

HJR

40



**STATE OF ALASKA  
1988 LEGISLATIVE SESSION**

**BILL VERSION:** CS HJR 40 (RES)  
**PUBLISH DATE:** April 21, 1988

**FISCAL NOTE**

**REQUEST:**

Revision Date: \_\_\_\_\_ Agency Affected: None  
 Title: Petroleum Research and Development BRU: \_\_\_\_\_  
 Sponsor: Zawacki Components: \_\_\_\_\_  
 Requestor: \_\_\_\_\_

**EXPENDITURES/REVENUES: (Thousands of Dollars)**

OPERATING	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
<b>TOTAL OPERATING</b>	-0-	-0-	-0-	-0-	-0-	-0-

CAPITAL						
---------	--	--	--	--	--	--

REVENUE						
---------	--	--	--	--	--	--

**FUNDING: (Thousands of Dollars)**

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
<b>TOTAL</b>						

**POSITIONS:**

FULL-TIME						
PART-TIME						
TEMPORARY						

**ANALYSIS :** (Attach a separate page if necessary)

\_\_\_\_\_

Prepared by: Staff Phone: 465-3711  
 Division: \_\_\_\_\_ Date: \_\_\_\_\_  
 Approved by Commissioner S. C. H. Date: 4/21/88  
 Agency: Resources Committee

Distribution (by preparer):  
 Legislative Finance  
 Legislative Sponsor  
 Requestor  
 Office of Management and Budget  
 Impacted Agency(ies)

Original sponsors: Zawacki, Adams,  
Frank, et al.

1 IN THE HOUSE

BY THE RESOURCES COMMITTEE

2 CS FOR HOUSE JOINT RESOLUTION NO. 40 (Resources)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 FIFTEENTH LEGISLATURE - SECOND SESSION

5 Relating to petroleum research and  
6 development in the state.

7 BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF ALASKA:

8 WHEREAS petroleum production in the state provides nearly 85 percent  
9 of the revenue for the state and will continue to be the major economic  
10 force in the state for coming decades; and

11 WHEREAS the state presently provides nearly 24 percent of the domestic  
12 crude oil produced in the United States; and

13 WHEREAS the petroleum resources in the state's arctic, subarctic, and  
14 offshore regions are expected to constitute nearly 40 percent of all of the  
15 future petroleum resources found within the United States in the near  
16 future; and

17 WHEREAS potential incremental oil production through enhanced oil  
18 recovery could amount to 10,000,000,000 barrels from known Alaska reserves;  
19 and

20 WHEREAS enhanced oil recovery from current and future oil fields in  
21 the state will require continuing basic laboratory research and modeling;  
22 and

23 WHEREAS the arctic North Slope represents a unique and major petroleum  
24 province that has special research needs and requires special technology;  
25 and

26 WHEREAS the state is well suited geographically to be the site for a  
27 research center for the petroleum development needs of the arctic North  
Slope; and

28 WHEREAS the United States Department of Energy is interested in

1 increasing the domestic supply of petroleum by encouraging scientific and  
2 technological advances at all stages of Alaska petroleum resource assess-  
3 ment, research development, and technology transfer; and

4 WHEREAS, based on the advice of the United States Energy Research  
5 Advisory Board, the United States Congress has appropriated funds for the  
6 U.S. Department of Energy to initiate geoscience and enhanced oil recovery  
7 research and development; and

8 WHEREAS the U.S. Department of Energy and Alaska recognize that it  
9 would be beneficial to cooperatively sponsor those projects on petroleum  
10 resource identification and extraction in which both the department and the  
11 state are interested; and

12 WHEREAS the state and the U.S. Department of Energy also recognize  
13 that it is beneficial to help promote petroleum resource identification,  
14 petroleum research characterization, development of extraction technology  
15 for petroleum resources, and the transfer of petroleum research technology  
16 to the private sector; and

17 WHEREAS the state is the owner of vast oil reserves now being produced  
18 by lessees at Prudhoe Bay, Kuparuk, and other fields, but the state is not  
19 at this time able to analyze the industry's estimate about when production  
20 from these vast fields will begin to decline; and

21 WHEREAS the state's revenue projections are affected by the decline  
22 projections provided by industry, and the projected decline of the Prudhoe  
23 Bay field has been changed from 1987 to 1990; and

24 WHEREAS the state will benefit from petroleum research that includes  
25 reservoir analysis and understanding of the actual benefits derived from  
26 enhanced oil recovery; and

27 WHEREAS the Petroleum Development Laboratory of the University of  
28 Alaska, Interior/Western, at Fairbanks is a nationally recognized and  
29 well-equipped petroleum research center that places special emphasis on the  
30 CSHJR 40(Res)

1 unique problems associated with development of the petroleum resources of  
2 the state;

3 BE IT RESOLVED that the Alaska State Legislature supports petroleum  
4 research and development and urges the Governor and the Alaska congress-  
5 sional delegation to continue to encourage petroleum research and develop-  
6 ment in the state by supporting the Petroleum Development Laboratory of the  
7 University of Alaska, Interior/Western, at Fairbanks; and be it

8 FURTHER RESOLVED that the Alaska State Legislature urges the Secretary  
9 of the U.S. Department of Energy to recognize the importance to national  
10 security of petroleum research and development at the Petroleum Development  
11 Laboratory of the University of Alaska, Interior/Western, at Fairbanks.

