

AK LEGISLATURE SPECIAL COMMITTEE FILES SCOMM 155 3288

Long-run Basin Development – Pipeline Expansions



- Value to Producers / Governments?
- Does Alaska have enough gas?
- Drilling impacts?
- Impact of rolled-in tolls?

Value of Potential Expansions (\$Billions)¹



	<u>Producer/Govts. Total Revenue *</u>	<u>Expansion Value</u>
Base Project		
- 25 years @ 4.5 Bcfd	(35 TCF) (delivered in Alberta) 350	
Expansions		
Case I		
- Base volumes for 10 years (4.5 Bcf/d)		
- 30% expansion for 25 years (5.9 Bcf/d)	(requires 7.8 TCF) 600	250
Case II		
- Base volumes for 10 years (4.5 Bcf/d)		
- 60% expansion for 25 years (7.2 Bcf/d)	700	350

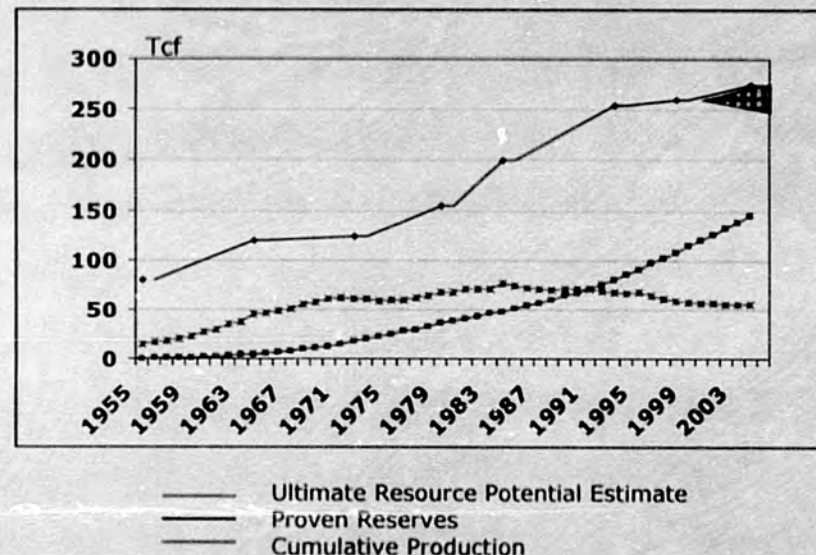
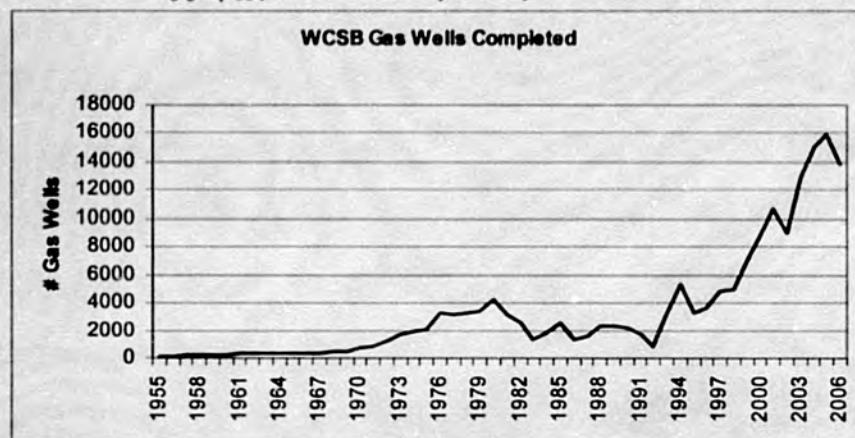
¹ Assumes annual average netback of \$6.89/MMbtu

* Direct revenue only
- no indirect impacts from additional E&P activity and spin-offs

Basin Development – Western Canada Example

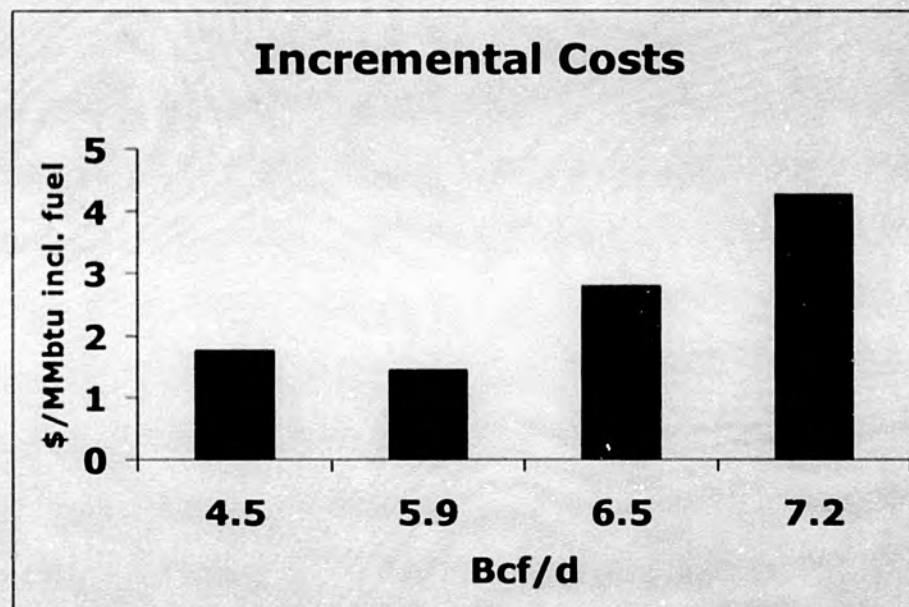


Western Canadian Basin



- Pipeline expansion can create “virtuous circle”
 - More exploration and drilling
 - If successful, leads to more pipeline expansion
- Exploration and drilling drives service industry and employment over long term

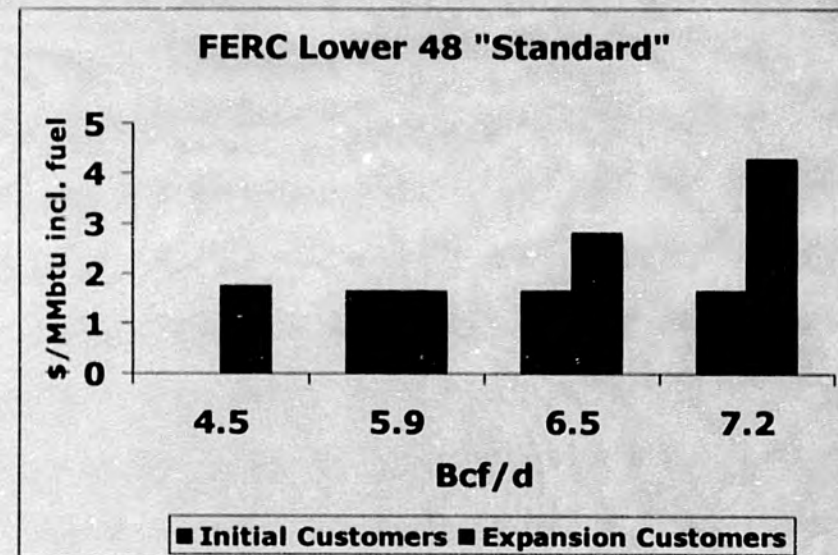
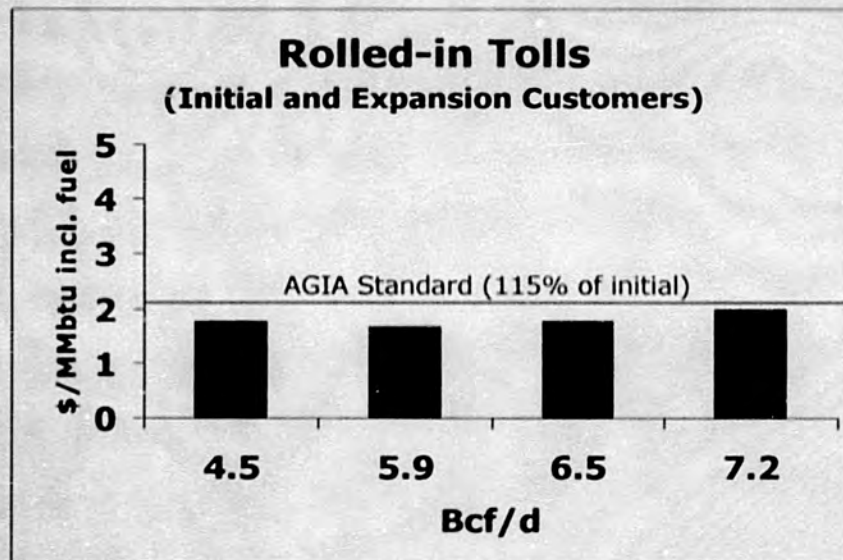
Impact of Rolled-in Tolls?



Alaska & Yukon-B.C. sections only

Assumed Volumes: 4.5 Bcf/d years 1 & 2
5.9 Bcf/d years 3 & 4,
6.5 Bcf/d years 5 & 6,
7.2 Bcf/d years 7 & beyond

Impact of Rolled-in Tolls?

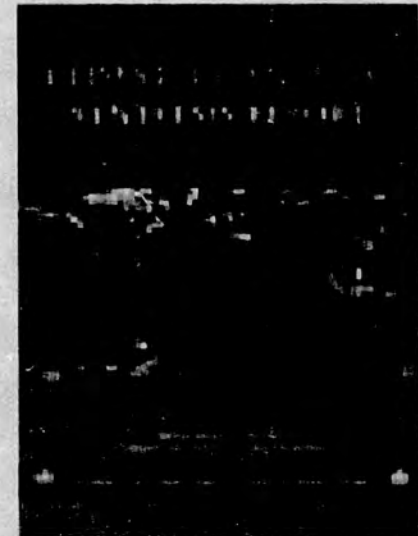


- Rolled-in tolls increase chance of expansions above 5.9 Bcf/d
 - 35% lower tolls for expansion customers to 6.5 Bcf/d
 - 50% lower to 7.2 Bcf/d

Climate Change Challenge - Overview



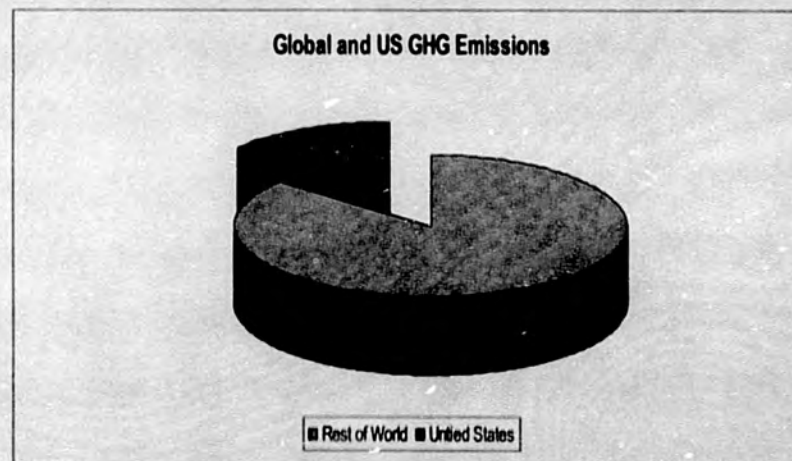
- Global concerns continue to grow.
- Intergovernmental Panel on Climate Change (IPCC) strengthens argument to limit manmade greenhouse gases (GHGs).
- Most common manmade GHG is carbon dioxide (CO₂).
- Bulk of CO₂ emissions generated by combustion of fossil fuels.
- Meeting the growing demand for energy while lowering GHGs is challenging as fossil fuels are abundant and inexpensive compared to low carbon alternatives.



