

**The original documents are located in Box 36, folder “Oil (1)” of the Philip Buchen Files at the Gerald R. Ford Presidential Library.**

### **Copyright Notice**

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted material. Gerald R. Ford donated to the United States of America his copyrights in all of his unpublished writings in National Archives collections. Works prepared by U.S. Government employees as part of their official duties are in the public domain. The copyrights to materials written by other individuals or organizations are presumed to remain with them. If you think any of the information displayed in the PDF is subject to a valid copyright claim, please contact the Gerald R. Ford Presidential Library.

*Dix, S.M.*



# Manufacturing & Marketing Consultants

320 FEDERAL SQUARE BUILDING • GRAND RAPIDS, MICHIGAN 49502 • AREA CODE 616-454-8261

September 6, 1974

Mr. Philip W. Buchen  
The White House  
Washington, D. C. 20500

Dear Phil:

Please do not take time to acknowledge this missive, I am reasonably sure the mails will get it to you, and I am well aware of the problem you are having answering mail, including the burden on Bunny and Mrs. Daughtrey.

The purpose of this communication and the enclosed bound report is to bring your file on the petroleum problem up to date. Last December we discussed in a fair amount of detail my correspondence with Jerry on this subject.

The petroleum problem is a conflict between physical facts and faith and morals. Limitations on this country's petroleum supplies and the turn down in production which occurred in 1970 was reliably forecast in 1956, and the forecast is being proved month by month with the current failures of tremendous investments in exploration to produce any real quantity of petroleum. The chart opposite Page 4 in the enclosed report is based on the relatively conservative Interior Department projection of petroleum supply and demand through the year 2000, which they published in 1972. Conservative in these terms means optimistic. The most convincing mathematical projections indicate less production.

If you have time, look at this chart and the table of contents which will give you an idea of what's in this report. My primary interest is making sure that you have this resource information available. It includes a transmittal letter to The President dated August 14 which went to Bill Seidman.

Best personal regards to you and your girl helpers.

Cordially,

*S. M. Dix*  
S. M. Dix

blr



S.M. Dix



**s.m.dix**  
ASSOCIATES INC.

**Manufacturing & Marketing Consultants**

THE PETROLEUM CRISIS REVISITED

An overview of the political and  
economic implications of geologic  
facts in the summer of 1974.

August 20, 1974

Samuel M. Dix

Consultant - Dr. John Henderson, Professor of Geology  
Grand Valley State Colleges

**s.m.dix**

320 FEDERAL SQUARE BLDG • GRAND RAPIDS, MICH. 49502 • PHONE (616) 454-8261





# Manufacturing & Marketing Consultants

320 FEDERAL SQUARE BUILDING • GRAND RAPIDS, MICHIGAN 49502 • AREA CODE 616-454-8261

August 14, 1974

The President  
The White House  
Washington, D. C. 20025

My dear Mr. President:

The following pages continue a discussion of the U. S. petroleum problem which I began with you more than a year ago. You may find the outline in the table of contents useful in obtaining an overview of the coverage. It begins where I left off the first week in December when I summarized the significance of the Arab boycott. Now I am looking back at the development of the crisis and the political and economic responses, following a diagnosis of the real problem, its implications, and possible solutions.

The petroleum crisis is basically an economic problem and it will be of first magnitude during your mandatory 2½ years. It is also a political problem and this is the rub. No one wants to accept the obvious solution, neither the economist nor the politician.

Petroleum is our most critical, non-replenishable resource: our expanding economy depends on it, we do not have enough for even one more generation, and the alternative sources of energy will not be available in time. Conservation is necessary and it is not too difficult if it is begun soon.

Your rapid elevation has altered the lines of communication. This winter and early spring I became very much concerned with the developing coverup, introduced by Mr. Nixon and heartily endorsed by the Congress and the business community. At that time, I completed a lengthy analysis which I sent to Bill Seidman, followed by discussions that have been kept



Page Two  
August 14, 1974

current. I prepared more monographs in various degrees of literary acceptability, but this is the first that I have wanted to address to you. I think the situation has stabilized, but this stabilizing is most dangerous.

The economists and financial men are not finding solutions for anything except the short haul and they are not facing the problems which go beyond the credit side of the international payments balance. There is no question about the importance of their efforts to resolve the immediate financial problem, but the long range is only next year or a few years after. In my view, it should be looked at very soon. It is the root of the inflationary problem, and no solution can be found to spiraling costs without recognizing the basic supply and demand of things which underlie costs and price.

Very respectfully yours,



S. M. Dix

blr

enclosure

**s.m.dix**  
ASSOCIATES INC.



TABLE OF CONTENTS  
(Outline)

	<u>Page</u>
GEOLOGICAL INTRODUCTION	1
INTERIOR DEPARTMENT PROJECTIONS THROUGH 2000	(Opposite) 4
PETROLEUM USE BREAKDOWN	5
ALTERNATIVES TO PETROLEUM IMPORTATION	6
FORECAST CONCLUSION	10
THE PETROLEUM CRISIS COVERUP	12
SEVEN YEAR PETROLEUM IMPORTS PROJECTION	(Opposite) 17
CONSEQUENCES	16
<i>Balance of Trade Deficit</i>	17
<i>World Political Dependence</i>	18
<i>Time and Transportation Crisis</i>	19
POSSIBLE SOLUTIONS	19
<i>Tax Petroleum Consumption a Little and Subsidize     Mass Transit</i>	21
<i>Revive Urban Renewal</i>	21
<i>Give the Railroads a Chance</i>	22
THE LONGER VIEW	23
PERSPECTIVE	29
APPENDIX — HOW MUCH PETROLEUM IS IN THE GROUND	32







## THE PETROLEUM CRISIS REVISITED

The Arab oil embargo of October 20, 1973 provided the industrial countries of the free world with a moment of truth; their supremacy was threatened and their combined response was not glorious. The era of Adam Smith's wealth of nations could be viewed in mortal reality. Now, only nine months later, the significance of the potential end of that era is beginning to take shape, not in the public forum or even the halls of academia, but in the shadow of public conscience and the visions of a few seers.

There had never been serious doubt about an eventual end to unlimited petroleum supplies. Geologists had traced the origin of that resource to the period of abundant marine organisms four hundred million years ago, the reaping of the harvest had not begun until 1859, and less than one hundred years later the beginning of the end of that reaping had been forecast for the United States as the decade of the 1970's, and for the world, sometime soon after the end of the century. The debate on U. S. petroleum limits developed momentum in 1956 with the predictions of N. King Hubbert, a geologist who had spent ten years with Shell Oil and who, in 1964, joined the staff of the U. S. Geological Survey. Hubbert's predictions were based on the geologic record of drilled wells (now 2,222,300 through 1973) and probability mathematics. With a record of seven billion feet of exploration, with the economic incentive to drill new wells in the most probable area for



finding oil, and the fact of constantly increasing exploration feet and exploration wells per barrel of oil produced, the peaking of new discoveries and production could be determined; and after that, the mathematics of the descent in oil production was well established in the production records of the same millions of wells.

The response to Hubbert's prediction was immediate. The petroleum industry took public issue with the forecast and over the next two decades, public commissions were appointed to dig deeper into the question of U. S. resource limits. Coincident with Hubbert's research and early findings, the Ford Foundation financed the funding of "Resources For the Future", a corporation for research and education in conservation. Hubbert's findings were confirmed in fact if not in detail by most geologists and by the actions of the major oil companies who quietly turned their attention to more promising fields of exploration in the Arabian peninsula, Africa and other parts of the world. Meanwhile, the same geologists and company spokesmen concentrated their public utterances on their differences. Would U. S. production peak in the early 1970's or a little later?

More important than the direct attack on Hubbert's mathematics and his conclusion as to the time of maximum U. S. production, was the apparent effort to cast doubt on the conclusion through confusion. Discussions of the amount of oil beneath the earth and under the seas within the U. S. continental limits provided just this opportunity, and the concentration on



these statistics continues today. More meaningful forecasts concerned the amount of producible petroleum which would be found. In 1958, in his address to the 38th annual meeting of the American Petroleum Institute, Morgan Davis, President of the Humble Oil Company, took this more forthright position in countering the predictions of limits by forecasting the finding of seventy billion barrels within the next twenty-five years. Today, sixteen years later, that forecast stands a reasonable chance of being fulfilled; but at the same time, that forecast also confirms the peaking of U. S. production in the early 1970's. This country is now consuming, although not producing, six billion barrels of petroleum a year and the finding of 70 billion barrels in twenty-five years is obviously only half this average annual requirement. Mr. Davis' company, now Exxon, acted on his forecast in moving its primary attention on sources of supply in the Arabian peninsula, and the Hubbert prediction was realized with the peaking of U. S. petroleum production in October, 1971, just two years before the Arab boycott.

