

AOGCC Pool Statistics

West Foreland Field, Undef Gas Pool

Alaska Oil and Gas Conservation Commission > Annual Reports > Pool Statistics - 2004: Updated 11 August 2005

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Operator: Forest Oil Corporation

Discovery Well: Pan American Petroleum Corp.
West Foreland No. 1
Permit #161-049
API No. 50-133-10028-00-00
Sec. 21, T08N, R14W, SM
Depth: 13,500' MD / 13,500' TVD
March 27, 1962

Status: **Producing****Location:** **Cook Inlet** [Area Loc. Map](#)**Orders:** [Complete List](#)

Summary: The West Foreland undefined gas pools were discovered in 1962 by the Pan American Petroleum Corporation's ("Pan Am") West Foreland No. 1 oil exploration well. Production tests conducted in two Lower Tyonek sands flowed at rates from 5 to 8 million cubic feet of gas per day. Amoco carried out an extended flow test in February and March of 1984 that yielded 7.7 million cubic feet of gas per day.

In April 2001, the current operator, Forest Oil Corporation ("Forest"), placed West Foreland No. 1 on continuous production from the Tyonek Undefined 4.0 Gas Pool. Production from the pool peaked in November 2003, when the average daily rate reached 3.4 million cubic feet per day. By December 2004, the production from the pool decreased to 2.6 million cubic feet of gas per day.

During 2004, Forest permitted and drilled West Foreland No. 2, a gas development well. A company press release dated February 16, 2005, reported that the well had been drilled upstructure to West Foreland No. 1, and that it had tested 15 million cubic feet of gas per day from two zones.

During December 2004, Forest put West Foreland No. 2 on continuous production from the Tyonek Undefined 4.2 pool, and it averaged 2.8 million cubic feet of gas per day.

[Strat Column](#)**Production:**[Prod Chart](#)[Prod Report](#)[Prod Data](#)

| | Gas (mcf) | Water (bbls) | Disposed Fluids (bbls) |
|-------------------|------------------|---------------------|-------------------------------|
| Cumulative | 2,121,484 | 0 | 0 |
| 2001 Total | 58,539 | 0 | 0 |
| 2002 Total | 60,065 | 0 | 0 |
| 2003 Total | 940,110 | 0 | 0 |
| 2004 Total | 1,024,590 | 0 | 0 |
| 2003 Rate (/d) | 2,576 | 0 | 0 |
| 2004 Rate (/d) | 2,807 | 0 | 0 |
| Change (%) | 9% | - | - |

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Field Development Information:

| Type Well | Status | Wells In Field | | | | |
|---------------|-----------|----------------|----------|----------|----------|----------|
| | | 2004 | 2003 | 2002 | 2001 | 2000 |
| Producer | Gas | 1 | 1 | 1 | 1 | 1 |
| Injector | Disposal | 0 | 0 | 0 | 0 | 0 |
| Non-Operating | Suspended | 0 | 0 | 0 | 0 | 0 |
| | Abandoned | 0 | 0 | 0 | 0 | 0 |
| Total | | 1 | 1 | 1 | 1 | 1 |

Permitted Wells in Field:

| Type Well | Status | 2004 | 2003 | 2002 | 2001 | 2000 |
|--------------|--------------|----------|----------|----------|----------|----------|
| Development | New | 0 | 0 | 0 | 0 | 0 |
| | Sidetrack | 0 | 0 | 0 | 0 | 0 |
| | Multilateral | 0 | 0 | 0 | 0 | 0 |
| Service | New | 0 | 0 | 0 | 0 | 0 |
| Exploration | New | 0 | 0 | 0 | 0 | 0 |
| Total | | 0 | 0 | 0 | 0 | 0 |

Active Completions in Pool (Month of December):

| Type Well | Status | 2004 | 2003 | 2002 | 2001 | 2000 |
|--------------|-------------------|----------|----------|----------|----------|----------|
| Gas Producer | Flowing | 0 | 1 | 1 | 1 | 0 |
| | Other | 0 | 0 | 0 | 0 | 0 |
| | Shut-In | 0 | 0 | 0 | 0 | 1 |
| Disposal | Disposal Injector | 1 | 0 | 0 | 0 | 0 |
| | Shut-In | 0 | 0 | 0 | 0 | 0 |
| Total | | 1 | 1 | 1 | 1 | 1 |