12 COPIES of this resolution shall be sent to the Honorable John S.  
13 Herrington, Secretary of the U.S. Department of Energy; and to the Honor-  
14 able Ted Stevens and the Honorable Frank Murkowski, U.S. Senators, and the  
15 Honorable Don Young, U.S. Representative, members of the Alaska delegation  
16 in Congress.



# Alaska State Legislature

HOUSE OF REPRESENTATIVES  
COMMITTEE ON RESOURCES

POUCH V  
JUNEAU, ALASKA 99811  
(907) 465-3715

## MEMORANDUM

April 21, 1988

TO: Rep. Sam Cotten, Co-Chair  
Rep. Adelheid Herzmann, Co-Chair  
Committee Members

FROM: Ned Farquhar, staff *Ned*

SUBJECT: Language for HJR 40

Rep. Zawacki has prepared a suggested committee substitute for HJR 40, on petroleum research and development. The proposed substitute (dated 3/15) is in the committee files.

I have also provided language to address another issue. At the Committee's last hearing on HJR 40 and HB 186, a question arose regarding the state's ability to analyze the oil industry's estimates of when major oil fields will decline.

For instance, at Prudhoe Bay the projected decline has been postponed from 1987 to 1990. The production decline estimate for Prudhoe is enormously important to Alaska; it affects the state's revenue projections and the tax climate. Revenue Commissioner Hugh Malone believes that better knowledge of the characteristics of major Alaska oil fields is a high priority. At the last hearing on HB 186, AOGCC Chair Chat Chatterton stated that the state is in the dark on the industry's production decline estimates for major fields.

The attached language, if added to HJR 40, might help encourage the Petroleum Development Laboratory at UAF to begin serving as an impartial and objective observer and analyst of production capabilities in Alaska oil fields.

cc: Rep. Zawacki

Attachment

1 increasing the domestic supply of petroleum by encouraging scientific and  
2 technological advances at all stages of Alaska petroleum resource assess-  
3 ment, research development, and technology transfer; and

4 WHEREAS, based on the advice of the United States Energy Research  
5 Advisory Board, the United States Congress has appropriated funds for the  
6 U.S. Department of Energy to initiate geoscience and enhanced oil recovery  
7 research and development; and

8 WHEREAS the U.S. Department of Energy and Alaska recognize that it  
9 would be beneficial to cooperatively sponsor those projects on petroleum  
10 resource identification and extraction in which both the department and the  
11 state are interested; and

12 WHEREAS the state and the U.S. Department of Energy also recognize  
13 that it is beneficial to help promote petroleum resource identification,  
14 petroleum research characterization, development of extraction technology  
15 for petroleum resources, and the transfer of petroleum research technology  
16 to the private sector; and

17 WHEREAS the state is the owner of vast oil reserves now being produced  
18 by lessees at Prudhoe Bay, Kuparuk, and other fields, but the state is not  
19 at this time able to analyze [REDACTED] the industry's estimate about when  
20 production from these vast fields will begin to decline; and

21 WHEREAS the state's revenue projections [REDACTED] are af-  
22 fected by the decline projections provided by industry, and the projected  
23 decline of the Prudhoe Bay field has been changed from 1987 to 1990; and

24 WHEREAS the state will benefit from petroleum research that includes  
25 reservoir analysis and understanding of the actual benefits derived from  
26 enhanced oil recovery; and

28 WHEREAS the Petroleum Development Laboratory of the University of  
29 Alaska, Interior/Western, at Fairbanks is a nationally recognized and  
well-equipped petroleum research center that places special emphasis on the

5-1389B  
Bannister  
3/15/88

Original sponsors: Zawacki, Adams,  
Frank, et al.