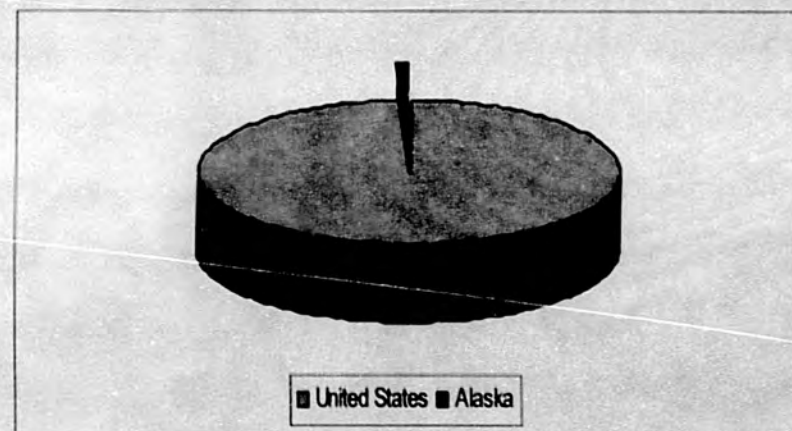
Alaska's Greenhouse Gas Emissions



The United States emits approximately 14% of global manmade GHG emissions.



Alaska emits less than 1% of US domestic GHG emissions: 52 million of 7076 million tonnes CO₂e.



Alaska and Climate Change



Alaska faces a unique challenge:

- Alaska and other regions at high northern latitudes will experience greater warming trends resulting from climate change.("Warming is expected to be greatest over land and at most high northern latitudes...." Section 3.2.2, Page 46, Climate Change 2007:Synthesis Report, IPCC)
- Supplying natural gas to markets will increase Alaska's emissions levels, however it will also help address the challenge of climate change by potentially displacing higher carbon fuels.
- Natural gas is cleanest burning fossil fuel, emitting approximately 50% less CO₂ than coal at the burner tip and roughly 25 % less CO₂ than oil when combusted.

TransCanada's Climate Change Activities



Emissions Reduction Programs

Leak Detection and Repair Program
Blowdown Management
High Efficiency Engines

Technology Development

Supersonic Ejector Patent
Incineration
Field test RB211-6761

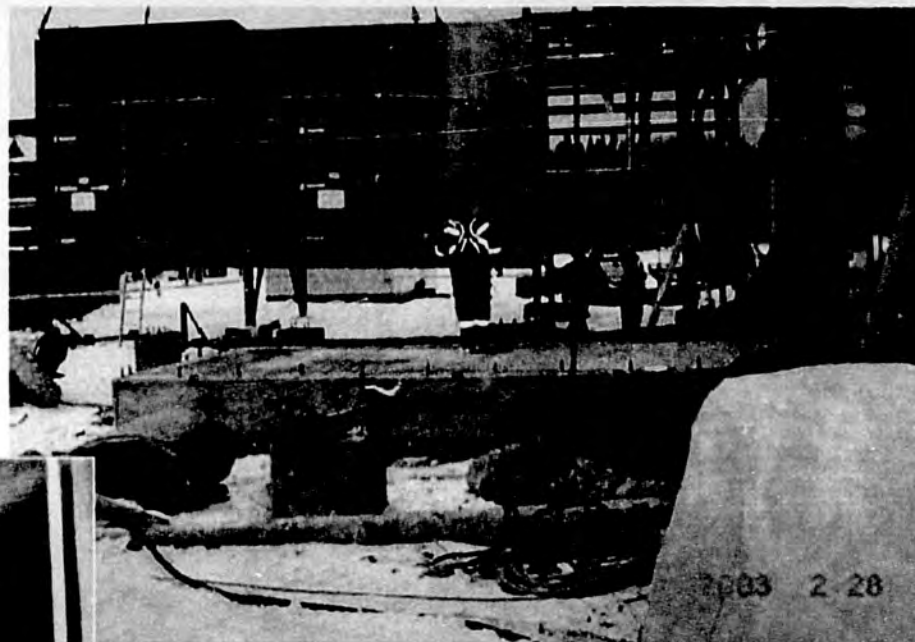
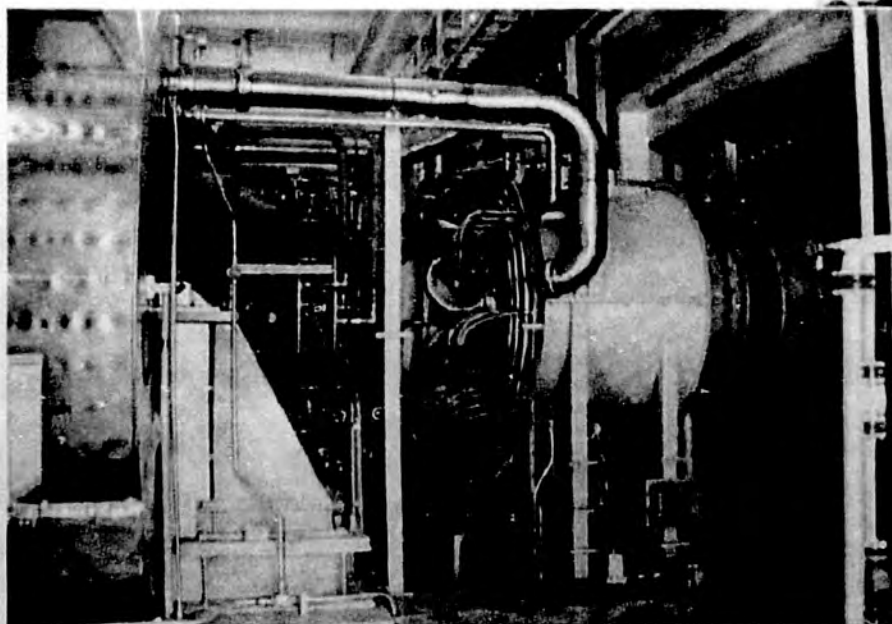
Sharing Knowledge

Methane to Markets (Washington, China, Russia)
USEPA Natural Gas Star – since 1990s

Technology Excellence

TransCanada is currently operating the world's first Rolls-Royce RB211-6761.

Unit demonstrates high efficiency (40%), low NOx and CO2 emissions.



Features include: remote stand-alone operation, modular design (ease of maintenance, reduced downtime).

TransCanada Invents New Gas Technology

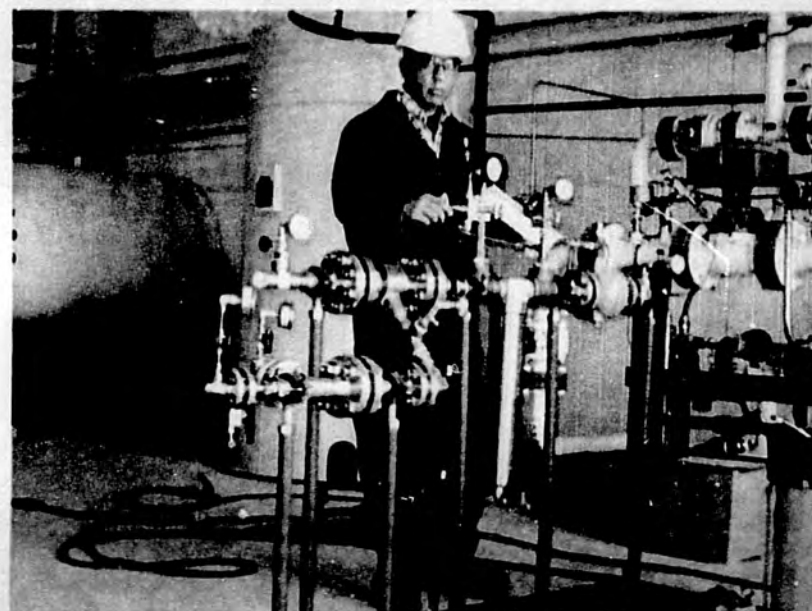


Supersonic Ejector reinjects very low pressure methane into high pressure gas stream.

Benefits include:

- GHG reduction of 1,700 tCO₂e (per unit per year),
- Savings of \$28,000 (per unit per year),
- Zero operating cost.

Canadian, US and PTC (world) patent applications



GHG Emissions from Long Haul Natural Gas Pipelines



TransCanada's Alberta System **2.5 million tonnes CO₂e**
(typically 900 PSI, 11 bcfd, 300 miles average distance of haul)

TransCanada's Mainline **3.8 million tonnes CO₂e**
(typically 900 PSI, 7 bcfd, 1400 miles average distance of haul)

Proposed GTP **4.1 million tonnes CO₂e**

Proposed pipeline / facilities **2.0 million tonnes CO₂e**
(2500 PSIG, 4.5 bcfd, 1715 miles)

Climate Change - Alaska Pipeline Project

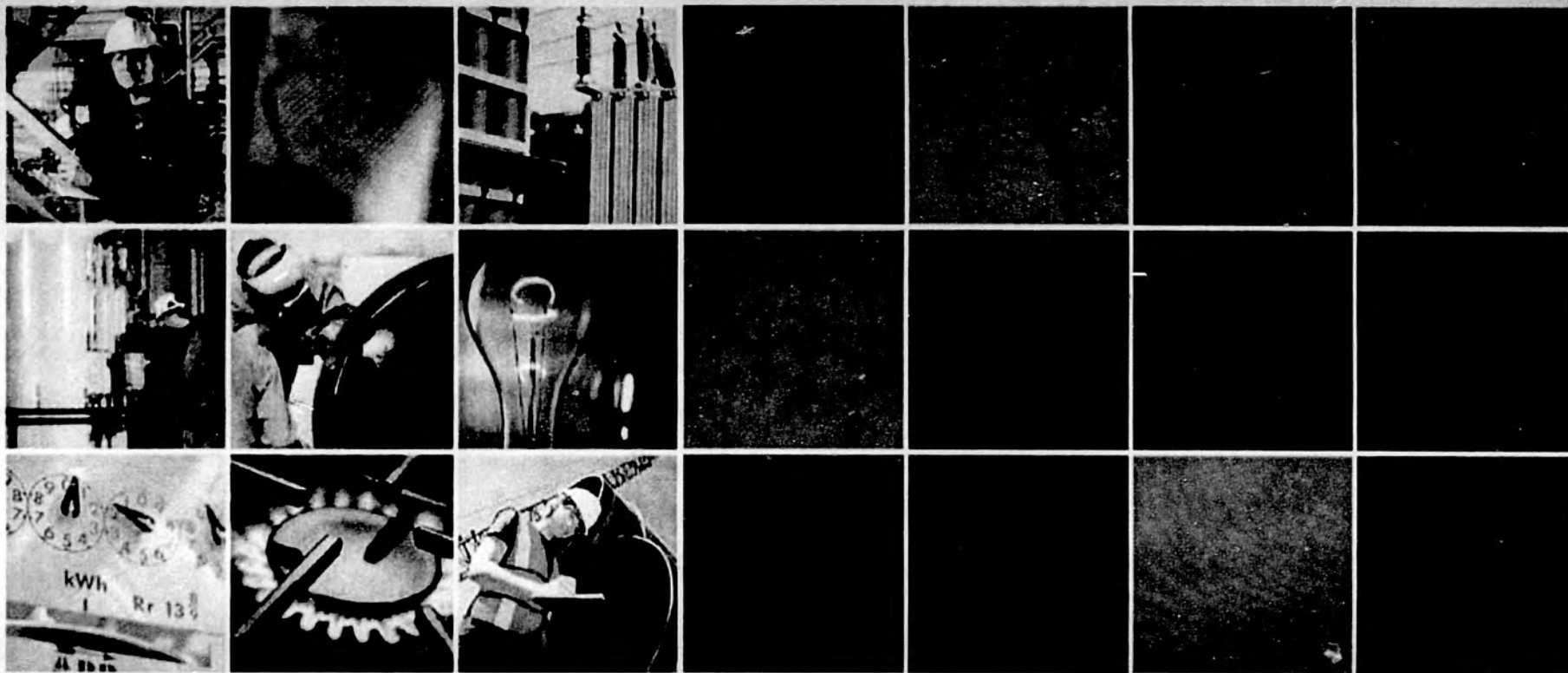


- TransCanada will responsibly manage GHG emissions associated with the pipeline.
- TransCanada's efforts to control emissions from this project will include the use of Best Management Practices in pipeline design and operation including:
 - Installation of the highest efficiency engines that are suitable for this application
 - Use of high strength steel, which will lower fuel usage by allowing higher pressure operation
 - Implementation of industry leading methane management programs