Reservoir Properties: Tyonek Formation

| Description | 2004 | 2003 | 2002 | 2001 | 2000 |
|---------------------------------------|--------|--------|--------|--------|--------|
| Reference Datum - ft. below sea level | 9200 | 9200 | 9200 | 9200 | 9200 |
| Temperature - ° F | 171 | 171 | 171 | 171 | 171 |
| Porosity - % | 20 | 20 | 20 | 20 | 20 |
| Permeability - md | 30 | 30 | 30 | 30 | 30 |
| Swi - % | 25 | 25 | 25 | 25 | 25 |
| Orig. Press. - psi | 4265 | 4265 | 4265 | 4265 | 4265 |
| Curr. Reservoir Press. - psi | 3054 | 4064 | 4172 | 4172 | 4172 |
| Curr. Reservoir Press. - Test Date | Dec-04 | Jan-03 | Nov-01 | Nov-01 | Nov-00 |
| Gas Specific Gravity (Air = 1.0) | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| Gross Pay - ft. | 20 | 20 | 20 | 20 | 20 |
| Net Pay - ft. | 15 | 15 | 15 | 15 | 15 |

References

Continued: 1 > 2

West Foreland Field, Undef Gas Pool

Pool Summary

The West Foreland undefined gas pools were discovered in 1962 by the Pan American Petroleum Corporation's ("Pan Am") West Foreland No. 1 oil exploration well. Production tests conducted in two Lower Tyonek sands flowed at rates from 5 to 8 million cubic feet of gas per day. Amoco carried out an extended flow test in February and March of 1984 that yielded 7.7 million cubic feet of gas per day.¹

In April 2001, the current operator, Forest Oil Corporation ("Forest"), placed West Foreland No. 1 on continuous production from the Tyonek Undefined 4.0 Gas Pool. Production from the pool peaked in November 2003, when the average daily rate reached 3.4 million cubic feet per day. By December 2004, the production from the pool decreased to 2.6 million cubic feet of gas per day.²

During 2004, Forest permitted and drilled West Foreland No. 2, a gas development well. A company press release dated February 16, 2005, reported that the well had been drilled upstructure to the West Foreland No. 1 well and that it had tested 15 million cubic feet of gas per day from two zones.³

West Foreland No. 2 was completed with a dual string, making it capable of producing from two separate gas pools: the Tyonek Undefined 4.0 and a new, overlying gas pool named Tyonek Undefined 4.2. During December 2004, Forest put the well on continuous production from the Tyonek Undefined 4.2 pool, and it averaged 2.8 million cubic feet of gas per day. By year-end 2004, the Tyonek Undefined 4.0 pool had not been placed on production in West Foreland No. 2.⁴

¹ Pan American Petroleum Company, 1968, Alaska Oil and Gas Conservation Commission Well File No. 1610490, West Foreland No. 1.

² Alaska Oil and Gas Conservation Commission, 2005, Well and Production Information Database

³ Forest Oil Corporation, 2005, Forest Oil Announces Exploration Discoveries and Provides an Operational Project Update; Press Release, Feb. 16, 2005; <http://phx.corporate-ir.net/phoenix.zhtml?c=92251&p=irol-newsArticle&t=Regular&id=676076&>

⁴ Alaska Oil and Gas Conservation Commission, 2005, Well and Production Information Database