1 IN THE HOUSE

2 CS FOR HOUSE JOINT RESOLUTION NO. 40 ( )

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 FIFTEENTH LEGISLATURE - SECOND SESSION

5 Relating to petroleum research and  
6 development in the state.

7 BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF ALASKA:

8 WHEREAS petroleum production in the state provides nearly 85 percent  
9 of the revenue for the state and will continue to be the major economic  
10 force in the state for coming decades; and

11 WHEREAS the state presently provides nearly 24 percent of the domestic  
12 crude oil produced in the United States; and

13 WHEREAS the petroleum resources in the state's arctic, subarctic, and  
14 offshore regions are expected to constitute nearly 40 percent of all of the  
15 future petroleum resources found within the United States in the near  
16 future; and

17 WHEREAS potential incremental oil production through enhanced oil  
18 recovery could amount to 10,000,000,000 barrels from known Alaska reserves;  
19 and

20 WHEREAS enhanced oil recovery from current and future oil fields in  
21 the state will require continuing basic laboratory research and modeling;  
22 and

23 WHEREAS the arctic North Slope represents a unique and major petroleum  
24 province that has special research needs and requires special technology;  
25 and

26 WHEREAS the state is well suited geographically to be the site for a  
27 research center for the petroleum development needs of the arctic North  
28 Slope; and

29 WHEREAS the United States Department of Energy is interested in

1 increasing the domestic supply of petroleum by encouraging scientific and  
2 technological advances at all stages of Alaska petroleum resource assess-  
3 ment, research development, and technology transfer; and

4 WHEREAS, based on the advice of the United States Energy Research  
5 Advisory Board, the United States Congress has appropriated funds for the  
6 U.S. Department of Energy to initiate geoscience and enhanced oil recovery  
7 research and development; and

8 WHEREAS the U.S. Department of Energy and Alaska recognize that it  
9 would be beneficial to cooperatively sponsor those projects on petroleum  
10 resource identification and extraction in which both the department and the  
11 state are interested; and

12 WHEREAS the state and the U.S. Department of Energy also recognize  
13 that it is beneficial to help promote petroleum resource identification,  
14 petroleum research characterization, development of extraction technology  
15 for petroleum resources, and the transfer of petroleum research technology  
16 to the private sector; and

17 WHEREAS the Petroleum Development Laboratory of the University of  
18 Alaska, Interior/Western, at Fairbanks is a nationally recognized and  
19 well-equipped petroleum research center that places special emphasis on the  
20 unique problems associated with development of the petroleum resources of  
21 the state;

22 BE IT RESOLVED that the Alaska State Legislature supports petroleum  
23 research and development and urges the Governor and the Alaska congress-  
24 sional delegation to continue to encourage petroleum research and develop-  
25 ment in the state by supporting the Petroleum Development Laboratory of the  
26 University of Alaska, Interior/Western, at Fairbanks; and be it

27 FURTHER RESOLVED that the Alaska State Legislature urges the Secretary  
28 of the U.S. Department of Energy to recognize the importance to national  
29 security of petroleum research and development at the Petroleum Development

1 Laboratory of the University of Alaska, Interior/Western, at Fairbanks.

2 COPIES of this resolution shall be sent to the Honorable John S.  
3 Herrington, Secretary of the U.S. Department of Energy; and to the Honor-  
4 able Ted Stevens and the Honorable Frank Murkowski, U.S. Senators, and the  
5 Honorable Don Young, U.S. Representative, members of the Alaska delegation  
6 in Congress.

7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29

TESTIMONY TO  
HOUSE RESOURCES COMMITTEE  
BY REPRESENTATIVE JIM ZAWACKI  
MARCH 17, 1988

Madam and Mr. Chairman and members of the committee I appreciate the opportunity to come before you and address House Joint Resolution 40 and the proposed Committee Substitute which pertains to petroleum research and development in our state.

Please take a moment and reference the letter in your packet dated January 29, 1988 addressed to me from U.S. Senator Ted Stevens. The letter addresses recommendations by the Energy Research Advisory Board, which was formed to advise the Department of Energy (DOE) on research needs, to establish six energy producing provinces throughout the country and to establish a university-based "center of excellence" that would have included Alaska. Unfortunately due to budget constraints from DOE and Congress the proposal has been put off. Because of this it was necessary to amend HJR 40, producing the CS that is in your packets.

I have highlighted the areas on the original bill that were deleted and have highlighted the additions on the Committee Substitute.

The importance of the amended resolution, which is supported by Dr. Sharma Research Director of University of Alaska,

Fairbanks is to send a message to the Governor, our Congressional leaders and the Secretary of the Department of Energy of the extreme importance of petroleum research and development in our State.

It is also a further acknowledgement that Alaska is the number one petroleum producing state in the country and through the nationally recognized Petroleum Development Laboratory of the University of Alaska, Fairbanks a special emphasis on the unique problems associated with petroleum production within the state needs to be addressed.

In the letter of March 9, 1988 to Senator Stevens from DOE it further addresses certain steps being taken by the Energy Research Advisory Board to obligate congressional funds to establish a consortium of states and universities which would deal with the problems of declining domestic oil through extensive research and development. Alaska is being considered as one of the consortium groups.

Again, the resolution would bring further recognition to our State and the fine Research Development Center at the University of Alaska, Fairbanks. With this I am asking this committee to support the proposed CS for HJR 40.

Madam, Mr. Chairman and members of the committee thank you for your time and consideration.