Summary



- Last year, the Administration and Legislature established AGIA as Alaska's transparent and competitive process to advance a gas pipeline project
 - AGIA was structured to encourage:
 - Construction of base project
 - Long-run basin development
 - Open access terms for:
 - Initial and future shippers
 - In-State, Lower 48, and LNG markets
- TransCanada has the credentials and capacity to build, own, operate and expand the project
- TransCanada's objectives are aligned with AGIA
 - Early in-service
 - Long-run basin development
 - Open access – equitable treatment for all customers



Thank You



TransCanada
In business to deliver

SENR
Handed out @ 6/6/08 hearing
Morning Session - during
Pat Galvin opening presentation.

ALASKA GASLINE INDUCEMENT ACT LICENSE

This License is issued under the authority of the Alaska Gasline Inducement Act ("AGIA"), AS 43.90.010-990. The License is issued by the State of Alaska ("State") to TransCanada Alaska Company, LLC and Foothills Pipe Lines Ltd. ("Licensee").

The License incorporates by reference as if set forth in full text, and consists solely of:

- the Alaska Gasline Inducement Act as in effect June 8, 2007;
- the Request for Applications dated July 2, 2007; and
- the Licensee's Application as determined complete on January 4, 2008, including all Licensee commitments, and all responses to additional information requests (whether by the Licensee, TransCanada Corporation or any other TransCanada entity).

In the event of a conflict between provisions in the incorporated documents, the Alaska Gasline Inducement Act is controlling, followed by the Request for Applications, and then the Licensee's Application.

Issued by:

STATE OF ALASKA

Date: _____

Thomas E. Irwin
Commissioner, Department of Natural Resources

STATE OF ALASKA)
) ss.
Third Judicial District)

On _____, before me appeared Thomas E. Irwin of the State of Alaska, Department of Natural Resources, and who executed this license and acknowledged voluntarily signing it on behalf of the State of Alaska as commissioner.

Notary public in and for the State of Alaska
My commission expires

STATE OF ALASKA

Patrick S. Galvin
Commissioner, Department of Revenue

Date: _____

STATE OF ALASKA)
) ss.
Third Judicial District)

On _____, before me appeared Patrick S. Galvin of the State of Alaska, Department of Revenue, and who executed this license and acknowledged voluntarily signing it on behalf of the State of Alaska as commissioner.

Notary public in and for the State of Alaska
My commission expires _____

3rd Sp. Session
June 2008

AGIA License

Qualified expenditures REG.S

addendum to
Commissioner Galvin
presentation

(a) A licensee may, in a form prescribed by the department and as often as once in each quarter, apply for reimbursement of qualified expenditures from the Alaska Gasline Inducement Act reimbursement fund established under AS 43.90.400 (a).

(b) An application under this section must be signed by the licensee, or the authorized representative of the licensee, and must state the licensee's name, the name of a contact person with responsibility for preparing the application, and the contact person's mailing address, electronic-mail address, and telephone number. For each expenditure for which reimbursement is claimed, an application must include

(1) a description of the qualified activity for which the expenditure is claimed and an explanation of how the expenditure directly relates to the qualified activity;

(2) an accounting of the expenditure, including a statement of the amount of the expenditure, the date it was paid, and identification of all financial and technical source documents and records supporting the expenditure, including invoices, contracts, receipts, and employee time records if the expenditure is for labor;

(3) a detailed description of the transaction underlying the expenditure, including the

(A) name, mailing address, electronic-mail address, and telephone number of each seller and service provider;

(B) date of the transaction; and

(C) location where the transaction occurred; and

(4) other information and documentation requested by the department, as the department considers necessary, for reviewing the application for reimbursement.

(c) The department will reimburse the licensee at the rate and in the manner provided under AS 43.90, this chapter, and the license held by the licensee under AS 43.90, for actual and reasonable expenditures that the department determines are qualified expenditures. However, the department will not reimburse the licensee for expenditures that the department determines are not reasonably required, are not qualified expenditures, are not paid as of the date of the application for reimbursement, or are not sufficiently documented. The department will notify the licensee in writing if the department determines that a claimed expenditure does not qualify for reimbursement.

(d) A licensee may appeal to the commissioners from a determination by the department under (c) of this section that a claimed expenditure does not qualify for reimbursement by filing a written appeal, in a form prescribed by the department, on or before the 90th day after the date of the department's notice to the licensee of the reimbursement determination. The appeal must describe the expenditures in dispute, explain why the licensee believes the expenditures qualify for reimbursement, and include supporting documentation.

passed out 6/6/08

2.2008 2008/2009
319 2008
June 2008
admission to
commissioner's office
319 2008
June 2008
admission to
commissioner's office

(e) The commissioners will decide the appeal after providing the licensee with notice and an opportunity to be heard. The written decision of the commissioners is a final agency action for purposes of appeal to the superior court.

History: Eff. 11/30/2007, Register 184

Authority: AS 43.90.110

AS 43.90.220

AS 43.90.400

15 AAC 90.020. Accounting, budget reports and audits

(a) A licensee applying for reimbursement under AS 43.90 and this chapter shall maintain its accounting system in accordance with generally accepted accounting principles applied on a consistent basis, and shall retain for a period of seven years from the date the licensee receives reimbursement of an expenditure under this chapter, and make available to the department upon request, all financial and technical source documents and records supporting the application for reimbursement.

(b) A licensee shall submit the following budget reports to the department, with the expenditures categorized by qualified activity and described in detail:

(1) an initial budget report within 60 days after issuance of the license under AS 43.90, estimating the amount of total qualified expenditures that the licensee expects to pay in each quarter of each fiscal year from the date the license is issued through completion of the project, and estimating the amount of the qualified expenditures that the licensee expects to submit to the department for reimbursement in each quarter during that period;

(2) quarterly updates to the initial budget report described in (1) of this subsection, including

(A) a statement of the total amount of qualified expenditures paid by the licensee, by quarter, from the date of the issuance of the license through the date of the quarterly report, compared with the budgeted qualified expenditures previously reported for each quarter; and

(B) an update of the estimate in the initial budget report of the amount of total qualified expenditures that the licensee expects to pay in each quarter of each fiscal year from the date of the quarterly report through completion of the project, and the estimated amount of the qualified expenditures that the licensee expects to submit to the department for reimbursement in each quarter during that period.

(c) The department and the Department of Natural Resources will jointly audit the records, books, and files of a licensee that has received reimbursement under AS 43.90

30/1/10 2008/2009

and this chapter, at any time on reasonable notice, but not less than annually, to ensure that the expenditures for which the department has reimbursed the licensee are qualified expenditures. If it is determined on audit that a licensee has received reimbursement for an expenditure that is not a qualified expenditure, the provisions of AS 43.90.230 apply.

History: Eff. 11/30/2007, Register 184

Authority: AS 43.90.110

AS 43.90.220

AS 43.90.230

AS 43.90.400

15 AAC 90.030. Qualified expenditures

(a) For purposes of reimbursement under this chapter, an expenditure is a qualified expenditure only if it meets the requirements set out in AS 43.90.110 (a)(1)(C) and this chapter, and is an actual and reasonable expenditure directly and reasonably related to a qualified activity that is paid by the licensee. Qualified expenditures include

(1) payment to an employee of the licensee, for the time expended on a qualified activity, for salary and wages, including the amount of customary or required benefits, and costs of business-related travel and meals during travel that the licensee reimburses to an employee under the licensee's contract of employment or standard written operating practice for the employee; however, a qualified expenditure does not include any portion of a

(A) bonus, stock option, or other payment above an employee's salary, wages, and customary or required benefits; or

(B) severance payment or other termination allowance paid to an employee;

(2) costs and expenses, including supplies, of office space leased exclusively for the project after the date that a license is issued under AS 43.90; if the office space is used for any activity other than for the project, the qualified expenditures include only the portion of the costs and expenses that are directly and reasonably related to the amount of use and cost incurred specifically for a qualified activity;

(3) costs of acquiring, leasing, installing, operating, transporting, maintaining, repairing, and replacing equipment and materials, including sales and use taxes, but not if the costs result from damage or loss due to gross negligence, willful misconduct, or criminal conduct by the licensee or an employee, officer, or contractor of the licensee;

(4) costs of transporting and maintaining equipment and materials, and personnel transportation, temporary living quarters, and subsistence for environmental studies, field studies, and surveys;

(5) costs of contract services, subject to the same limitations as the licensee's costs in this section;

(6) net premiums for insurance the licensee is required to carry;

(7) costs of acquiring, leasing, installing, operating, repairing, and maintaining communications systems and computer systems necessary for the project, including sales and use taxes;

(8) costs of required permits and licenses;

(9) costs for non-litigation legal services only;

(10) costs of compliance with ecological, environmental, and health and safety requirements, but not if the costs result from damage or loss due to gross negligence, willful misconduct, or criminal conduct by the licensee or an employee, officer, or contractor of the licensee; and

(11) other costs determined by the commissioners to be qualified expenditures.

(b) Qualified expenditures in (a) of this section do not include expenditures that are not actually paid by the licensee, not reasonable, or not directly and reasonably related to a qualified activity, and do not include any expenditure for

(1) overhead costs, including

(A) salaries, wages, employee benefits, and business-related expenses of the licensee's employees performing functions not directly related to a qualified activity;

(B) office and other expenses not directly related to a qualified activity; and

(C) costs of administration, accounting, human resources, training, property and income taxes, entertainment, self-insurance, and warehousing;

(2) lobbying costs, including costs of engaging in an assignment for the purpose of influencing legislative or administrative action of a government entity if the assignment is substantially the same as an assignment for the purpose of influencing state legislative or administrative action that would require registration under AS 24.45.041;

(3) litigation costs and fees, including costs and fees associated with dispute resolution in judicial, arbitration, or administrative proceedings;

CORRECTION

THE FOLLOWING DOCUMENT(S)
HAVE BEEN REFILMED TO
ASSURE LEGIBILITY OR PAGINATION



Rev. 6/98

Central Microfilm Services
Department of Education & Early Development
State of Alaska

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(3) litigation costs and fees, including costs and fees associated with dispute resolution in judicial, arbitration, or administrative proceedings;

(4) the cost of an asset or work product acquired or developed by the licensee before the license is issued under AS 43.90; or

(5) payments for civil or criminal restitution, judgment or interest on a judgment, penalty, or fine.

