

State of Alaska

Division of Oil and Gas

Kevin Banks
Director

January 2011



The Division of Oil and Gas ...

manages lands for oil, gas, and geothermal exploration and development in a fair and transparent manner to maximize prudent use of resources for the greatest benefit of all Alaskans.



Mission Elements

Elements required to fulfill our mission under 38.05.180

- Maximize the economic and physical recovery of resources
- Maximize competition among explorers and developers
- Maximize use of Alaska's human resources in the development of the resources
- Encourage assessment of oil and gas resources and maximize the flexibility of issuing leases
 - Recognize varied geographical regions and costs of development
 - Minimize adverse impacts from exploration, development, production, and transportation activities

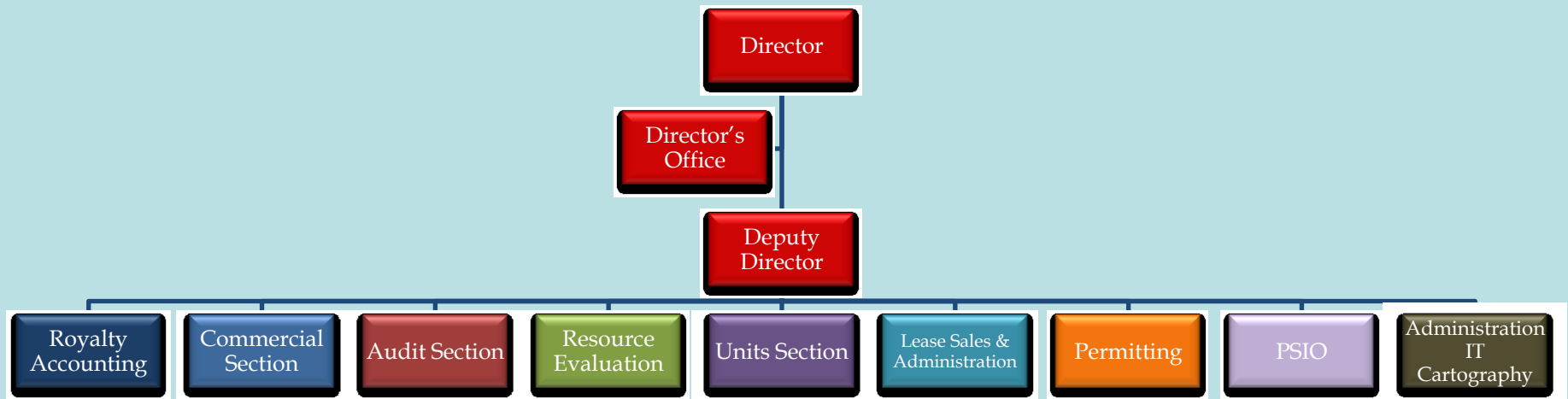
Elements required to fulfill our mission under 38.05.035

- Manage, inspect, and control state land, including any improvements, that belong to the state and are under the jurisdiction of the division

Gross Oil Volume from State Leases

FY2010

<u>Company</u>	<u>Barrels of Oil</u>
1 ConocoPhillips	82,135,010
2 BP	62,591,253
3 Exxon	43,622,534
4 State of Alaska	25,620,845
5 Chevron/Unocal	4,968,278
6 Anadarko	4,680,339
7 Pioneer	2,226,816
8 ENI	983,621
9 XTO Energy	859,743
10 PEO	658,097
11. Small producers (6)	167,876
Total	228,554,412



The Division of Oil and Gas manages the state's oil and gas resources with a budget of \$14.3 million (FY 2011) and a staff of 95, consisting of highly specialized technical experts with many years of experience in the industry. The Division works in asset teams, pulling together the experts needed from different sections, in order to manage each different task or issue.

- Petroleum Geologists
- Petroleum Geophysicists
- Petroleum Engineers
- Commercial Analysts
- Petroleum Economists
- Biologists
- Attorneys
- Accountants
- Auditors

The Petroleum Systems Integrity Office (PSIO) relies on the Division for IT and administrative support but has its own budget.

Achievements in 2010

- Division-wide
- Resource Evaluation
- Leasing
- Unit Administration
- Royalty Accounting
- Audit
- Commercial
- PSIO

Achievements in 2010

Division-Wide

- Developed Draft Strategic Plan for Division in order to streamline processes, identify areas in need of improvement, and better focus our resources and energy in a changing investment and production climate.