**Department of Energy**  
Washington, DC 20585

March 9, 1988

Honorable Ted Stevens  
United States Senate  
Washington, D.C. 20510

Dear Senator Stevens:

This is in response to your letter of January 25, 1988, expressing your concern over several issues related to advanced petroleum recovery. I welcome this opportunity to provide you with our views on this critically important issue.

The February 1987 Energy Research Advisory Board (ERAB) report on geosciences and national security made a significant contribution to the continuing dialogue on the appropriate Federal response to the current decline in domestic oil production. This report, which was received with much interest by the Department, established the need for high priority research to improve the recovery of domestic oil and gas and identified the important role that geoscience can play. I believe that there is full agreement among all parties on the validity of this need. However, there is not complete agreement on the most appropriate strategy for implementing the needed work.

We have, nonetheless, taken several steps to move forward with the ERAB recommendations. First, we have given much greater management attention to the entire area of oil and gas extraction. We have established the Office of Geoscience Research (OGR), reporting directly to me. Its core staff has been placed, and we are vigorously recruiting a distinguished geoscientist to head the office. The OGR will oversee and coordinate all the geoscience research conducted by Fossil Energy and will work very closely with our Office of Oil, Gas and Shale Technology in assuring that the critical integration of all the needed disciplines does, in fact, occur. Also, the Hydrocarbon Geoscience Research Coordinating Committee, which I chair, has been chartered to coordinate oil and gas research across the full Department and other Government agencies. These efforts have been undertaken in direct response to recommendations in the ERAB report.

We have also increased the Fossil Energy Program's emphasis on research in this critical area. Our request to Congress for Enhanced Oil Recovery (EOR) for Fiscal Year 1987 was under \$4.5 million; our current request is for nearly \$17 million. A review of our budget request will show the extent to which this increase deals with the issues of geoscience and advanced oil

recovery, rather than what has classically been EOR. I would note that this increase is consistent with our overall concern that we focus on work appropriate to Federal support, and that our requests be consistent with the requirements of Gramm-Rudman-Hollings and the results of the 1987 budget summit.

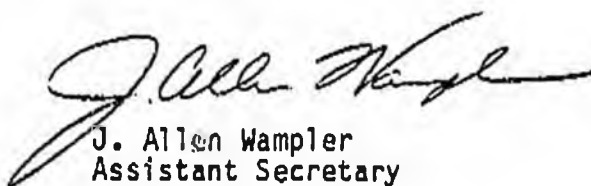
We are in the process of obligating the Congressionally directed funds for obtaining outside expert opinion needed to develop a comprehensive plan. Once we have this information we will be developing a formal research plan, which will lead to a resolution of any unresolved implementation questions.

We have followed very closely the efforts of Dr. William Fisher, of the Texas Bureau of Economic and Geology, and his colleagues from many other states, to establish a consortium to deal with the problems of declining domestic oil and gas production. This issue is, quite appropriately, a public sector question that can only be resolved through the participation of the affected states themselves. They are, after all, the repositories of the data that is critical to the problem.

On February 23, 1988, I signed a statement of intent to the effect that we intend to support such a consortium. This support references the Congressionally directed funds for obtaining outside expert opinion needed to develop a comprehensive geoscience and oil extraction plan. We understand that this group is preparing an unsolicited proposal on this subject. I should note that the consortium, as proposed, includes the universities and/or geological surveys from 13 states, including Alaska.

Thank you for the opportunity to present our views on this important national issue.

Sincerely.



J. Allen Wampler  
Assistant Secretary  
Fossil Energy



UNIVERSITY OF ALASKA - FAIRBANKS  
Fairbanks, Alaska 99775-0500

December 8, 1987

Mr. Douglas B. Uthus, Director  
Office of Oil, Gas and Shale Technology  
U.S. Department of Energy  
Fossil Energy (FE-30, GTN)  
Washington, D.C. 20545

Dear Mr. Uthus:

This is in response to your solicitation for comments on the draft, "EOR Initiative - A Strategy for Enhanced Domestic Oil Production," mailed to Dr. G. D. Sharma, Director, Petroleum Development Laboratory, University of Alaska Fairbanks. The draft has been reviewed by the staffs of the Petroleum Development Laboratory and Petroleum Engineering Department.

The state of Alaska presently provides over 23 percent of the U.S. total crude and has the potential for providing the nation a significant supply during the next century. Therefore, Alaska will be a key component in the strategy for the future domestic production. The state of Alaska and the University of Alaska Fairbanks are, therefore, committed to the development of petroleum resources to meet the nation's petroleum demand and security needs (copy of letter from Honorable Governor Steve Cowper to the Honorable John S. Herrington, Secretary of Energy, enclosed). The Petroleum Development Laboratory, University of Alaska Fairbanks being the sole oil and gas research institution in the state of Alaska, undoubtedly will be an important and integral element in developing the petroleum resources of the state. Thus, it is essential that the Department of Energy and the Petroleum Development Laboratory work closely to formulate strategy for these resources. We indeed are looking forward to working with the Department of Energy.

