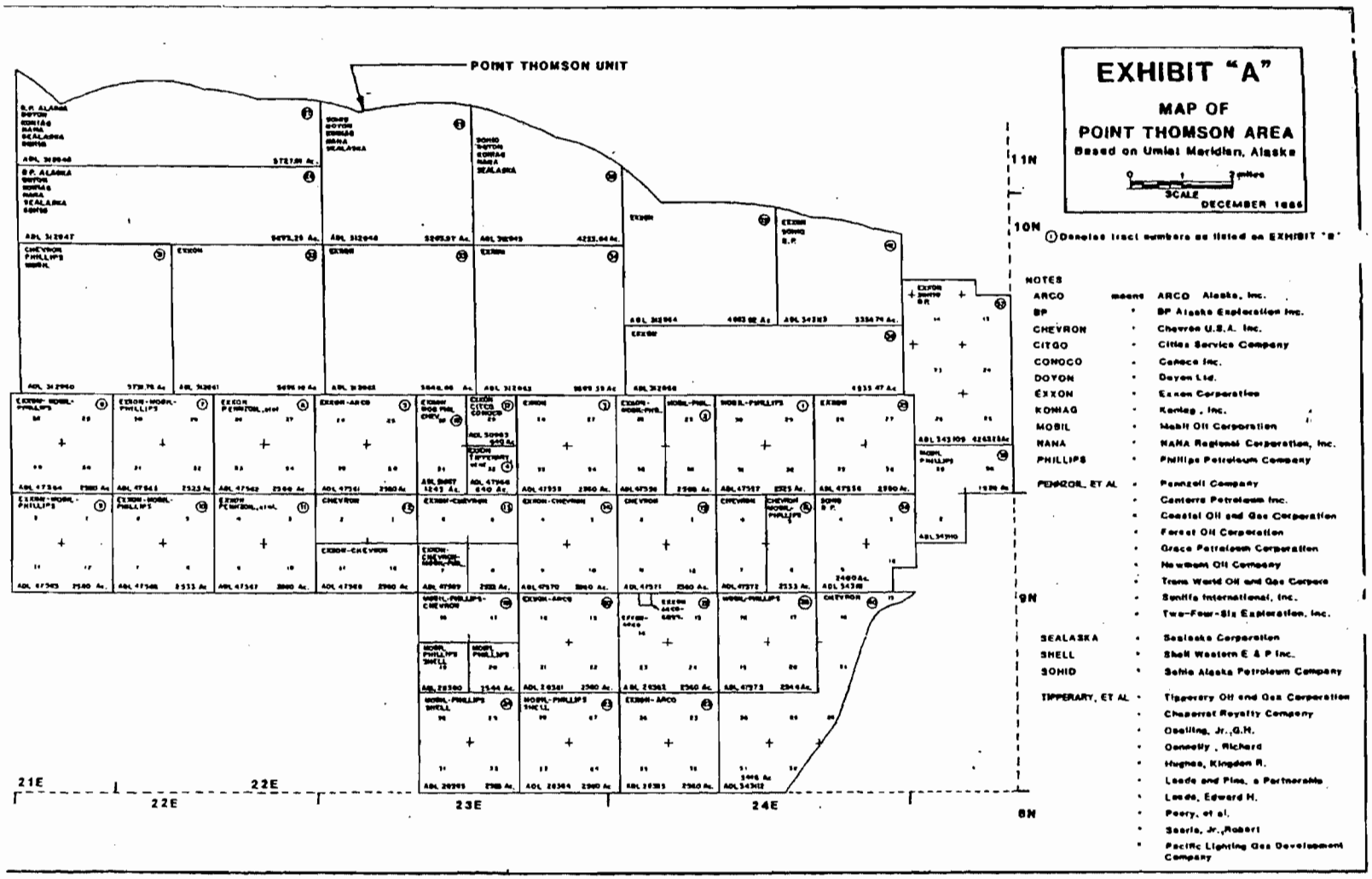


PTU22P_000613

Exc. 000057

PTU REC_001272

EXHIBIT B

SCHEDULE SHOWING THE PERCENTAGE AND KIND OF OWNERSHIP
OF OIL AND GAS INTERESTS

POINT THOMSON UNIT
STATE OF ALASKA

TRACT	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. & EXPIRATION DATE OF LEASE	BASIC ROYALTY/NPS	LESSEE OF RECORD	OVERRIDING ROYALTY & PERCENTAGE	WORKING INTEREST & PERCENTAGE
State Lands							
1	T10N-R24E, UPM Block 9: All (Secs. 29,30,31,32)	2,523	ADL-47557 HBU*	12-1/2%/None	Mobil Phillips	None	Mobil-50% Phillips-50%
2	T10N-R23E, UPM Block 7: All (Secs. 25,26,35,36)	2,560	ADL-47558 HBU*	12-1/2%/None	Mobil Phillips Exxon	None	Mobil-50% in Secs. 25 & 36 25% in Secs. 26 & 35 Phillips-50% in Secs. 25 & 36; 25% in Secs. 26 & 35 Exxon-50% in Secs. 26 & 35
3	T10N-R23E, UPM Block 8: All (Secs. 27,28,33,34)	2,560	ADL-47559 HBU*	12-1/2%/None	Exxon	None	Exxon-100%
4	T10N-R23E, UPM Block 9: SE/4 (Sec. 32)	640	ADL-47560 HBU*	12-1/2%/None	Exxon Tipperary Leede Leede & Pine Donnelly Chaparral Doelling, Jr. Searls, Jr. Peery et al. Hughes Pacific	None	Exxon-50% Tipperary-20.19512% Leede-10.09756% Leede & Pine-2.01951% Donnelly-2.27195% Chaparral-2.27195% Doelling, Jr-.2.27195% Searls, Jr.-1.13598% Peery-1.13598% Hughes-3.60000% Pacific-5.00000%

* Held By Unit
GWD/kla

12/85

EXHIBIT B - PAGE TWO