Achievements in 2010

Resource Evaluation

- Building on the 2009 preliminary Cook Inlet gas supply study and updating the integrated engineering and geological analyses, Resource Evaluation is working closely in 2010-2011 with DOG Commercial Section to complete a comprehensive analysis of the investment costs that would be required to meet southcentral Alaska's future gas needs from Cook Inlet fields.
- Provided geological, geophysical, and engineering analysis in support for the Division's leasing and exploration licensing program and the Division's oversight of producing and prospective units and participating areas.
- Worked to ensure that the State receives all data sets from exploration wells, seismic surveys, and other geological and geophysical work in exchange for exploration tax credits under AS 43.55.023 and 43.55.025.
- Working in concert with DGGs to conduct complimentary and integrated analyses of oil and gas resource potential throughout the state, with greatest current emphasis on the Cook Inlet basin and North Slope Foothills. Through a separate initiative, Resource Evaluation is contributing integrated geological-geophysical analysis of resource potential in the Umiat-Gubik area and along the route of the proposed Roads to Resources Foothills West transportation corridor.
- Substantially progressed the understanding of Alaska's CO₂ sequestration capacity; evaluating strategies for ensuring State oversight of carbon sequestration if it were to be mandated by Federal government.

Achievements in 2010

Leasing

- Conducted five areawide lease sales in FY 2010, resulting in \$11.3 million in bonus bids
- 495,326 acres leased, with 149 bids on 134 tracts, and 21 bidding groups participating
- Administered 1,495 leases covering nearly 4.5 million acres generating more than \$6.1 million in rental income
- Processed more than 740 assignments of interests in oil and gas leases

Unit Administration

- Staff managed 38 units producing from 78 participating areas with six new units approved in FY10
- Considered and issued 42 unit and PA decisions in FY10, including:
 - Four new PAs
 - Two unit expansions
 - Two PA expansions/contractions
 - Two unit terminations
- Currently working on a dozen unit actions in the pre-application phase, including four new units and at least five new PAs

Achievements in 2010

Royalty Accounting

- Collected \$2,201 million in revenue (FY2010), including:
 - \$1,237 million in royalty-in-value;
 - \$913 million from royalty-in-kind oil sales, and
 - \$21 million in the state's share of federal rents and royalties
 - \$30 million in Net Profit Share Lease Payments
- Processed more than 20,580 production, royalty and NPSL reports
- Provided royalty and NPSL filing support to 23 active lessees

Achievements in 2010

Audit

- Audit Staff issued 12 state and federal audits during the past 12 months resulting in the collection of \$17.6 million in additional revenue
- Audit claims in the amount of \$33.9 million are currently outstanding
- Audit Staff have played an important role in addressing royalty valuation issues and providing support for Royalty Settlement Agreement reopeners
- The Audit Section has begun work to isolate and document audit processes

Achievements in 2010

Commercial

- Royalty Settlement Agreement re-opener analysis and negotiations support.
 - Completion of a limited re-opener agreement with Conoco-Phillips;
 - Marine capital cost model of an oil major for the purposes of royalty settlement agreement.
- Gas sales analysis and support.
 - Oversaw study of preliminary economics for a bullet line;
 - Oversaw completion of study on the impact of shale gas on gas prices in the lower 48;
 - Completion of regulations package governing North Slope Gas for shippers on an AGIA-licensed pipeline.
- Analysis of Pacific Energy's properties for bankruptcy filings.
- Analysis of the value of state right-of-ways for Liberty development.
- Cook Inlet ACES model developed for public distribution.
- Development of commercial terms for the CINGG storage lease
- Cook Inlet Natural Gas Production Cost Study.

Achievements in 2010

Petroleum Systems Integrity Office

- Completed “Gap Analysis” project and submitted identified gaps and proposed corrective actions to Natural Resources Subcabinet
- Coordinated with state and federal agencies regarding oil and gas facilities and activities in Alaska
 - Regular liaison meetings, incident notification e-mail cache and monthly reports
 - Conducted inquiry into recent integrity events and employee concern
 - Followed up with operators regarding past corrective actions
 - Provided risk assessment training for state and federal agency personnel
- Prepared assessment process for reviewing industry’s use of quality management principles – plan to implement in 2011
 - Become proactive, rather than reactive

Feedback/Questions



Appendix: Oil and Gas Revenues and Activities in the Cook Inlet Region and on the North Slope.

