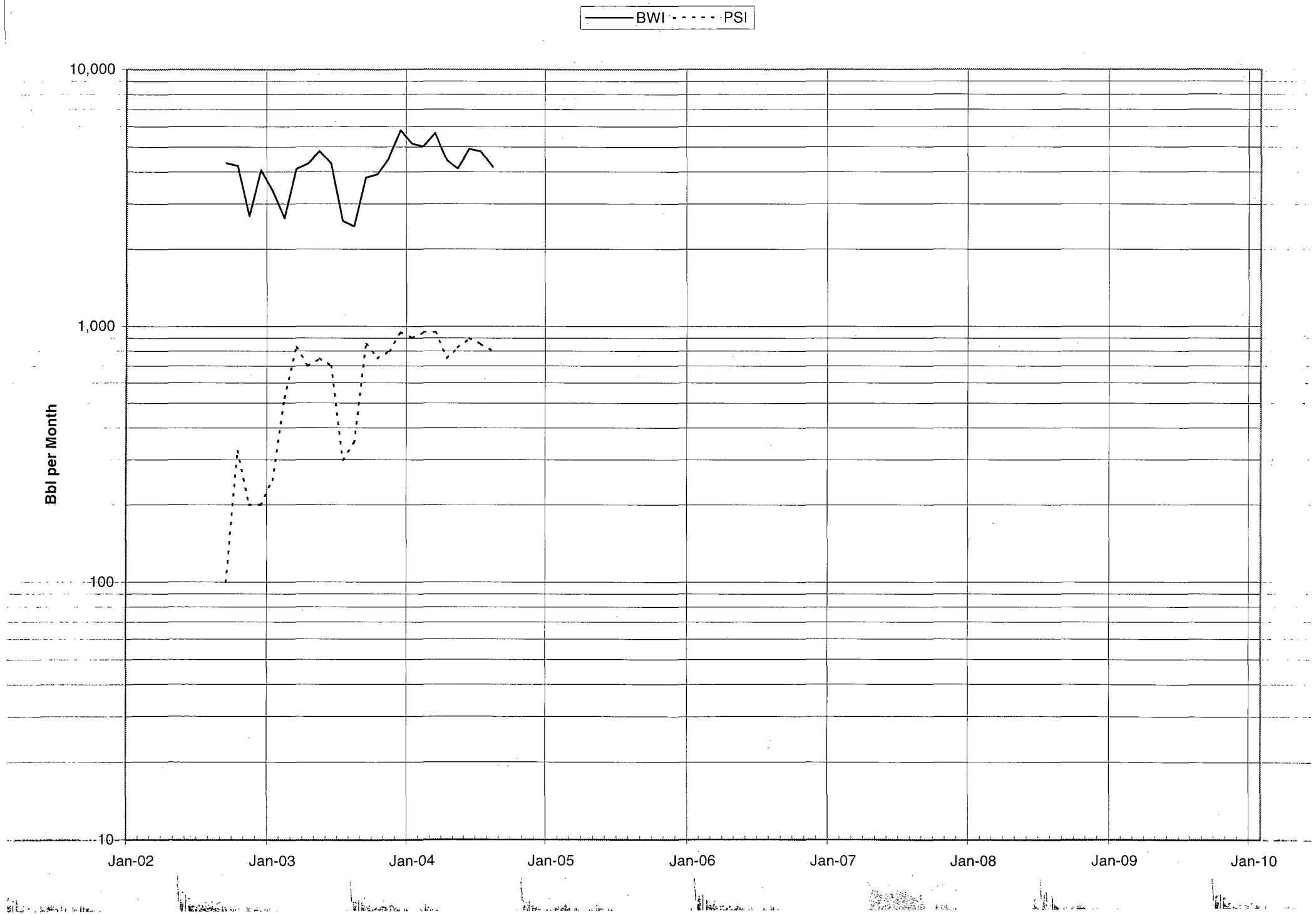
WHL #19


BO
BW
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

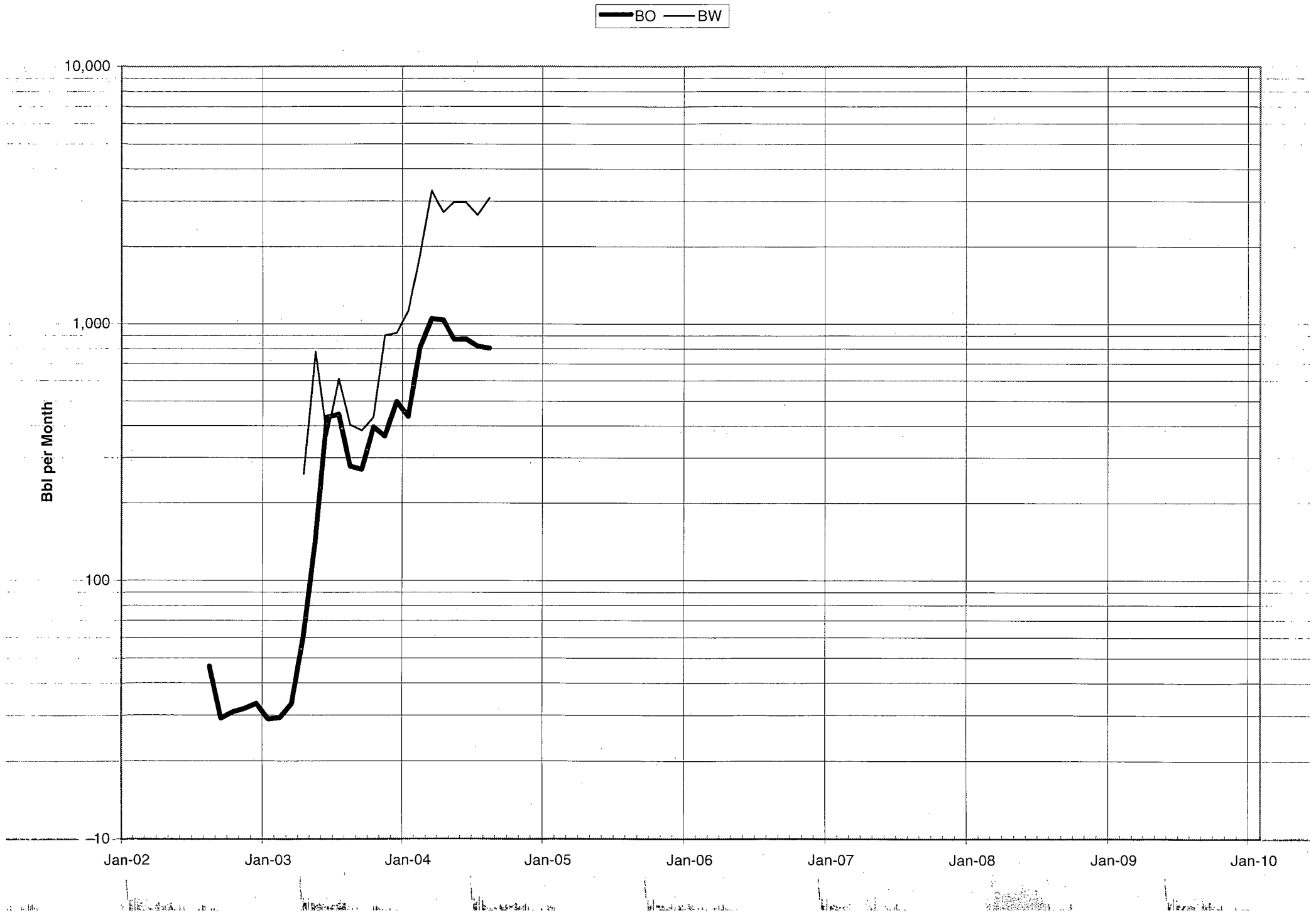
WHL #20


BO
BW
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

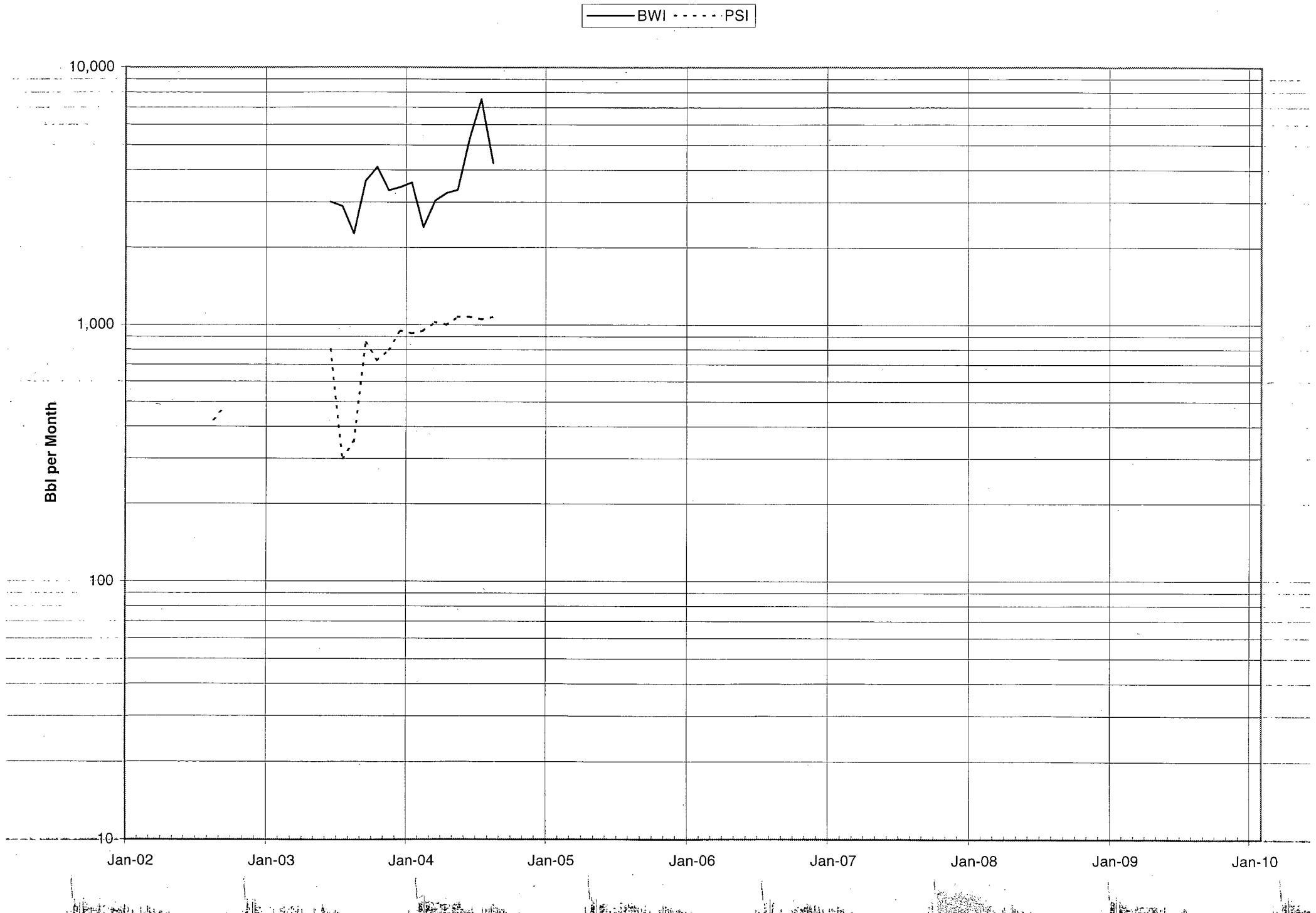
WHL #21


BWI
PSI
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