AGIA Presentation Schedule 6/6 - 6/10

Friday 6/6/2008

- Introduction - *Galvin*
- TC Alaska Application Overview - *Palmer*
- Overview of Findings - *Galvin / Irwin*
- The Prize - *Swenson / Houseknecht*
- Jobs, Training and In-State Gas - *Bishop / Mulligan/Gibson* (Time Permitting)

Saturday 6/7/2008

- Jobs, Training and In-State Gas - *Bishop / Mulligan/Gibson* (If Necessary)
- Pipeline Regulator and Commercial Issues - *B&V/GT/Sparger/Anderson/Banks/Bishop/etc.*
- The Importance of True Open Access to Exploration - *Banks*

Sunday 6/8/2008

- How to Get the Gas - *B&V, TC, Hosie (by phone), Van Fleet*

Monday 6/9/2008

- LNG: Economics, Likelihood of Success, and Path Forward - *Gas Strat. / B&V / Westney / Sparger /Goldman Sachs*

Tuesday 6/10/2008

- TC's Project: Economics, Likelihood of Success - *Goldman Sachs, Sparger, Anderson, Westney, B&V*

Presenter Biographical Information

ARCADIS

ARCADIS is a global network of business professionals that provides project management, consultancy and engineering. ARCADIS develops, designs, implements, maintains and operates projects for companies and governments. With 13,000 employees and \$1.9 billion in gross revenue the company is multi-nationally present with a close-knit local network. Expertise and experience are of international significance.

Conrad Mulligan

Mr. Mulligan has more than 14 years experience as a strategic planner, technical communicator, meeting facilitator, rapporteur, and issues analyst. He has developed an expertise in communicating technical and scientific information. Mr. Mulligan is adept at working with scientists, engineers, and researchers to craft compelling, focused documents that are accessible, accurate, correct, and that meet their intended audiences' needs. He is skilled at 'translating' complex information for non-technical readers, at discerning and packaging the key points and messages from large studies or bodies of knowledge, and at developing layouts and graphics that make complicated information approachable by a variety of audiences.

Black & Veatch

Black & Veatch Corporation is a leading global engineering, consulting and construction company. Founded in 1915, Black & Veatch specializes in infrastructure development in energy, water, telecommunications, federal management consulting, and environmental markets. Black & Veatch is an employee-owned company with more than 100 offices worldwide. Among other rankings and awards, Black & Veatch is ranked on the Forbes list of the "500 Largest Private Companies in the United States."

Michael Elenbaas

Mr. Elenbaas leads financial analysis, risk management, market analysis and asset management studies for energy and water utilities. He also specializes in strategic planning and risk management for the energy and water industries. Mr. Elenbaas has played a significant role in his career with Black & Veatch developing strategic planning and risk analysis solutions. His responsibilities have included creation of a capital project prioritization process and tool for both energy and water utilities, and several innovative and complex risk analysis models. He holds a B.S. degree in Mechanical Engineering from Dordt College.

Hua Fang - Senior Economist

Dr. Fang is a Senior Economist at Black & Veatch. She provides expertise in derivative asset pricing, econometrics modeling, stochastic processes and price modeling, fundamental market analysis, energy asset valuation, and forecasting. Dr. Fang applies the most recent developments in financial theory to the real world energy context and to provide better methods of asset evaluation and risk management for the energy industry. She holds a Ph.D. in Economics from the University of Virginia, an M.A. in Economics from University of Virginia, and an M.A. and B.A. in International Finance from the People's University of China.

Greg Hopper - Vice President

Mr. Hopper is vice president and a founding member of Lukens Energy Group (LEG) and brings nearly 20 years of energy industry experience to the company. At LEG he works with clients in the natural gas and electric generation industries, focusing on strategic and analytic services regarding capital asset investments and optimization. As part of this work he led due diligence valuations supporting three interstate pipeline acquisitions and a large LNG import terminal. Mr. Hopper leads the firm's market analysis practice and has consulted to numerous clients on regional needs for new pipeline capacity. He holds an M.B.A. in Finance from Rice University and a B.B.A. in Accounting from the University of Texas.

Deepa Poduval

Ms. Poduval is a Principal with Black & Veatch and is responsible for business strategy and project management. Ms. Poduval's client engagements focus on strategic analytical services supporting portfolio optimization, asset acquisition, risk management, and business strategy development. Her expertise includes the valuation of energy industry assets, analysis of oil & gas marketing strategies and commercial agreements, performance and risk measurement, and analysis & utilization of natural gas industry structural models. She holds an M.S. degree in Engineering Management from Dartmouth College, an M.S. in Economics from B.I.T.S., and a B.E. in Mechanical Engineering.

Scott R. Smith - Senior Vice President

Mr. Smith leads Lukens Energy Group for B&V's Enterprise Management Solutions division, and has over 25 years of energy industry experience. His consulting focus and expertise includes energy market analysis, risk management, energy asset optimization, business strategy development, natural gas and power project development, trading and marketing strategy development, energy decision analysis and contract negotiations. He leads the Market Analysis practice within Enterprise Management Solutions. Mr. Smith holds an M.B.A. from Southern Methodist University and a B.S. in Chemical Engineering from the University of Texas.

Brown, Williams, Moorhead & Quinn, Inc.

Brown, Williams, Moorhead & Quinn, Inc. (BWMQ) is a leading energy consulting firm that has been providing advice and assistance to clients for more than 20 years. BWMQ provides comprehensive energy related services to hundreds of clients, including electric, natural gas and oil pipeline companies, local distribution companies, energy producers, trade associations, shippers and federal and state agencies. BWMQ provides advice on how to properly interpret and account for FERC precedents and current policies in the electric, natural gas and oil pipeline industries. BWMQ prepares complete regulatory filings for clients on a wide variety of regulatory matters and offers insights into the regulatory issues that arise in the evolving world of FERC regulation.

Barry E. Sullivan - President

Mr. Sullivan joined BWMQ in September 2005 after a long career in the Office of Litigation at FERC. He has filed expert witness testimony on a wide range of regulatory issues over the years, including all phases of natural gas pipeline regulation, market power, and oil pipeline ratemaking testimony. He filed testimony against the TAPS carriers in the TAPS proceeding in Docket No. IS05-82. Mr. Sullivan has over 29 years of experience in litigated formal rate proceedings before FERC.

Bruce Warner - Vice-President

Mr. Warner has over 34 years of experience as a consultant, CPA, Certified Depreciation Professional (CDP), accountant, strategic planner and regulatory executive. Mr. Warner served in regulatory, strategic planning and accounting management capacities for Williams Gas Pipelines-West and Kern River Gas Transmission Company for 25 years. His management experience and testimony experience includes: FERC regulation, rates and governmental affairs, property and inventory accounting, financial reporting, regulatory research, tariffs, nominations and strategic planning. Mr. Warner represented Williams in litigation against the TAPS carriers before the Regulatory Commission of Alaska.

Energy Capital Advisers

Energy Capital Advisers is an oil and gas asset acquisition and divestiture firm, which has facilitated the marketing, sales and purchase of production, royalties, overrides and prospects throughout the United States since 1982. The firm has successfully assisted clients in selling properties ranging from small Non-Operated Working Interests to the total assets of an entire company.

Scott Hobbs

Mr. Hobbs has been in the natural gas industry for over 30 years with experience in all facets of the business. Over the last six years, he has provided consulting services to state government, investment bankers, private equity firms, and other investors evaluating major projects, acquisitions, and divestitures principally involving oil and gas pipelines, processing plants, power plants, and gas distribution assets. During that period, he also served as Executive Chairman of Optigas, Inc., a private midstream (gathering and processing) natural gas company which was sold in March, 2006 to Energy Spectrum, a private equity firm in Dallas, Texas. Mr. Hobbs is presently on the Board of Directors of Buckeye GP LLC, the general partner of Buckeye Partners, L.P., a publicly traded master limited partnership.

Energy Project Consultants

Energy Project Consultants is a Colorado-based consulting firm with more than 35 years of experience in natural gas pipeline project management, engineering and construction management. The firm's experience spans onshore and offshore projects, as well as liquefied natural gas (LNG) projects.

Bill Sparger

Mr. Sparger has more than 35 years experience in project management, design and construction of natural gas pipelines, compressor stations, and gas processing facilities. Most recently, he worked for Entrega Gas Pipeline Company on a large diameter natural gas pipeline project. He also provided initial project management oversight for a proposed 1300 mile 42" pipeline from the Cheyenne Hub to eastern Ohio. That project is moving forward today with BP and ConocoPhillips participation.

Gaffney Cline

Gaffney Cline & Associates (GCA), a wholly owned subsidiary of Baker Hughes, is a global petroleum consultancy of over 45 years specializing in the provision of independent technical, commercial and strategic advice and assistance to international oil and gas companies, national oil companies, governments and financial institutions. GCA's involvement in the energy industry spans the entire spectrum from upstream to downstream, and includes energy strategy and portfolio management advice.

Robert George - Area Manager and Senior Advisor

Mr. George has over 35 years experience in the international oil and gas industry. With a degree in Earth Sciences from Leeds University, England and an M.B.A. from the Open University, Mr. George has spent most of his career in the commercial and financial area of the business. He has advised companies on strategy, acquisitions and divestments, and financing; advised governments and government agencies on petroleum policy and investment issues; and provided expert support and testimony in dispute proceedings. Mr. George's clients have included National Oil Companies, governments, ministries or taxation authorities in Venezuela, Brazil, Kuwait, Saudi Arabia, Mexico, and Alaska on matters including license promotion, taxation, fiscal and regulatory reform and contract structuring.

Richard Ruggerio - Area Manager and Senior Advisor

Mr. Ruggerio is a graduate of the Colorado School of Mines and has over 30 years industry experience with a primary focus on natural gas, from upstream development to midstream infrastructure and downstream markets. Mr. Ruggerio worked for a major energy company for the first 20-plus years of his career, in which he was involved in multiple domestic and international gas projects, including development of pipeline and LNG projects. Since joining GCA he has advised governments on petroleum fiscal policy and design, participated on legislation and regulation drafting committees, participated in commercial negotiations (on behalf of governments) and provided expert support and testimony in gas dispute proceedings.

Gas Strategies

Gas Strategies Consulting was formed in 1989 as the consulting arm of its parent, Gas Strategies Group Limited. The practice advises on all commercial issues relating to the gas business. In 2003, Gas Strategies Group Limited was purchased by CRISIL, India's leading ratings, financial news, risk and policy advisory company. Gas Strategies serves clients around the globe from their London base and also has a presence through consultants, associates and joint venture partners around the globe in Spain, France, Italy, Germany, Australia, Singapore, Brunei, Korea, South Africa and the United States.

Gas Strategies operates across natural gas and LNG chains from markets to supply source, specializing in the following key areas: gas market supply, demand and pricing analysis; commercial due diligence for project sponsors and lenders; project structuring, evaluation and feasibility; business strategy development and implementation; competitor analysis and benchmarking; monetization strategy for gas exploration and production; contract advice, negotiation, valuation and arbitration; and regulation, restructuring and liberalization.