The State Revenue Pie

Petroleum Revenue Sources (FY 2010)

**Total Royalties, Bonuses, Rents, Fees & Settlements:
\$2,214.90 Million**

General Fund Royalties, Bonuses, Fees & Rents: ¹
\$1,476.5 Million

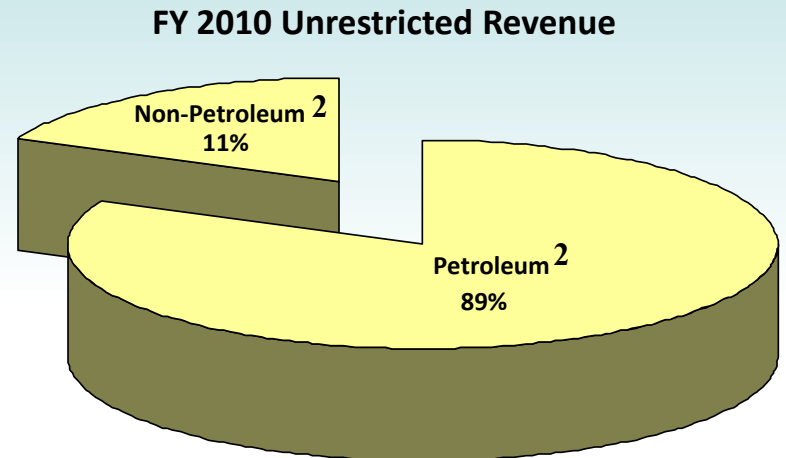
Royalties to Permanent Fund & School Fund: ¹
\$691.2 Million

**Taxes:
\$3,437.7 Million ²**

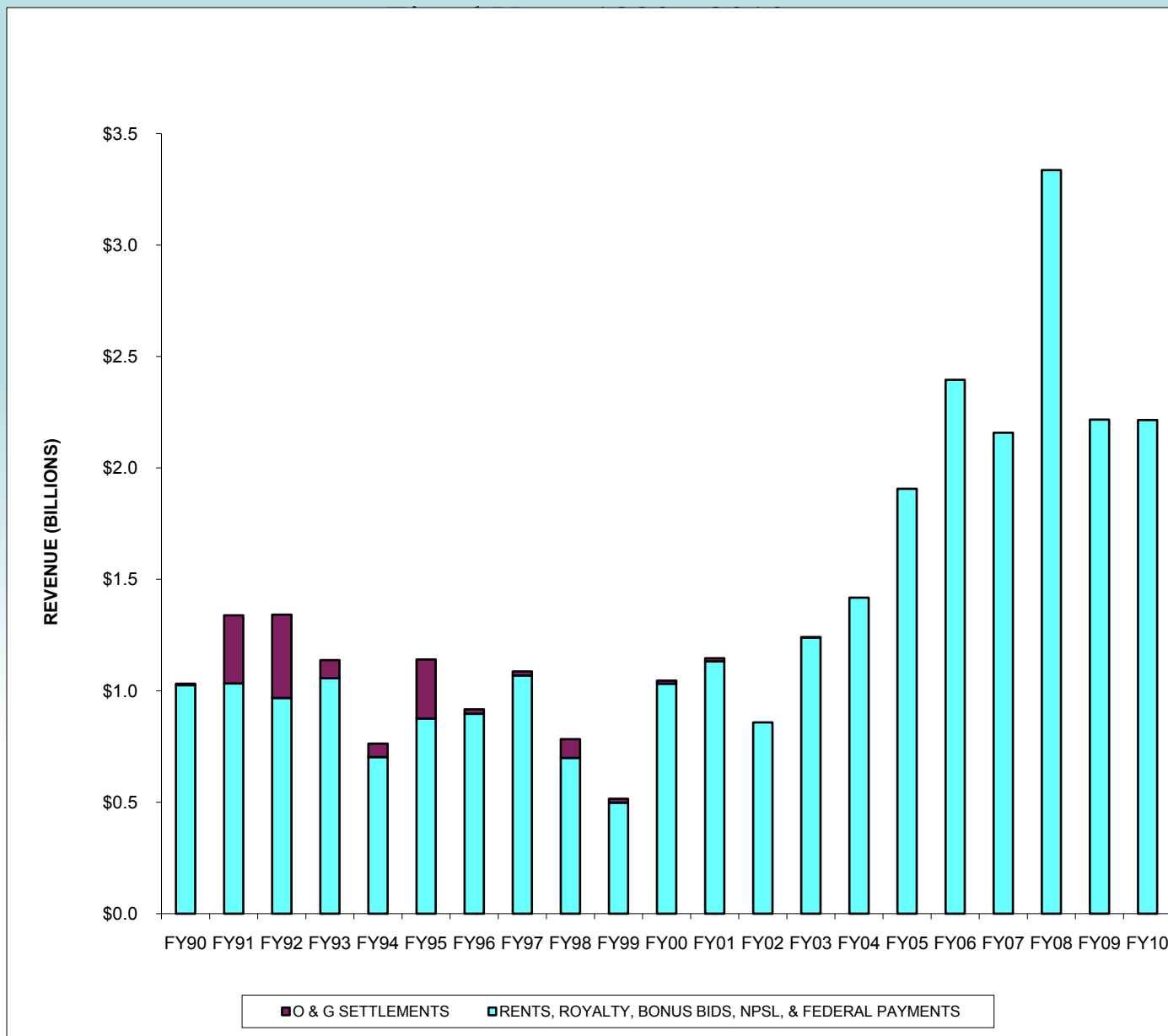
(Oil & Gas Property Tax + Income Tax + Severance Tax)