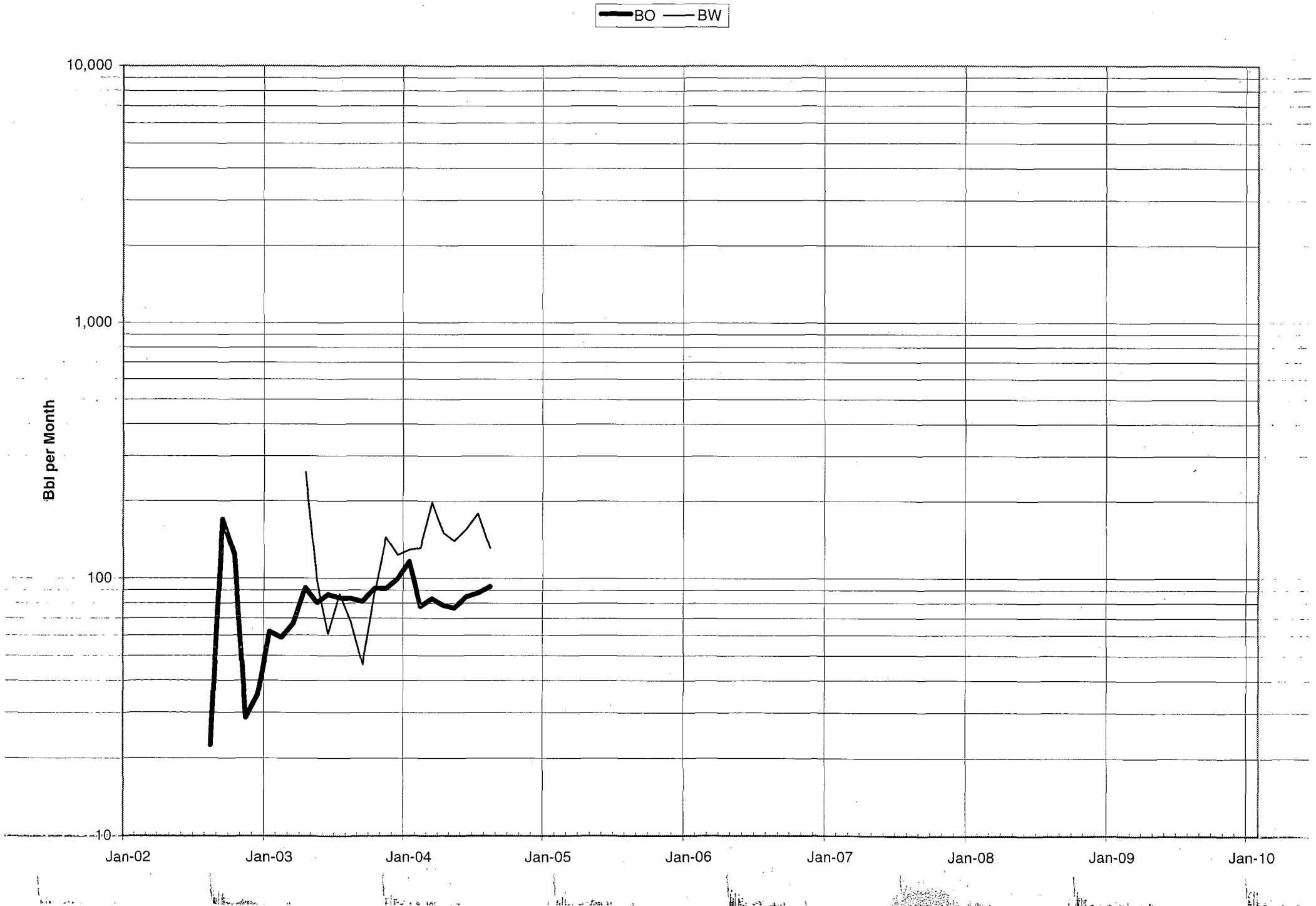
WHL #22


BO
BW
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

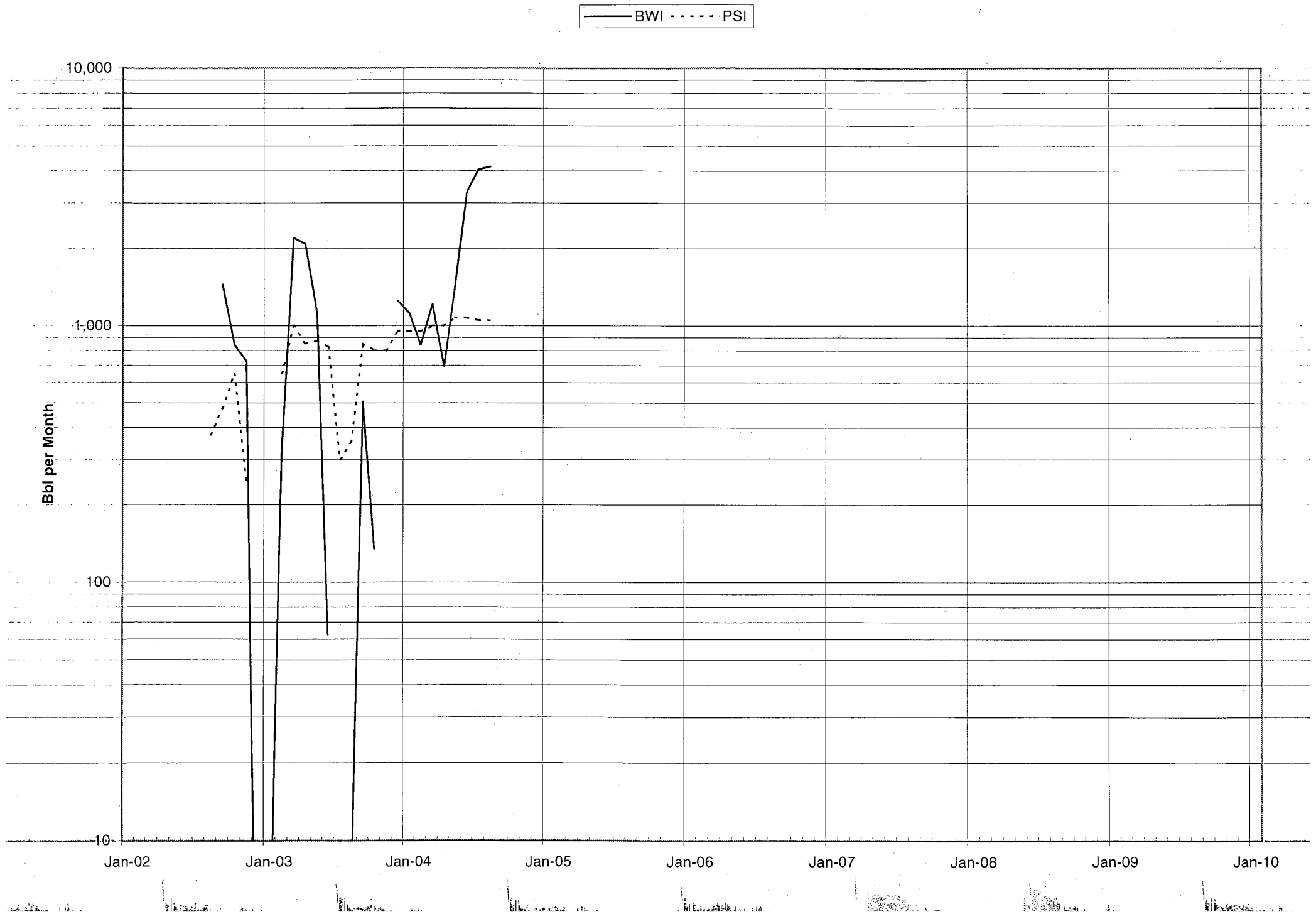
WHL #23


BWI
PSI
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

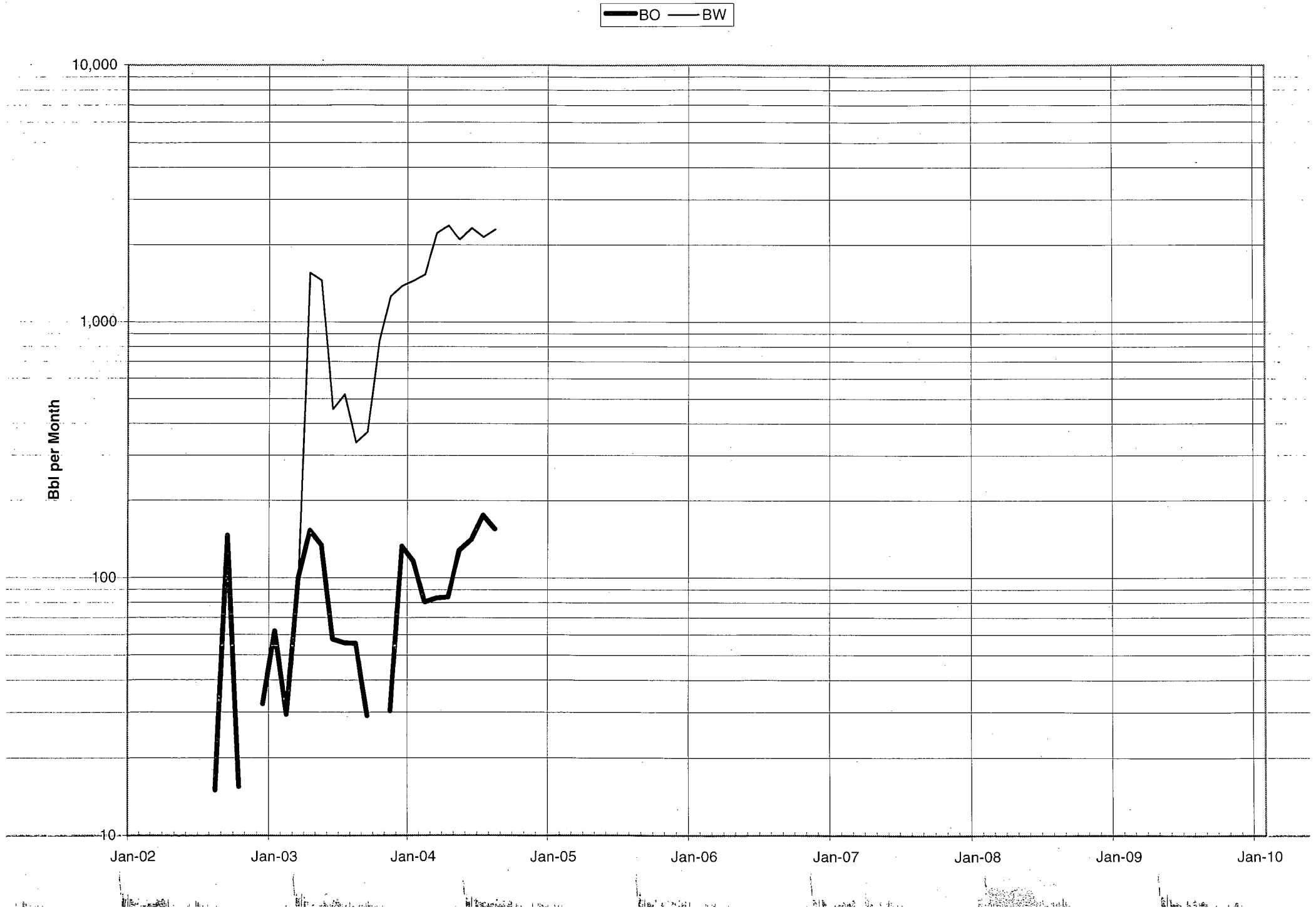
WHL #24


BO
BW