TRACT	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. & EXPIRATION DATE OF LEASE	BASIC ROYALTY/NPS	LESSEE OF RECORD	OVERRIDING ROYALTY & PERCENTAGE	WORKING INTEREST & PERCENTAGE
State Lands							
5	T10N-R22E, UPM Block 7: All (Secs. 25,26,35,36)	2,560	ADL-47561 HBU*	12-1/2%/None	ARCO Exxon	None	ARCO-25% Exxon-75%
6	T10N-R22E, UPM Block 8: All (Secs. 27,28,33,34)	2,560	ADL-47562 HBU*	12-1/2%/None	Exxon Coastal Pennzoil Forest Grace Canterra Transworld Two-Four-Six Sunlite Newmont	Fackler, Calderwood and Mangus-.083125% Sabine Royalty-.083125% Hilltop Community Church-.00236232931% Peter J. Farrelly-.00236232928% Little Sisters of the Poor-.00236232931% Donnell O. Wells-.0035445571%	Exxon-50% Coastal-11.5% Pennzoil-10% Forest-5.247382% Grace-.53157725% Canterra-10.03157725% Transworld-1.328943125% Two-Four-Six-1.328943125% Sunlite-.53157725% Newmont-9.5%
7	T10N-R22E, UPM Block 9: All (Secs. 29,30,31,32)	2,523	ADL-47563 HBU*	12-1/2%/None	Exxon Mobil Phillips	None	Exxon-50% Mobil-25% Phillips-25%
8	T10N-R21E, UPM Block 7: All (Secs. 25,26,35,36)	2,560	ADL-47564 HBU*	12-1/2%/None	Exxon Mobil Phillips	None	Exxon-50% Mobil-25% Phillips-25%
9	T9N-R21E, UPM Block 1: All (Secs. 1,2,11,12)	2,560	ADL-47565 HBU*	12-1/2%/None	Exxon Mobil Phillips	None	Exxon-50% Mobil-25% Phillips-25%
10	T9N-R22E, UPM Block 3: All (Secs. 5,6,7,8)	2,533	ADL-47566 HBU*	12-1/2%/None	Exxon Mobil Phillips	None	Exxon-50% Mobil-25% Phillips-25%