The most recent and most complete forecast of future U. S. production and consumption - supply and demand - was published by the Interior Department in 1972, on the basis of 1971 statistics. This forecast through the year 2000 is of considerable significance today, first because it predates the cloud of confusion which settled on all official pronouncements after the Arab boycott, and second because of its potential future accuracy, despite the under estimate of its predictions for the first two years which are now history. Reduced to three significant figures, this forecast





# U. S. PETROLEUM PRODUCTION AND CONSUMPTION

VS. TIME

1920 THROUGH 2000

BILLIONS OF BBLs./YEAR

As reported and as forecast  
by U. S. Dept. of the Interior  
Public Document 2400-00775 (1972)

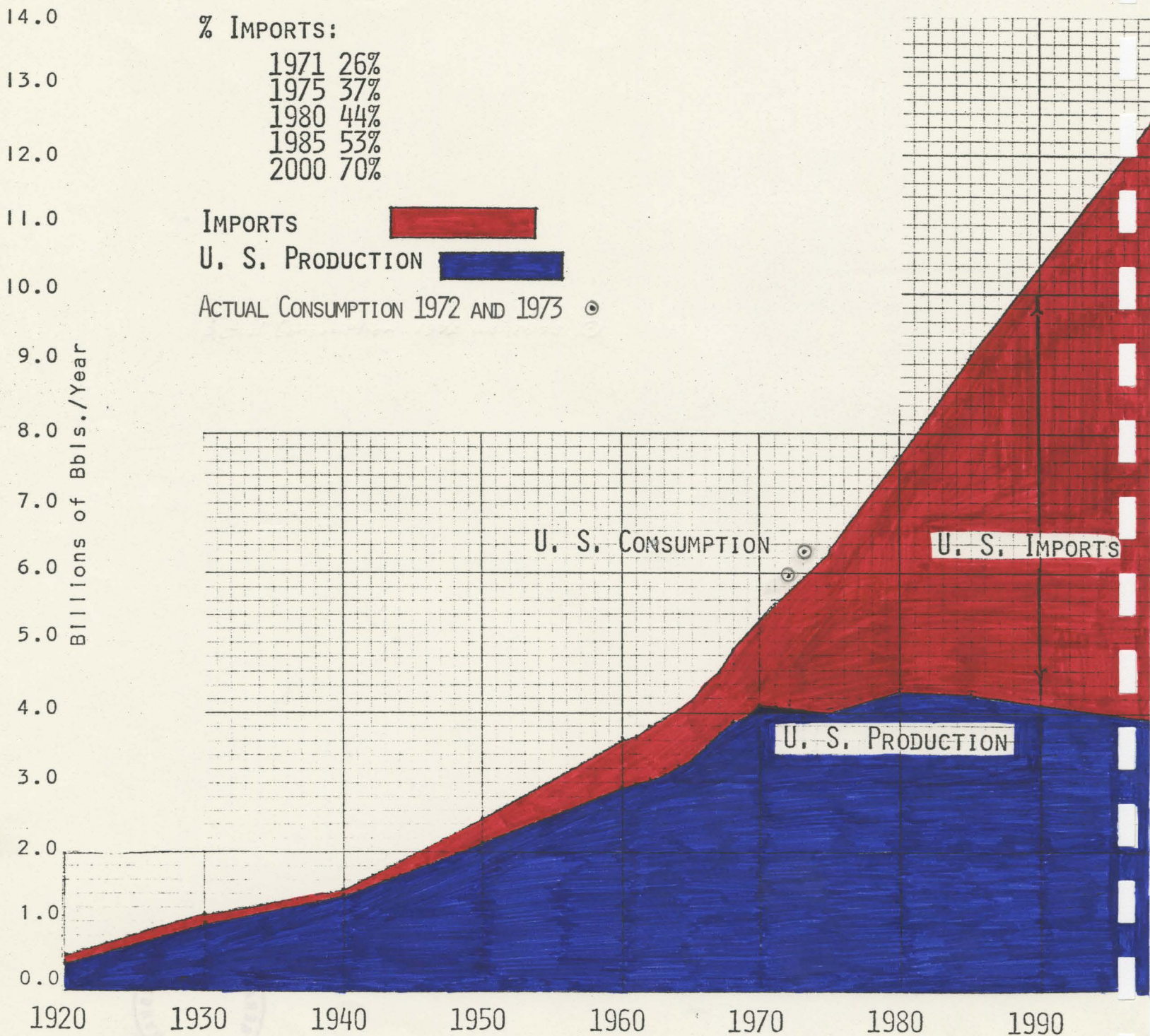
## % IMPORTS:

1971	26%
1975	37%
1980	44%
1985	53%
2000	70%

IMPORTS

U. S. PRODUCTION

ACTUAL CONSUMPTION 1972 AND 1973



Public Document 2400-00775 contains the following tabulation of U. S. petroleum supply and demand stated in billions of barrels per year:

	<u>1971</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>	<u>2000</u>
U. S. Demand	5.52	6.34	7.62	9.14	12.99
U. S. Supply	4.12	4.00	4.29	4.26	3.86
Supplemental Supply (Imports)	1.41	2.34	3.33	4.89	9.13
(% Imports)	26%	37%	44%	53%	70%

The graph on the opposite page presents this same information identifying demand as consumption and U. S. supply as production. This graph also picks up the same statistics from the historic records published by the Interior Department and the Petroleum Institute for the decades 1920 through 1960, plotting the first year of each decade.

The narrow margin between petroleum supply and demand through the year 1970 is supported by further statistics relating U. S. and world production. In 1925, the United States produced 70% of the world's petroleum, but in 1965 its contribution to world supply was down to 25%. Until the end of World War II, the United States was exporting twice the quantity of its imports. Imports represented only products moving across near borders for convenience. Thus, the necessity for U. S. imports is a very recent thing, and it was only after 1970 that the financial burden of imports began to develop. Most important, the graph demonstrates the contribution to the developing problem of the constantly expanding U. S. consumption. To live



within the limits of present U. S. petroleum production, we only need to drop back to 1962 consumption.

The questions raised by the Interior Department's forecast concern first, the reliability of this prediction after the increase in petroleum prices, and second, the interpretation of supplemental supplies which we have identified as imports. Is there a practical alternative to petroleum importation and U. S. dependence on overseas supplies?

Before considering alternatives to petroleum supply, a breakdown of the current use or employment of this raw material is needed, and this information is readily available in the monthly publication of the Interior Department. For the year 1973, the following uses are identified, barrel by barrel. As a percent of total consumption, these figures indicate:

	<u>Percentage</u>
Motor gasoline	38.6
Aviation and jet fuel	6.3
Distillate fuel oil	17.8
Residual fuel oil	16.1
Petrochemical feed stocks	2.0
Ethane and ethylene	1.8
Asphalt	2.8
All other products	14.6

The significance of this breakdown is the preponderance of gasoline consumption as the end product and the more than 50% of petroleum product used in transportation. Motor gasoline is specific to automobile use with only a little borrowed for lawn mowers and lesser engines. Distillate fuel divides between home heating, truck transportation, and railroad use.



Residual fuel oil is the heavy oil burned by ships, utility companies, and other large power plants. Less than 4% is specifically identified for its use as chemical hydrocarbons.

Thus, the big user of petroleum and the big problem for the future is a substitute fuel for transportation power. At one half of our consumption, this amounts to 2½ billion barrels per year by 1985 and 4½ billion barrels per year by the end of the century.

#### ALTERNATIVES TO PETROLEUM IMPORTATION

In the months after the Arab boycott, there was much discussion in political circles of alternatives to U. S. petroleum dependence. The shortage of gasoline and home heating oil and the tripling of residential fuel costs stimulated this discussion and the optimistic forecasts, but there was never very much question in scientific circles. The analysis of each of the alternatives to petroleum had been written and discussed. In brief, these analyses indicated:

*Hydraulic power, wind power, and tide power* have limited potential. There is not enough of it to have a significant effect on national requirement.

*Geothermal power* is fascinating but virtually unexplored. Again, in the quantities required, it is improbable that any significant contribution will result from this source.





*Atomic fission* is here and proved, but domestic atomic fuel may not last as long as our petroleum resources. The waste problem has not been resolved, and public acceptance of the implicit dangers has not yet been realized after twenty-five years of experience.

*Solar energy* is the choice of Barry Commoner, one of the country's leading ecologists, and he has been willing to join General Motors in claiming large quantities of untapped U. S. petroleum and castigating the government for mismanagement of energy resources; but we have found no solar energy plans that will stand up to the facts of 20th century economics and the second law of thermodynamics in providing a reliable source of energy in the quantities required. Solar energy will be available for heating homes and providing hot water in some parts of the country.

*Alcohol* is a suggested substitute for gasoline to power vehicles of the future and it is almost immediately available. There is no problem with the employment of alcohol or its production in fairly large quantities. The problem develops when the quantity required approaches the one billion barrels of gasoline per year now represented by foreign imports. The principal source of alcohol is from vegetation and a crop must be produced before it becomes available for conversion to this chemical. In broad perspective, a study of the Michigan State University School of Agricultural Engineering,



established a negative heat balance for U. S. agriculture. The total amount of fossil fuel energy required to produce the fertilizer, cultivate the crop, and move the crop to market exceeded the value of the crop in terms of heat units.