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

WHL #25


BWI
PSI
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

WHL #26


BO
BW
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

WHL #27

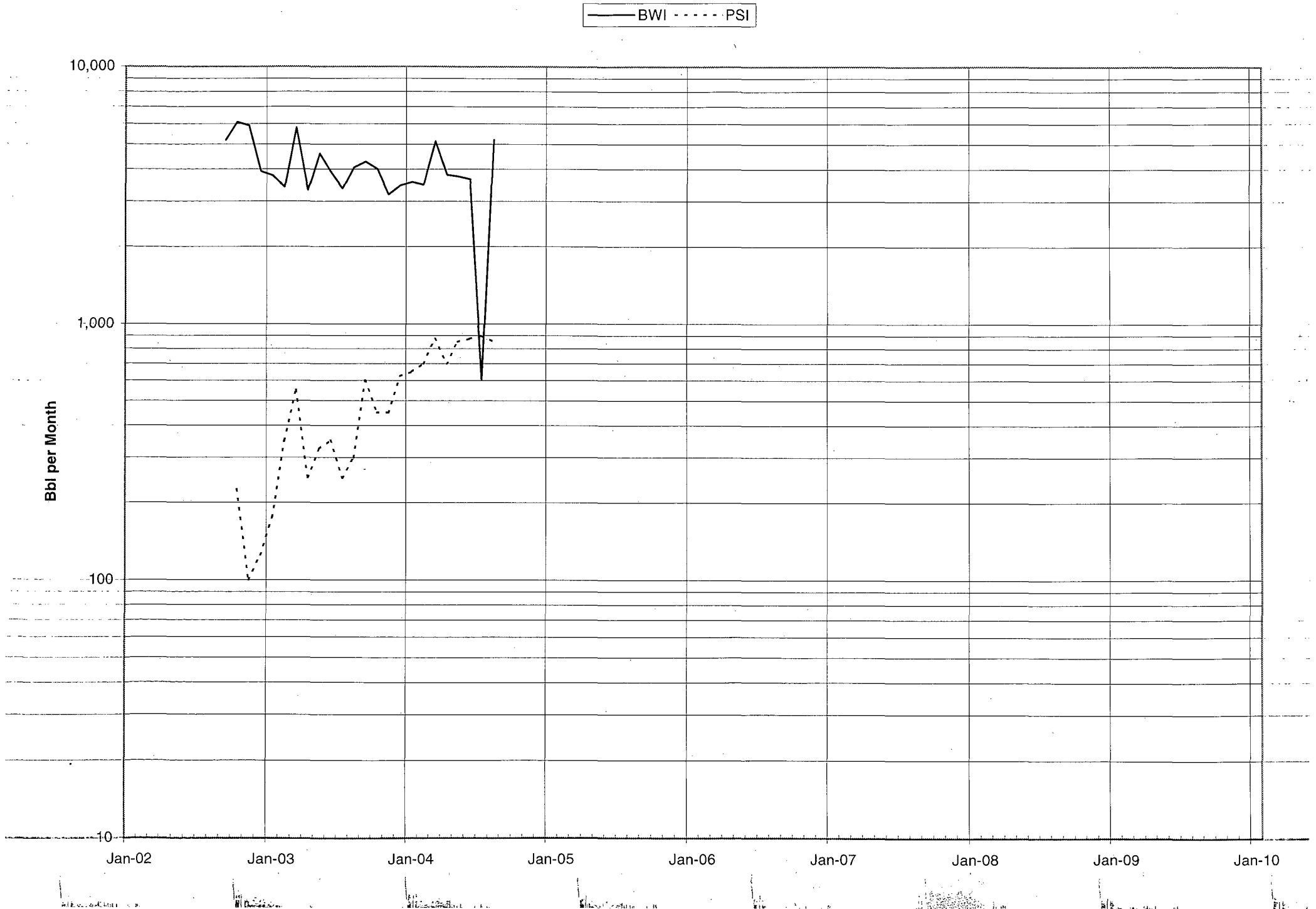

BWI
PSI
10,000
1,000
100
10
Bbl per Month
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10