State of Alaska, Oil and Gas Conservation Commission

Production History for: W FORELAND, TYONEK UND 4.0 GAS Pool

Jan 1958

| <u>Month</u> | <u>DaysProd</u> | <u>Oil (BBL)</u> | <u>Gas (MCF)</u> | <u>Water (BBL)</u> | Producing |
|-------------------|-----------------|------------------|------------------|--------------------|--------------|
| | | | | | <u>Wells</u> |
| Apr 2001 | 6 | 0 | 2126 | 0 | 1 |
| May 2001 | 31 | 0 | 9959 | 0 | 1 |
| Jun 2001 | 30 | 0 | 10889 | 0 | 1 |
| Jul 2001 | 31 | 0 | 11708 | 0 | 1 |
| Aug 2001 | 18 | 0 | 9279 | 0 | 1 |
| Oct 2001 | 5 | 0 | 2282 | 0 | 1 |
| Nov 2001 | 27 | 0 | 11164 | 0 | 1 |
| Dec 2001 | 30 | 0 | 4804 | 0 | 1 |
| Year Total | | 0 | 62211 | 0 | |
| Jan 2002 | 30 | 0 | 5740 | 0 | 1 |
| Feb 2002 | 27 | 0 | 1953 | 0 | 1 |
| Mar 2002 | 17 | 0 | 1218 | 0 | 1 |
| Apr 2002 | 18 | 0 | 2155 | 0 | 1 |
| May 2002 | 3 | 0 | 267 | 0 | 1 |
| Jun 2002 | 18 | 0 | 1361 | 0 | 1 |
| Jul 2002 | 31 | 0 | 2593 | 0 | 1 |
| Aug 2002 | 31 | 0 | 2516 | 0 | 1 |
| Sep 2002 | 27 | 0 | 1996 | 0 | 1 |
| Oct 2002 | 1 | 0 | 112 | 0 | 1 |
| Nov 2002 | 5 | 0 | 5281 | 0 | 1 |
| Dec 2002 | 24 | 0 | 33475 | 0 | 1 |
| Year Total | | 0 | 58667 | 0 | |
| Jan 2003 | 28 | 0 | 64314 | 0 | 1 |
| Feb 2003 | 24 | 0 | 66108 | 0 | 1 |
| Mar 2003 | 31 | 0 | 65505 | 0 | 1 |
| Apr 2003 | 30 | 0 | 81124 | 0 | 1 |
| May 2003 | 31 | 0 | 89712 | 0 | 1 |
| Jun 2003 | 30 | 0 | 94630 | 0 | 1 |
| Jul 2003 | 31 | 0 | 85035 | 0 | 1 |
| Aug 2003 | 31 | 0 | 89214 | 0 | 1 |
| Sep 2003 | 30 | 0 | 72738 | 0 | 1 |
| Oct 2003 | 31 | 0 | 76914 | 0 | 1 |
| Nov 2003 | 30 | 0 | 101681 | 0 | 1 |
| Dec 2003 | 31 | 0 | 89041 | 0 | 1 |
| Year Total | | 0 | 976016 | 0 | |
| Jan 2004 | 31 | 0 | 88232 | 0 | 1 |
| Feb 2004 | 29 | 0 | 81264 | 0 | 1 |
| Mar 2004 | 31 | 0 | 86026 | 0 | 1 |
| Apr 2004 | 30 | 0 | 76407 | 0 | 1 |
| May 2004 | 31 | 0 | 76437 | 0 | 1 |
| Jun 2004 | 30 | 0 | 78452 | 0 | 1 |
| Jul 2004 | 31 | 0 | 83561 | 0 | 1 |
| Aug 2004 | 31 | 0 | 75100 | 0 | 1 |
| Sep 2004 | 30 | 0 | 76706 | 0 | 1 |
| Oct 2004 | 30 | 0 | 88988 | 0 | 1 |
| Nov 2004 | 30 | 0 | 81854 | 0 | 1 |
| Dec 2004 | 46 | 0 | 131563 | 0 | 2 |
| Year Total | | 0 | 1024590 | 0 | |