Held By Unit
WD/kla

12/85

PTU22P_000615

Exc. 000059

PTU REC_001274

EXHIBIT B - PAGE THREE

TRACT	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. & EXPIRATION DATE OF LEASE	BASIC ROYALTY/NPS	LESSEE OF RECORD	OVERRIDING ROYALTY & PERCENTAGE	WORKING INTEREST & PERCENTAGE
State Lands							
11	T9N-R22E, UPM Block 2: All (Secs. 3,4,9,10)	2,560	ADL-47567 HBU*	12-1/2%/None	Exxon Coastal Pennzoil Forest Grace Canterra Transworld Two-Four-Six Sunlite Newmont	Fackler, Calderwood and Manqus-.083125% Sabine Royalty-.083125% Hilltop Community Church-.002362329 31% Peter J. Farrelly-.002362329 28% Little Sisters of the Poor-.002362329 31% Donnell O. Wells-.0035445571%	Exxon-50% Coastal-11.5% Pennzoil-10% Forest-5.247382% Grace-.53157725% Canterra-10.03157725% Transworld-1.328943125% Two-Four-Six-1.328943125% Sunlite-.53157725% Newmont-9.5%
12	T9N-R22E, UPM Block 1: All (Secs. 1,2,11,12)	2,560	ADL-47568 HBU*	12-1/2%/None	Chevron Exxon	None	Chevron-100% in Secs. 1 & 2 - 50% in Secs. 11 & 12 Exxon-50% in Secs. 11 & 12
13	T9N-R23E, UPM Block 3: All (Secs. 5,6,7,8)	2,533	ADL-47569 HBU*	12-1/2%/None	Chevron Mobil Phillips Exxon	None	Chevron-50% in Secs. 5,6,8 -16-2/3% in Sec. 7 Mobil-16-2/3% in Sec. 7 Phillips-16-2/3% in Sec. 7 Exxon-50% in Secs. 5,6,7,8
14	T9N-R23E, UPM Block 2: All (Secs. 3,4,9,10)	2,560	ADL-47570 HBU*	12-1/2%/None	Chevron Exxon	None	Chevron-50% Exxon-50%
15	T9N-R23E, UPM Block 1: All (Secs. 1,2,11,12)	2,560	ADL-47571 HBU*	12-1/2%/None	Chevron	None	Chevron-100%

* Held By Unit
GWD/kla

12/85

Exc. 000060

PTU22P_000616

PTU REC_001275

EXHIBIT B - PAGE FOUR

TRACT	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. & EXPIRATION DATE OF LEASE	BASIC ROYALTY/NPS	LESSEE OF RECORD	OVERRIDING ROYALTY & PERCENTAGE	WORKING INTEREST & PERCENTAGE
State Lands							
16	T9N-R24E, UPM Block 3: All (Secs. 5,6,7,8)	2,533	ADL-47572 HBU*	12-1/2%/None	Chevron Mobil Phillips	None	Chevron-100% Secs. 6 & 7/ 40% Secs. 5 & 8 Mobil-30% Secs. 5 & 8 Phillips-30% Secs. 5 & 8
17	T10N-R23E, UPM Block 9: NE/4 (Sec. 29)	640	ADL-50983 HBU*	12-1/2%/None	Citgo Conoco Exxon	Subject to 1/3 Net Profits Interest to Tipperacy, et al.	Citgo-33-1/3% Conoco-16-2/3% Exxon-50%
18	T10N-R23E, UPM Block 9: W/2 (Secs. 30,31)	1,243	ADL-51667 HBU*	12-1/2%/None	Exxon Mobil Phillips Chevron	Tipperary et al.-6.25%	Exxon-50% Mobil-16-2/3% Phillips-16-2/3% Chevron-16-2/3%