The staff's comments on the draft have been delivered to you by Dr. Sharma in Denver and both of you had time to discuss Alaska's research needs that will be incorporated in the draft proposal.

The EOR Initiative draft, in my opinion, includes salient research agenda proposed by the Energy Research Advisory Board (ERAB) to the Secretary of Energy. The spectrum of research included in the ERAB recommendation was, to a large extent, extremely broad and did not include feasible orderly means to achieve its objectives. The EOR Initiative draft, on the other hand, has focused on critical research needs and has prioritized

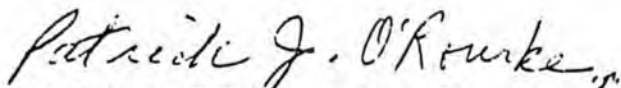
UNIVERSITY OF ALASKA

interrelated research components in a meaningful schedule which appears to be reasonable and attainable.

The University of Alaska Fairbanks supports the "EOR Initiative - A Strategy for Enhanced Domestic Oil Production" draft proposal. Dr. Sharma, as in the past, will be coordinating research and development of Alaskan petroleum resources with you during the implementation of the EOR Initiative.

In the meantime, if the University of Alaska Fairbanks can be of any further assistance, please feel free to contact me or Dr. Sharma at your convenience.

Sincerely,



Patrick J. O'Rourke, Chancellor  
University of Alaska Fairbanks

PJO'R:lm

cc: Governor Steve Cowper  
Senator Ted Stevens  
Senator Frank Murkowski  
Mr. John W. Katz  
Dr. G. D. Sharma ✓

JOHN C. STENNIS, MISSISSIPPI, CHAIRMAN

ROBERT C. BYRD, WEST VIRGINIA  
WILLIAM PROXMIRE, WISCONSIN  
DANIEL K. INOUE, HAWAII  
ERNEST F. HOLLINGS, SOUTH CAROLINA  
LAWTON CHILES, FLORIDA  
J. BENNETT JOHNSTON, LOUISIANA  
QUENTIN N. BURDICK, NORTH DAKOTA  
PATRICK J. LEAHY, VERMONT  
JIM SASSER, TENNESSEE  
DENNIS D'CONCINI, ARIZONA  
DALE BUMPERS, ARKANSAS  
FRANK R. LAUTENBERG, NEW JERSEY  
TOM HARKIN, IOWA  
BARBARA A. MIKULSKI, MARYLAND  
HARRY REID, NEVADA

MARK O. HATFIELD, OREGON  
TED STEVENS, ALASKA  
LOWELL P. WICKER, JR., CONNECTICUT  
JAMES A. MCCLURE, IDAHO  
JAKE GARN, UTAH  
THAD COCHRAN, MISSISSIPPI  
ROBERT W. KASTEN, JR., WISCONSIN  
ALFONSO M. DAMATO, NEW YORK  
WARREN RUDMAN, NEW HAMPSHIRE  
ARLEN SPECTER, PENNSYLVANIA  
PETE V. DOMENICI, NEW MEXICO  
CHARLES E. GRASSLEY, IOWA  
DON NICKLES, OKLAHOMA

## United States Senate

COMMITTEE ON APPROPRIATIONS  
WASHINGTON, DC 20510-6025

FRANCIS J. SULLIVAN, STAFF DIRECTOR  
J. KEITH KENNEDY, MINORITY STAFF DIRECTOR

January 29, 1988

The Honorable Jim Zawacki  
Alaska State House  
Pouch V  
Juneau, Alaska 99811

Dear Jim:

Last fall you contacted me with a request for information relating to petroleum research. I have done some checking on recent proposals and wanted to pass on what I have learned.

In February, 1987, the Energy Research Advisory Board, which was formed to advise the Department of Energy on research needs, delivered a report to the Secretary of Energy. The report called for the division of the country into 6 energy producing provinces and the establishment of a university-based "center of excellence" in each province. The centers of excellence would carry out oil, gas and coal research tailored to the needs of each particular province. This report, by the way, recommended including Alaska with the West Coast states in one province, while putting Texas by itself in another.

The Department of Energy, while accepting the need for more research aimed at improving petroleum recovery techniques, rejected the implementation recommendations of the report. DOE objected to the practical problems of this approach. There is simply no way we could pick six universities out of all the petroleum producing states and focus a federal research program on those schools alone. Note that the University of Alaska Fairbanks would have to compete with the California schools to be named the "center of excellence" in our proposed province.

The Honorable Jim Zawacki  
January 29, 1988  
PAGE TWO

The likely result would be a compromise where the available federal funds would be spread thinly between a large number of schools. In fact, almost exactly this result occurred when, several years ago, a research program was set up for hard rock minerals. Today, more than 15 schools split approximately \$1.5 million under the remnants of that program.

