

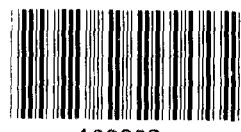
GAO

Fact Sheet for the Chairman,  
Subcommittee on Fossil and  
Synthetic Fuels, Committee on  
Energy and Commerce  
House of Representatives

May 1986

NAVAL PETROLEUM  
RESERVES

Sales Procedures and  
Prices Received for  
Elk Hills Oil



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UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

May 9, 1986

RESOURCES, COMMUNITY,  
AND ECONOMIC DEVELOPMENT  
DIVISION

B-208196

The Honorable Philip R. Sharp  
Chairman, Subcommittee on Fossil  
and Synthetic Fuels  
Committee on Energy and Commerce  
House of Representatives


Dear Mr. Chairman:

In response to your concern about the Department of Energy's (DOE's) actions in selling oil from the Elk Hills Naval Petroleum Reserve (NPR-1) at what appeared to be unreasonably low prices, we prepared the enclosed fact sheet to address this issue. Based on your April 25, 1986, request and subsequent discussions with your office, the fact sheet provides information on the basis for and procedures followed by DOE in selling NPR-1 oil and sales data for the period extending from October 1985 through April 1986.

We limited our work to obtaining information on sales activities during two contract periods--October 1, 1985, through April 1, 1986, and April 1 through October 1, 1986. We obtained this information from a review of documents and discussions with officials at the NPR-1 Office in California and discussions with DOE headquarters officials. We did not discuss with oil purchasers their bidding process nor did we look into whether DOE had alternative methods of disposing of NPR-1 oil. As agreed with your office, we did not obtain agency comments on this document. However, we discussed its factual accuracy with responsible DOE officials and made revisions as appropriate.

As arranged with your office, we are providing copies of this report to the Secretary of Energy and other interested parties and will make copies available to the public upon request.

Sincerely yours

  
James Duffus III  
Associate Director

## Background

The Elk Hills Naval Petroleum Reserve (NPR-1), located near Bakersfield, California, ranks seventh among domestic producing oil fields with an average daily production rate of over 130,600 barrels of oil during fiscal year 1985. NPR-1 also produces large quantities of natural gas and natural gas liquids. The U.S. government owns approximately 78 percent of NPR-1, and Chevron U.S.A., Inc., owns the remaining 22 percent. Chevron and the government share production, revenues, and expenses in proportion to their ownership shares. DOE reported that revenues generated from the sale of the government's share of crude oil, natural gas, and natural gas liquids from NPR-1 totaled \$1.3 billion in fiscal year 1985; production costs totaled about \$111 million. Daily production of crude oil for fiscal year 1986 is expected to be about 127,000 barrels, of which the government's share would be about 99,000 barrels. DOE has contracted to sell about 82,000 barrels per day under contracts which run from April 1, 1986 to October 1, 1986. DOE is selling its remaining share of production to the Department of Defense.

## Basis for selling NPR-1 oil

NPR-1 was originally established in 1912 to provide a source of liquid fuels for the Armed Forces during national emergencies. Crude oil production from the field started in 1919 and continued at various levels, reaching a peak of 65,000 barrels per day in 1945. After World War II, NPR-1 production was slowed to the minimum level necessary to prevent damage to the field. Following the Arab oil embargo in 1973-74, the Congress passed the Naval Petroleum Reserves Production Act of 1976 (Public Law 94-258), which authorized and directed that NPR-1 be explored and developed to its full economic and production potential and produced at its maximum efficient rate (MER) for 6 years. The act further specified that the President could extend production for 3-year periods after an investigation had been made to determine the necessity for continued production.

In accordance with section 201(3) of the Naval Petroleum Reserves Production Act (10 U.S.C. 7422(c)(2)(B)), the President informed the Congress on October 5, 1984, of his determination that it is in the national interest to continue production of NPR-1 at the MER through a second 3-year period ending on April 5, 1988. The act (10 U.S.C. 7430 (b)) further provides that, notwithstanding any other provisions of law, the government's share of petroleum shall be made at public sale to the highest bidder without regard to federal, state, or local regulations controlling sales of petroleum products.

The act defines the MER as that rate which will permit economic development and depletion of NPR-1 without decreasing the amount of oil expected to be ultimately recovered. GAO and DOE's Inspector General have questioned the MER established by DOE. Our July 30, 1984, report on production alternatives for NPR-1,<sup>1</sup> stated that, in regard to geological considerations, the MER set for NPR-1 by DOE may be too high. As a result, ultimate recovery of DOE's estimated 713 million barrels of oil in the reservoir could be decreased by about 139 million barrels over the life of the field. A report by DOE's Office of Inspector General released on April 25, 1986,<sup>2</sup> on NPR-1 production concluded that

"Our review disclosed that production rates at the Reserve were not developed through engineering-based MER calculations. Production for the past seven years has exceeded the MER calculated by the Reserve's own engineers and principal consultants. According to studies prepared by the Department's technical engineers and consultants, between 90 and 130 million barrels of otherwise recoverable oil is at risk of being lost through overproduction over the life of the Reserve. Based on the average market value of \$18 per barrel on March 6, 1986, the value of this oil was between \$1.60 billion and \$2.30 billion. We estimate that about half of the oil at risk of loss could yet be recovered if Reserve management develops and implements valid engineering-based MERS."