EXHIBIT G (page 1 of 5)

BEACH EXPLORATION - WEST HIGH LONESOME ACTUAL UNIT AND ALLOCATED WELL INJECTION (Monthly)

	UNIT WHL Summary		WHL #1 Exxon Fed A #1		WHL #2 Exxon Fed A #2		WHL #3 Exxon Fed A #3		WHL #5 Shiloh Fed #4		WHL #7 Rosewood St 18 #1		WHL #13 Iles Fed #4		WHL #14 Exxon Fed #6		WHL #15 Exxon Fed #2	
DATE	BWInj	Psi	BWInj	Psi	BWInj	Psi	BWInj	Psi	BWInj	Psi	BWInj	Psi	BWInj	Psi	BWInj	Psi	BWInj	Psi
Aug-02	0	450	0	225			0	0	0	0	0	0	0	425	0	0	0	225
Sep-02	41,054	550	2,864	400			4,932	0	4,626	250	5,352	100	155	550	4,779	125	2,990	425
Oct-02	43,338	750	1,781	625			5,459	250	3,607	550	4,812	450	0	SI	4,960	375	6,577	675
Nov-02	34,149	350	1,403	300			5,377	225	2,315	225	4,044	225	0	SI	4,450	150	2,521	275
Dec-02	26,046	350	5	SI			4,757	150	2,790	250	3,144	250	0	SI	3,509	225	544	275
Jan-03	22,385	350	12	SI			4,080	150	2,284	275	2,767	250	0	SI	3,176	250	187	275
Feb-03	20,660	650	480	650			3,419	375	2,073	550	2,650	450	0	SI	2,086	400	963	625
Mar-03	43,100	1,000	1,753	950			5,041	650	3,589	850	4,433	650	0	SI	5,747	900	4,835	950
Apr-03	40,454	850	1,799	850			5,147	550	2,278	100	4,846	600	0	SI	5,601	750	4,980	850
May-03	36,263	875	1,106	850			5,313	550	2,193	100	3,699	600	0	SI	5,010	800	2,831	850
Jun-03	33,820	825	994	800			4,424	550	2,198	75	2,794	750	483	800	4,228	750	2,869	800
Jul-03	22,352	325	190	250			2,828	250	2,380	50	3,733	250	19	0	2,016	275	350	250
Aug-03	21,793	350	41	325			2,490	325	2,571	50	3,789	275	0	SI	2,113	300	18	325
Sep-03	32,397	850	781	850			4,610	800	1,786	50	5,307	650	0	SI	3,552	800	536	850
Oct-03	32,241	800	543	775			4,751	725	1,787	100	5,428	450	0	SI	3,326	700	549	775
Nov-03	32,671	850	955	775			4,874	750	2,544	150	5,499	450	0	SI	3,338	700	674	775
Dec-03	40,369	1,000	1,557	950			5,648	750	3,434	200	5,261	400	0	SI	3,628	900	1,912	950
Jan-04	36,441	950	1,229	925			4,453	725	3,330	200	5,128	550	0	SI	2,869	850	1,321	925
Feb-04	33,838	1,000	1,207	900			4,045	700	3,674	650	4,612	450	0	SI	2,920	900	1,270	900
Mar-04	46,860	1,075	1,225	1,050			5,099	750	5,137	650	5,957	550	1,485	1,025	3,735	1,025	3,526	1,025
Apr-04	42,633	1,050	1,160	1,000			5,074	725	5,600	650	6,051	600	801	1,000	3,260	1,000	4,140	1,025
May-04	40,198	1,100	1,876	1,075			4,694	850	4,518	575	5,702	650	712	1,075	3,457	1,075	3,438	1,075
Jun-04	57,238	1,125	2,645	1,050	4,627	20	4,402	1,050	5,553	750	7,209	700	413	1,075	1,961	1,100	3,302	1,100
Jul-04	69,750	1,075	6,531	1,050	8,323	325	6,355	1,050	7,117	650	7,830	700	962	1,050	150	1,050	3,266	1,050
Aug-04	69,750	1,075	5,784	1,075	7,611	500	5,720	1,075	7,305	650	8,212	750	692	1,075	2,974	1,075	1,689	800
	919,800		37,921		20,561		112,992		84,690		118,261		5,722		82,845		55,289	

EXHIBIT G (page 2 of 5)

BEACH EXPLORATION - WEST HIGH LONESOME ACTUAL UNIT AND ALLOCATED WELL INJECTION (Monthly)

	WHL #16 *Exxon Fed #1*		WHL #17 *Renee Fed #1*		WHL #21 *Federal 19 #1*		WHL #23 *Iles Fed #3*		WHL #25 *Coastal Fed #1*		WHL #27 *Renee Fed #3*	
DATE	BWInj	Psi	BWInj	Psi	BWInj	Psi	BWInj	Psi	BWInj	Psi	BWInj	Psi
Aug-02			0	50	0	0	0	425	0	375	0	0
Sep-02			3,879	450	4,332	100	513	475	1,447	475	5,186	0
Oct-02			4,972	625	4,225	325	0	SI	842	650	6,104	225
Nov-02			4,711	300	2,691	200	0	SI	727	250	5,910	100
Dec-02			3,305	300	4,069	200	0	SI	1	SI	3,921	125
Jan-03			2,726	300	3,372	250	0	SI	2	SI	3,779	175
Feb-03			2,611	625	2,645	525	0	SI	323	650	3,409	350
Mar-03			5,608	900	4,104	825	0	SI	2,198	1,000	5,793	550
Apr-03			6,109	800	4,303	700	0	SI	2,081	850	3,311	250
May-03			5,581	800	4,816	750	0	SI	1,116	875	4,597	325
Jun-03			4,551	800	4,306	700	3,010	800	63	825	3,900	350
Jul-03			1,997	250	2,575	300	2,898	300	0	300	3,366	250
Aug-03			1,983	325	2,450	350	2,264	350	5	350	4,070	300
Sep-03			3,620	850	3,795	850	3,630	850	505	850	4,275	600
Oct-03			3,687	750	3,917	750	4,108	725	135	800	4,009	450
Nov-03			3,736	775	4,522	800	3,337	800	0	800	3,193	450
Dec-03			4,982	950	5,798	950	3,432	950	1,252	950	3,465	625
Jan-04			4,689	900	5,146	900	3,583	925	1,121	950	3,571	650
Feb-04			4,363	950	5,023	950	2,396	950	842	950	3,486	700
Mar-04			5,631	975	5,660	950	3,041	1,025	1,217	1,000	5,145	875
Apr-04			4,367	850	4,421	750	3,263	1,000	694	1,000	3,802	700
May-04			3,187	825	4,117	825	3,352	1,075	1,397	1,075	3,748	850
Jun-04	5,872	25	4,071	900	4,910	900	5,320	1,075	3,295	1,075	3,659	875
Jul-04	8,370	500	3,863	900	4,800	850	7,529	1,050	4,050	1,050	605	900
Aug-04	6,669	675	5,297	900	4,179	800	4,259	1,075	4,158	1,050	5,200	850
	20,911		99,527		100,177		55,933		27,468		97,503	

EXHIBIT G (page 3 of 5)

BEACH EXPLORATION - WEST HIGH LONESOME ACTUAL UNIT AND ALLOCATED WELL PRODUCTION (MONTHLY)