*Hydrogen* has been another suggestion as a replacement fuel for the internal combustion engine, but the production of hydrogen is by electrolysis requiring electrical energy input which exceeds the heat value of the product. With limited supplies of fissionable atomic fuel, hydrogen must be overruled as an available energy resource.

*Atomic fusion* is the power source of the future, but when? No promises can be obtained from responsible scientists except to note that twenty to forty years is the proper time dimension, not six to twelve. Consider that twenty-five years after the atomic fission method had been proved, this energy source accounts for less than 2% of the U. S. supply of energy. Atomic fusion requires controlled reactions at temperatures above one million degrees Fahrenheit, a technical achievement far exceeding the propulsion problem in getting a man to the moon with known energy sources.

This leaves *coal* and *shale*, both in abundant supply, but not immediately available or particularly desirable economically and ecologically. Shale is a low-grade energy source, one-quarter the heat value of crude petroleum and one-third the heat value of coal.



Oil from shale can be produced today with difficulty, requiring large quantities of water, not available in the arid states where it is found. Limited quantities of gasoline and other petroleum products can be produced from oil shale, but there is no possibility of substituting oil shale for petroleum imports in the quantities presently required.

*Coal* then becomes the principal alternative. When coal is employed as a source of fuel for the internal combustion engine, the cost of the resulting liquid or gaseous material exceeds the cost which would pertain from the Arabs' highest price demand and could not compete so long as Arab oil is available. Coal never should have been replaced by oil and gas in the production of electricity by the utility companies, but fifteen years after the beginnings of air pollution control, we still do not have an economical method of removing sulphur dioxide from coal combustion emissions. The chemistry is simple but the cost problem has not been satisfactorily resolved. Our most abundant coal supply in economic terms is illegal for most users under the advancing requirements of the federal air pollution statute as it is written today.

The simple conclusion is that there is a negligible, real alternative to the importation of petroleum. If our demand for energy in its customary form is to be satisfied in the quantities required to maintain U.



tion growth, industrial development, and the living standard improvements to which we have become accustomed, we must continue to import petroleum.

The cost of petroleum alternatives will become two to three times the equivalent \$12 per barrel cost which appears to be the upper limit of the current Arab demands, and in addition there is no assurance that the quantity required can be supplied.

#### FORECAST CONCLUSION

The second question raised by the Interior Department forecast is the effect on that forecast by changes in the economic environment resulting from the tripling of import oil prices and the two-tier market for domestic oil. Higher priced petroleum should encourage more exploration, although this economic pressure will be disappointing if our geological forecasts are correct. A lot more drilling will produce only a little more petroleum. However, stripper fields should be brought back into production and more expensive tertiary methods of obtaining more oil from old fields will become feasible.

At the end of the first half of 1974, production statistics were disappointing. Year to year comparisons were off approximately one-half million barrels per day, and 1973 production was below the forecast - approximating the anticipated production fall off to 1975. Thus, on the supply side, the economic stimulation still has two years to catch up before any upward correction will be required.



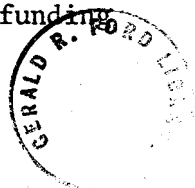
Comparisons between current demand and the original forecast indicate, greater quantity movements both ways. Contrary to the expected average  $3\frac{1}{2}\%$  increase per year between 1971 and 1975 in the Interior Department forecast, actual demand increased 7.9% in 1972 and 5.1% in 1973. Thus, considerable slackening of demand is required to bring consumption back to the original forecast. Current figures indicate that this has been occurring with no growth in the demand of 1974 as a consequence of the increase in gasoline prices, currently at 45% over a year ago. The annual increase in the Interior Department forecast may have to be reduced, but the amount of the reduction cannot yet be proved. For now, the figures are not sufficiently off target to change the interpretation of the consequences. Petroleum is now available, thanks to foreign sources of supply, and the U. S. dependence on these sources will increase substantially. Between now and 1980, the U. S. population between ages twenty and sixty-five will increase  $10\frac{1}{2}\%$ . We could find no one in government willing to forecast petroleum consumption expansion at less than a 3% annual rate after adjustment is made for the effect of the current price influence. But these statistics were not publicized and the interpretation of their implication did not enter the nation's thinking at any level in the spring of 1974.



THE PETROLEUM CRISIS COVER-UP

President Nixon was the first to react and to state the position of his administration that America would be free of dependence on foreign sources of energy by 1980, and almost every American wanted to believe him. The substitution of the word "energy" for "petroleum" was the principal contribution of the presidential proclamation. This substitution permitted moving away from the actual petroleum problem preparing for the coverup which was soon to follow. The President actually had no plan for achieving either energy or petroleum independence by 1980, and it is becoming apparent that all the king's horses and all the king's men cannot produce such a plan without facing a reduction in consumption which was unacceptable to the Nixon Administration.

The next voices to be heard were in the United States Senate. That body's investigations provided an opportunity to balance fifty years of domination of the U. S. Government by petroleum wealth, holding up the present leaders of the industry in criminal implication. In early March, the Joint Economic Committee of the U. S. Congress released a reappraisal of U. S. energy policy which made a number of recommendations for legislative action, but these recommendations focused on control of oil prices (which they thought should come down), removal of tax benefits to the oil industry, enforcement of antitrust laws, and discouragement of international economic warfare. The report was also concerned with resource information, better thermal efficiency in new buildings enjoying federal subsidy, funding



of mass transit, and relaxed trucking regulations to enhance competition and efficiency in transportation.

The Joint Economic Committee was not concerned with the potential limit in the availability of U. S. produced petroleum, nor was any recognition given to a trade deficit which might result from foreign oil imports. No real consideration was given to reducing petroleum consumption, only equity in the distribution of gasoline based on transferable ration coupons if the gasoline supply situation worsened. The tenor of the Congressional conclusion was sedative. The effect of the primary recommendation was to encourage the return of the crisis by rolling back prices to increase consumption on the one hand, and restricting production by holding down capital accumulation on the other. Congress had spoken through its Senators, its Representatives, and its professional economists. In Chairman Wright Patman's transmittal letter of the 1974 reappraisal, he optimistically endorsed energy self sufficiency in 1980 and gave the petroleum crisis coverup its greatest boost.

By the end of March, American business made its contribution. The economy had been dealt a severe blow by the Arab embargo. Automobile sales were at their lowest level in years and jitters were developing in broad segments of the market. The obvious answer to United States petroleum independence was the balancing of the supply and demand of that product within the limits of the Western Hemisphere production capacities. With America consuming one-third of the world's production and still producing



almost two-thirds of its own requirements, the U. S. economy was the strongest in the free world and only a curtailment of the burgeoning consumption of petroleum products would bring independence within practical realization. The American public had been prepared by the winter scares and was ready to make sacrifices for real national security and control of its country's destiny.

But the spirit of sacrifice is not long lived without encouragement, and there was none, only a few pundits in the media, one time analyses on the editorial page, and one time documentaries on the television screen.

The counterattack on rationality was launched by Edward Cole, President and Chief Executive Officer of General Motors Corporation. His company had employed John Ricca, a former Deputy Director of the Oil and Gas Office (Interior Department), to head the Corporation's Department of Conservation and to prepare the Corporation position that America did not lack for petroleum resources, enough oil in the ground to last 465 years at the present rate of consumption.

There was no challenge to the General Motors claim, no politician's voice, no media response, no consumer outrage, not even a complaint from the environmentalists. The story was flagrant. By no stretch of the imagination could the published and available facts of U. S. petroleum resource be interpreted to provide much more than one-tenth of the time claimed by Mr. Cole for continued supply at the present rate of consumption. True, the attack had been directed at the weakest link in petroleum information





reporting. Supplies of petroleum in the ground are most subject to misinterpretation without challenge. U. S. Geological Survey Circular 650 classifies potential petroleum by the probability of discovery, and much the largest quantity is called submarginal, undiscovered resource with this definition: "The quantities of liquids and gas in the submarginal, undiscovered category are those quantities estimated to be present but that cannot be produced if found, or that might never be found because of small size or remote location". More than 72% of the total falls in this category and the finding of this quantity was the basis of Mr. Cole's claim.

In May and June "so-called" was added to references to the petroleum crisis. By July, the Wall Street Journal referred to the petroleum crisis in quotes. The American public had reached consensus without a debate. More than half of all petroleum used in the United States serves the transportation industry, dominated by the business and pleasure vehicles of the American public. No curtailment of petroleum consumption would be possible without affecting America's love affair with the automobile. Millions of jobs as well as a substantial portion of the pleasure of every American are tied to unlimited supplies of petroleum. The automobile love is truly an addiction which can be shaken only with severe shock.

Under this effective screen from rational analysis, the Arab oil began again to flow unrestrictively and the new prices were accepted by a public well aware that any loud complaint might bring curtailment of their supply.