* Held By Unit
GWD/kla

12/85

Exc. 000061

EXHIBIT B - PAGE FIVE

TRACT	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. & EXPIRATION DATE OF LEASE	BASIC ROYALTY/NPS	LESSEE OF RECORD	OVERRIDING ROYALTY & PERCENTAGE	WORKING INTEREST & PERCENTAGE
State Lands							
19	T9N-R23E, UPM All Secs. 17, 18, 19, 20	2,544	ADL-28380 HBU*	12-1/2%/None	Chevron Mobil Phillips	None	Secs. 17 & 18: Chevron - 33-1/3% Mobil - 33-1/3% Phillips - 33-1/3% Sec. 19: Mobil - 50.0% Phillips - 22.5% Shell - 27.5% Sec. 20: Mobil - 50% Phillips - 50%
20	T9N-R23E, UPM All Secs. 15, 16, 21, 22	2,560	ADL-28381 HBU*	12-1/2%/None	ARCO Exxon	None	ARCO - 50% Exxon - 50%
21	T9N-R23E, UPM All Secs. 13, 14, 23, 24	2,560	ADL-28382 HBSIP***	12-1/2%/None	ARCO Chevron Exxon	None	All Secs. 13, 14, 23 and 24 except NW/4 NE/4 of Sec. 14: ARCO - 50% Exxon - 50% NW/4 NE/4 of Sec. 14: ARCO - 50% Chevron - 35%** Exxon - 15%**
22	T9N-R23E, UPM All Secs. 25, 26, 35, 36	2,560	ADL-28383 HBU*	12-1/2%/None	ARCO Exxon	None	ARCO - 50% Exxon - 50%
23	T9N-R23E, UPM All Secs. 27, 28, 33, 34	2,560	ADL-28384 HBU*	12-1/2%/None	Mobil Phillips Shell	None	Mobil - 50.0% Phillips - 22.5% Shell - 27.5%
24	T9N-R23E, UPM All Secs. 29, 30 31, 32	2,555	ADL-28385 HBU*	12-1/2%/None	Mobil Phillips Shell	None	Mobil - 50.0% Phillips - 22.5% Shell - 27.5%

* Held by Unit
** Until Payout
*** Held By Shut-In Production

12/85

Exc. 000062

PTU22P_000618

PTU REC_001277

TRACT	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. & EXPIRATION DATE OF LEASE	BASIC ROYALTY/NPS	LESSEE OF RECORD	OVERRIDING ROYALTY & PERCENTAGE	WORKING INTEREST & PERCENTAGE
State Lands							
25	T10N-R24E, UPM All Secs. 27, 28, 33, 34	2,560	ADL-47556 HBSIP***	12-1/2%/None	Exxon	None	Exxon - 100%
26	T9N-R24E, UPM All Secs. 17, 18 19, 20	2,544	ADL-47573 HBSIP***	12-1/2%/None	Mobil Phillips	None	Mobil - 50% Phillips - 50%
27	NR 6-4 Flaxman Island A portion of Blks. 707 and 708 as shown on the "Leasing and Nomination Map" for the Federal/State BF Sea Oil and Gas Lease Sale, dated 1/30/79, more particularly described as follows: Those lands located in Blk. 707 within the offshore 3-mile arc lines, listed as state area on the "Supplemental Official OCS Block Diagram" approved 10/4/79, containing 2970.79 acres, and those lands in Blk. 708 within the offshore 3-mile arc lines, listed as state area on the "Supplemental Official OCS Block Diagram" approved 10/4/79 containing 2756.22 acres.	5,727.01±	ADL-312846 2/01/90****	SSR 20-65%/None	BP Alaska Doyon Koniag NANA Sealaska Sohio	None	BP Alaska - 86% Doyon - 1% Koniag - 1% NANA - 1% Sealaska - 1% Sohio - 10%
28	NR 6-4 Flaxman Island A portion of Blks. 751 and 752 as shown on the "Leasing and Nomination Map" for the Federal/State BF Sea Oil and Gas Lease Sale, dated 1/30/79, more particularly described as follows: Those lands located in the N/2 of Block 751, being a portion of Blk. 751 as shown on the aforesaid Leasing and Nomination Map, containing 2846.65 acres, and those lands in the N/2 of Block 752, being a portion of Blk. 752 as shown on the aforesaid Leasing and Nomination Map, containing 2846.64 acres.	5,693.29±	ADL-312847 2/01/90****	SSR 20-65%/None	BP Alaska Doyon Koniag NANA Sealaska Sohio	None	BP Alaska - 86% Doyon - 1% Koniag - 1% NANA - 1% Sealaska - 1% Sohio - 10%