	UNIT ACTUAL WHL Summary			WHL #2 Exxon Fed A #2			WHL #4 Shiloh Fed #3			WHL #6 Iles Fed #8			WHL #8 Exxon Fed #5		
DATE	BO	BW	MCF	BO	BW	MCF	BO	BW	MCF	BO	BW	MCF	BO	BW	MCF
Aug-02	1,007	0	0	7	0	0	22	0	0	24	0	0	72	0	0
Sep-02	1,221	0	0	30	0	0	30	0	0	30	0	0	30	0	0
Oct-02	989	0	0	31	0	0	31	0	0	31	0	0	15	0	0
Nov-02	951	0	0	32	0	0	32	0	0	32	0	0	42	0	0
Dec-02	1,319	0	0	25	0	0	33	0	0	33	0	0	67	0	0
Jan-03	1,151	0	0	31	0	0	31	0	0	15	0	0	62	0	0
Feb-03	796	0	0	29	0	0	29	0	0	59	0	0	59	0	0
Mar-03	1,366	527	0	33	0	0	67	0	0	133	279	0	67	0	0
Apr-03	2,048	6,478	0	61	0	0	183	777	0	428	1,555	0	122	130	0
May-03	2,202	6,427	0	57	0	0	229	518	0	499	1,354	0	115	52	0
Jun-03	2,461	3,425	0	58	0	0	231	182	0	558	1,057	0	115	30	0
Jul-03	2,121	4,340	0	56	0	0	168	174	0	335	1,302	0	112	43	0
Aug-03	1,646	3,813	0	57	0	0	144	70	0	182	1,100	0	86	522	0
Sep-03	1,627	3,108	0	60	0	0	150	77	0	168	884	0	87	347	0
Oct-03	1,883	4,062	0	61	0	0	152	43	0	206	1,362	0	122	325	0
Nov-03	1,883	7,542	0	59	0	0	152	36	0	152	2,883	0	147	592	0
Dec-03	2,391	8,000	0	66	0	0	166	0	0	232	3,015	0	133	615	0
Jan-04	2,408	8,641	0	58	0	0	145	32	0	290	3,192	0	145	645	0
Feb-04	2,177	9,814	0	54	0	0	54	0	0	130	3,255	0	100	697	0
Mar-04	2,383	14,054	0	56	0	0	56	0	0	139	4,886	0	111	1,234	0
Apr-04	2,380	13,025	0	56	0	0	54	0	0	131	4,096	0	131	977	0
May-04	2,507	14,075	0	51	0	0	51	0	0	205	4,478	0	154	1,085	0
Jun-04	2,793	14,606	0	17	0	0	57	0	0	211	4,544	0	170	1,085	0
Jul-04	2,900	15,070	0				91	0	0	226	4,608	0	242	1,816	0
Aug-04	3,431	17,081	0				93	0	0	279	5,377	0	270	1,967	0
	48,041	154,088		1,046	0		2,451	1,909		4,729	49,226		2,775	12,163	

EXHIBIT G (page 4 of 5)

BEACH EXPLORATION - WEST HIGH LONESOME ACTUAL UNIT AND ALLOCATED WELL PRODUCTION (MONTHLY)

	WHL #9 Exxon Fed #4			WHL #10 Exxon Fed #3			WHL #11 Renee Fed #4			WHL #12 Iles Fed #2			WHL #16 Exxon Fed #1		
DATE	BO	BW	MCF	BO	BW	MCF	BO	BW	MCF	BO	BW	MCF	BO	BW	MCF
Aug-02	72	0	0	72	0	0	46	0	0	18	0	0	36	0	0
Sep-02	30	0	0	30	0	0	30	0	0	151	0	0	30	0	0
Oct-02	15	0	0	15	0	0	31	0	0	155	0	0	31	0	0
Nov-02	64	0	0	38	0	0	32	0	0	80	0	0	42	0	0
Dec-02	67	0	0	100	0	0	33	0	0	48	0	0	44	0	0
Jan-03	62	0	0	31	0	0	31	0	0	62	0	0	58	0	0
Feb-03	59	0	0	29	0	0	29	0	0	29	0	0	59	0	0
Mar-03	67	0	0	33	0	0	33	0	0	67	0	0	67	0	0
Apr-03	122	130	0	61	130	0	31	0	0	61	130	0	61	259	0
May-03	115	52	0	86	52	0	57	0	0	143	518	0	172	1,036	0
Jun-03	115	30	0	87	30	0	58	0	0	115	304	0	144	607	0
Jul-03	112	43	0	84	43	0	56	0	0	112	477	0	140	738	0
Aug-03	81	0	0	86	35	0	57	70	0	115	348	0	107	488	0
Sep-03	90	0	0	90	102	0	60	51	0	120	179	0	120	410	0
Oct-03	91	0	0	122	152	0	91	87	0	91	173	0	152	346	0
Nov-03	88	0	0	117	348	0	121	180	0	91	360	0	147	522	0
Dec-03	100	0	0	133	462	0	166	369	0	100	308	0	199	462	0
Jan-04	203	193	0	174	548	0	145	387	0	87	355	0	174	548	0
Feb-04	168	458	0	156	493	0	134	409	0	27	409	0	104	559	0
Mar-04	139	740	0	139	99	0	139	592	0	28	395	0	56	345	0
Apr-04	140	805	0	140	443	0	136	817	0	28	201	0	56	362	0
May-04	179	1,119	0	173	643	0	273	982	0	26	140	0	51	315	0
Jun-04	273	1,109	0	254	620	0	328	1,529	0	28	62	0	17	84	0
Jul-04	311	1,152	0	302	862	0	255	1,440	0	60	31	0			
Aug-04	666	1,564	0	341	984	0	300	1,491	0	62	33	0			
	3,430	7,397		2,895	6,046		2,673	8,404		1,904	4,422		2,068	7,082	

EXHIBIT G (page 5 of 5)

BEACH EXPLORATION - WEST HIGH LONESOME ACTUAL UNIT AND ALLOCATED WELL PRODUCTION (MONTHLY)

	WHL #18 Iles Fed #7			WHL #19 Big Mac Fed #1			WHL #20 WHL #20			WHL #22 Renee Fed #2			WHL #24 M&W Fed #1			WHL #26 Ryan Fed #2		
DATE	BO	BW	MCF	BO	BW	MCF	BO	BW	MCF	BO	BW	MCF	BO	BW	MCF	BO	BW	MCF
Aug-02	36	0	0	6	0	0	511	0	0	46	0	0	22	0	0	15	0	0
Sep-02	60	0	0	60	0	0	363	0	0	29	0	0	169	0	0	146	0	0
Oct-02	62	0	0	31	0	0	371	0	0	31	0	0	124	0	0	15	0	0
Nov-02	32	0	0	51	0	0	414	0	0	32	0	0	29	0	0	0	0	0
Dec-02	33	0	0	67	0	0	668	0	0	33	0	0	35	0	0	32	0	0
Jan-03	31	0	0	62	0	0	522	0	0	29	0	0	62	0	0	62	0	0
Feb-03	29	0	0	59	0	0	208	0	0	29	0	0	59	0	0	29	0	0
Mar-03	33	0	0	67	0	0	500	155	0	33	0	0	67	0	0	100	93	0
Apr-03	31	0	0	61	648	0	520	648	0	61	259	0	92	259	0	153	1,555	0
May-03	29	0	0	57	259	0	286	259	0	143	777	0	80	97	0	134	1,454	0
Jun-03	29	0	0	58	152	0	317	152	0	433	364	0	87	61	0	58	455	0
Jul-03	28	0	0	56	217	0	279	87	0	444	609	0	84	87	0	56	521	0
Aug-03	29	0	0	56	303	0	230	70	0	278	404	0	83	67	0	56	337	0
Sep-03	28	0	0	60	205	0	211	51	0	271	384	0	81	46	0	29	371	0
Oct-03	30	0	0	61	173	0	213	43	0	396	433	0	91	87	0	0	838	0
Nov-03	30	0	0	59	279	0	235	35	0	364	901	0	91	144	0	30	1,261	0
Dec-03	33	0	0	66	308	0	266	31	0	498	923	0	100	123	0	133	1,385	0
Jan-04	29	0	0	58	0	0	232	32	0	435	1,128	0	116	129	0	116	1,451	0
Feb-04	27	0	0	54	0	0	207	33	0	805	1,839	0	78	131	0	81	1,532	0
Mar-04	28	0	0	56	0	0	222	49	0	1,049	3,295	0	83	197	0	83	2,221	0
Apr-04	28	0	0	56	40	0	225	40	0	1,036	2,717	0	79	150	0	84	2,375	0
May-04	26	0	0	51	35	0	192	65	0	871	2,974	0	77	140	0	128	2,099	0
Jun-04	27	0	0	57	62	0	254	62	0	874	2,968	0	85	155	0	141	2,326	0
Jul-04	28	0	0	60	123	0	242	62	0	819	2,652	0	88	179	0	176	2,145	0
Aug-04	31	0	0	58	123	0	279	33	0	805	3,082	0	93	131	0	155	2,295	0
	808	0		1,386	2,926		7,965	1,907		9,846	25,710		2,054	2,184		2,012	24,714	

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark Fesmire, P.E.
Director
Oil Conservation Division

June 9, 2004

Beach Exploration, Inc.
800 N. Marienfeld
Suite 200
Midland Texas 79701-3382

Attention: Ms. Julie B. LeMond

CERTIFICATION OF ENHANCED OIL RECOVERY PROJECT FOR RECOVERED OIL TAX RATE

The New Mexico Oil Conservation Division hereby certifies that the following Enhanced Oil Recovery Project has been approved by the Division as a secondary recovery project pursuant to the provisions of the "*New Mexico Enhanced Oil Recovery Act,*" *Sections 7-29A-1 through 7-29A-5, NMSA 1978.* In order to qualify for the recovered oil tax rate, you must apply for certification of positive production response within five years from the date injection commenced within the project. Only production from that portion of the project area identified herein which is actually developed for enhanced recovery will qualify for the reduced tax rate.