DOE officials, however, believe that NPR-1 has been and is currently being produced at the appropriate rate and that no recoverable oil has been lost. They believe the current recovery factors are consistent with the original projections and that ultimate recovery will be achieved.

#### Procedures for selling NPR-1 oil

The government's share of NPR-1 crude oil production is sold on the open market by competitive bidding as provided for by the Naval Petroleum Reserves Production Act. DOE solicits bids from interested parties through an invitation for bid. Based on the prospective buyers' perceptions of supply and demand conditions in the oil market during the contract period,

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<sup>1</sup>Naval Petroleum Reserve No. 1--An Assessment of Production Alternatives (GAO/RCED-84-180, July 30, 1984)

<sup>2</sup>Controls Over Crude Oil Production under Public Law 94-258 at Naval Petroleum Reserve No. 1, Elk Hills, California (DOE/IG-0226, April 14, 1986)

they submit bids showing the quantity of oil to be purchased and the bonus or discount per barrel which will apply to oil purchases during the contract period. Bidders may submit more than one bid. The DOE contracting officer determines whether the bids conform to the invitation for bid requirements, assesses the qualifications of the bidders, and awards contracts to the highest responsible bidders until all available oil is sold.

The total price paid by purchasers for NPR-1 oil is a combination of a crude oil base price and the contractual bonus or discount amount. Although DOE has slight variations in its method of establishing the crude oil base price for the different types of oil at NPR-1, the general procedure is as follows. The major oil companies operating in the central California area periodically send out to all oil producers a "Crude Oil Price Schedule." These schedules reflect the prices the oil companies are willing to pay for oil of a specified type and quantity and become the "posted" price for that oil. DOE receives these price schedules and computes an average price based on the three highest offerings for oil of quality equal to NPR-1 oil and produced from nearby fields. These average prices, with appropriate adjustments, become DOE's crude oil base price for the period covered by the price schedules. DOE's base prices fluctuate as the relevant posted prices change. Under normal conditions in oil markets, these changes seldom occur more often than once a month. When oil prices are changing rapidly, however, the posted prices can change more frequently.

#### NPR-1 oil sales

During the October 1, 1985, to April 1, 1986, contract period, DOE sold about 86,000 barrels of oil per day from NPR-1. From the start of this period through the first week of February 1986, posted crude oil prices remained fairly stable, ranging from \$24.88 to \$24.95 per barrel. Discount bids by the contractors purchasing NPR-1 oil during the 6-month period ranged from \$.197 to \$1.16 per barrel.

Oil prices in the spot market began to decline in late November 1985, but the posted prices in California lagged this decline and did not reflect this price decrease until early February 1986. When bid proposals for the April 1 to October 1, 1986, contract period were submitted to DOE, they were made on the basis of the January posted prices with the discounts offered reflecting the disparity between posted prices and observed spot market prices. The subsequent decline in posted prices as reflected in DOE's base prices, is shown in table 1.

Table 1: DOE Base Prices from  
February 10 to August 3, 1986

<u>Date<sup>a</sup></u>	<u>DOE base price per barrel</u>
2-10-86	\$23.51
2-11-86	23.39
2-13-86	22.98
2-24-86	22.80
3-04-86	21.15
3-07-86	21.51
3-07-86	20.10
3-12-86	18.12
3-14-86	18.43
3-14-86	18.09
3-19-86	17.13
3-24-86	15.14
3-31-86	14.73
4-03-86	14.47

<sup>a</sup>DOE billing date.

Although DOE's base prices were changing drastically during this period, the contracted discounts remained the same. Consequently, the net prices to the government for this period were not too far below the posted prices.

For the current 6-month contract period which began on April 1, 1986, 15 companies were awarded contracts competitively to purchase about 82,000 barrels per day of NPR-1 crude oil. These companies bid discounts from the posted prices ranging from \$0.97 to \$6.98 per barrel. DOE's base prices during April remained relatively constant. Information on the prices the 15 companies paid for oil from DOE's April 8, 1986, billing date through its April 23, 1986, billing date (the latest available date during the period in which we conducted our review) is shown in table 2.

Table 2: NPR-1 Crude Oil Prices for DOE Billings  
Made from April 8 through 23, 1986