The fact remains, however, that research on advanced recovery techniques is needed. It could significantly extend the life of our oil fields and make a major contribution to the nation's future energy supply. The question is how such a program should be carried out.

I have learned that a group of universities from the other oil producing states are forming a consortium to define and establish our research needs. They plan to approach both the federal government and private industry to support the resulting research plan.

This approach makes sense to me, and I am encouraging the University of Alaska to become involved. The work done by the University's Fossil Energy Research Council would tie in well with this plan.

I would be pleased to work with you on this project, Jim.

With best wishes,

Cordially,



TED STEVENS

# ★ Fairbanks North Star Borough

809 Pioneer Road

P.O. Box 1267

Fairbanks, Alaska 99707

907 452-4761

September 29, 1987

Representative James (Jim) Zawacki  
P.O. Box 783  
Girdwood, Alaska 99587

Dear Representative Zawacki:


Enclosed is a copy of Fairbanks North Star Borough Assembly Resolution No. 87-097 in support for Establishing The Petroleum Research And Development Center at the Petroleum Development Laboratory, University of Alaska - Fairbanks.

Petroleum production in the state provides nearly 85% of the revenue for the State of Alaska and will continue to be the major economic force in the State for coming decades.

It is hoped that every member of the Senate and House will work hard to support funding in petroleum research and development and persuade the Department of Energy to designate Alaska as a major U.S. petroleum province and the Petroleum Development Laboratory, University of Alaska - Fairbanks, as one of the six recommended "Center of Excellence" to conduct oil and gas research.

Your efforts in promoting this opportunity will benefit us all, and thank you in advance for your consideration.

Sincerely,



Howard "Buzz" Otis  
Presiding Officer

Enclosure

HBO/nb

*Alaska*  
**MUNICIPAL**  
*League*

TELEPHONE  
(907) 586-1325

105 MUNICIPAL WAY, SUITE 301  
JUNEAU, ALASKA 99801

TO: Representative Adelheid Herrmann, Co-Chair  
Representative Sam Cotten, Co-Chair  
Members of the House Resources Committee

FROM: Scott A. Burgess, Executive Director 

DATE: March 14, 1988

SUBJECT: HJR 40 - Petroleum research and development

The Alaska Municipal League supports HJR 40. Attached is AML Resolution No. 88-40 which supports the concepts outlined in HJR 40.

Attachment

RESOLUTION OF THE ALASKA MUNICIPAL LEAGUE

RESOLUTION NO. 88-40

A RESOLUTION FOR ESTABLISHING THE PETROLEUM  
RESEARCH AND DEVELOPMENT CENTER AT THE  
PETROLEUM DEVELOPMENT LABORATORY,  
UNIVERSITY OF ALASKA FAIRBANKS.

WHEREAS, the League supports petroleum production in the State which provides nearly 85% of the revenue for the State of Alaska and will continue to be the major economic force in the State for coming decades, and

WHEREAS, Alaska's arctic, subarctic, and offshore regions are expected to provide up to 40% of all future petroleum resources within the United States, and

WHEREAS, potential incremental oil production through Enhanced Oil Recovery (EOR) could be as much as 10 billion barrels from known Alaskan reservoirs, and

WHEREAS, potential natural gas production could be as much as 600 trillion cubic feet from known, but unconventional, formations, and

WHEREAS, additional recovery (EOR) from current production and future fields will need continuing basic research and modeling in the laboratory, and

WHEREAS, the U.S. Department of Energy has been advised by the Energy Research Advisory Board to establish six major petroleum recovery research "Centers of Excellence," one in each major U.S. petroleum province, and

WHEREAS, the Arctic North Slope represents a unique and major petroleum province requiring special technology and with its own research needs, and

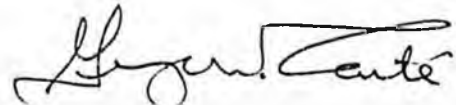
WHEREAS, the University of Alaska Fairbanks, by virtue of its geographic location, is well suited for a research center for the Arctic North Slope petroleum developmental needs, and

WHEREAS, the Petroleum Development Laboratory, University of Alaska, is a nationally recognized, well-equipped petroleum research center, with special emphasis on the unique problems associated with Alaskan petroleum resources;

NOW, THEREFORE, BE IT RESOLVED that the Alaska Municipal League urges the Honorable Governor of the State of Alaska, the Alaska State Legislature, the U.S. Congressional Delegation, and the Alaskan oil industry to support funding in petroleum research and development.

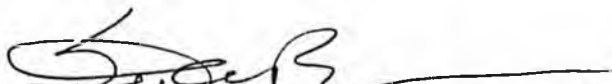
BE IT FURTHER RESOLVED that the Alaska Municipal League does encourage the State's Congressional Delegation to persuade the Department of Energy to designate Alaska as a major U.S. petroleum province and the Petroleum Development Laboratory, University of Alaska Fairbanks, as one of the six recommended "Centers of Excellence" to conduct oil and gas research.