If operation of this project is terminated for any reason, the operator of the project must notify this Division and the Secretary of the Taxation and Revenue Department not later than the thirtieth day after termination.

NAME OF PROJECT:	West High Lonesome Unit Waterflood Project
OCD ORDER NO.	R-11674
OPERATOR:	Beach Exploration, Inc.
ADDRESS:	800 N. Marienfeld Suite 200 Midland, Texas 79701-3382
CERTIFICATION DATE:	October 1, 2002

PROJECT AREA:

Township 16 South, Range 29 East, NMPM

Section 17:	S/2 NW/4, SW/4, W/2 SE/4
Section 18:	Lots 2-4, S/2 NE/4, SE/4, SE/4 NW/4, E/2 SW/4
Section 19:	E/2 NW/4, NE/4
Section 20:	W/2 NW/4, NE/4 NW/4, NW/4 NE/4

APPROVED BY:

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

DAVID CATANACH
Engineer/Examiner

Xc: File-EOR 58
Mr. Jan Goodwin, Secretary
New Mexico Taxation and Revenue Department

Beach Exploration, Inc.

May 25, 2004

RECEIVED

MAY 28 2004

Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, NM 87505

Director
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: CERTIFICATE OF QUALIFICATION
West High Lonesome Unit Area Waterflood Project
T-16-S, R-29-E, N.M.P.M.
Section 17: S/2 NW/4 and W/2 SE/4
Section 18: Lots 2-4, S/2 NE/4, SE/4, SE/4 NW/4 & E/2 SW/4
Section 19: E/2 NW/4 & NE/4
Section 20: N/2 NW/4, SW/4 NW/4 & NW/4 NE/4

Dear Sir:

Beach Exploration, Inc. ("Beach"), the operator of the West High Lonesome Unit Area, approved by Division Order Nos. R-11674 and R-11674-A, requests the Division issue a Certificate of Qualification for the project area. A draft certificate is enclosed. Injection of water for the subject unit commenced October 2002.

Very truly yours,

Julie B. LeMond

/jbl
Enclosure

800 N. MARIENFELD • SUITE 200 • MIDLAND, TX 79701-3382 • OFFICE (432) 683-6226 • FAX (432) 683-1038

DRAFT

CERTIFICATE OF QUALIFICATION
OF AN ENHANCED OIL RECOVERY PROJECT

The New Mexico Oil Conservation Division hereby certifies that the following Enhanced Oil Recovery Project has been approved by the Division as a secondary project, pursuant to the provisions of the New Mexico Enhanced Oil Recovery Act (L. 1992, Ch. 30). In order to qualify for the Recovered oil Tax Rate, you must apply to the division for certification of a positive production response pursuant to statute. Only production from that portion of the project area identified herein which is actually developed for enhanced recovery will qualify for the reduced tax rate.

If operation of this project is terminated for any reason, the operator of the project must notify this Division and the Secretary of the Taxation and Revenue Department not later than the thirtieth day after termination.

NAME OF PROJECT: West High Lonesome Unit Area Waterflood Project

DIVISION ORDER NOS.: R-11674 and R-11674-A

OPERATOR'S ADDRESS: Beach Exploration, Inc.
800 N. Marienfeld, Suite 200
Midland, TX 79701
432-683-6226
432-683-1038 Fax
Attn: Mr. Robert N. Hinson

CERTIFICATION DATE: May ____, 2004

INITIAL PROJECT AREA:

Township 16 South, Range 29 East, N.M.P.M.
Section 17: S/2 NW/4 and W/2 SE/4
Section 18: Lots 2-4, S/2 NE/4, SE/4, SE/4 NW/4 & E/2 SW/4
Section 19: E/2 NW/4 & NE/4
Section 20: N/2 NW/4, SW/4 NW/4 & NW/4 NE/4
Eddy County, New Mexico
Containing 1156.60 acres, more or less

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Director

STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

See Also Order No. R-11674

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 13127
ORDER NO. R-11674-A

APPLICATION OF BEACH EXPLORATION, INC. TO INCREASE THE MAXIMUM SURFACE INJECTION PRESSURE WITHIN THE WEST HIGH LONESOME (PENROSE SAND) UNIT WATERFLOOD PROJECT, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on August 7, 2003, at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 24th day of November, 2003, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and the subject matter.

(2) By Order No. R-11673 issued in Case No. 12684 on October 19, 2001, the Division, upon application of Beach Exploration, Inc., approved statutory unitization of portions of the High Lonesome-Queen Pool, Eddy County, New Mexico, called the West High Lonesome Unit. The Unitized Formation within this Unit is comprised of the "Penrose" sand member of the Queen formation extending from approximately 1,576 feet subsurface to approximately 1,820 feet subsurface.

(3) By Order No. R-11674 issued in Case No. 12685 on October 19, 2001, the Division, upon application of Beach Exploration, Inc., authorized the institution of a waterflood project within the West High Lonesome Unit Area located in portions of Township 16 South, Range 29 East, NMPM, High Lonesome-Queen Pool, Eddy County, New Mexico, by the injection of water into the Penrose member of the Queen formation through eighteen injection wells located in Sections 16, 18, 19 and 20.

(4) Order No. R-11674 required two wells previously plugged to be re-entered and re-plugged in a manner satisfactory to the supervisor of the Division's Artesia District Office. These wells had been plugged in the 1940's and 1950's, with 10-sack cement plugs after the casing had been recovered.

(5) As required prior to injection, these two wells were re-entered and re-plugged under supervision of the Artesia District Office in June of 2002, to protect ground water and prevent migration of injection water out of zone.

(6) Order No. R-11674 also limited the surface injection pressure on all injection wells to no more than 341 psi, which equates to a gradient of 0.20 psi per foot of depth to the average uppermost injection perforation.

(7) Beach Exploration, Inc. applied administratively (Reference No. pkrv0306434432) on March 4, 2003, to increase allowable injection pressures on injection wells within their West High Lonesome (Penrose Sand) Unit waterflood project. The application was set for hearing by the Division in order for the applicant to provide testimony pertinent to its application.

(8) In this case, the applicant, Beach Exploration, Inc., seeks an order increasing the allowable surface injection pressure on each of the eighteen existing injection wells within the West High Lonesome (Penrose Sand) Unit waterflood project to 1,100 psi.

(9) The applicant presented the following engineering testimony.

(a) To limit injection pressure, appropriate pump bypasses must be in place and working properly. For short periods of time, this equipment was not working properly and surface injection pressure increased, at which time the waterflood began to respond. Conversely, when injection pressures were again limited, the waterflood production dropped off.

(b) Due to the reservoir being tighter than expected, each injection well is only able to inject approximately 35 barrels per day at the currently allowed 341 psi surface injection pressure.

(c) Within this waterflood, initial in-situ free gas volume is calculated at 1.6 million barrels. An injection rate of at least 200 barrels per day per injection well for 21 months is required to fill up this pore volume, to reach peak waterflood response, and to achieve acceptable economics.

(d) The six step rate tests run in April and July of 2003 on this waterflood project, show fracture pressures ranging from 830 to 1,220 psi. The average surface fracture pressure is 978 psi, which reflects an average surface gradient of 0.57 psi per foot and an average bottom hole gradient of 1.01 psi per foot (friction being negligible at these low rates). Similarly, on the offsetting Red Lake Unit (also Penrose sand), the average surface fracture pressure measured in 1991 was 935 psi.

(e) These fracture pressures roughly equate to the pressure resulting from a gradient of overburden rocks (red beds, anhydrites, and salt). This relationship implies that vertical and horizontal stresses are approximately equal and that some wells will fracture horizontally and some will fracture vertically.

(f) The injection formation is bounded top and bottom by thick, dense, anhydritic dolomites and shales. These rocks are normally "higher stress" than the reservoir rock and therefore provide resistance to vertical fracture migration.

(g) In 1992, using rock mechanic properties obtained by running a "full wave sonic" log, Halliburton created a processed (interpreted) "frac-height" log, which indicated that at 200 psi over fracture pressure (in wells which fracture vertically), the injection water will fracture up approximately 35 feet and down approximately 135 feet.

(h) Injection profile logs were run in 1992 on four Penrose wells in the Red Lake Unit while injecting at 1,500 psi. Within the depths of investigation, no migration was seen more than six feet beyond the perforated interval.