ORD LIBRARY

America would have gasoline for the summer and what else mattered? The inflation problem appeared to be more broadly based and the new science of economics went to work on the theories of recycling world investment capital with little concern for the balances between free nations.

But there are haunting fears that the Arabs will not fall easily into the role of banker for the free world. The economic power in the free world is theirs with the American abdication, but how will they handle this tidy responsibility?

#### CONSEQUENCES

With some reduction in U. S. consumption and with the availability of imported petroleum and petroleum products, the consequences of the crisis are in the future. The questions which remain are how far in the future and how great the danger. As a first step in this evaluation, current knowledge can be applied to the forecast of U. S. supply and demand through 1980. This is accomplished in the table opposite the following page on a slightly optimistic basis.

A 3% annual growth factor is applied with recognition that half of this amount represents population increases resulting from a simple demographic progression: the children who will be adults in 1980 are already here. The rest is the minimum expansion expectancy, one-half percent below the original Interior Department forecast.



SEVEN YEAR PETROLEUM IMPORTS PROJECTION  
1974 THROUGH 1980

	U. S. Supply and Demand Billion Bbl. per Year			% Import	Cost of Foreign Supply \$ Billion per Year	
	U.S. Demand @ +3%/yr.	U.S. Supply**	Foreign Supply*		\$8 per Bbl.	\$12 per Bbl.
1973						
Actual	6.30	4.04	2.26		(18.08)	(27.12)
1974	6.49	4.03	2.46	37.9	19.68	29.52
1975	6.68	4.02	2.66	39.8	21.28	31.92
1976	6.88	4.01	2.87	41.7	22.96	34.44
1977	7.09	4.00	3.09	43.5	24.72	37.08
1978***	7.30	4.18	3.12	42.7	24.96	37.44
1979***	7.52	4.36	3.16	42.0	25.28	37.92
1980***	7.75	4.71	3.04	39.2	<u>24.32</u>	<u>36.48</u>
					<u>163.20</u>	<u>244.80</u>

VALUE OF GROSS U.S. FARM PRODUCT	1971	30.4
(U.S.D.A. <i>Economic Research Serv.</i> )	1972	34.4
	1973	47.7

- \*As reported. - U. S. Dept. of the Interior, Year 1973.  
 \*\*Includes hydrogen, N.G.L., L.C., and refinery and reporting gain or loss.  
 \*\*\*With Alaskan pipeline supply @ 2M bbl/day in 1980, 1M '78, 1M '79

The U. S. supply projection is a virtual trade-off between declining oil from old fields and oil expected to be found, principally off shore. An extra one million barrels of daily production is required each year if the historic decline from old fields continues, and this decline is confirmed in the present estimates of petroleum reserves. Alaskan oil should begin to flow in 1978 and we have projected the realization of the full capacity of the pipeline now in construction by 1980, another optimistic assumption. If realized, this two million barrel per day addition to U. S. supplies over three years will satisfy approximately twice the increase in demand for the same three years. After that, imports will again continue their rise to somewhere near the 70% dependency in 2000 as forecast by the Interior Department.

*Balance of Trade Deficit*

That petroleum imports will contribute to the balance of trade deficit is not a question, but the amount of the contribution and the relationship of the dollar quantity to other U. S. commodities is.

For the remainder of the decade, imported oil should fall between \$8 and \$12 a barrel, with the current prices near the upper level. At this upper level, the American foreign trade deficit for required petroleum imports will eclipse the value of the gross U. S. farm product in the year 1971. In 1973, farm product value increased by more than 50%, and with the help of the sale of previous years' surpluses agricultural exports balanced the petroleum imports at the



level of \$9 billion, but agriculture alone cannot perform this service again.

*World Political Dependence*

Political dependence is the second legacy of the October 1973 petroleum crisis. The United States can no longer pretend to an ability to rely on its stockpile of a dozen metals to exercise its independence from the third world. The petroleum addiction of our economy has wounded the military industrial complex and this may be the real significance of the coverup.

In the early stages of the petroleum crisis, the Arabs were the enemy; we needed the oil for more than convenience; we had sea power, atomic power, and economic persuasion potential against a virtual power vacuum; but how could these strengths be employed? The Arabian peninsula can be reached through the Red Sea or the Persian Gulf, both restricted by narrow access and almost half the globe away from U. S. ports. U. S. War College has not yet volunteered any practical military solution, even after nine months of discussion. Its only tentative suggestion is the stockpiling of petroleum. So how much should we stockpile, a year's supply? Ten year's supply? Maybe it would make more sense to start now leaving the U. S. produced half of our present consumption in the ground.



*Time and Transportation Crisis*

The ultimate economic problem of the petroleum shortfall is time, and transportation is the critical resource: time to develop alternative sources of energy, time to reduce the radius of necessary travel, time to develop energy efficient transportation, and time to achieve political acceptance of the limits of energy for subsidized private use. Homes built today outside the range of common carrier transportation service will be there for fifty years, economically reachable only by electronic media if automobile fuel is restricted. Factories set down in rural acreage depend on a web of roads and of individual private powered vehicles, and they have a similar vulnerability for the same time span. Petroleum will become less available in quantity, and both petroleum and its replacement will be more costly, much more costly. The United States does not have fifty years to adjust to less than half its current per capita petroleum consumption. Actually, the time is almost now.

POSSIBLE SOLUTIONS

The only alternative to the economic and political consequences of massive petroleum importation is a reduction in consumption. There is no actual physical or economic barrier to this course of action. The waste of petroleum products in the American economy is prodigious, and little suffering would result from a substantial reduction in this waste. More lives were



lengthened than were shortened in the turning down of thermostats last winter, and statistics now establish the substantial saving in lives which was the byproduct of reduced highway speeds. Cars are already equipped to carry more than one passenger and car pools have social advantages offsetting inconvenience and a few raised temperatures. Our railroads have not yet been dismantled and our highways will accommodate mass transit vehicles which multiply by ten the effectiveness of petroleum products consumed.

But none of these economies can be realized except under economic or political pressure - higher prices or some form of rationing. There should be little question in making this choice as the price structure is basic to our free economy and our free political society, whereas rationing over an extended period advances the police state.

The petroleum problem is political and political expediency becomes the primary consideration in the immediate solution. With close to half of all petroleum usage tied to transportation, reduction in unnecessary transportation expenditures and improvement in transportation efficiency provide the obvious answers. The revitalization of our cities offers the greatest opportunity to eliminate unnecessary transportation in all forms. Between cities, freight can be moved five times as efficiently by rail as by trucks, and bus transportation represents a five to ten time savings in necessary petroleum power compared with the private car and the airplane. Ways must be found to reverse the dispersion of our industries and our residential population and the phasing out of our most efficient common carrier system,



the American railroad. The political barriers to realizing these objectives are not insurmountable and at least three courses of action are immediately available:

*Tax Petroleum Consumption a Little and Subsidize Mass Transit*

There is no time for glamorous new underground or overhead railroads or innovative people movers. We have built the rail and road systems and the production lines are available to produce buses and rail cars. The only requirement is to bring the economic equation into balance. Bus service will not be used so long as gasoline is cheap and the private car is everywhere available. Rail service will not be used when truck service is made cheaper by government subsidy. One cent per gallon of federal tax will generate approximately \$1 billion per year in revenue. Given an understanding of the future limitations of gasoline and diesel fuel supply, the public will accept the balanced solution if it is introduced gradually and if the revenue generated is used to implement the mass transit systems, buses for people and rail for long distance freight.

*Revive Urban Renewal*

Bills for this purpose are before Congress. It has taken twenty years to develop this program and it is now the most effective tool in the federal arsenal to reverse the decay of our cities. The entire organization structure of urban renewal is on a standby basis waiting for legislative decision. Part of the structure had already been dis-





mantled when the petroleum crisis surfaced, a casualty to the last five years of vacillation as to social goals by Congress and the Administration. All that is needed is the decision to provide funds.

*Give the Railroads a Chance*

As we have noted, railroads provide our most efficient transportation. Measuring their performance in terms of tons moved per gallon of petroleum, they are the nation's most valuable asset. But the railroads have been buried under discriminating federal and local taxes and regulatory restrictions while their competition has been subsidized from the treasuries of the same governments. It is too late to untangle these interferences and allow the free economy to effect a new balance with the new high cost of petroleum products. Consider one railroad, the Penn Central which went into bankruptcy with assets exceeding liabilities by \$1.7 billion and consider further that these assets had a real market value several times the value shown on the books of the corporation. Proposals are before Congress and the organization structure is established, but a reading of these bills is most disquieting. There is a void in the understanding of rail operations and the economic significance to the country's welfare in the solution. Both new thinking and Congressional decision is required.