*** Held By Shut-in Production

**** Will be held by Unit if well commenced prior to 2/1/1990 at location determined jointly by State and Lessees.

GWD/kla 12/85

EXHIBIT B - PAGE SEVEN

TRACT	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. & EXPIRATION DATE OF LEASE	BASIC ROYALTY/NPS	LESSEE OF RECORD	OVERRIDING ROYALTY & PERCENTAGE	WORKING INTEREST & PERCENTAGE
State Lands							
29	NR 6-4 Flaxman Island A portion of Blks. 709 and 753 as shown on the "Leasing and Nomination Map" for the Federal/State BF Sea Oil and Gas Lease Sale, dated 1/30/79, more particularly described as follows: Those lands located in Blk. 709 within the offshore 3-mile arc lines, listed as state area on the "Supplemental Official OCS Block Diagram" approved 10/4/79, containing 2419.33 acres, and those lands in the N/2 of Blk. 753, being a portion of Blk. 753 as shown on the aforesaid Leasing and Nomination Map, containing 2846.64 acres.	5,265.97±	ADL-312848 2/01/90****	SSR 20-65%/None	Doyon Koniag NANA Sealaska Sohio	None	Doyon - 1% Koniag - 1% NANA - 1% Sealaska - 1% Sohio - 96%
30	NR 6-4 Flaxman Island A portion of Blks. 710 and 754 as shown on the "Leasing and Nomination Map" for the Federal/State Beaufort Sea Oil and Gas Lease Sale, dated 1/30/79, more particularly described as follows: Those lands located in Block 710 within the offshore 3-mile arc lines, listed as state area on the "Supplemental Official OCS Block Diagram" approved 10/4/79, containing 1386.99 acres and those lands in the N/2 of Block 754, being a portion of Block 754 as shown on the aforesaid Leasing and Nomination Map, containing 2846.65 acres.	4,233.64	ADL-312849 2/01/90****	SSR 20-65%/None	Doyon Koniag NANA Sealaska Sohio	None	Doyon - 1% Koniag - 1% NANA - 1% Sealaska - 1% Sohio - 96%
31	NR 6-4 Flaxman Island A portion of Blks. 751 and 795 as shown on the "Leasing and Nomination Map" for the Federal/State BF Sea Oil and Gas Lease Sale, dated 1/30/79 more particularly described as follows: Those lands located in the S/2 of Blk. 751 on the aforesaid Leasing and Nomination Map, containing 2846.64 acres, and those lands lying northerly of the south boundary of Sections 23 and 24, T10N, R21E; U.M., AK., and lying northerly of the south boundary of Sections 19 and 20, T10N, R22E, U.M., AK., in Blk. 795 (being the northerly portion) listed as state area on the "Supplemental Official OCS Block Diagram" approved 10/4/79, containing 2885.14 acres.	5,731.78±	ADL-312860 2/01/90****	SSR 20-65%/None	Chevron Mobil Phillips	None	Chevron - 33-1/3% Mobil - 33-1/3% Phillips - 33-1/3%