(i) Fracturing either vertically or horizontally is not desirable. Fracturing horizontally will bypass oil and defeat the purpose of the waterflood. Therefore, careful consideration is being given to limiting injection pressures to measured fracture pressure in those wells tending to fracture horizontally. On wells tending to fracture vertically, fracturing up out of zone would lose water and become very expensive. Vertical fracturing is less sensitive to occasional over-pressuring than horizontal fracturing.

(j) The Penrose is a central member of the Queen formation. There are no productive intervals in the Queen either above or below the Penrose. Also, the Seven Rivers and Yates, which are above the Queen, are not productive in this area.

(k) There is a very small and intermittent amount of fresh ground water in this area normally about 75 feet deep. The waterflood is dependent on purchased fresh water until fill-up of the reservoir.

(l) There have been 363,000 barrels of water injected and only 32,000 barrels of fluid withdrawn from the waterflood. This injected water is filling up the pore volume and is not leaving the injected interval.

(m) Surface pipe is normally set at or above the top of the salt, which in this area is at approximately 340 feet. The main challenge in drilling wells in this area is cementing the surface pipe. Up to ten attempts were made on one well using different cements before an adequate cement job was obtained.

(10) The salt section in this area from approximate depths of 340 feet to 700 feet has at least one recorded instance of being charged up with high-pressure salt water. The Brainard Federal Well No. 1 (API 30-015-02761) located in Unit O, Section 20, less than one mile southeast of the West High Lonesome Unit boundary, encountered high flow rates from the surface casing shoe depth while attempting to spot a cement plug during plugging operations. Flow rates were reported at 500 to 800 barrels of salt water per hour from the salt section.

(11) The source of these salt section water problems has not been determined and further investigation should be done. As required while applying for waterflood status in Case 12685, the applicant has completed a comprehensive search for inadequately cemented wells within the area of review of all injection wells and, as a consequence, has re-entered and re-plugged two wells.

(12) By Order No. R-9453-A issued in Case No. 10495 on July 13, 1992, the Division, upon application of Beach Exploration, Inc., authorized an injection pressure increase to a maximum of 1,500 psi for all wells in the Red Lake Unit located in portions of Township 16 South, Ranges 28 and 29 East, NMPM, Eddy County, New Mexico. The Red Lake Unit is an analogous waterflood to the West High Lonesome (Penrose Sand) Unit and contains injection wells in the same formation and at similar depths.

(13) The applicant, through its engineering evidence and testimony, has satisfactorily demonstrated that injection at a higher surface injection pressure is necessary in order to efficiently and effectively waterflood the West High Lonesome (Penrose Sand) Unit and will allow the applicant to recover additional oil reserves, thereby preventing waste.

(14) The applicant has further satisfactorily demonstrated that injection into the injection wells at a surface injection pressure of 1,100 psi will not result in the migration of fluid from the Queen formation and will not pose a threat to underground sources of drinking water in this area.

IT IS THEREFORE ORDERED THAT:

(1) Division Order No. R-11674 is hereby amended to authorize Beach Exploration, Inc. to inject water into eighteen previously approved injection wells (as more fully described on Exhibit "A" of Order No. R-11674) located within the West High Lonesome (Penrose Sand) Unit waterflood project in Sections 16, 18, 19 and 20, Township 16 South, Range 29 East, NMPM, High Lonesome-Queen Pool, Eddy County, New Mexico, at a maximum surface injection pressure of 1,100 psi.

(2) The Division Director shall have the authority to reduce or rescind the surface injection pressure approved herein should it become apparent that the injected fluid is not being adequately confined to the High Lonesome-Queen Pool.

(3) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Lori Wrotenbery

LORI WROTENBERY
Director

SEAL

STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 12685
ORDER NO. R-11674

APPLICATION OF BEACH EXPLORATION, INC. FOR APPROVAL OF A WATERFLOOD PROJECT AND TO QUALIFY THE PROJECT FOR THE RECOVERED OIL TAX RATE PURSUANT TO THE ENHANCED OIL RECOVERY ACT, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on July 12, 2001, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 19th day of October, 2001, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.

(2) Division Cases No. 12684 and 12685 were consolidated at the time of the hearing for the purpose of testimony.

(3) The applicant, Beach Exploration, Inc. ("Beach"), seeks authority to institute a waterflood project within its West High Lonesome Unit Area (being the subject of companion Case No. 12684) by the injection of water into the Penrose Sand member of the Queen formation, High Lonesome (Queen) Pool, Eddy County, New Mexico, through 18 initial injection wells shown on Exhibit "A" attached to this order.

(4) The applicant further seeks to qualify the waterflood project as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (NMSA 1978 Sections 7-29A-1 through 7-29A-5).

(5) Mr. Bill Taylor and Mr. Harvey Taylor ("the Taylors"), working interest owners in the SE/4 NW/4 of Section 19, Township 16 South, Range 29 East, NMPM, being Tract No. 11 of the West High Lonesome Unit, appeared at the hearing, cross examined Beach's witnesses and made a statement at the conclusion of proceedings.

(6) The Taylors do not oppose the proposed secondary recovery project.

(7) The West High Lonesome Unit is proposed to comprise the following-described acreage in Eddy County, New Mexico:

Township 16 South, Range 29 East, NMPM

Section 17:	S/2 NW/4, SW/4, W/2 SE/4
Section 18:	Lots 2 through 4, S/2 NE/4, SE/4, SE/4 NW/4, E/2 SW/4
Section 19:	E/2 NW/4, NE/4
Section 20:	W/2 NW/4, NE/4 NW/4, NW/4 NE/4

(8) The evidence presented demonstrates that the wells in the project area are in an advanced state of depletion.

(9) During the Phase I portion of the project, the applicant proposes to utilize an 80-acre five-spot injection pattern with 13 injection wells and 14 producing wells.

(10) The applicant testified that the proposed secondary recovery project within the West High Lonesome Unit should result in the recovery of an additional 558,000 barrels of oil that would otherwise not be recovered, thereby preventing waste.

(11) Approval of the proposed waterflood project should result in the recovery of additional hydrocarbons from the Penrose Sand member of the Queen formation within the project area that may otherwise not be recovered, thereby preventing waste, and will not violate correlative rights.

(12) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(13) Injection into the wells shown on Exhibit "A" should be accomplished through 2 3/8 inch internally plastic-lined tubing installed in a packer located within 100 feet of the uppermost injection perforations or casing shoe. The casing-tubing annulus

should be filled with an inert fluid and a gauge or approved leak-detection device should be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

(14) Beach requested that it be authorized to inject into the wells shown on Exhibit "A" at a maximum surface injection pressure of 1100 psi.

(15) The Division normally approves a maximum surface injection pressure based upon a gradient of 0.2 psi per foot to the uppermost injection perforations. Utilizing this gradient, the proposed injection wells would normally be assigned maximum surface injection pressures ranging from 315 psi to 355 psi.

(16) Beach presented no step-rate test data or additional engineering evidence to demonstrate that its proposed maximum surface injection pressure will not cause fracturing of the injection formation or confining strata.

(17) The proposed injection wells or pressurization system should be initially equipped with a pressure control device or acceptable substitute that will limit the surface injection pressure to no more than 341 psi (based upon the average depth of injection for the wells shown on Exhibit "A").

(18) Prior to commencing injection operations, the casing in each well should be pressure tested throughout the interval from the surface down to the proposed packer setting depth to assure the integrity of such casing.

(19) The applicant identified two wells within the "area of review" that may not be adequately plugged so as to confine the injected fluid to the proposed injection interval.

(20) Prior to commencing injection operations into any injection well located within one-half mile of the following-described wells, the applicant should be required to re-enter and re-plug these wells in a manner that is satisfactory to the supervisor of the Division's Artesia District Office:

Well Name & Number	Well Location
George Atkins Iles No. 5	330' FSL & 1650' FEL, Unit O, Section 17, T-16S, R-29E
B. H. Nolan/George Atkins Iles No. 1	330' FSL & 330' FEL, Unit P, Section 17, T-16S, R-29E

(21) The operator should give advance notice to the supervisor of the Division's Artesia District Office of the date and time (i) injection equipment will be installed, (ii) the mechanical integrity pressure tests will be conducted on the proposed injection wells, and (iii) remedial plugging work will be conducted on the Iles Wells No. 1 and 5, so that these operations may be witnessed.

(22) The operator should immediately notify the supervisor of the Division's Artesia District Office of the failure of the tubing, casing or packer in any of the injection wells or the leakage of water, oil or gas from or around any producing or plugged and abandoned well within the project area, and should promptly take all steps necessary to correct such failure or leakage.

(23) The proposed waterflood project should be approved, and the project should be governed by Division Rules No. 701 through 708.

(24) The injection authority granted herein for each well shown on Exhibit "A" should terminate one year after the date of this order if the operator has not commenced injection operations into the well; however, the Division, upon written request by the operator, may grant an extension for good cause.