## THE LONGER VIEW

Petroleum is a much more critical resource to the free world economy and political structure than economists and politicians have been willing to admit in their public utterances. Perhaps they have not yet computed the energy component in our basic commodities and in the final goods and services we take for granted. Also, the relative importance of the trade balance is lost in a trillion dollar economy with fine tuning, international recycling of credit, and control of money supply the primary subjects of discussion. The simple fact of survival in the producing and trading world is more important, and there are indications that this simple fact is beginning to be recognized. We can devalue our dollar and pay astronomical wages, salaries, interest on money loaned, and prices for our own work and the products of our land; but ultimately, we can trade with the outside world only with goods and services on terms mutually agreeable.

The real beneficiaries of the free world difficulties are not the Arabs who are part of our free world, but the competing economies in the Communist world. They do not have a petroleum or energy or basic raw material problem. They can use our food and our technology, but these are not critical to their competitive survival.

The U. S. economy, with its still abundant resources and technological leadership is the strongest in the free world, but faith and past glories will not resolve the problems which have been created by population expansion and advances in living standards in a world of finite resources.



government organized to respond to each individual's desires and prejudices will some day have to give consideration to the survival of the nation and the maintenance of the maximum possible degree of individual freedom within the limits of its resources. Of immediate importance, the free world needs an anchor, at least one strong nation with survival capacity.

Atomic fusion is not yet here and available to replace fossil fuels as the primary source of energy. Until that day arrives, we are really shooting craps with destiny in ignoring the economic and political implications of a 40% dependence on foreign sources of the resource without which our industrial wheels cannot turn. After World War I, England lost control of the empire upon which its independence was based. Thirty years later, that country's fall was confirmed in World War II. The United States, which replaced England in the leadership of the free world, faces a similar situation today with its developing dependence on foreign resources, but this country does not need to take the free world into a leaderless morass.

The difficulty for the U. S. is the remoteness of the next crisis. World supplies of petroleum are not expected to peak and reach the beginning of their decline until after the turn of the century. Until then, we can expect relatively cheap imported product in large quantities, but will the quantities be large enough? Approximately 13 billion barrels in the year 2000 is more than 35 million barrels per day, and the projected 70% importation requirement is 25 million barrels per day. What happens when our friends decide that enough is enough and what happens to the rest of the



free world nations who need petroleum for survival not for subsidized personal transportation? 26½ years is not far away but it is not within the life expectancy of most of our industrial leaders or within the current term of our present politicians. That is the problem. Has a democracy ever been able to plan and make this kind of decision?

A potential solution to our long term problem is available for consideration, a hypothesis for study. Step by step, it involves recognizing that:

1. *The problem is petroleum* (which includes natural gas), and although petroleum is a principal source of energy and energy is the primary problem, energy sources are economically interchangeable to a limited extent. Discussions of total energy supply and demand camouflage the petroleum resource problem. Today, it is the petroleum shortage that must be dealt with and it is the petroleum statistics which are of primary importance.

2. *The petroleum problem is political.* It grew naturally enough in the free economy, but it grew too big and it now has too great an influence on all the other segments of the economy. There is no way that the petroleum industry can be allowed to return to its independent role, unrestricted politically, to reduce U. S. consumption to its lesser U. S. productive capacity or to supply the U. S. market at the convenience of its available foreign resources.



3. *The petroleum business is a world business.* The major oil companies recognized the limitations of U. S. natural resources twenty-five years ago and moved on to the world stage in their primary exploration and in establishing their primary source of production. The refineries were not built in the United States because the oil required for these new refineries is no longer here. There is not even enough to keep the existing refineries supplied.

4. *The two faces of the petroleum problem are time and the transportation industry.* Given enough time, other hydrocarbon sources can be substituted for petroleum in virtually all of its employment and other sources of energy can be found for each of its services; but the petroleum employment which remains is the use in transportation. There is not time to let the natural economic forces work their way to a solution of the U. S. dependence on petroleum to move people and to move freight. During the same twenty-five years that the petroleum industry was moving out of the United States, the United States was building an economy which depended on cheap, liquid or gaseous hydrocarbon in quantities which can be replaced only if all the remaining time of the U. S. supply of petroleum is intelligently used.

5. *Conservation is not a responsibility which can be delegated to the free enterprise system.* In the application of what is left of the rational thinking process, this should be obvious; but the evidence of the proof is also available in the scientific method. This is a



problem for the social sciences at the moment. The total motivations and direction of free enterprise is to identify human needs and supply those needs from available natural resources. In the process, the resources are exploited and expended until they are exhausted. Substitution with a more expensive resource is not possible in competition with the cheaper resource so long as the primary resource is available. Competition provides few answers to the present petroleum problem given recognition of the practical limitations of available time.

6. *The United States government has been corrupted by petroleum almost from the beginning of the petroleum age.* Both the administrative and legislative branches are controlled by the economic influence of petroleum power. Information on the developing petroleum crisis had been documented by federal and state executive and legislative commissions and authorities for most of the same twenty-five years that academic researchers were aware of the gathering storm. But nothing has resulted from this political accumulation of information.

7. *Consider a lifetime or other long term appointed energy commission.* In the two hundred years of the American experiment and experience with the Democratic form of government, two examples of successful administration of ultimate power stand out. The organization of the Supreme Court of the United States which was set forth in the Constitution, and the pattern of long term although not life appointment employed in the establishment of the seat of power for

the administration of the Federal Reserve system. There is more than meets the eye in the importance of the Federal Reserve system independence today and the need for the same kind of objectivity in resolving of the petroleum problem.

8. *Very little innovation or dominant governmental activity is required to bring this eventual crisis under control.* We are dependent on foreign sources of petroleum. The long term risk to our international prestige and defense posture must be balanced against the short term risks to our internal economy. The principal tools required to realize this balance are tried and proven governmental activities in the present free economy. The taxation of imports and product use requires no additional government function or even organization. Only the centralized authority to establish the level of taxes is required. Government subsidy of transportation exists in the Department of Transportation. Only the direction of the activity is needed. The TVA history has provided the framework and experience for a pilot project in public power. Only the direction of that project and similar models to develop new sources of energy and fuels is required. The net effect of a properly defined and centralized energy authority would be less government. Literally hundreds of offices, bureaus, and sub-departments must be coordinated and most of them should be phased out. There is no basis for concern over the appointment process or the concentration of power which would

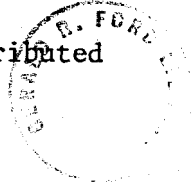


result. The most ambitious presidents have made responsible appointments under the congressional review procedure. We just put to test the appointment to the second highest office in the land under circumstances which were recognized as having a very good chance that the appointment being made actually represented the highest authority in the Executive branch.

#### PERSPECTIVE

The problem which has surfaced in the months since the October petroleum crisis is the dichotomy between the representatives of the natural and social sciences in our society. There had been no economists in the U. S. Geological Survey office. There is no apparent understanding of geology, physics, or basic engineering in most economic and business circles. "We can do it" is the optimistic approach to each problem, but "we" implies that natural scientists will perform miracles: the agrarians will produce more food, the physicist will deliver atomic fusion, and the geologist will find all the oil we need.

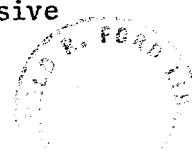
We have lost the momentum of public awareness of conservation developed during the winter crisis. And virtually all eyes are now turned to the problem labeled inflation which is credited with the potential generation of a world depression. But the petroleum supply problem and resulting price escalation is the foundation of this inflation both specifically and symbolically. The petroleum crisis demonstrated the limits to growth and contributed





to the spectacular rise in costs of almost everything in the market. The current attention to the inflation problem may be the final step in the petroleum coverup process. The problems of inflation control are so pervasive that politicians can be excused for their inability to find a satisfactory solution. The answers to the petroleum supply problem are specific and immediately available, but they are not politically palatable.

Limits to growth have been established, and the limits have been debated long enough to generate a challenge in social science and economic thinking, but there is surprisingly little evidence of a positive response. Instead, the most vocal economic dictum has been a denial of the fact of limits. In the business community there is a virtual unanimous rejection of the consideration of limits. The recent upturn in world petroleum supply has been called an oil glut with eager anticipation of falling prices but with no recognition of the demand trend or the physical nature of petroleum. The stuff has been in the ground millions of years and there is no real economic pressure on any of the producing countries to oversupply the market and reduce the ultimate value of their resource. Also, there are few secrets as to the probable replacement of petroleum in its primary uses. Coal should immediately replace petroleum for power generation and this transition will reduce demand for a few years. After that, atomic fusion will only replace coal and open the door to high cost substitutes for petroleum in the internal combustion engine. Similarly, the replacement of petrochemicals with hydrocarbons from coal represents a more expensive source, keeping the floor under petroleum prices.



Oil in the ground is golden and it will remain that way indefinitely. The U. S. supply of this gold is not insignificant, and looking back, we can relate a very considerable amount of this country's power in the world to this supply, but the knife cuts both ways. Future U. S. power will be limited if we trade our independence for unlimited consumption. Atomic fusion is not here yet and time is running out.