State of Alaska, Oil and Gas Conservation Commission

Production History for: W FORELAND, TYONEK UND 4.0 GAS Pool

Jan 1958

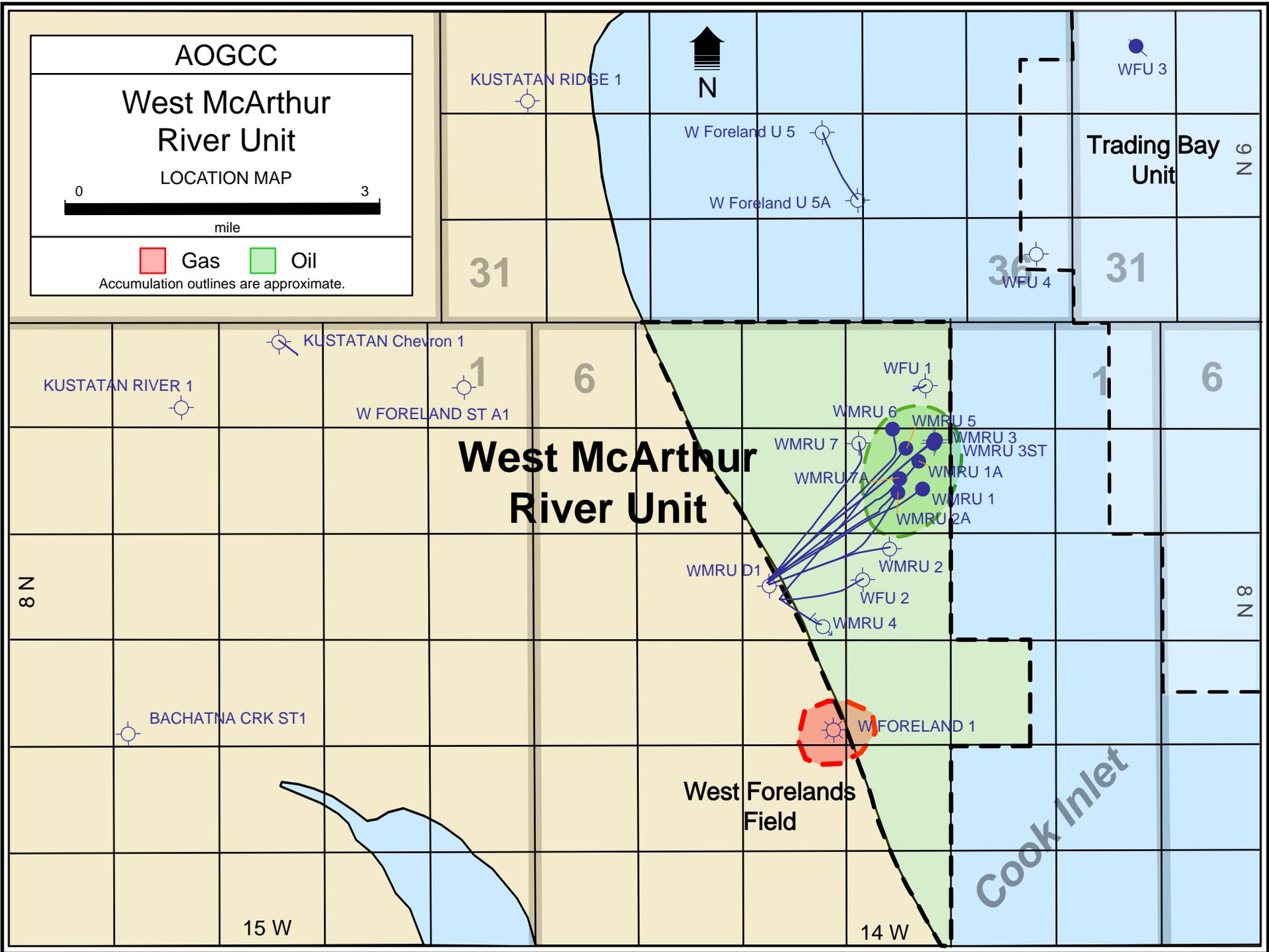
| <u>Month</u> | <u>DaysProd</u> | <u>Oil (BBL)</u> | <u>Gas (MCF)</u> | <u>Water (BBL)</u> | <u>Producing Wells</u> |
|--------------|-----------------|------------------|------------------|--------------------|------------------------|
| Pool Total | | 0 | 2,121,484 | 0 | |