Rob Shepherd

Mr. Shepherd is a Senior Consultant with Gas Strategies. His interests include the commercial and strategic aspects of LNG projects, industry and regulatory structures across the world, and the future of liberalized gas markets. Before joining Gas Strategies, Rob spent many years with BP, managing BP's share of the North West Shelf LNG project in Australia and of Qatargas. He played a leading role in BP's UK gas business, selling to British Gas and starting BP's move into direct gas marketing. His experience includes advising on the development of Atlantic LNG in Trinidad and providing due diligence on many recent LNG export and receiving terminal projects from RasGas to Yemen LNG. In addition, Rob advises on development of commercial operational procedures for two LNG projects and assistance in developing institutional structures for South Africa and the West African Gas Pipeline with the World Bank.

Goldman Sachs

Goldman Sachs is a leading global investment banking, securities and investment management firm that provides a wide range of services worldwide. Goldman Sachs provides a broad range of investment banking services to a diverse group of corporations, financial institutions, investment funds, governments and individuals. Goldman Sachs engages in market-making and specialist activities on equities and options exchanges and clear client transactions on major stock, options and futures exchanges worldwide. They also provide investment advisory and financial planning services and offer investment products (primarily through separately managed accounts and commingled vehicles, such as mutual funds and private investment funds) across all major asset classes to a diverse group of institutions and individuals worldwide and provide prime brokerage services, financing services and securities lending services to institutional clients, including hedge funds, mutual funds, pension funds and foundations, and to high-net-worth individuals worldwide.

Paul Bloom - Vice President, Public Sector and Infrastructure Banking

Mr. Bloom grew up in Anchorage and began his career in 1986 working in government finance for the Portland Development Commission, the City of New York and the Port of Seattle, where he managed all aspects of the Port's capital planning and financing program. Since his investment banking career began in 1994, Mr. Bloom has focused on the Northwest region and served as lead banker to a variety of Alaska clients, including the State of Alaska, the Municipality of Anchorage, Alaska Industrial Development and Export Authority and the Alaska Energy Authority. Mr. Bloom's financing experience with these clients includes a variety of structures and forms of debt including project financings in the energy, port and airport sectors.

Bruce Schwartz - Vice President, Credit Risk Management and Advisory

Mr. Schwartz is a Vice President in the Credit Risk Management & Advisory Group at Goldman, Sachs, based in New York. His primary focus is managing Goldman's credit risk to the energy sector, including upstream, downstream, midstream, oilfield services, and utility companies across debt and derivative products. In addition, Mr. Schwartz advises companies on the credit aspects of merger and acquisition transactions and corporate finance strategies. Prior to joining Goldman Sachs in 2005, Mr. Schwartz worked at Standard & Poor's Corporate Ratings, where he served as one of two global coordinators for their oil and gas ratings practice.

Timothy Romer - Managing Director and Co-Head of Public Sector Banking

Mr. Romer is co-head of the Public Sector Banking at Goldman Sachs. He offers over 20 years of experience in infrastructure finance, having been Co-Head and Managing Director of Merrill Lynch's western region public finance group until February 2000 and more recently, Managing Director in Bank of America Securities' Real Estate Secured Finance Group. Mr. Romer provides a deep and diverse background in government, energy and project finance, completing large and small real estate, housing, infrastructure, general municipal and specialty credit financings throughout most of the western region of the United States. He has also been involved in a wide range of large infrastructure projects and public private ventures. Tim received a B.S. in Industrial Engineering from Stanford University and an M.B.A., with honors, from the Wharton School at the University of Pennsylvania.

Ray Strong - Managing Director, Global Natural Resources Group

Mr. Strong is a Managing Director in the Global Natural Resources Group at Goldman Sachs, based in New York. With over 17 years of investment banking experience, he has executed mergers and acquisitions transactions and equity and debt offerings for companies in the energy sector, including downstream, midstream, upstream, and oilfield services companies. Mr. Strong's primary focus is on downstream, midstream and master limited partnership clients within the Natural Resources Group. Mr. Strong joined Goldman Sachs, Energy & Power Group from CSFB's Natural Resources Group as a Vice President in 1999 and was promoted to Managing Director in 2001. He earned a B.A. in Economics from Middlebury College in 1991.

Greenberg Traurig

With 1,750 lawyers and 29 offices worldwide, Greenberg Traurig represents electric power generators, natural gas pipeline companies and other industry participants before the FERC, SEC and other federal agencies, as well as state agencies, in a wide range of regulatory matters, including: complex ratemaking proceedings; certificate and licensing proceedings; investigations by FERC and other agencies; and rulemaking proceedings.

Greenberg Traurig represents clients from all corners of the oil and gas industry, from independent producers and pipeline companies to major integrated companies, as well as regulators and governments. Work in the oil and gas transportation and storage industries includes: natural gas and oil supply, transportation and storage contracts; pipeline transportation, rail/truck transport and trans-oceanic coal/oil shipping agreements; acquisition and divestiture of gas processing and treating facilities, mid-stream transportation facilities, and pipeline and gathering systems; formation of strategic alliances, partnerships and joint ventures for the development of pipeline projects; negotiation and preparation of gas processing and treating, facility use, and gas purchase and sales agreements; preparation of transportation contracts for crude oil, natural gas and liquids; acquisition and divestiture of natural gas storage facilities; and development and/or acquisition of natural gas storage facilities.

Kenneth M. Minesinger

Mr. Minesinger is co-chair of Greenberg Traurig's Energy & Natural Resources practice group. He represents various clients in the energy industry, focusing his practice on energy regulatory proceedings before the Federal Energy Regulatory Commission and on related antitrust, litigation and transactional matters. He has represented energy clients in a wide range of regulatory matters, including complex ratemaking, restructuring, and licensing proceedings, and complaints and investigations into allegations of market manipulation and the exercise of market power. As the competitive issues in energy regulatory proceedings often intersect with the application of the antitrust laws, Mr. Minesinger has also represented energy and non-energy clients on numerous antitrust matters, including mergers and acquisitions, counseling, and litigation. He is also a former Chairman of the Antitrust Committee of the Energy Bar Association.

Donald Shepler

Mr. Shepler has more than 30 years of experience in the natural gas pipeline industry representing major interstate natural gas pipelines before the Federal Energy Regulatory Commission. His experience has included representing pipeline companies in complex rate and restructuring proceedings, numerous certificate proceedings with respect to new facilities and services, and transactional activities regarding sales of capacity on interstate gas pipelines. Mr. Shepler has briefed and argued cases before the United States Court of Appeals for the District of Columbia Circuit and the Tenth Circuit.

Allan Van Fleet

Mr. Van Fleet has 30 years of litigation, arbitration and antitrust victories, pro bono work, and service to the bar and community. He has represented large and small companies in a variety of industries, including computers and components, telecommunications, biotechnology, health care, foods and beverages, energy, oilfield services, pipelines, railroads, airlines, steel, glassmaking, concrete and cement, accounting, financial services, insurance, legal services, collegiate merchandise, and entertainment, and religious education. Mr. Van Fleet has tried cases for plaintiffs and defendants across the country and internationally. His antitrust practice includes, in addition to litigation, developing compliance programs; providing advice on transactions; structuring mergers and acquisitions; and representing clients before federal, state, and international agencies.

Hosie, MacArthur LLP

Hosie, MacArthur LLP is a San Francisco-based trial law firm that represents individuals, businesses and state government in complex commercial litigation in state and federal courts across the United States. In the past 20 years, the firm has won more than \$2 billion in cases involving antitrust, intellectual property, energy and natural resources law and business tort claims. The firm and its partners have extensive experience in antitrust, intellectual property, energy and natural resources law, fraud, business torts, media law and class actions. In recent years, it has successfully pursued lawsuits for high-technology clients pressing both intellectual property and antitrust claims.

Spencer Hosie

Mr. Hosie is a nationally recognized top-ranked trial lawyer for complex commercial cases. In his over 20 year career, he has won or settled cases worth almost \$2 billion for his clients. In June 2005, the National Law Journal profiled Mr. Hosie as one of the 10 most successful trial lawyers in the country. His practice covers the spectrum of complex commercial cases, with particular focus on antitrust, energy, and intellectual property litigation. Mr. Hosie currently is an advisor to the Alaska, Louisiana, and Hawaii state governments.

PetroTel, Inc.

PetroTel is recognized worldwide as industry leaders in enhanced oil recovery, reservoir characterization and simulation, coalbed methane, production, and exploration technologies. We provide professional consulting and advisory services along with integrated project management support to domestic and international petroleum companies. We are an integrated team consisting of a number of highly qualified, versatile, and experienced experts and professionals that represent a diverse set of disciplines: reservoir engineering, reservoir simulation, reservoir characterization, enhanced oil recovery technologies, development geology and geophysics, exploration geology and geophysics, and petrophysics. We also have experts in economics and integrated project management and planning, including production, drilling, and facility engineering support. Together, we represent over 1100 years of combined experience and have broad experience in serving clients throughout the world. Our experience includes working with major oil companies in North and South America, South Asia, Russia, the Far East, Europe, and the Middle East.

Dr. Anil Chopra

Dr. Chopra obtained his B.S. degree from the Indian Institute of Technology (IIT) at Kanpur and a Ph.D. degree from University of Houston, both in Chemical Engineering. He is a Member of the Society of Petroleum Engineers, a past SPE Distinguished Lecturer, and recipient of a corporate highest technical achievement award. He is the Editor of the SPE book on Applied Geostatistics for Reservoir Characterization and has authored over 35 technical papers. He has over 25 years of experience in Reservoir Engineering, Enhanced Oil Recovery, Reservoir Characterization and Reservoir Management. He is founder of PetroTel Inc.

Pingo International

Pingo International is an engineering consulting business with expertise in pipeline system design, construction and operation. The firm has extensive experience working in both North and South America, as well as in the Far East.

Patrick Anderson

Mr. Anderson has served in various Executive and Senior Technical positions with TransCanada Pipelines and its affiliates for 30 years in designing and building gas pipelines in Canada. Mr. Anderson was President of ARCAN Engineering & Construction (Argentina) from 1997 to 1999 and President of TransCanada Pipelines Services between 2000 and 2001. He has extensive experience conducting business in many countries ranging from the Far East to South America and is a leader in the design, construction and operation of pipeline systems. Currently Mr. Anderson is active in the pipeline engineering consulting business through his personally owned company, PINGO International Inc. Previously, Mr. Anderson was active on many Boards of Directors in Canada as well as in several foreign countries.

State of Alaska

Kevin Banks, Acting Director, Division of Oil & Gas, Department of Natural Resources

Kevin Banks moved to Alaska in 1982 and worked for the Minerals Management Service as an economist in the Social and Economic Studies Program. In this position, he led the agency's economic research program and directed several engineering assessments of the technologies required to develop the oil and gas resources of the Alaska Outer Continental Shelf. In 1991, Mr. Banks came to the Division of Oil and Gas as its sole petroleum economist. He presided over the establishment of the Commercial Section and was responsible for managing the State of Alaska's royalty in-kind program, implementing the royalty modification statutes and other oil and gas incentives, and administering the many royalty settlement agreements between the state and its lessees. Mr. Banks has a B.S. in economics/philosophy from Loyola University Los Angeles, and an M.A. in economics from Washington State University.

Clark "Click" Bishop - Commissioner, Department of Labor and Workforce Development

Mr. Bishop has been a leader for more than 17 years in training Alaskans for good jobs in the trades and craft industries. As commissioner of the Department of Labor and Workforce Development since 2007, he directs a statewide organization responsible for meeting the training needs of hundreds of employers and thousands of workers. Mr. Bishop served as the administrator and coordinator for the Alaska Operating Engineers Employers Training Trust, a statewide private industry organization training a new generation of workers for the civil and pipeline construction industries. His previous experience in the construction industry included 15 years working for private construction companies across Alaska. Mr. Bishop has more than 17 years of experience working on a regular basis with employers, elected officials, public agencies, private and public sector boards, labor unions and councils, Alaska Native organizations, industry employers and associations as an advocate for career and technical education in Alaska. He has held leadership positions in which he has developed innovative approaches for educating and training residents across Alaska for high-skill, high-pay jobs and careers. A life-long Alaskan, Mr. Bishop has also served on numerous on statewide/local public policy boards actively involved in developing workforce initiatives.