FORD LIBRARY



## APPENDIX

### HOW MUCH PETROLEUM IS IN THE GROUND

Estimates of the amount of undiscovered petroleum in the ground represent a completely different set of numbers and forecast bases than the projection of the oil which will flow from existing wells and from future wells to be discovered. It is important to keep this fact in mind if confusion is to be avoided. Obviously, the employment of this confusion has been deliberate in the petroleum crisis coverup process. Most of the information which has been released has concerned petroleum reserves and future petroleum discoveries, gratuitously interpreted in terms of the immediate availability of that supply to meet current demands. Proved reserves, potentially producible oil, and total oil in place refer to completely different quantities in the petroleum numbers game.

Proved reserves are a relatively accurate geological accounting of the oil available for future production. Proved reserves are represented by the oil remaining in actively producing wells and the oil in proven wells which have been capped for future production. In 1970, when oil production in the United States peaked, proved reserves were indicated at 39 billion barrels representing eleven year's supply at the present rate of U. S. production or six year's supply at the present rate of U. S. consumption if all of that oil could be produced on demand. Both of these figures are fiction because production must decrease as reserves are depleted and there



is no way that the presently available U. S. reserves can be produced at the present level of U. S. consumption.

Future discoveries of petroleum seldom are identified as such. Geologic reports are stated in terms of the ultimate oil in place or, a different number, the estimates of ultimate producible oil resources. From either figure, cumulative production plus proved reserves must be subtracted to obtain estimates of future discovery. The relationship between producible oil and oil in place is important. At the present time, only 30% of the oil in place can be produced. An oil well flows until the underground pressure is exhausted. The well is then stripped by pumping, and finally a secondary stripping process involving heat or hydraulic pressure may be employed.

Obviously, a forecast of the ultimate oil in place can be easily converted to an estimate of ultimate producible oil resource. The only difficulty with these terms and calculations is the opportunity for confusion of the figures accidentally or intentionally.

Forecasting is a dangerous business, particularly for public servants. All early forecasts proved to be excessively conservative. In 1922, the U. S. Geological Survey forecast ultimate producible oil at only a year or so beyond the level of proved reserves. When new discoveries proved this forecast to be in error, this organization went out of the forecast business and let the Department of the Interior make its own guesses albeit with their help, but it was not until 1956 that the Department came up with



a guess of ultimate producible oil at the 300 billion barrel level. In the meantime, a number of geologists had undertaken independent forecasts based on various defined methods.

The best known of these geologists is N. King Hubbert, whose methodology was discussed earlier, but some additional facts can be noted: 85% of the world's oil is produced by 238 fields (only 5% of all fields); 65% of the world's oil is produced by only 55 fields representing 1% of the total; there are currently more than 25,000 of these independent oil fields. The geologist looks at this data in terms of the structural characteristics of the earth where oil has been found leading to the probability of finding more oil in similar structures. You can be sure that these data have not been locked up in the archives and ignored. At least the last of these two million wells have been drilled in the geographic areas with the greatest probability of finding oil.

The second analysis is purely statistical. Given man's knowledge of petroleum geology and his desire to find oil, how does his experience relate to probable future success. In the most understandable terms, probability translates to barrels of oil produced per foot of drilling or the ratio of producing wells to dry wells. Between 1928 and 1938, these statistics produced an average of 276 barrels of oil per foot of drilling. By 1971, this production had been reduced to 35 barrels of oil per foot. Aside from the economics of the oil exploration business, the mathematics of this analysis lead to a conclusion that we will never reach a point when

we can say that there is no more oil to be found, but that we are rapidly reaching the point inside the U. S. shoreline when there is not enough oil to justify much more exploration.

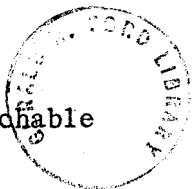
With primary concentration on probability mathematics, geologist Hubbert made his first forecast in 1956, restricting his estimates to the conterminous U. S. states. His conclusion fell between 150 and 200 billion barrels. In 1959 he corrected his forecast adding new data in Alaska to exceed the 200 billion level of ultimate, producible oil resources. Since then, he has made forecasts in 1962, 1966, 1967, 1969, and 1970, all back and forth across the 200 billion barrel line. Hubbert's probability forecasts focus on the point in time when maximum production is realized. In his earliest forecasts, he anticipated a peaking of U. S. production in the early 1970's and he has never corrected this forecast. The curve of cumulative production plus proved reserves follows a bell-shaped curve from the flow of the first well in 1859 through the period of acceleration from 1900 to 1930 and the beginning of a tapering off in 1950. Similarly, production from old wells follows the same classic mathematical decline. Matching these two curves, both the year of peak production could be predicted and the quantity of future production from future finds as well as the amount of production per year can be anticipated.

A number of other geologists have made forecasts of ultimate production: Pratt in 1942 through 1956, Weeks, Pogue and Hill, Zapp, Hendricks, Elliott

and Linden, Schweinfurth, Hill, The Oil and Gas Journal, and The National Petroleum Council. An approximate average of these forecasts centers on 330 billion barrels. Subtracting petroleum already produced and dividing by 1973 consumption indicates a ratio of between one to thirty and one to forty. This ratio is the frequently misused statistic stated as years supply. We would have thirty to forty years of remaining oil in the ground if we stopped using more each year.

Forecasts which exceed this estimate of ultimate producible oil are few. A man named Egloff has suggested figures at 500 billion barrels and above, but the other high forecasts are explained in terms of anticipation of obtaining substantially more than the 30% of the oil in the ground available under the present state of the art. The answers remain: less than twenty years for the disciples of Hubbert, thirty to forty years for the more optimistic geologists, and one man who hedges his bet above 500 billion barrels out there.

The most authoritarian source of petroleum resource information is a publication by the United States Geological Survey titled, "The United States Mineral Resources, Oil and Gas", identified as Professional Paper 820, released 1973. T. H. McCulloh discusses the problem of geologic forecasts in esoteric terms and charts the forecasts which have been made chronologically. Unfortunately, this is not easy reading, and it is not too difficult to ascertain that the Geological Survey is not primarily concerned with the education of the public beyond providing an unimpeachable

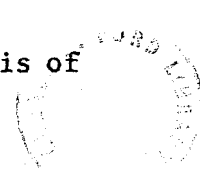




source of basic information.

We have discussed Geological Survey Circular 650 in the General Motors coverup. This document came into existence in 1972 on the insistence of Representative Aspenwall, Chairman of the House Committee responsible for the Interior Department operations. The Colorado representative was concerned with the protection of mining interests which control the politics of his state. He insisted that the Geological Survey, which had always been the ivory tower of the Interior Department, authenticate the ultimate U. S. mineral resources without equivocation on the economics or practicality of recovery.

Petroleum is a ubiquitous, indefinite substance. Every mouse and every fern which grows and is interned will leave a few hydrocarbon molecules which are chemically comparable with the great petroleum basins that have fueled the world's economy in this century. Pushed by the pressures that only a Congressional committee chairman can generate, the U. S. Geological Survey published Circular 650 which included the Chairman's demand. They carefully identified their big number as quantities estimated to be present but that cannot be produced if found, or that might never be found because of small size or remote location. Knowing the political facts of Washington life, Geological Survey Circular 650 and the geologists language is understandable, but the damage had been done. A big number had been released and was available for misinterpretation, and this was the basis of the 465 year petroleum resources which the President of General Motors Corporation advertised this spring as our U. S. resource, the basis of his