State of Alaska, Oil and Gas Conservation Commission

Production History for: W FORELAND, TYONEK UND 4.2 GAS Pool

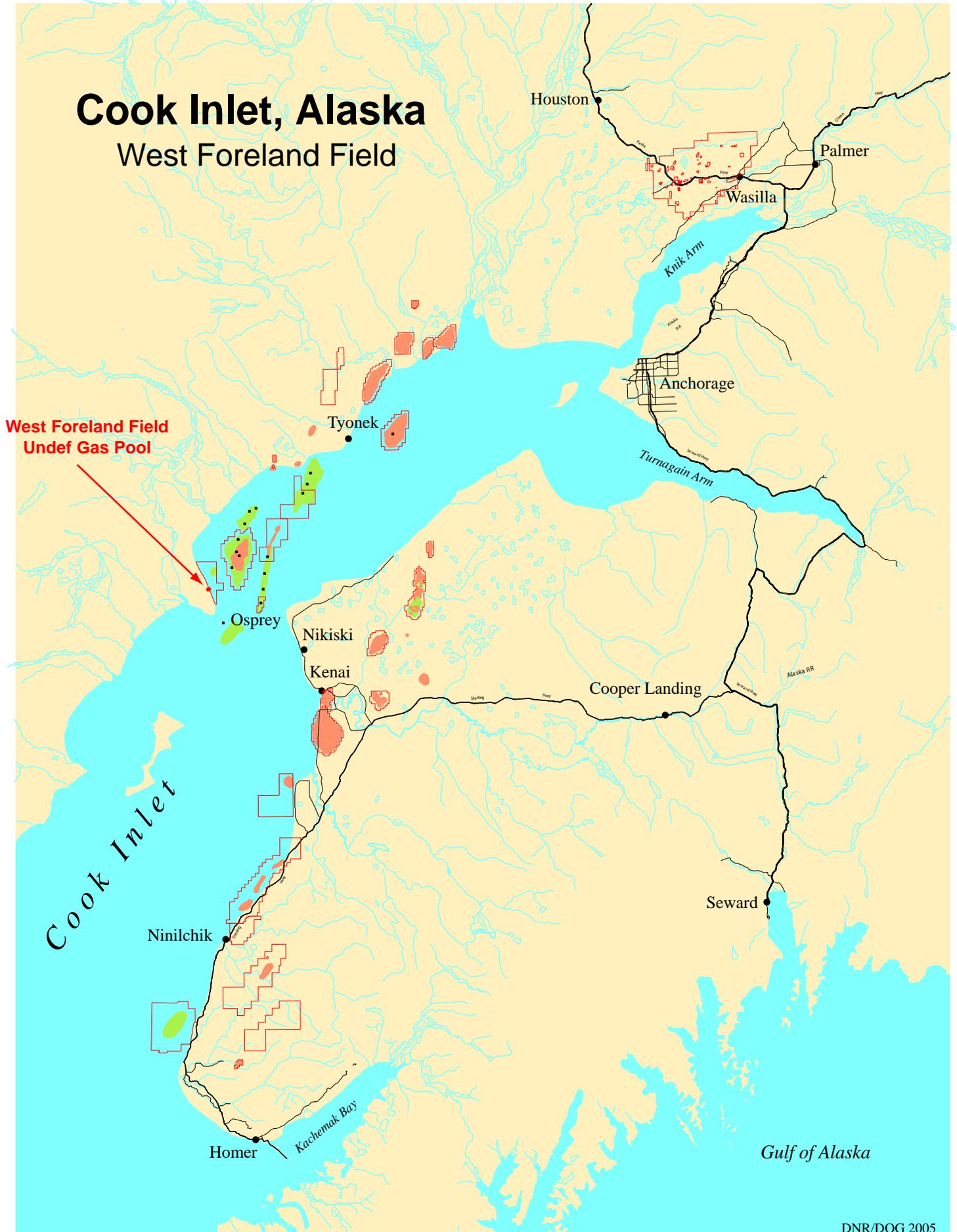
Jan 1958 Dec 2004

| <u>Month</u> | <u>DaysProd</u> | <u>Oil (BBL)</u> | <u>Gas (MCF)</u> | <u>Water (BBL)</u> | <u>Producing Wells</u> |
|-------------------|-----------------|------------------|------------------|--------------------|------------------------|
| Dec 2004 | 15 | 0 | 50884 | 0 | 1 |
| Year Total | | 0 | 50884 | 0 | |
| Pool Total | | 0 | 50,884 | 0 | |



Cook Inlet, Alaska

West Foreland Field



W FORELAND, UNDEFINED GAS

Reference List

Alaska Oil and Gas Conservation Commission, 2000, Conservation Order No. 450, West Foreland Field; available on line at
http://www.state.ak.us/local/akpages/ADMIN/ogc/orders/co/co400_499/co450.htm

Alaska Oil and Gas Conservation Commission, 2001, Conservation Order No. 450A, West Foreland Field; available on line at
http://www.state.ak.us/local/akpages/ADMIN/ogc/orders/co/co400_499/co450a.htm

Alaska Oil and Gas Conservation Commission, 2003, Conservation Order No. 450B, West Foreland Field; available on line at
http://www.state.ak.us/local/akpages/ADMIN/ogc/orders/co/co400_499/co450b.htm

Alaska Oil and Gas Conservation Commission, 2004, Conservation Order No. 532, West Foreland Field; available on line at
http://www.state.ak.us/local/akpages/ADMIN/ogc/orders/co/co500_599/co532.htm

Forest Oil Corporation, 2005, Forest Oil Announces Exploration Discoveries and Provides an Operational Project Update; Press Release, Feb. 16, 2005;
<http://phx.corporate-ir.net/phoenix.zhtml?c=92251&p=irol-newsArticle&t=Regular&id=676076&>

Pan American Petroleum Company, 1968, Alaska Oil and Gas Conservation Commission Well File No. 1610490, West Foreland No. 1.