**** Will be held by Unit if well commenced prior to 2/1/1990 at location determined jointly by State and Lessees.

12/85

Exc. 000064

PTU22P_000620

PTU REC_001279

EXHIBIT B - PAGE EIGHT

TRACT	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. & EXPIRATION DATE OF LEASE	BASIC ROYALTY/NPS	LESSEE OF RECORD	OVERRIDING ROYALTY & PERCENTAGE	WORKING INTEREST & PERCENTAGE
State Lands							
32	NR 6-4 Flaxman Island A portion of Blks. 752 and 796 as shown on the "Leasing and Nomination Map" for the Federal/State BF Sea Oil and Gas Lease Sale, dated 1/30/79, more particularly described as follows: Those lands located in the S/2 of Blk. 752, being a portion of Blk. 752 on the aforesaid Leasing and Nomination Map, containing 2846.64 acres, and those lands lying northerly of the south boundary of Sections 20, 21, 22, and 23, T10N, R22E, U.M., Ak., in Blk. 796 (being the northerly portion) listed as state area on the "Supplemental Official OCS Block Diagram" approved 10/4/79, containing 2849.54 acres.	5,696.18	ADL-312861 2/01/90****	SSR 20-65%/NONE	Exxon	None	Exxon - 100%
33	NR 6-4 Flaxman Island A portion of Blks. 753 and 797 as shown on the "Leasing and Nomination Map" for the Federal/State BF Sea Oil and Gas Lease Sale, dated 1/30/79, more particularly described as follows: Those lands located in the S/2 of Blk. 753, being a portion of Blk. 753 on the aforesaid Leasing and Nomination Map, containing 2846.64 acres, and those lands lying northerly of the south boundary of Sections 23 and 24, T10N, R23E; U.M., Ak., in Blk. 797 (being the northerly portion) listed as state area on the "Supplemental Official OCS Block Diagram" approved 10/4/79, containing 2802.04 acres.	5,648.68±	ADL-312862 HPSIP***	SSR 20-65%/NONE	Exxon	None	Exxon - 100%
34	NR 6-4 Flaxman Island A portion of Blocks 754 and 798 as shown on the "Leasing and Nomination Map" for the Federal/State BF Sea Oil and Gas Lease Sale, dated 1/30/79, more particularly described as follows: Those lands located in the S/2 of Blk. 754, being a portion of Blk. 754 on the aforesaid Leasing and Nomination Map, containing 2846.64 acres, and those lands lying northerly of the south boundary of Sections 20, 21, 22, and 23, T10N, R23E; U.M., Ak., in Blk. 798 (being the northerly portion) listed as state area on the "Supplemental Official OCS Block Diagram" approved 10/4/79, containing 2742.71 acres.	5,589.35±	ADL-312863 2/01/90****	SSR 20-65%/NONE	Exxon	None	Exxon - 100%

*** Held by Shut-In Production

**** Will be held by Unit if well commenced prior to 2/1/1990 at location determined jointly by State and Lessees.

12/85

Exc. 000065

TRACT	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. & EXPIRATION DATE OF LEASE	BASIC ROYALTY/NPS	LESSEE OF RECORD	OVERRIDING ROYALTY & PERCENTAGE	WORKING INTEREST & PERCENTAGE
State Lands							
35	NR 6-4 Flaxman Island A portion of Blks. 711 and 755 as shown on the "Leasing and Nomination Map" for the Federal/State BF Sea Oil and Gas Lease Sale, dated 1/30/79, more particularly described as follows: Those lands located in Blk. 711 within the offshore 3-mile arc lines, listed as state area on the "Supplemental Official OCS Block Diagram" approved 10/4/79, containing .6 acres, and those lands in Block 755 within the offshore 3-mile arc lines, listed as state area on the "Supplemental Official OCS Block Diagram" approved 12/9/79, containing 4682.42 acres.	4,683.02±	ADL-312864 2/01/90****	SSR 20-65%/NONE	Exxon	None	Exxon - 100%
36	NR 6-4 Flaxman Island A portion of Blks. 799 and 800 as shown on the "Leasing and Nomination Map" for the Federal/State BF Sea Oil and Gas Lease Sale, dated 1/30/79, more particularly described as follows: Those lands lying northerly of the south boundary of Sections 23 and 24, T10N, R23E; U.M., Ak., and lying northerly of the south boundary of Secs. 19 and 20, T10N, R24E; U.M., Ak., in Blk 799 (being the northerly portion) listed as state area on the "Supplemental Official OCS Block Diagram" approved 10/4/79, containing 2671.47 acres, and those lands lying northerly of the south boundary of Secs. 20, 21 and 22, T10N, R24E; U.M., Ak., and lying westerly of 146°00'00" west longitude in Block 800 listed as state area on the "Supplemental Offical OCS Block Diagram" approved 10/4/79, containing 2264.00 acres.	4,935.47±	ADL-312866 2/01/90****	20%/52.352%	Exxon	None	Exxon - 100%