Fred Esposito - Director, Alaska Vocational Technical Center, Department of Labor and Workforce Development

Mr. Esposito has been the Director of the Alaska Vocational Technical Center (AVTEC) since 1997 and is presently working with the Commissioner of the Alaska Department of Labor and Workforce Development creating a statewide training plan for the AGIA. Mr. Esposito previously spent 16 years working in K-12 education in Alaska, first as a vocational education teacher in rural Alaska and then as vocational education administrator for the Kenai Peninsula Borough School District. He received an M.S. in Vocational Education from the University of Alaska in 1986.

Patrick Galvin - Commissioner, Department of Revenue

Mr. Galvin was appointed Commissioner of the Department of Revenue by Governor Sarah Palin effective December 4, 2006. Before his appointment he served as a Petroleum Land Manager for the Alaska Department of Natural Resources, Division of Oil & Gas. His responsibilities included managing the oil and gas leasing and licensing programs, lease administration, and oil and gas permitting for the division. His education background includes a Bachelor's degree in Visual Arts and Quantitative Economics from the University of California, San Diego, a law degree from the University of San Diego, and an M.B.A. from San Diego State.

Jack Hartz - Petroleum Reservoir Engineer, Division of Oil & Gas, Department of Natural Resources

Mr. Hartz is a Petroleum Reservoir Engineer working in the Resource Evaluation Section of the Division of Oil & Gas since 2005. Prior to this he worked as a Reservoir Engineer for the Alaska Oil & Gas Conservation Commission from 1991-2005. In addition, from 1970 to 1991 Mr. Hartz worked for Union Oil of California, Standard Oil of Ohio, British Petroleum and Alaska Petroleum Contractors in various petroleum engineering positions. Mr. Hartz has a Bachelor of Science degree in Petroleum Engineering from Montana Tech, is a lifetime member of the Society of Petroleum Engineers and is a Registered Professional Petroleum Engineer (No. 7923) in the State of Alaska.

Julie Houle - Petroleum Geologist II, Division of Oil & Gas, Department of Natural Resources

Ms. Houle is a Petroleum Geologist with the DNR Division of Oil & Gas and is the current Section Chief for the Resource Evaluation Group. She received a B.S. in Geology from Stanford University; an M.A. in Geology from the University of Texas at Austin; and an M.A.T. from the University of Alaska Anchorage. She worked with Atlantic Richfield Company and ARCO Alaska, Inc. from 1980-1994. During that time she was the field party chief for ARCO Alaska's 1984 ANWR field program and was the geologist on the team that discovered the Pt. McIntyre Field in 1988. Ms. Houle has been with the division since November 1996.

Thomas Irwin - Commissioner, Department of Natural Resources

Tom Irwin has been an important player in Alaska's resource industry for many years. He earned a mining engineering degree from the Colorado School of Mines in 1968, and was managing a gold mine in Nevada before moving to Alaska in 1992 as Vice President of Operations for Fairbanks Gold Mining, Inc. to help design and begin the Fort Knox gold mine. Mr. Irwin held increasingly important management positions with Fort Knox and True North Mines; has a strong record of service to Alaska's minerals industry; and is a strong advocate for responsible resource development in our state. Mr. Irwin became Commissioner of the Alaska Department of Natural Resources in 2003. In 2006, he became Vice President of Government and Public Affairs for Golden Valley Electric Association. He resumed his position as DNR Commissioner for Governor Sarah Palin in March of 2007.

Steve Moothart - Petroleum Geologist I, Division of Oil & Gas, Department of Natural Resources

Mr. Moothart is a Petroleum Geologist with the State Dept. of Natural Resources, Oil and Gas Division. He received both his bachelor's (1986) and master's (1992) degrees in Geology from Oregon State University. He joined the Division's Resource Evaluation section in 2006. Prior to joining the Division, Mr. Moothart accrued over 15 years industry experience with ARCO/ConocoPhillips including field evaluation, development and reservoir modeling of fields on Alaska's North Slope.

Marty Rutherford - Deputy Commissioner, Department of Natural Resources

Ms. Rutherford has served the citizens of Alaska for the last 24 years. Currently, she is the Deputy Commissioner of the Department of Natural Resources (DNR) for the State of Alaska and is the lead for the State's gas line negotiation team. Ms. Rutherford has been involved with oil and gas leasing and royalty policy for the last 15 years. She has also served on the Exxon Valdez Oil Spill (EVOS) Restoration Team advising the EVOS Trustee Council on mitigation issues. Prior to her service with DNR, she was the Deputy Commissioner of the Alaska Department of Community and Regional Affairs and the Director of its Municipal & Regional Assistance Division.

**Robert Swenson - Director, Division of Geologic & Geophysical Surveys,
Department of Natural Resources**

Mr. Swenson received his Bachelor of Science degree from the University of Montana and a master's degree in geology from the University of Wyoming, with emphasis in structural geology. He began his geologic pursuits in Alaska in 1991 analyzing the resource potential of sedimentary basins across all of Alaska for ARCO, ConocoPhillips, and later as exploration manager for Denali Oil & Gas. Mr. Swenson left the industry in 2004 when asked to return to Alaska and serve first as Deputy Director of Geologic Research for the Department of Natural Resources, and later as State Geologist for the Division of Geological & Geophysical Surveys. Mr. Swenson currently lives in Fairbanks, Alaska, and serves on numerous federal and state advisory boards including the Department of Energy gas hydrates research advisory board, the US Geological Survey FEDMAP advisory panel, and Alaska sub-cabinet on climate change. Always a field geologist, he continues to carve out time for summer field work and geologic research in the foothills of the Brooks Range.

U.S. Geological Survey

David W. Houseknecht

Dave Houseknecht joined the U.S. Geological Survey (USGS) in 1992, serving as Energy Program Manager until 1998. He has worked on Alaska North Slope basin analysis and petroleum resource assessments since 1995. He frequently represents the USGS scientific perspective on petroleum resources in ANWR, NPRA, and other areas of Alaska and the Global Arctic to Congress and the Administration. Previously, Houseknecht was a professor of geology at the University of Missouri (1978-1992) and a consultant to the oil industry (1981-1992), working on domestic and international projects. He received geology degrees from Penn State University (B.S. 1973, Ph.D. 1978,) and Southern Illinois University (M.S. 1975).

Westney

Westney has over 30 years of experience in providing risk assessment advice related to major construction projects involving energy and other companies around the world. Westney's representative clients on major projects in the past have included each of the major North Slope Producers.

Since 1978, Westney Consulting Group has been providing owners and contractors with methodologies and services to reduce the cost and risk of capital projects. The company's business focus is the energy industry, and its services are based on its differentiated approaches to strategic risk management, strategic project planning, as well as the evaluation and improvement of the effectiveness of project organizations. Westney's services are based on its proprietary Risk Resolution™ concepts and processes that allow Strategic Project Risks to be framed very early in project development.

Eric Briel - Chief Operating Officer

Mr. Briel routinely supports and leads large team facilitation events for Westney, including Project Execution Planning and Project Delivery System Assessment, as well other best practices including VE, Constructability, Risk Analysis and Lessons Learned. Mr. Briel has a total of 25 years of professional experience and expertise including six years as an officer in the U.S. Army Corps of Engineers, involved with all phases of operational planning and project execution, coupled with 18 years of progressive project management responsibilities on international projects for BP (formally Amoco). His knowledge and professional skills in project management span all project phases from initial development of a business opportunity through detailed design, fabrication, installation, start-up and initial facility operation. He holds a bachelor's degree in Civil Engineering from the Virginia Military Institute and an M.B.A. from Regis University.

Keith Dodson

Mr. Dodson has extensive experience in the natural gas and LNG industries. Mr. Dodson's focus is on Strategic Risk Management and Risk-Driven Contract Strategy. He is the developer of the Risk Resolution™ process. Mr. Dodson joined Westney in 2003, after holding executive positions with international engineering & construction contractors, such as Vice Chairman and CEO of MW Kellogg Ltd., President and CEO of Stone & Webster, and Executive VP of Brown & Root. He was also Senior VP with a major energy company. He holds a B.S. in Engineering from the University of Texas, and was Chairman of the Engineering Foundation. He was also Chairman of the Construction Industry Institute. Mr. Dodson is a graduate of the Advanced Management Program at Rice University.

Schedule of Hearings on AGIA - June & July, 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
	1	2	3	4	5	6	7
			Convene in Juneau	LB&A Consultants	LB&A Consultants	TransCanada & Administration	TransCanada & Administration
8	9	10	11	12	13	14	
TransCanada & Administration	TransCanada & Administration	TransCanada Administration LB&A	Travel Day	Fairbanks 10 am-5 pm Carlson Center In-State Gas	Fairbanks 9 am-5 pm Carlson Center TC/Admin/LBA	Fairbanks 9 am-5 pm Carlson Center TC/Admin/Public Testimony	
15	16	17	18	19	20	21	
Note: Anchorage Location to be determined	Anchorage Regulatory Agencies 9 am-5 pm	Anchorage Pt. Thomson 9 am-5 pm	Anchorage TC/Admin 9 am-5 pm Public Testimony 6-8 pm	Anchorage TC/Admin 9 am-5 pm Public Testimony 6-8 pm	Anchorage In-State Gas 9 am-5 pm		
22	23	24	25	26	27	28	
		Mat-Su TC/Admin/LBA 1-5 pm Public Testimony 6-8 pm Palmer Train Depot		Kenai TC/Admin/LBA 1-5 pm Public Testimony 6-8 pm Soldotna Sports Ctr.			
29	30	July 1	2	3	4	5	
	Barrow Community Celebration Day	Barrow Time & Location To be determined					
6	7	8	9	10	11	12	
		Ketchikan TC/Admin/LBA Public Testimony					

Updated June 5, 2008

Schedule of Hearings on AGIA - June & July, 2008

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15 Note: Anchorage Location to be determined	16 Anchorage Regulatory Agencies 9 am-5 pm	17 Anchorage Pt. Thomson 9 am-5 pm	18 Anchorage TC/Admin 9 am-5 pm Public Testimony 6-8 pm	19 Anchorage TC/Admin 9 am-5 pm Public Testimony 6-8 pm	20 Anchorage In-State Gas 9 am-5 pm	21
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		Ketchikan TC/Admin/LBA Public Testimony				

Updated June 5, 2008

Gavel In & Call to order:

**I CALL THE JOINT MEETING OF THE SENATE SPECIAL
COMMITTEE ON ENERGY and THE HOUSE RULES SPECIAL SUB-
COMMITTEE ON AGIA TO ORDER**

Friday, June 6, 2008

LET THE RECORD REFLECT THAT IT IS _____ P.M.