West Foreland Field, Undefined Gas Pool

Pool Summary

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⁴ Alaska Oil and Gas Conservation Commission, 2005, Well and Production Information Database

W FORELAND FIELD

No Pool

Current Orders

| Order No. | AA | Operator | Date | Description | Current | |
|-----------|----|----------|--------------|-------------|---------------------------|---|
| OTH | 8 | 0 | FOREST OIL C | 06-Jan-00 | West Foreland Field Plan. | Y |

W FORELAND FIELD

No Pool

Spacing Exception Orders

| Order No. | AA | Operator | Date | Description | Current |
|-----------|-------|----------------|-----------|--|---------|
| CO | 450 A | 0 FOREST OIL C | 23-Apr-01 | Amends CO 450. Spacing exception expires 7-1-2003. Covers gas prod. From any interval not deeper than 9,527 feet measured depth in the W Forland # 1 well. | N |
| CO | 450 | 0 FOREST OIL C | 24-Jul-00 | Spacing exception for the West Foreland #1 gas well | Y |
| CO | 25 | 0 Shell | 06-Jul-66 | Spacing exception Forelands Channel State #1-A. | N |
| CO | 21 | 0 Shell | 25-Apr-66 | Spacing exception Forelands Channel State #1. | N |

**W FORELAND FIELD
TYONEK UNDEFINED 4.0 GAS POOL**

Spacing Exception Orders

| Order No. | AA | Operator | Date | Description | Current |
|------------------|-----------|-----------------|-------------|---|----------------|
| CO | 532 | 0 FOREST OIL C | 16-Sep-04 | Spacing Exception West Foreland #2 gas production well. | Y |
| CO | 450 B | 0 FOREST OIL C | 29-Sep-03 | Spacing Exception granting permanent exception to the spacing requirements of 20 AAC 25.055 to allow for production from the West Foreland #1 gas well. | Y |

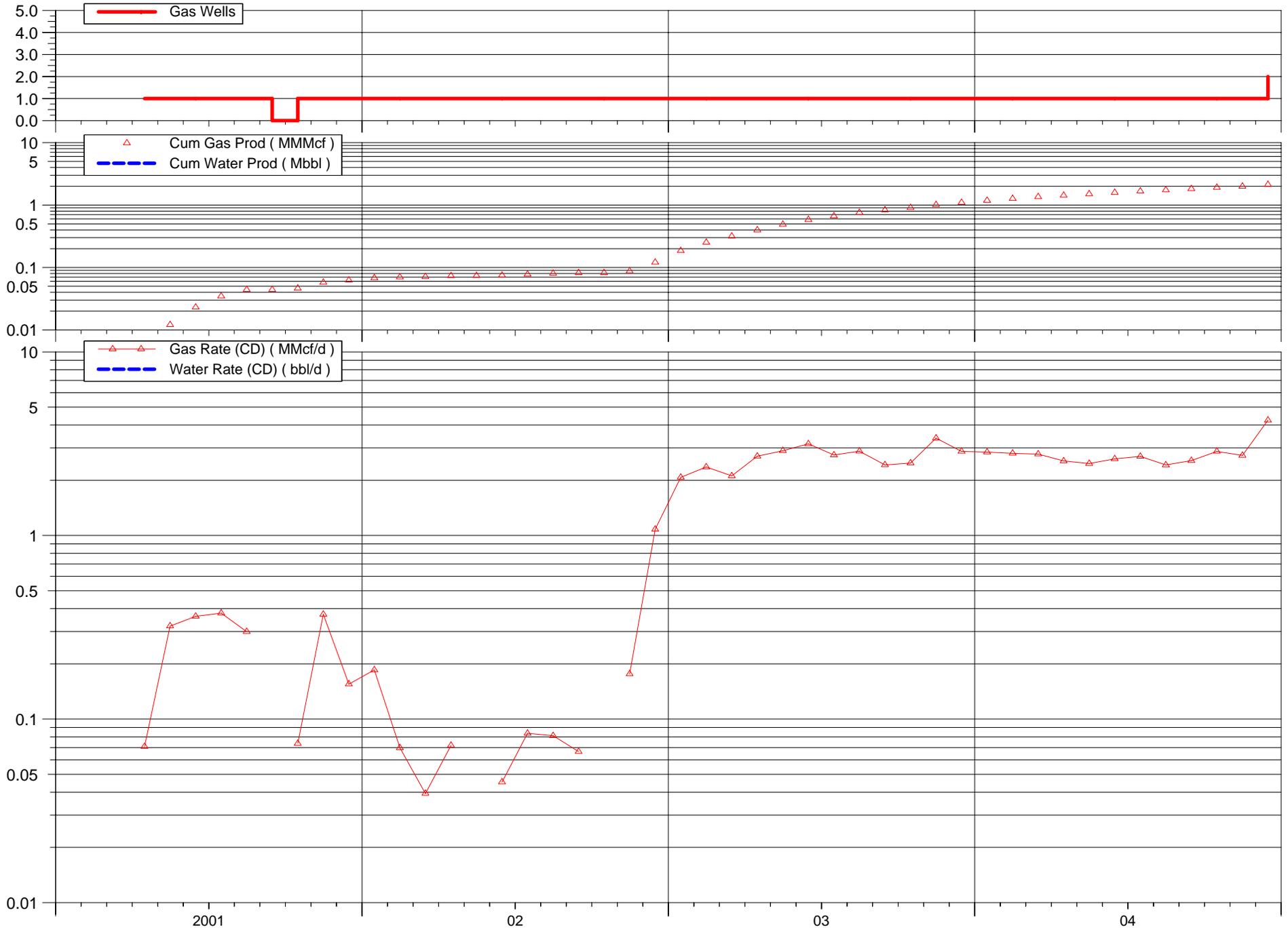
Cook Inlet Generalized Stratigraphic Column