Adopted this 13th day of November 1987.



George W. Carte', President

ATTEST:

  
Scott A. Burgess, Executive Director

Resolution No. 88-40

AGREEMENT

RELATING TO FOSSIL ENERGY RESOURCE CHARACTERIZATION,  
RESEARCH, TECHNOLOGY DEVELOPMENT, AND  
TECHNOLOGY TRANSFER,

BETWEEN THE

UNITED STATES DEPARTMENT OF ENERGY

AND

THE STATE OF ALASKA

WHEREAS, the United States Department of Energy (hereinafter referred to as DOE) is interested in enhancing the domestic supply of fossil fuels by encouraging scientific and technological advances at all stages of resource assessment, research, development, and technology transfer, and

WHEREAS, the State of Alaska (hereinafter referred to as the STATE) recognizes that it contains the largest quantity of domestic unextracted reserves of crude oil, natural gas, heavy oil, tar sand oil, coal, shale oil, methane hydrates, and peat, which can be supplied to domestic and international markets in a safe and economic manner consistent with minimizing the possible adverse effects upon the rich natural environment of the STATE, and

WHEREAS, both the DOE and the STATE share the mutual goal of encouraging research, resource characterization, technology development and technology transfer in order to successfully make Alaskan fossil energy resources available to the consumer, in a safe, economic, and environmentally acceptable manner;

THEREFORE, the DOE and the STATE recognize that it would be beneficial to cooperate in the sponsorship of joint research and development projects of mutual interest in fossil energy resource identification and extraction, and

THEREFORE, the Parties agree as follows:

Article 1

OBJECTIVES

This agreement is undertaken to help advance the fossil energy resource identification, characterization, extraction technology development, and technology transfer to the private sector, for Alaskan reserves of crude oil, natural gas, heavy oil, tar sand oil, coal, shale oil, methane hydrates, and peat, and may include scientific activities and investigations of underlying environmental concerns.

## Article 2

### FORMS OF COOPERATION

The following cooperative activities may be undertaken:

- a) Exchange of information, publications, reports, technical data, samples, materials, instruments, and components for test purposes; including data bases, computer codes, results and methods of research and development which will be specified in future Annexes to this agreement;
- b) Exchange visits by scientists, engineers, and other specialists for participation in research and development activities related to the furtherance of the objectives of the agreement which will be specified in future Annexes to this agreement;
- c) Joint research projects, which may include a cost-sharing arrangement and/or an arrangement for joint planning and/or joint project execution, which will be specified in future Annexes to this agreement;
- d) Such other scientific and environmentally-related cooperative activities which may be agreed upon, which would further the objectives of this agreement which will be specified in future Annexes to this agreement.

## Article 3

### SUBJECT AREAS OF COOPERATION

Subject areas of cooperation will include:

- a) ice research
- b) fossil fuel resource identification and characterization;
- c) transfer of existing fossil energy technology into the Arctic environment
- d) scientific and environmentally-related investigations relevant to fossil energy extraction and development.
- e) other areas of fossil energy research and development as may be mutually agreed upon.

#### Article 4

#### FINANCIAL CONDITIONS

No financial commitments are established initially in this agreement, and it is understood that participation by either party in future specific activities shall be subject to the availability of funds. The parties shall set forth in each Annex to this Agreement the financial terms and conditions, including the budget and the funding commitments of each party, for the activities defined in the task statement in each Annex. All other costs resulting from cooperation under this Agreement shall be borne by the party that incurs them.

#### Article 5

#### LAWS AND REGULATIONS

Activities under this agreement shall be in accordance with applicable State and Federal laws and regulations, including specifically those governing the public disclosure of certain geological and geophysical data.

#### Article 6

#### THIRD PARTY INVOLVEMENTS

It is specifically understood that activities may be conducted under this agreement by the University of Alaska, acting as a unit of the State, with approval by appropriate STATE and University officials, for specific research activities to be described in future Annexes. The provisions of this agreement shall not affect the rights or obligations of either party under its other agreements or arrangements with other agencies, contractors, or individuals.

#### Article 7

#### INTELLECTUAL PROPERTY

Each Annex shall include appropriate intellectual property provisions which recognize the rights and equities of each party consistent with applicable laws and regulations.

Article 8

COORDINATION


Each of the parties will appoint an Arctic Fossil Energy Research Coordinator who will facilitate joint activities under this agreement, with the intention that there be regular communication between the two coordinators to assist in the implementation of this agreement. An annual report of activities under the agreement will be prepared jointly by the coordinators and submitted to the DOE and the STATE.