(25) The evidence presented demonstrates that:

(a) the application for approval of the proposed secondary recovery project has not been prematurely filed either for economic or technical reasons;

(b) the area affected by the proposed project has been so depleted by primary operations that it is prudent to apply secondary recovery techniques to maximize the ultimate recovery of crude oil from the pool; and

(c) the proposed secondary recovery project meets all the criteria for certification by the Division as a qualified "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (NMSA 1978 Sections 7-29A-1 through 7-29A-5).

(26) The approved project area should initially comprise the entire West High Lonesome Unit, as described in Finding No. (7); however, the "project area" and/or the

producing wells eligible for the enhanced oil recovery (EOR) tax rate may be contracted and reduced based upon the evidence presented by the applicant in its demonstration of a positive production response.

(27) To be eligible for the EOR tax rate, the operator should advise the Division of the date water injection commences within the secondary recovery project. At that time, the Division will certify the project to the New Mexico Taxation and Revenue Department.

(28) At such time as a positive production response occurs, and within five years from the date the project was certified to the New Mexico Taxation and Revenue Department, the applicant must apply to the Division for certification of a positive production response. This application shall identify the area benefiting from enhanced oil recovery operations and the specific wells eligible for the EOR tax rate. The Division may review the application administratively or set it for hearing. Based upon the evidence presented, the Division will certify to the New Mexico Taxation and Revenue Department those wells that are eligible for the EOR tax rate.

IT IS THEREFORE ORDERED THAT:

(1) Beach Exploration, Inc., is hereby authorized to institute a waterflood project within its West High Lonesome Unit Area, described below, by the injection of water into the Penrose Sand member of the Queen formation, High Lonesome (Queen) Pool, Eddy County, New Mexico, in the 18 wells shown on Exhibit "A" attached to this order located in Sections 17, 18, 19 and 20, Township 16 South, Range 29 East, NMPM:

Township 16 South, Range 29 East, NMPM

Section 17:	S/2 NW/4, SW/4, W/2 SE/4
Section 18:	Lots 2 through 4, S/2 NE/4, SE/4, SE/4 NW/4, E/2 SW/4
Section 19:	E/2 NW/4, NE/4
Section 20:	W/2 NW/4, NE/4 NW/4, NW/4 NE/4

(2) The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(3) Injection into each of the wells shown on Exhibit "A" shall be accomplished through 2 3/8 inch internally plastic-lined tubing installed in a packer located within 100 feet of the uppermost injection perforations or casing shoe. The

casing-tubing annulus shall be filled with an inert fluid and a gauge or approved leak-detection device shall be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

(4) The injection wells or pressurization system shall be equipped with a pressure control device or acceptable substitute that will limit the surface injection pressure to no more than 341 psi.

(5) The Division Director may administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in the fracturing of the injection formation or confining strata.

(6) Prior to commencing injection operations, the casing in each well shall be pressure tested throughout the interval from the surface down to the proposed packer setting depth to assure the integrity of such casing.

(7) Prior to commencing injection operations into any injection well located within one-half mile of the following-described wells, the applicant shall re-enter and re-plug these wells in a manner that is satisfactory to the supervisor of the Division's Artesia District Office:

Well Name & Number	Well Location
George Atkins Iles No. 5	330' FSL & 1650' FEL, Unit O, Section 17, T-16S, R-29E
B. H. Nolan/George Atkins Iles No. 1	330' FSL & 330' FEL, Unit P, Section 17, T-16S, R-29E

(8) The operator shall give advance notice to the supervisor of the Division's Artesia District Office of the date and time (i) injection equipment will be installed, (ii) the mechanical integrity pressure test will be conducted on the proposed injection wells, and (iii) remedial plugging work will be conducted on the Iles Wells No. 1 and 5, so that these operations may be witnessed.

(9) The operator shall immediately notify the supervisor of the Division's Artesia District Office of the failure of the tubing, casing or packer in any of the injection wells or the leakage of water, oil or gas from or around any producing or plugged and abandoned well within the project area, and shall promptly take all steps necessary to correct such failure or leakage.

(10) The waterflood project is hereby designated the West High Lonesome Unit Waterflood Project, and the applicant shall conduct injection operations in

accordance with Division Rules No. 701 through 708, and shall submit monthly progress reports in accordance with Division Rules No. 706 and 1115.

(11) The injection authority granted herein for each well shown on Exhibit "A" shall terminate one year after the date of this order if the operator has not commenced injection operations into the well; provided, however, the Division, upon written request by the operator, may grant an extension for good cause.

(12) The West High Lonesome Unit Waterflood Project is hereby certified as an "Enhanced Oil Recovery Project." The project area shall initially comprise the entire West High Lonesome Unit, described in Ordering Paragraph No. (1), provided however, the project area and/or the producing wells eligible for the enhanced oil recovery (EOR) tax rate may be contracted and reduced based upon the evidence presented by the applicant in its demonstration of a positive production response.

(13) To be eligible for the EOR tax rate, the operator shall advise the Division of the date and time water injection commences within the secondary recovery project. At that time, the Division will certify the project to the New Mexico Taxation and Revenue Department.

(14) At such time as a positive production response occurs, and within five years from the date the project was certified to the New Mexico Taxation and Revenue Department, the applicant must apply to the Division for certification of a positive production response. This application shall identify the area benefiting from enhanced oil recovery operations and the specific wells eligible for the EOR tax rate. The Division may review the application administratively or set it for hearing. Based upon the evidence presented, the Division will certify to the New Mexico Taxation and Revenue Department those wells that are eligible for the EOR tax rate.

(15) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Lori Wrotenbery

LORI WROTENBERY
Director

Exhibit "A"
Division Order No. R-11674
West High Lonesome Unit Waterflood Project
Approved Injection Wells

Well Name & Number	API Number	Well Location	Injection Interval	Packer Depth
Exxon Federal "A" No. 1	30-015-25983	2310' FNL & 330' FEL, Unit H, Section 18, T-16S, R-29E	1,714'-1,728'	1,664'
Exxon Federal "A" No. 2	30-015-26035	2310' FNL & 1650' FEL, Unit G, Section 18, T-16S, R-29E	1,702'-1,722'	1,652'
Exxon Federal "A" No. 3	30-015-26123	2410' FNL & 1932' FWL, Unit F, Section 18, T-16S, R-29E	1,645'-1,655'	1,595'
Exxon Federal No. 1	30-015-24345	660' FSL & 660' FEL, Unit P, Section 18, T-16S, R-29E	1,722'-1,756'	1,672'
Exxon Federal No. 2	30-015-25375	330' FSL & 1650' FEL, Unit O, Section 18, T-16S, R-29E	1,713'-1,750'	1,663'
Exxon Federal No. 6	30-015-25672	560' FSL & 2035' FWL, Unit N, Section 18, T-16S, R-29E	1,708'-1,727'	1,658'
Rosewood State "18" No. 1	30-015-25733	1650' FSL & 330' FWL, Unit L, Section 18, T-16S, R-29E	1,576'-1,596'	1,526'
Shiloh Federal No. 3	30-015-25527	2310' FNL & 988' FWL, Unit E, Section 17, T-16S, R-29E	1,730'-1,758'	1,680'
Shiloh Federal No. 4	30-015-25606	2210' FNL & 1650' FWL, Unit F, Section 17, T-16S, R-29E	1,752'-1,764'	1,702'
Iles Federal No. 2	30-015-02752	1650' FSL & 2310' FWL, Unit K, Section 17, T-16S, R-29E	1,700'-1,812'	1,650'
Iles Federal No. 3	30-015-02759	330' FNL & 2310' FWL, Unit C, Section 20, T-16S, R-29E	1,590'-1,820'	1,580'
Iles Federal No. 4	30-015-01438	1650' FSL & 2310' FEL, Unit J, Section 17, T-16S, R-29E	1,740'-1,800'	1,717'
Iles Federal No. 8	30-015-25788	2310' FSL & 1950' FWL, Unit K, Section 17, T-16S, R-29E	1,740'-1,764'	1,690'
Renee Federal No. 1	30-015-25363	660' FSL & 330' FWL, Unit M, Section 17, T-16S, R-29E	1,729'-1,750'	1,679'
Renee Federal No. 3	30-015-25495	1650' FNL & 330' FWL, Unit E, Section 20, T-16S, R-29E	1,774'-1,793'	1,724'
Federal "19" No. 1	30-015-25392	660' FNL & 660' FEL, Unit A, Section 19, T-16S, R-29E	1,746'-1,772'	1,696'
Big Mac Federal No. 1	30-015-02758	660' FNL & 3300' FEL, Unit C, Section 19, T-16S, R-29E	1,683'-1,699'	1,633'
Coastal Federal No. 1	30-015-25304	1980' FNL & 1980' FEL, Unit G, Section 19, T-16S, R-29E	1,747'-1,797'	1,697'