Present at the table are:

**Schedule for today: Take a lunch break around noon.
Return for an afternoon session with one brief break mid-way.
Plan to adjourn by 5:30....BUT if we don't finish up, come
back after a short dinner break for an EVENING SESSION**

Welcome: Trans Canada and Administration members

**Welcome to those listening at LIO's and on Gavel to Gavel
around the state.**

**5:30 PM: Adjourn. Returning tomorrow @ 10 AM to hear
further from Trans Canada and the Administration.**

Gavel In & Call to order:

**I CALL THE JOINT MEETING OF THE SENATE SPECIAL
COMMITTEE ON ENERGY and THE HOUSE RULES SPECIAL SUB-
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Friday, June 6, 2008

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Gavel In & Call to order:

**I CALL THE JOINT MEETING OF THE SENATE SPECIAL
COMMITTEE ON ENERGY and THE HOUSE RULES SPECIAL SUB-
COMMITTEE ON AGIA TO ORDER**

Friday, June 6, 2008

LET THE RECORD REFLECT THAT IT IS _____ P.M.

Present at the table are:

**Schedule for today: Take a lunch break around noon.
Return for an afternoon session with one brief break mid-way.
Plan to adjourn by 5:30....BUT if we don't finish up, come
back after a short dinner break for an EVENING SESSION**

Welcome: Trans Canada and Administration members

**Welcome to those listening at LIO's and on Gavel to Gavel
around the state.**

**5:30 PM: Adjourn. Returning tomorrow @ 10 AM to hear
further from Trans Canada and the Administration.**

Gavel In & Call to order:

**I CALL THE JOINT MEETING OF THE SENATE SPECIAL
COMMITTEE ON ENERGY and THE HOUSE RULES SPECIAL SUB-
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SCOMM

155:5

ALASKA STATE LEGISLATURE

Senator Charlie Huggins, Chair
Senate Special Committee on Energy
State Capitol, Room 119
Juneau, AK 99801
Phone: 465-3878
Fax: 465-3265



Representative John Harris, Chair
House Rules Subcommittee on AGIA
State Capitol, Room 208
Juneau, AK 99801
Phone: 465-4859
Fax: 465-3799

Third Special Session
Twenty-Fifth Legislature

Gymnasium
Terry Miller Building, Juneau Alaska
Saturday June 7, 2008
10:00-5:30 p.m.

Joint Meeting AGENDA

- Presentations: Review of AGIA Findings and Determination; Natural Gas Pipeline Project as proposed by TransCanada Alaska Company, LLC and Foothills Pipelines Ltd. (TC Alaska) to the State of Alaska.

Administration and TransCanada: continued

- ① TC Alaska's AGIA Application Overview – **Tony Palmer**,
Vice President, Alaska Business Development

change in order of business →
~~Overview of Findings – **Pat Galvin**, Commissioner, DOR~~
~~**Tom Irwin**, Commissioner, DNR~~

② The Prize – **Bob Swenson**, Director Div. of Geological & Geophysical Surveys, DNR
Dave Houseknecht, Geologist, USGS

← Jobs and Training – **Clark Bishop**, Commissioner, DOL; **Conrad Mulligan**, ARCADIS;

← Pipeline Regulatory and Commercial Issues –

Black & Veatch;

Greenburg Traurig;

Bill Sparger, Energy Project Consultants;

Pat Anderson, Pingo International;

Kevin Banks, Actng. Dir. Division of Oil & Gas

Testimony: By Invitation

Sp. Session on AGIA
Juneau

June 7, 2008
FRIDAY

3:15 PM

Natural Gas Exploration Potential in the Alaskan Arctic



Bob Swenson – State Geologist
Dave Houseknecht - USGS

ALASKA



USGS
science for a changing world

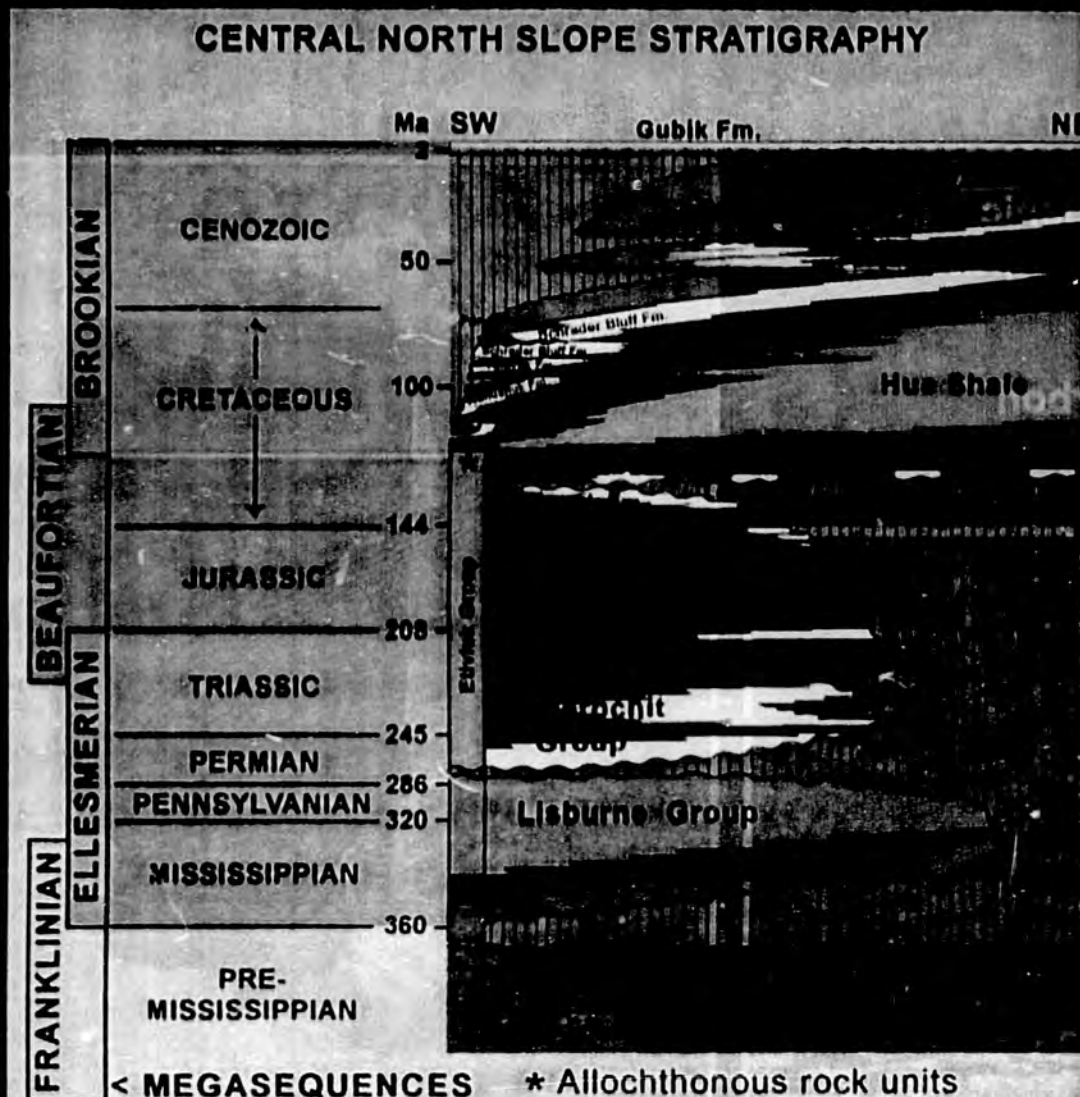
Gil Mull photo

dhouse@usgs.gov

Arctic Alaska - Key Geologic Features



Stratigraphy – Known & Potential Source Rocks



< Paleogene Canning

< Seabee

< GRZ (HRZ)

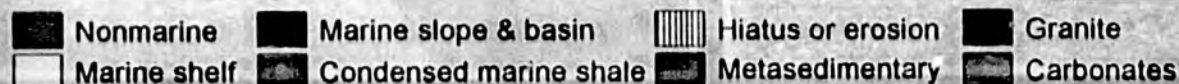
< Lower Kingak

< Shublik

< Lisburne (Kuna)