¹ Includes Federally shared rentals + royalties

² Source: DOR Preliminary Fall 2010 Revenue Sources Book

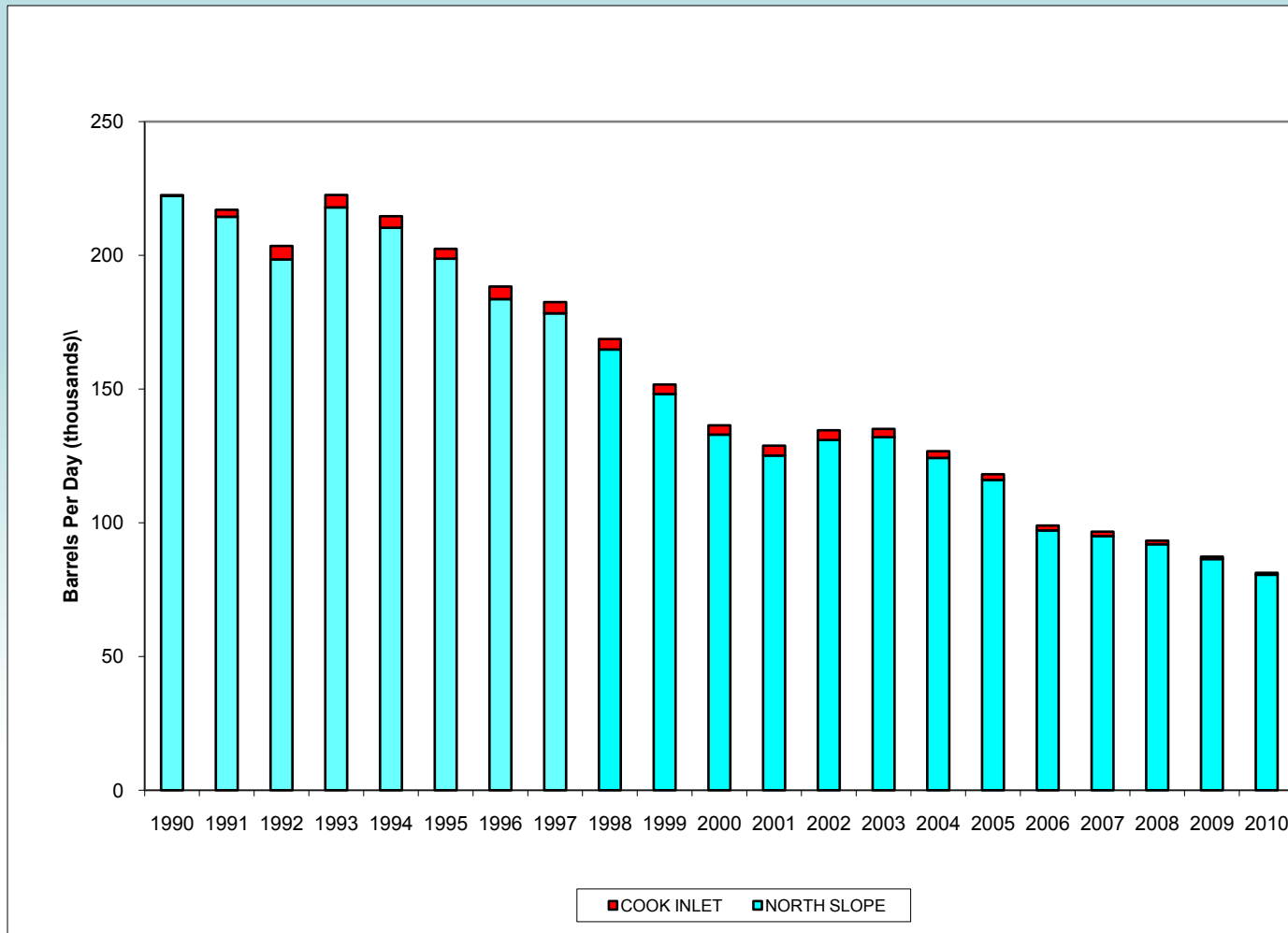


Fiscal Year Oil and Gas Revenue on State Lands



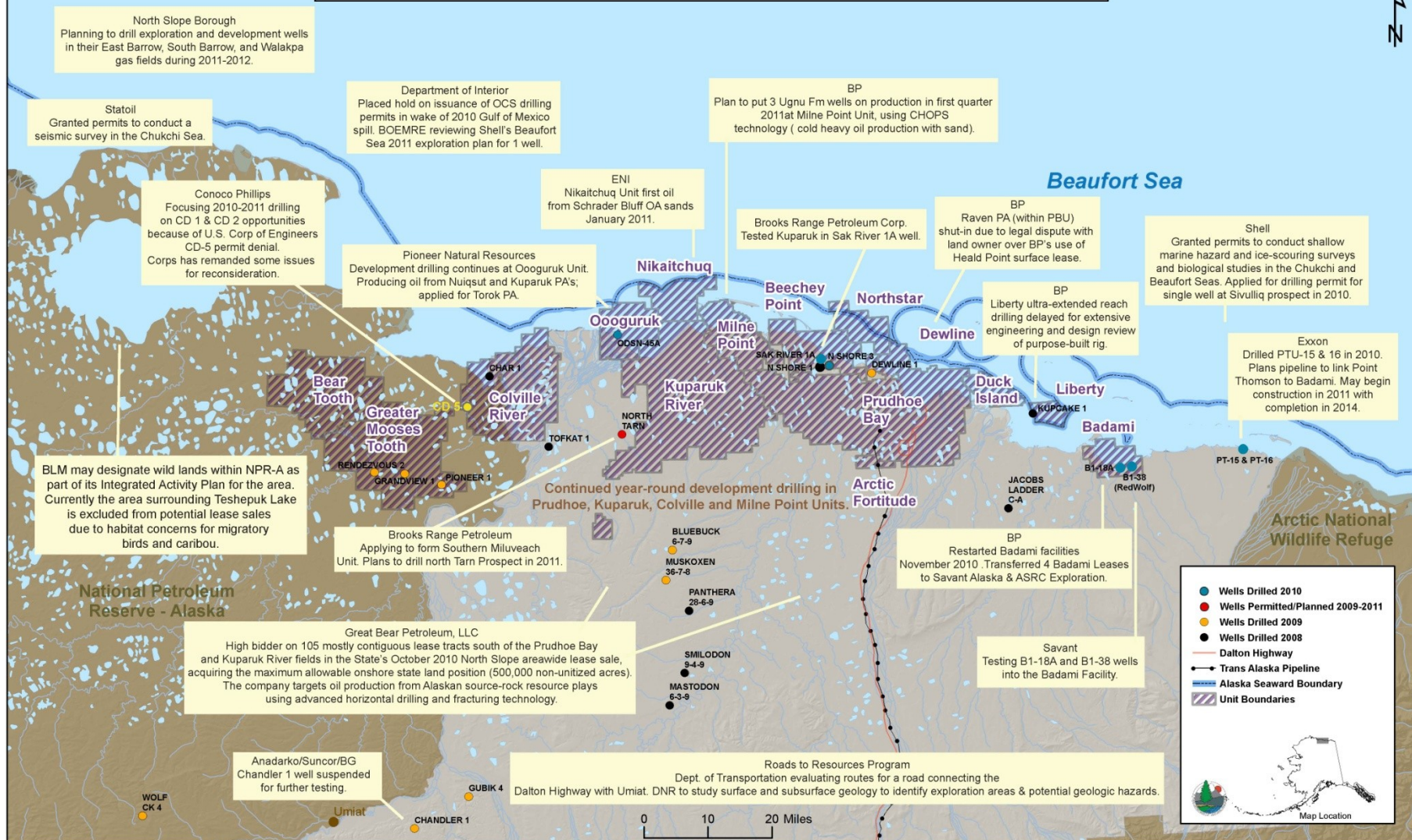
Annual State Oil Royalty Production

In thousands of barrels per day; fiscal years 1990 - 2010



North Slope Oil and Gas Activity 2010-2011

State of Alaska, Department of Natural Resources, Division of Oil and Gas, January 2011