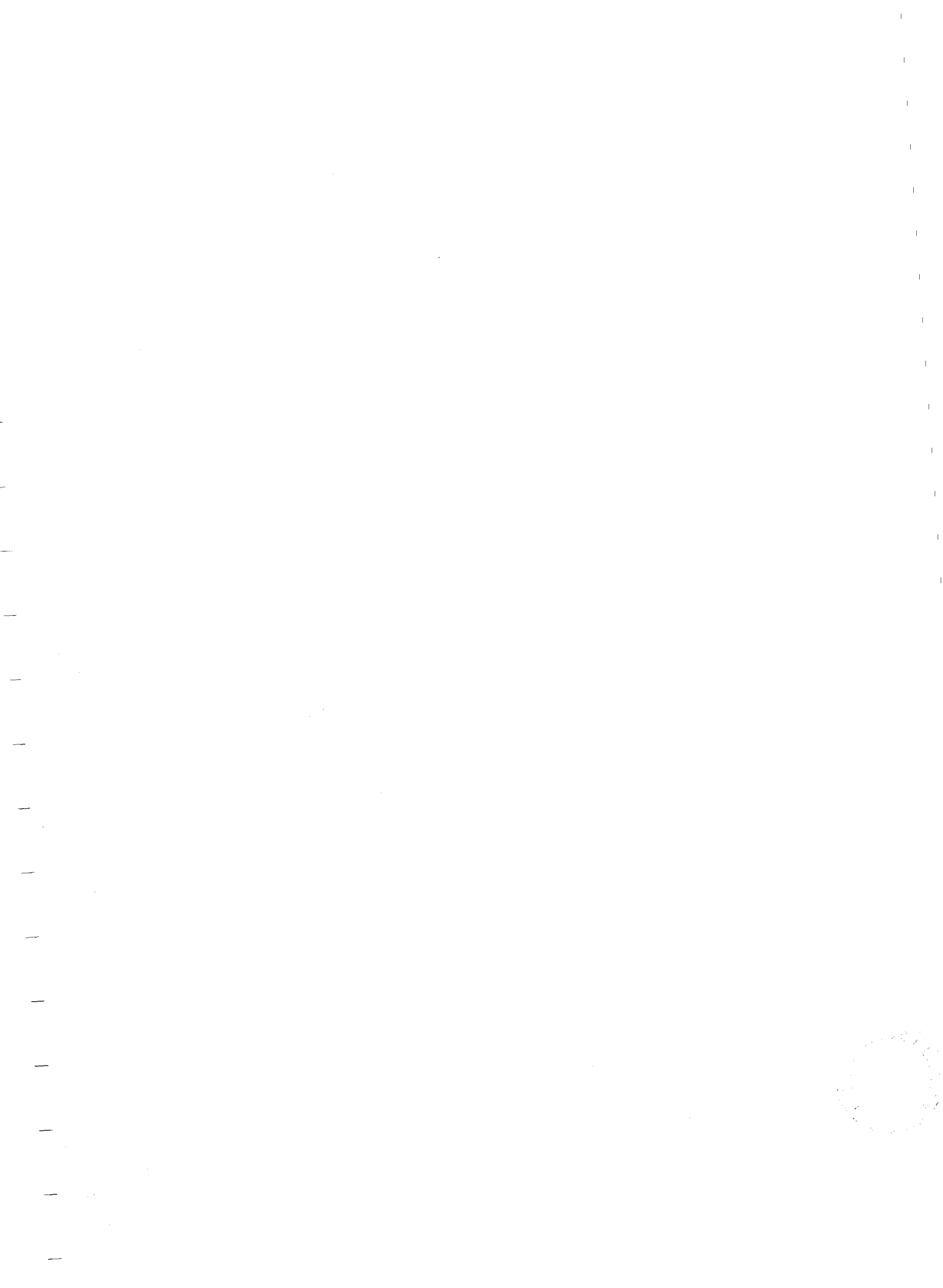


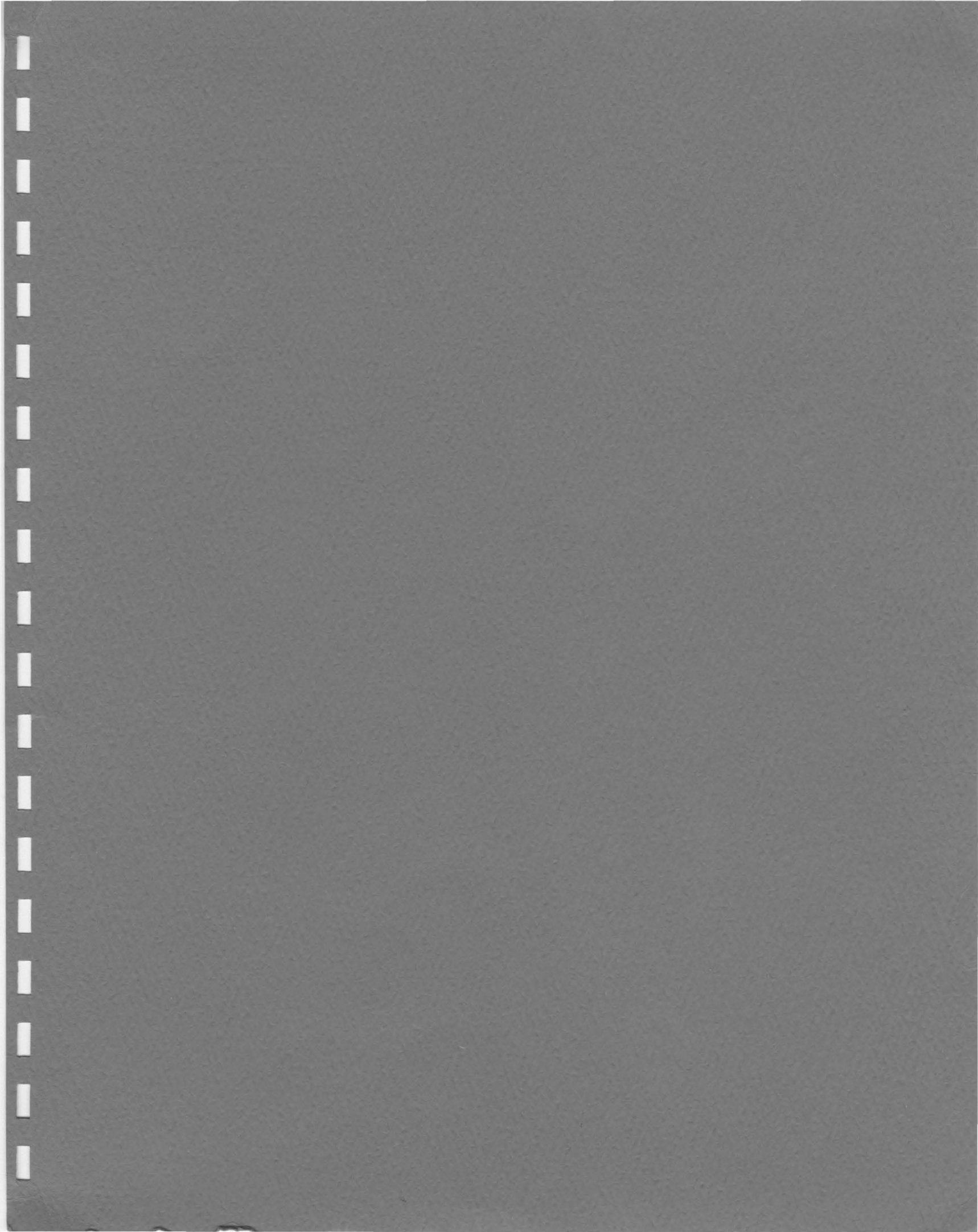
campaign to bury the petroleum crisis and get his automotive lines rolling again.

On March 26, 1974, Dr. V. E. McKelvey, Director of the U. S. Geological Survey, revised that department's estimates of U. S. oil and gas resources. In this revision, the department has indicated the measured reserves at the single, relatively precise present estimate of 48.3 billion barrels. Indicated and referred reserves represent an estimate of future potential discoveries based on a geological projection of the present oil fields and known formations. This is a refinement of the original estimate of potentially recoverable and undiscovered resources with the highest probability of being produced. The department's conservative estimate for this category is 25 billion barrels with an outside expectancy of 45 billion barrels. Adding measured reserves, a conservative estimate would stop at 73.3 billion barrels or a theoretical 11.6 years supply at the 1973 consumption rate. The outside estimate produces 93.3 billion barrels or 14.8 years.

Undiscovered recoverable resources represent the unknown in future exploration which the department now identifies as between 200 and 400 billion barrels. When the more conservative estimate of potential future discoveries is added, the total future U. S. resource is indicated at 273 billion barrels, or a little over forty-three years at the present rate of consumption. However, when a 3% annual increase in consumption is projected,

this large quantity reduces to less than twenty-eight years; and as noted, this is still theoretical as the oil will not flow that fast, and we will be more and more dependent on foreign oil as we approach the limits of our own resources. At the U. S. Geological Survey estimate of ultimate possible oil resource, the theoretical limit is equivalent to thirty-nine remaining years supply, two years more than half the life expectancy of a girl baby born in 1974.





FROM: WELLS, WARREN

CLASSIFICATION: UNCLASS

TO PRESIDENT \_\_\_\_\_  
SEIDMAN \_\_\_\_\_  
OTHER Philip Buchen

ACTION: XX  
LOG ONLY: \_\_\_\_\_

Date of Correspondence: Sept 23 74  
Date Received: Oct 22 74

SUBJECT: WELLS WRITES PHIL BUCHEN re STRATEGY FOR U.S. LEVERAGE FOR PRICE REDUCTION IN MIDDLE EAST OIL AND OBTAINING IRANIAN/ARAB COOPERATION

	ACTION	INFO CY	ACTION REQUIRED
SECRETARIAT		X	Reply for Seidman Signature.....
READ FILE		X	Memo for Seidman Signature.....
L. Wm. Seidman			ANY ACTION NECESSARY.....
B. Watkins			RECOMMENDATIONS/COMMENTS.....
R. Porter	XXX		Refer to _____ for DIRECT REPLY....
			Refer to <u>STATE</u> for DRAFT REPLY..... XXXXXX
			OTHER
			ACTION DUE DATE: <u>NOV. 5 74</u>

NO ACTION IS NECESSARY RETURN FOLDER TO SECRETARIAT FOR FILING CHECK NAN \_\_\_\_\_

DATE	FROM	TO	ACTION REQUIRED	STATUS
10/22/74	ADD-ON		REFER TO STATE DEPT FOR DRAFT REPLY FOR SEIDMAN SIG	D
10/31/74	ADD-ON		RECV DRAFT REPLY FM STATE DEPT 10/30/74	
10/31/74	EXSEC	PORTER	DRAFT REPLY FOR APPROVA AND TYPING	CD
11/10/74	<i>Porter</i>	<i>Seidman</i>	<i>F45</i>	
11/13/74	ADD-ON		SEIDMAN SGD LTR TO WARREN WELLS 11/11/74	CLOSE



Comments/Special Instructions: CC OF REPLY SENT TO PHIL BUCHEN - 11/13/74

CROSS REFERENCE: \_\_\_\_\_  
SOCIAL DISPOSITION \_\_\_\_\_  
Date Dispatches \_\_\_\_\_  
Initials \_\_\_\_\_

FILING INSTRUCTIONS  
WH CENTRAL FILES XX  
SEIDMAN EX/SEC FILES CC  
NOV 13 1974

November 11, 1974

Dear Mr. Wells:

Mr. Buchen has asked me to reply to your letter to him of September 23 proposing a strategy for obtaining a reduction of Middle Eastern oil prices and Iranian and Arab cooperation in recycling their oil income.