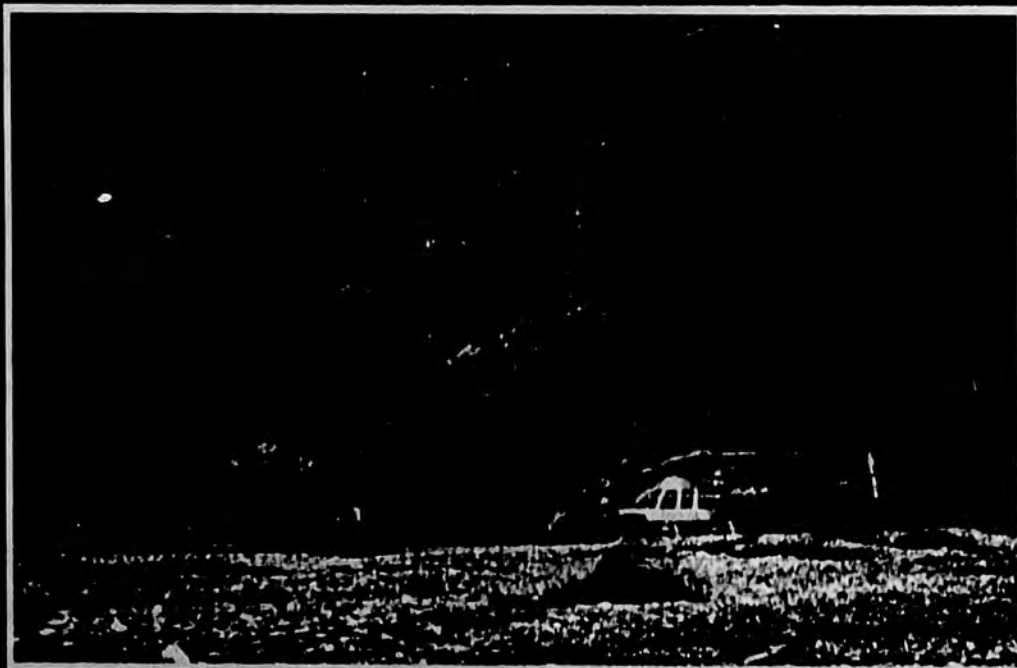
< Kekiktuk

< MEGASEQUENCES * Allochthonous rock units

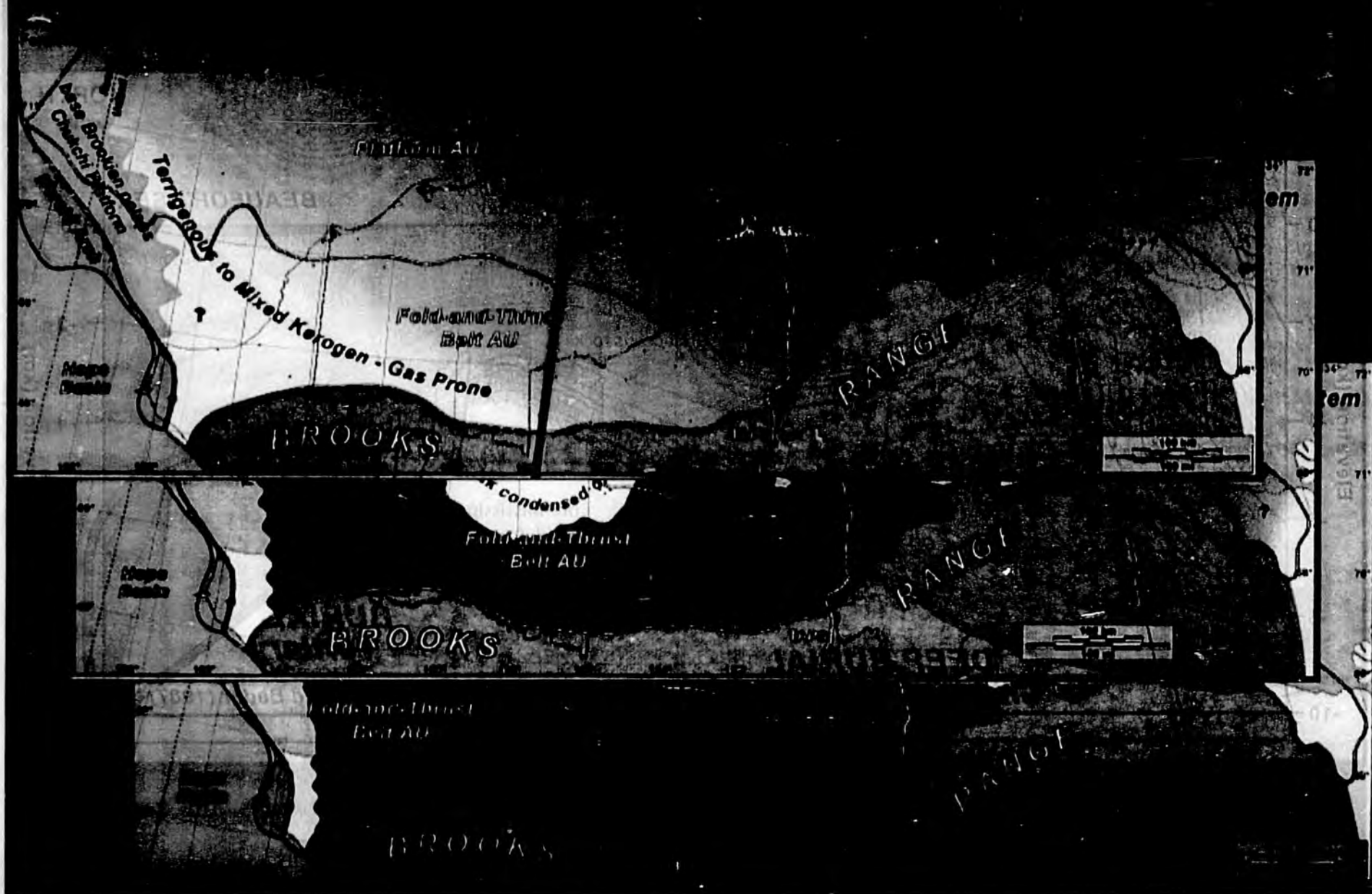


Source Rock & Hydrocarbon Characterization

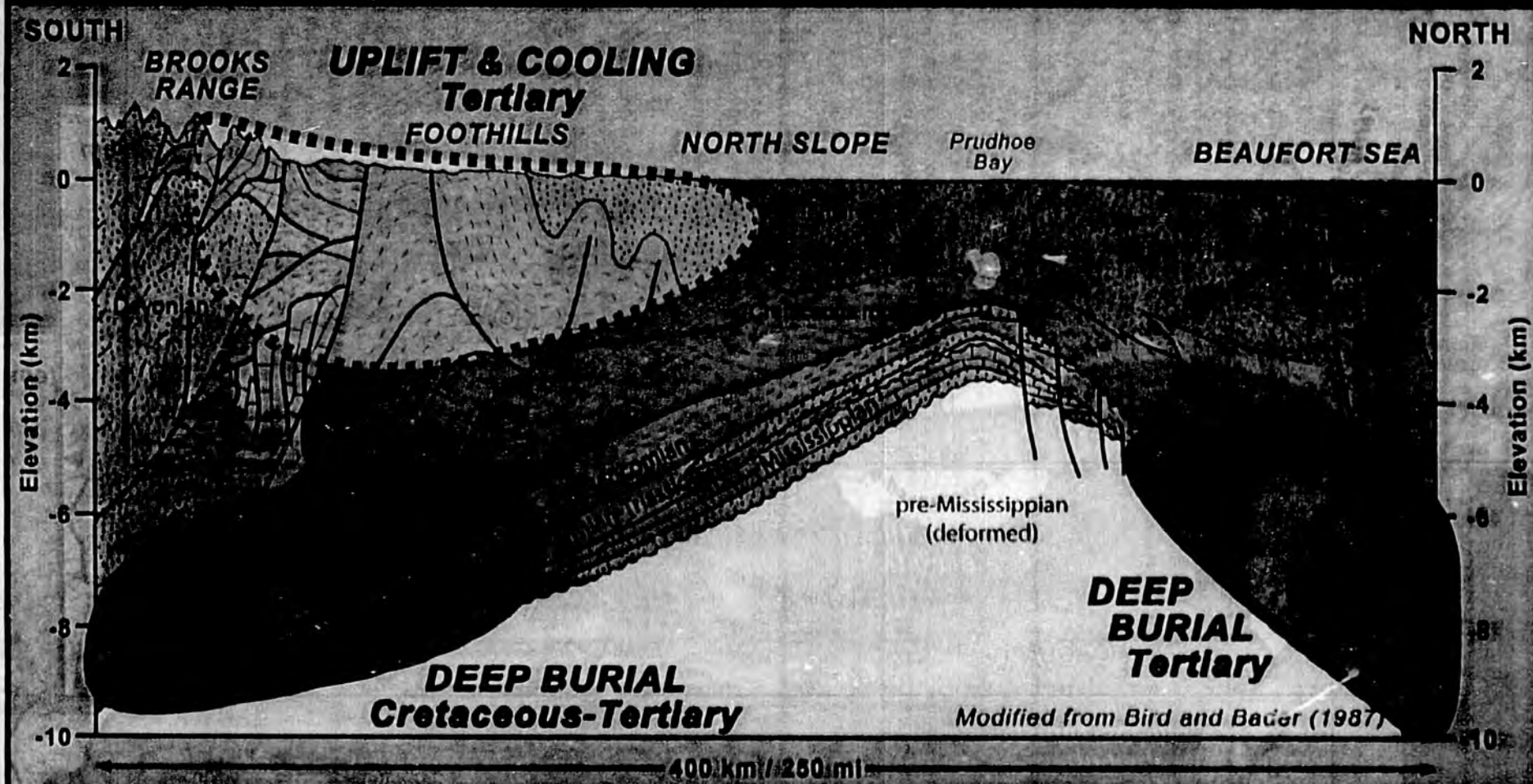
- Synthesizing a decade of organic geochemical analyses and integrate with regional geologic data
- Characterization of hydrocarbon occurrences



Arctic Alaska Source Rock Systems

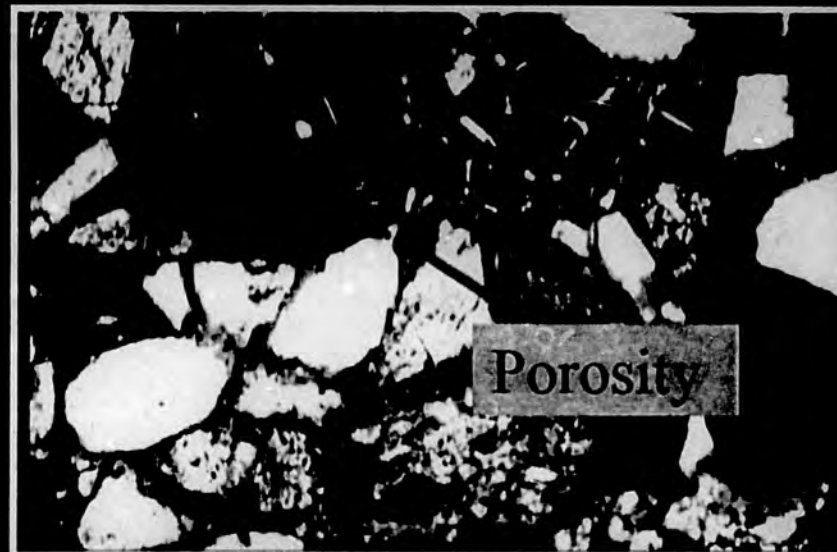
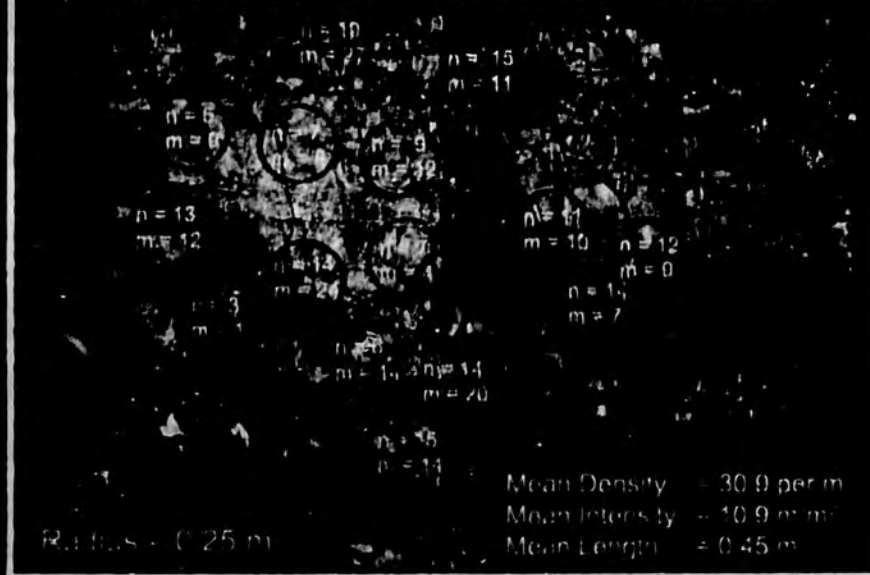


Overview of Regional Geology

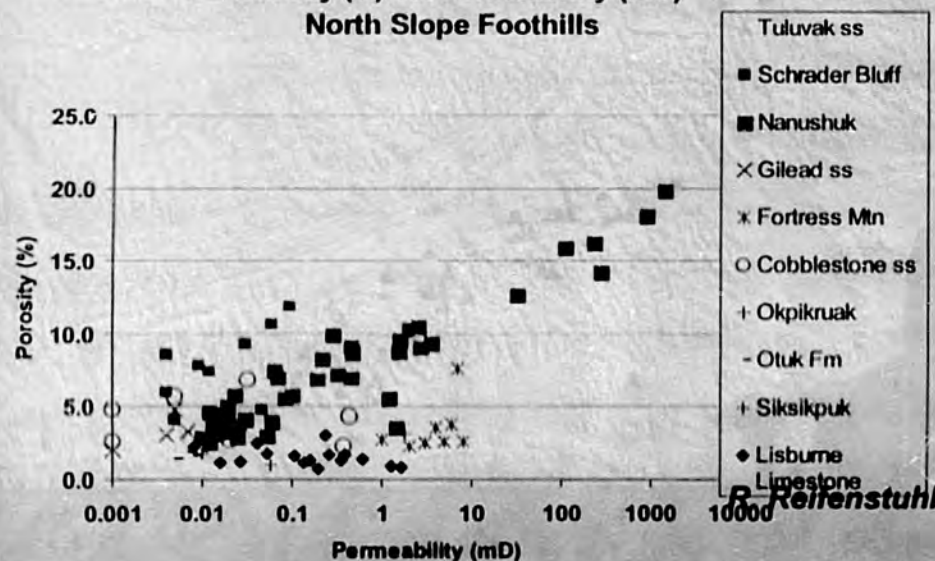


• Reservoir quality studies

Skimo Anticline – Overturned Forelimb



Porosity (%) vs. Permeability (mD) North Slope Foothills



Foothills Drilling and Gas Occurrences