North Slope Oil & Gas Activity 2010

- Badami Unit – BP/Savant
 - Savant Alaska, LLC drilled and completed 1 development well and 1 exploration well in 2010 (AOGCC). Restarted Badami facilities November 2010.
 - BP transferred 4 Badami leases to Savant Alaska & ASRC.
- Beechey Point Unit – Brooks Range Petroleum
 - Unit Formed in 2009. 2 exploration wells drilled in early 2010.
 - Tested Kuparuk Formation in Sak River#1A well.
- Colville River Unit – ConocoPhillips
 - 13 unit wells drilled and completed in 2010, 5 wells in Alpine PA and 8 wells in Fiord PA (AOGCC). 32 wells planned.
 - Increased drilling on state leases at CD1 and CD2 because of U.S. Corp of Engineers denial of CD5 (Alpine West satellite development permit. Corps has remanded some issues for reconsideration.
- Dewline Unit -- UltraStar
 - Applied for unit expansion in 2010. Second exploration well planned for 2012-2013.
- Kuparuk River Unit -- ConocoPhillips
 - Development drilling continues, 47 permitted unit wells (each lateral counts as a permitted well bore) completed in 2010 (AOGCC). 14 wells planned in 2011.
 - Kuparuk PA: 12 coiled tubing wells (44 laterals, AOGCC) completed in 2010.
 - Tarn PA: 3 grass root wells drilled and completed drilled in 2010 (AOGCC); PA expansion likely.
- Liberty (Federal Unit) – BP
 - Ultra-extended reach drilling delayed for extensive engineering and design review of purpose built rig.

North Slope Oil & Gas Activity 2010, continued

- Milne Point Unit – BP
 - 5 development sidetrack wells (7 total laterals) drilled and completed in 2010 (AOGCC). 4 wells planned in 2011, mainly in Kuparuk PA.
 - BP sanctioned the Ugnu CHOPS Pilot (Cold Heavy Oil Production with Sand); 3 wells to be put on production during first quarter 2011.
- Nikaitchug Unit – ENI
 - Completed sealift of processing and utility modules in August, 2010.
 - AOGCC pool rules approved 2010 and PA application in progress for Schrader Bluff reservoir.
 - First production expected January 2011.
 - 2-3 wells planned in 2011.
- Oooguruk Unit – Pioneer
 - Development drilling continuing. 5 wells drilled and completed in 2010 (3 in Nuiqsut PA, 2 in Kuparuk PA), including 2 dual laterals (AOGCC).
 - Torok Formation produced 1,100 bbls/day in 2009; Pioneer applied for Torok PA in 2010, which could result in drill site expansion.
 - 3-4 wells planned in 2011.
- Prudhoe Bay Unit – BP
 - 50 permitted sidetracks and 8 grass roots wells drilled in 2010, with total of 66 laterals completed in 2010 (AOGCC).
 - 27 sidetracks and one new development well in Ivishak PA Q4 2010-2011.
 - Aurora PA: 1 producer, 1 injector wells Q4 2010.
 - Borealis PA: 4-5 wells planned for 2011-2012.
 - Polaris PA: 1 producer and 4 injectors planned for Q4 2010-2011.
 - Raven PA shut-in due to legal dispute with private landowner over BP's use of Heald Point surface lease.

North Slope Oil & Gas Activity 2010, continued

- Additional Activity – (Oil & Gas)