<u>Company</u>	<u>Billing date</u>	<u>Barrels lifted<sup>a</sup></u>	<u>DOE base price</u>	<u>Contract discount</u>	<u>Average price paid<sup>b</sup></u>
(-----dollars per barrel-----)					
Alliance Oil and Refining Co.	4-09-86	6,550	\$13.80	\$6.98	\$6.82
	4-16-86	5,853	13.32	6.98	6.34
	4-23-86	5,835	13.28	6.98	6.30
Beacon Oil Co.	4-09-86	7,711	13.80	6.949	6.85
	4-16-86	6,980	13.32	6.949	6.37
	4-23-86	6,868	13.28	6.949	6.33
Bemico Corp.	4-08-86	7,340	13.80	5.79	8.01
	4-15-86	9,188	13.21	5.79	7.42
	4-22-86	8,803	13.19	5.79	7.40
Caljet, Inc.	4-10-86	12,494	13.70	4.985 <sup>c</sup>	8.72
	4-16-86	14,684	13.20	4.985 <sup>c</sup>	8.22
	4-23-86	13,205	13.17	4.985 <sup>c</sup>	8.18
Champlin Petroleum Co.	4-08-86	86,662	13.80	4.825 <sup>c</sup>	8.97
	4-15-86	108,476	13.21	4.825 <sup>c</sup>	8.38
	4-22-86	103,939	13.19	4.825 <sup>c</sup>	8.37
Crysen Trading & Marketing, Inc.	4-08-86	8,599	13.80	5.043 <sup>c</sup>	8.75
	4-09-86	15,116	13.70	5.043 <sup>c</sup>	8.66
	4-09-86	27,196	13.70	5.043 <sup>c</sup>	8.66
	4-15-86	10,763	13.21	5.043 <sup>c</sup>	8.16
	4-16-86	14,932	13.24	5.043 <sup>c</sup>	8.20
	4-16-86	31,964	13.20	5.043 <sup>c</sup>	8.16
	4-22-86	10,313	13.19	5.043 <sup>c</sup>	8.15
	4-23-86	14,994	13.20	5.043 <sup>c</sup>	8.16
	4-23-86	28,743	13.17	5.043 <sup>c</sup>	8.13
Edgington Oil Co., Inc.	4-08-86	34,664	13.80	3.371 <sup>c</sup>	10.43
	4-15-86	43,389	13.21	3.371 <sup>c</sup>	9.84
	4-22-86	41,575	13.19	3.371 <sup>c</sup>	9.82
Golden West Refining Co.	4-08-86	29,011	13.80	5.0735	8.72
	4-15-86	36,314	13.21	5.0735	8.13
	4-22-86	34,795	13.19	5.0735	8.12



<u>Company</u>	<u>Billing date</u>	<u>Barrels lifted<sup>a</sup></u>	<u>DOE base price</u>	<u>Contract discount</u>	<u>Average price paid<sup>b</sup></u>
(-----dollars per barrel-----)					
Kern Oil & Refining Co.	4-08-86	53,612	13.80	5.80	8.00
	4-15-86	67,106	13.21	5.80	7.41
	4-22-86	64,300	13.19	5.80	7.39
Lunday-Thagard Co.	4-08-86	23,107	13.80	4.28 <sup>c</sup>	9.52
	4-15-86	28,923	13.21	4.28 <sup>c</sup>	8.93
	4-22-86	27,714	13.19	4.28 <sup>c</sup>	8.91
McMillian Ring-Free Oil Co., Inc.	4-08-86	7,105	13.80	5.38	8.42
	4-15-86	8,894	13.21	5.38	7.83
	4-22-86	8,522	13.19	5.38	7.81
	4-22-86	3,537	13.07	4.87	8.20
Newhall Refining Co., Inc.	4-15-86	73,320	13.21	2.524 <sup>c</sup>	10.68
	4-22-86	69,295	13.19	2.524 <sup>c</sup>	10.67
	4-08-86	57,777	15.59	4.318 <sup>c</sup>	11.27
	4-09-86	22,911	13.80	4.318 <sup>c</sup>	9.49
	4-09-86	13,267	13.80	4.318 <sup>c</sup>	9.49
	4-16-86	31,964	13.32	4.318 <sup>c</sup>	9.00
	4-16-86	15,546	13.28	4.318 <sup>c</sup>	8.96
	4-23-86	13,756	13.27	4.318 <sup>c</sup>	8.95
	4-23-86	20,407	13.28	4.318 <sup>c</sup>	8.96
Oxbow Resources, Inc.	4-08-86	28,886	13.80	3.75 <sup>c</sup>	10.05
	4-15-86	36,156	13.21	3.75 <sup>c</sup>	9.46
	4-22-86	34,644	13.19	3.75 <sup>c</sup>	9.44
Sound Refining Co.	4-08-86	28,845	13.83	4.2248 <sup>c</sup>	9.60
	4-09-86	43	13.73	4.2248 <sup>c</sup>	9.51
	4-15-86	36,106	13.21	4.2248 <sup>c</sup>	8.98
	4-16-86	51	13.20	4.2248 <sup>c</sup>	8.98
	4-22-86	34,596	13.19	4.2248 <sup>c</sup>	8.97
	4-23-86	46	13.17	4.2248 <sup>c</sup>	8.95
U.S. Oil & Refining Co.	4-08-86	5,778	13.80	4.31	9.49
	4-15-86	7,233	13.21	4.31	8.90
	4-22-86	6,930	13.19	4.31	8.88

<sup>a</sup>Total barrels lifted (delivered) during billing period.

<sup>b</sup>Some items do not subtract due to rounding.

<sup>c</sup>Discount represents the average of discounts bid where companies submitted separate bids for each successive increment of oil quantities purchased, i.e., the first 1,000 barrels, the second 1,000 barrels, etc.

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