The strategy you propose resembles a number of other proposals to use force or the threat of force to deal with the oil price/supply situation. The problem with such proposals is that they imply a political restructuring of the world at least as drastic as any predicted economic restructuring that may be brought on by high oil prices. On the strictly practical level, they fail to answer the question of how to deal with oil producers that are prepared - as some of the most important would almost certainly be - to respond to the use or threat of force by destroying their oil fields.

We continue to believe that the solution to the oil price problem, as well as to other economic problems that beset the world, will be found not through confrontation and use of force, but through development of international cooperation, based on the recognition of the interdependence that has come to characterize world society. Developing such cooperation will, admittedly, be a long, hard and often frustrating process, but that is the only approach that provides hope for a solution of our economic problems while maintaining a stable peace.

Sincerely,

/s/

L. William Seidman  
Assistant to the President  
for Economic Policy

Mr. Warren Wells  
P. O. Box 3008  
Santa Barbara, California 93105



cc: Phil Buchen  
EXXEXXEXX

10/2/74

To: Mr. Seidman

From: Phil Buchen

For your response. Thanks.





**WARREN WELLS**

*Financial Writer and Consultant*

P. O. Box 3008  
SANTA BARBARA, CALIFORNIA 93105

805-967-0101

September 23, 1974

Mr. Philip W. Buchen  
The White House  
Washington, D. C. 20500

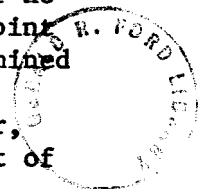
Dear Mr. Buchen:

I am writing this letter to detail a strategy which would give the United States major and effective leverage with respect to obtaining large price reductions in Middle East oil and obtaining Iranian and Arab cooperation relative to recycling their excess annual balance of payments via longer term obligations on an individual nation by nation basis with the U.S., Japan and our European allies.

In assessing the political situation within the Middle East areas it is notable that a single denominator factor of vulnerability is applicable to most of the major Middle East oil producers including Saudia Arabia, Iran, Kuwait, and the Arab Emirates. Political control is either monarchical or the virtual equivalent in the case of the Arab Emirates and the Sheikdom of Kuwait. Additionally, their total populations are relatively small, particularly in relation to the huge wealth in oil resources controlled. Thus, the dominant fear is that of Soviet financed revolution or of Soviet financed aggression. In the latter connection it is notable that Iraq has long cast a covetous eye at bordering Kuwait and the nearby neutral zones. The potential hazards of Kuwait and the neutral zones from Soviet financed aggression would obviously be far greater if Syria and Iraq decided to act jointly under Soviet sponsorship.

Thus, it goes without saying that the aforementioned Middle East oil producers would become tremendously disturbed if they became aware of the probability of the United States entering into a broad based program of political, military, and economic cooperation with the Soviet Union with respect to joint policy action throughout the entire Middle East area. This probability could be brought to the fore either by means of a news leak or by informal advisal by a special Presidential envoy to the Middle East area who would inform the countries involved that the U.S. was giving serious consideration to such action in the interest of averting a general worldwide economic catastrophe.

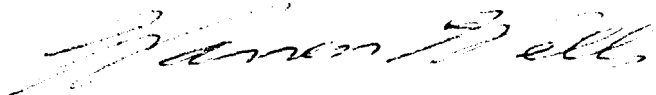
Psychological pressure effects would obviously be tremendously increased if no clarification were provided on the basis that the format with respect to joint policy and action by the Soviet Union and the United States would be determined by direct negotiation between the two nations, and we could obviously not predetermine a final format involving give and take on both sides. However, it might be delicately pointed out that there was no reason why the concept of nationalization of natural resource assets by relatively small populations could not be extended to extraterritorialization or modified internationalization in the minimum interest of all of the nations in the entire surrounding areas including the more heavily populated Arab states and such nearby heavily populated countries as Pakistan and India.



It might be noted that the policy concept maintained above might have to be seriously considered and explored in the event that the principal oil producing Middle East nations refused to cooperate with respect to realistic reductions in oil prices and programs of broad gage monetary coordination with the U.S., Japan and Western Europe. There is an excellent chance that the Soviet Union would be willing to enter wholeheartedly into the type of economic, military, and political coordination previously mentioned, particularly if we provided some further concessions such as a firm agreement not to supply armaments to Red China and, while being committed to neutrality in the event of a Soviet-China war, to nevertheless guarantee the Soviet Union against attack from any European powers, including those presently controlled by Russia. Conceivably the Soviet Union might also be willing to permit very substantial liberalization for the Eastern European powers now under her control if we further agreed not to extend any economic assistance or enter into any trading agreements without prior consultation with the Soviet Union, and subject to concurrence by the Soviet Union with respect to the contemplated economic agreement.

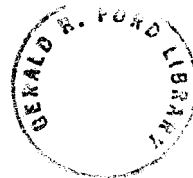
Cooperation on such a basis with the Soviet Union would be preferable to permitting the continuing disasterization of free nation economies under present trends. Deterioration of free nation economies could lead to widespread political radicalization with incalculable adverse consequences.

Yours sincerely,



Warren Wells

WW:rs



10/2/74

To: Kurt Herge  
Assistant to the Secretary  
and Chief of Staff  
Department of the Interior

From: Jay French

Please send a draft response for Mr. Buchen.  
Thanks.



EVELLE J. YOUNGER  
ATTORNEY GENERAL

STATE OF CALIFORNIA



OFFICE OF THE ATTORNEY GENERAL

**Department of Justice**

3580 WILSHIRE BLVD.  
LOS ANGELES, CALIFORNIA 90010

September 17, 1974

The Honorable Gerald R. Ford  
President of the United States  
The White House  
1600 Pennsylvania Avenue, N.W.  
Washington, D.C. 20500

Subject: Offshore Oil and Gas  
Drilling in California

Dear Mr. President:

As you are aware, the People of the State of California, through the California Attorney General's Office, has filed a lawsuit against the Secretary of Interior to enjoin him from proceeding from what appears to us to be a decision to drill for oil and gas on the Outer Continental Shelf off southern California. Our lawsuit contends that the federal government is proceeding in violation of the National Environmental Policy Act in that the Outer Continental Shelf Program Environmental Impact Statement has not been completed prior to the decisions that have already been made.

The People of the State of California respectfully urge you to reverse the decision-making process of the Department of Interior and to require the federal government to stop all planning for Outer Continental Shelf drilling off California until the Program Environmental Impact Statement is completed and completely evaluated. We feel this would be in compliance with the National Environmental Policy Act.

The comments attributed to Mr. John Sawhill, the Federal Energy Administrator, when he was in California, to the effect that as soon as the Environmental Impact Statement is completed, Outer Continental Shelf drilling off California will be commenced, is precisely the attitude our lawsuit contends is in violation of the National Environmental Policy Act, i.e., that the decision has already been made.



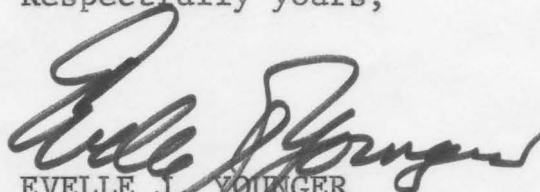
*in court already*  
*Philip Buchen*

The Honorable Gerald R. Ford  
President of the United States

Page Two

In fact, under the National Environmental Policy Act, a decision cannot be made until the decision-maker has the Environmental Impact Statement before him, because the law requires that the decision-maker consider the Environmental Impact Statement prior to making such a decision.

Respectfully yours,



EVELLE J. YOUNGER  
Attorney General of the  
State of California

ltp

cc: Hon. Rogers C. B. Morton  
Mr. John C. Sawhill