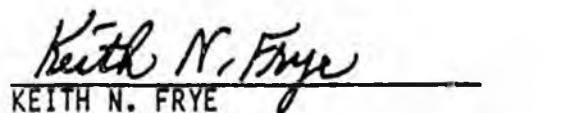
Article 9

ENTRY INTO FORCE AND DURATION

This agreement shall enter into force upon signature of both parties, shall extend for a period of five (5) years after the date of signature and may be amended or extended by mutual written agreement of the parties. Either party may terminate this agreement by providing the other party with four (4) months advance written notice. Any such termination shall be without prejudice to the rights which have accrued under this agreement to either party up to the date of such termination.

Agreed this 23 day of August, 1985, at Anchorage,  
Alaska

  
BILL SHEFFIELD  
GOVERNOR  
STATE OF ALASKA

  
KEITH N. FRYE  
DEPUTY ASSISTANT SECRETARY FOR  
OIL, GAS, SHALE AND COAL LIQUIDS  
U.S. DEPARTMENT OF ENERGY



UNIVERSITY OF ALASKA - FAIRBANKS  
Fairbanks, Alaska 99775-0500

December 8, 1987

Mr. Douglas B. Uthus, Director  
Office of Oil, Gas and Shale Technology  
U.S. Department of Energy  
Fossil Energy (FE-30, GTN)  
Washington, D.C. 20545

Dear Mr. Uthus:

This is in response to your solicitation for comments on the draft, "EOR Initiative - A Strategy for Enhanced Domestic Oil Production," mailed to Dr. G. D. Sharma, Director, Petroleum Development Laboratory, University of Alaska Fairbanks. The draft has been reviewed by the staffs of the Petroleum Development Laboratory and Petroleum Engineering Department.

The state of Alaska presently provides over 23 percent of the U.S. total crude and has the potential for providing the nation a significant supply during the next century. Therefore, Alaska will be a key component in the strategy for the future domestic production. The state of Alaska and the University of Alaska Fairbanks are, therefore, committed to the development of petroleum resources to meet the nation's petroleum demand and security needs (copy of letter from Honorable Governor Steve Cowper to the Honorable John S. Herrington, Secretary of Energy, enclosed). The Petroleum Development Laboratory, University of Alaska Fairbanks being the sole oil and gas research institution in the state of Alaska, undoubtedly will be an important and integral element in developing the petroleum resources of the state. Thus, it is essential that the Department of Energy and the Petroleum Development Laboratory work closely to formulate strategy for these resources. We indeed are looking forward to working with the Department of Energy.

The staff's comments on the draft have been delivered to you by Dr. Sharma in Denver and both of you had time to discuss Alaska's research needs that will be incorporated in the draft proposal.

The EOR Initiative draft, in my opinion, includes salient research agenda proposed by the Energy Research Advisory Board (ERAB) to the Secretary of Energy. The spectrum of research included in the ERAB recommendation was, to a large extent, extremely broad and did not include feasible orderly means to achieve its objectives. The EOR Initiative draft, on the other hand, has focused on critical research needs and has prioritized

UNIVERSITY OF ALASKA

interrelated research components in a meaningful schedule which appears to be reasonable and attainable.

The University of Alaska Fairbanks supports the "EOR Initiative - A Strategy for Enhanced Domestic Oil Production" draft proposal. Dr. Sharma, as in the past, will be coordinating research and development of Alaskan petroleum resources with you during the implementation of the EOR Initiative.

In the meantime, if the University of Alaska Fairbanks can be of any further assistance, please feel free to contact me or Dr. Sharma at your convenience.

Sincerely,



Patrick J. O'Rourke, Chancellor  
University of Alaska Fairbanks

PJO'R:bm

cc: Governor Steve Cowper  
Senator Ted Stevens  
Senator Frank Murkowski  
Mr. John W. Katz  
Dr. G. D. Sharma ✓

HJR 40



## PETROLEUM DEVELOPMENT LABORATORY

University of Alaska • Fairbanks, Alaska 99701

April 19, 1988

The Honorable Sam Cotten, Chairman  
House Resource Committee  
P.O. Box V (MS 3100)  
Juneau, Alaska 99811

Dear Representative Cotten:

Thank you very much for meeting with me and taking time from your busy schedule. I would like to again emphasize that the passage of CHJR-40 is extremely important for the faculty and staff of the Petroleum Development Laboratory - Petroleum Engineering. Your endorsement for the passage will significantly affect the program attracting federal funds and thus qualified faculty and students. Most importantly, the resolution will enhance research for petroleum extraction in Alaska.

As per our discussion I am enclosing copies of correspondence regarding the request for West Sak crude samples for research purposes and the denial. If I could be of any further assistance towards the passage of the pending resolution, please do contact me at your convenience.

Once again, thank you for your consideration.

Sincerely yours,

A handwritten signature in cursive script, which appears to read "G.D. Sharma".

G.D. Sharma  
Director  
Petroleum Development Laboratory

GD/jw  
Encl