| | | | | | | | | |
|-----------------------|----------------------|---|--|--|--|--|--|--|
| TERTIARY | PLIOCENE | Sterling Fm. |       | | | | | |
| | MIOCENE | Beluga | | | | | | |
| | | Tyonek Fm. | | | | | | |
| | OLIGOCENE | Hemlock | | | | | | |
| | | <table border="1" style="width: 100%; height: 40px;"> <tr> <td style="width: 15%;"></td> </tr> </table> | | | | | | |
| | | | | | | | | |
| | EOCENE | W. Foreland | | | | | | |
| Chickaloon Fm. | | | | | | | | |
| CRETACEOUS | UPPER | Matanuska Fm. | | | | | | |
| | LOWER | Unnamed Shale | | | | | | |
| JURASSIC | UPPER | Naknek Fm. | | | | | | |
| | | Chinitna Fm. | | | | | | |
| | MIDDLE | Tuxedni Gp. | | | | | | |
| LOWER | Talkeetna Fm. | | | | | | | |

W. Foreland
Undef Gas

**OIL
SOURCE**

WEST FORELAND FIELD, UNDEFINED GAS POOL



W FORELAND FIELD

No Pool

Current Orders

| Order No. | AA | Operator | Date | Description | Current | |
|-----------|----|----------|--------------|-------------|---------------------------|---|
| OTH | 8 | 0 | FOREST OIL C | 06-Jan-00 | West Foreland Field Plan. | Y |

W FORELAND FIELD

No Pool

Spacing Exception Orders

| Order No. | AA | Operator | Date | Description | Current |
|-----------|-------|----------------|-----------|--|---------|
| CO | 450 A | 0 FOREST OIL C | 23-Apr-01 | Amends CO 450. Spacing exception expires 7-1-2003. Covers gas prod. From any interval not deeper than 9,527 feet measured depth in the W Forland # 1 well. | N |
| CO | 450 | 0 FOREST OIL C | 24-Jul-00 | Spacing exception for the West Foreland #1 gas well | Y |
| CO | 25 | 0 Shell | 06-Jul-66 | Spacing exception Forelands Channel State #1-A. | N |
| CO | 21 | 0 Shell | 25-Apr-66 | Spacing exception Forelands Channel State #1. | N |

**W FORELAND FIELD
TYONEK UNDEFINED 4.0 GAS POOL**

Spacing Exception Orders

| Order No. | AA | Operator | Date | Description | Current |
|------------------|-----------|-----------------|-------------|---|----------------|
| CO | 532 | 0 FOREST OIL C | 16-Sep-04 | Spacing Exception West Foreland #2 gas production well. | Y |
| CO | 450 B | 0 FOREST OIL C | 29-Sep-03 | Spacing Exception granting permanent exception to the spacing requirements of 20 AAC 25.055 to allow for production from the West Foreland #1 gas well. | Y |