- **Onshore State (and ASRC) Lands**

- ExxonMobil drilled and tested 2 wells at Point Thomson field (PTU-15 and -16) in 2010. Plans pipeline to connect Point Thomson to Badami pipeline system; may begin construction in 2011 with completion in 2014.
 - Brooks Range Petroleum is applying for new Southern Miluveach Unit (52,000 acres) immediately west of the Kuparuk River Unit, with plans to drill North Tarn prospect in 2011.
 - Union (Chevron) relinquished or sold all but 4 of its 59 White Hills leases south of Kuparuk.
 - Great Bear Petroleum, LLC was high bidder on 105 mostly contiguous tracts south of Kuparuk and Prudhoe Bay Units in October 2010 North Slope areawide sale, acquiring the maximum allowed non-unitized land position (500,000 acre onshore limit). The company is targeting oil production from source-rock resource plays using advanced horizontal drilling and fracturing technology.
 - Teck-Cominco postponed drilling another shale gas exploration well at the Sakkan Unit in the far western North Slope. Project goal is to establish local fuel gas supply for Red Dog mine.
 - Anadarko, Suncor, and BG dropped 65 state leases in the southern North Slope Foothills , and suspended the Chandler 1 well near Gubik/East Umiat for further testing. The joint venture partnership retains a significant acreage position on state and ASRC lands in other parts of Foothills.
 - DNR (DOG and DGGS) is conducting integrated subsurface interpretation and geologic field work in the Umiat – East Umiat – Gubik area to gain better understanding of resource potential associated with DOT-led Roads to Resources Foothills West project; multi-year project started in 2010.

North Slope Oil & Gas Activity 2010, continued

- Additional Activity – (Oil & Gas)

- **OCS**

- Department of Interior placed a hold on issuance of OCS drilling permits in wake of 2010 Gulf of Mexico spill; State has challenged this in court as a de-facto drilling moratorium. DOI issued a decision to honor existing OCS leases in December, 2010.
 - Shell was granted permits to conduct shallow hazard surveys, ice-scour surveys, and biological studies in support of 2011 exploration plan in the Beaufort Sea OCS. Shell applied to BOEMRE for a permit to drill a single well at their Sivulliq prospect (former Hammerhead oil and gas discovery) in the eastern Beaufort Sea at Camden Bay.
 - Statoil obtained seismic permits and acquired a 3-D survey over its leases in the Chukchi Sea OCS.

- **NPRA**

- BLM may designate wild lands within NPR-A as part of its Integrated Activity Plan for the area. Currently the area surrounding Teshepuk Lake is excluded from potential lease sales due to habitat concerns for migratory birds and caribou.
 - Talisman/FEX relinquished 11 leases in the North Slope Foothills and 19 leases in Beaufort Sea state waters adjacent to NPRA in Harrison Bay. The company is seeking to sell its interest in its remaining Foothills and NPR-A leases, including 3 suspended exploration wells in northwestern NPRA.

North Slope Planned Activity

Badami Unit: Two wells being tested to bring field back on line

Beechey Point Unit: Two exploration wells planned

Colville River Unit: 32 wells planned

Dewline Unit: Second Exploration well planned for 1st Quarter 2012

Kuparuk River Unit: 14 wells planned

Milne Point Unit: BP sanctioned the Ugnu Pilot "CHOPS" (Cold Heavy Oil Production with Sand); four wells planned.

Slope wide estimated heavy oil reserves (Ugnu) are 20 BBO.

Nikaitchug Unit: Two - three wells planned

Oooguruk Unit: Three - four wells planned

PBU-Aurora: Two wells planned for 4th Q 2010; one for 2011

PBU-Borealis: Four to five wells planned 2011

PBU-Polaris: Drill one producer and 4 injection wells in 2011

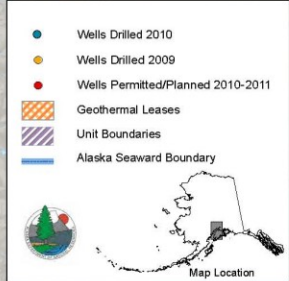
PBU-Prudhoe IPA: 2010 plan to drill 1 new development well and 27 sidetracks

Sakkan Unit: one exploration well 2011

Northstar Unit: NS-08 tract op Kuparuk C sand commenced Nov. 2010.

Brooks Range Petroleum - North Tarn Well

State of Alaska, Department of Natural Resources, Division of Oil and Gas, January 2011



Cook Inlet Oil & Gas Activity 2010

- Beluga River Unit – ConocoPhillips (Gas)
 - Drilled and completed one well, BRU 212-24T.
 - Redevelopment plan underway – installation of pad compression
- Cannery Loop Unit – Marathon (Gas)
 - Federal oil and gas lease AA-019230 segregated; lease and unit administration waived to the State of Alaska, effective March 26, 2010, terminating joint administrative responsibilities.
 - Gas storage lease/CINGSA issuance pending full RCA approval.
- Nicolai Creek Unit – Aurora Gas (Gas)
 - Applied for gas storage in Nicolai Creek Unit 2, withdrew their application.
 - AOGCC issued a storage injection order and aquifer exemption for Nicolai Creek Unit 2.
 - Expanded Unit, formed West Beluga and West Tyonek Pas
 - Drilled and completed a new gas well to the west, Nicolai Creek 11 in late 2009, currently in production.
- Ninilchik Unit – Marathon (Gas)
 - Drilled and completed two wells, Paxton 3 and Paxton 4.
 - Installing compression on all producing pads
- North Fork Unit – Armstrong (Gas)
 - Acquired 3D seismic program over unit March 2010
 - Drilled and completed two new gas wells, North Fork Unit 14-25 and North Fork Unit 32-35.
 - Re-completed SOCAL NFU 41-35 in gas zone, drilled 34-26.
 - Constructing a 7.4-mile gas pipeline between North Fork and Anchor Point , could be ready for operation in mid_February given approval of permit applications
 - First gas sales anticipated Mar 2011
 - Testing oil horizon
- Trading Bay Unit/ McArthur River Field– Chevron (Oil & Gas)
 - Drilled and completed two wells, TBU M-10 and TBU M-11.
- West McArthur River Unit – Cook Inlet Energy (Oil & Gas)
 - Cook Inlet Energy acquired in Dec. 2009
 - Workover on three wells
 - Restarted 4 oil wells to bring field back into production.
 - Current production: 778 barrels/day (November 2010)

Cook Inlet Oil & Gas Activity 2010 (continued)

- Additional Activity – (Oil & Gas)
 - Linc Energy Alaska, Inc. acquired Geo Petro summer 2010 and drilled LEA 1 discovery well. Announced success Oct. 2010, well results pending. Planning an exploration well in the Trading Bay area onshore
 - Marathon drilled Sunrise Prospect east of Swanson River field, Sunrise Lake 2. Encountered “zone of interest” and is evaluating results to “determine commerciality.”
 - Nordaq Energy Partners planning exploration well, Shadura 1, from an ice road west of Swanson River field on CIRI acreage within the Kenai Wildlife Refuge. Targeting gas in the Beluga and the Tyonek formations.
 - ConocoPhillips and Marathon LNG export license’ 2 year extension was approved by the DOE. Reauthorizes export to 4/13.
 - Enstar is extending the KKPL natural gas pipeline from Ninilchik to Anchor Point, allowing North Fork gas to reach market.
 - Chevron will open data room in 1Q 2011 for sale of all Cook Inlet assets. Target sale close by 7/1/11.

Cook Inlet Oil & Gas Activity 2010 (continued)

- Additional Activity – (Oil & Gas)
 - Apache acquired 182,500 acres of previously leased State acreage. Permitting 2-D seismic test in preparation for more advanced exploration. DCOM is issuing joint public notice this week announcing a 17-day comment period for the project.
 - Cook Inlet Energy, LLC, a wholly owned subsidiary of Miller Petroleum Inc., permitting 3 exploration wells (Stingray) for the winter of 2010-2011 in the West Foreland area onshore. Targeting Beluga Formation gas. Permits should be issued early 2011.
 - Buccaneer Alaska LLC applied for two proposed units, Northwest North Cook Inlet Unit and Southern Cross Unit. Currently organizing financing for a jack-up rig.
 - Buccaneer acquired 44,000 acres of previously leased State acreage on the east side of the Cook Inlet. With 5,760 acres acquired during the 2010 lease sale, total acreage is approximately 49,000 acres. Buccaneer plans to drill one exploration about 15 miles east of Anchor Point, late 2011. Permits issued pending posting of bond.
 - Buccaneer acquired 5,653 acres on the west side of Cook Inlet near the Nicolai Creek Unit. Buccaneer plans to drill one well in 2011.
 - Buccaneer is in the permitting process for drilling on Mental Health Trust Lands north of Kenai airport, and expected to drill in the next few months.
 - Aurora applied for one proposed unit, Cohoe Unit. Decision pending. Lease operations permit issued in late 2010.
 - Armstrong applied for North Fork draft unit expansion. Decision pending.
 - Escopeta hopes to bring jack-up into Cook Inlet under terms of POE. Permit will be issued following selection of rig. Fresh public review may be required due to beluga whale issue.

Additional Cook Inlet Activity 2010

- Cook Inlet Geothermal Energy and Coal Gasification
 - Ormat Energy conducted fieldwork, drilled two small diameter temperature gradient holes (Mt Spurr Lower Chakachatna River 62-02 and Mt Spurr Upper Chakachatna River 67-04). Planning to continue exploration next year.
 - CIRI drilled one stratigraphic test for coal gasification project, CIRI CC-06C-10.