**** Will be held by Unit if well commenced prior to 2/1/1990 at location determined jointly by State and Lessees.

GWD/kla

12/85

EXHIBIT B - PAGE TEN

TRACT	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. & EXPIRATION DATE OF LEASE	BASIC ROYALTY/NPS	LESSEE OF RECORD	OVERRIDING ROYALTY & PERCENTAGE	WORKING INTEREST & PERCENTAGE
State Lands							
37	T10N-R24E, UPM Sec. 10: S 1/2 S 1/2 lying easterly of 146°00'00" west longitude Sec. 11: S 1/2 S 1/2 Sec. 12: SW 1/4 SW 1/4 Sec. 15: All lying easterly of 146°00'00" west longitude Sec. 22: All lying easterly of 146°00'00" west longitude All of Secs. 13, 14, 23, 24, 25, 26	4,263.88	ADL-343109 HBU*	12 1/2%/40%	BP Alaska Exxon Sohio	None	BP Alaska - 16.5% Exxon - 50.0% Sohio - 33.5%
38	T10N-R24E, UPM All Secs. 35, 36 T9N-R24E, UPM All Sec. 2	1,920	ADL-343110 HBU*	12-1/2%/40%	Mobil Phillips	None	Phillips - 50% Mobil - 50%
39	T9N-R24E, UPM All Secs. 3, 4, 9; Sec. 10: N/2 and SW/4	2,400	ADL-343111 HBU*	12-1/2%/40%	BP Alaska Sohio	None	BP Alaska - 13.33338% Sohio - 86.66662%

* Held By Unit

GWD/kla

12/85

TRACT	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. & EXPIRATION DATE OF LEASE	BASIC ROYALTY/NPS	LESSEE OF RECORD	OVERRIDING ROYALTY & PERCENTAGE	WORKING INTEREST & PERCENTAGE
State Lands							
40	T9N-R24E, UPM All, excluding ANWR, of Secs. 15, 16, 21, 28 29, 30, 31, 32	3,446	ADL-343112 HBU*	12-1/2%/40%	Chevron	None	Chevron - 100%
41	T10N-R24E, UPM All those lands lying westerly of 146°00'00" west longitude in block 756 within the offshore three mile arc	3,354.74	ADL-343113 HBU*	12-1/2%/40%	BP Alaska Exxon Sohio	None	BP Alaska - 16.5% Exxon - 50.0% Sohio - 33.5%
	TOTAL	129,800.01					

ARCO	ARCO Alaska, Inc.
BP	BP Alaska Exploration, Inc.
Mobil	Mobil Oil Corporation
Phillips	Phillips Petroleum Company
Exxon	Exxon Corporation
Chevron	Chevron U.S.A. Inc.
Conoco	Conoco Inc.
Citgo	Cities Service Company
Doyon	Doyon, Ltd.
Koniag	Koniag, Inc.
NANA	NANA Regional Corporation, Inc.
Pennzoil et al.	Pennzoil Company, Newmont Oil Company, Canterra Petroleum Inc., Forest Oil Corporation, Coastal Oil & Gas Corporation, Sunlite International Inc., Grace Petroleum Corporation, Trans World Oil & Gas Ltd., Two-Four-Six Exploration Inc.
Sealaska	Sealaska Corporation
Shell	Shell Western E & P Inc.
Sohio	Sohio Alaska Petroleum Company
Tipperary et al.	Tipperary Oil & Gas Corporation, Edward H. Leede, Leede & Pine (a Partnership), Richard Donnelly, Chaparral Royalty Co., G. H. Doelling, Jr., Robert Searls, Jr., Kingdon R. Hughes, Pacific Lighting Gas Development Company, Bernice C. Peery (Individually, as Independent Executrix of the Estate of Testamentary Trusts respectively called Linda Sue Searls Trust-A, Susan Jean Searls Trust-A, and John Peery Searls Trust-A and Jeanne Alice Searls, Devisee under the will of John W. Peery, Deceased).

* Held By Unit

GWD/kla

12/85

EXXON COMPANY, U.S.A.
POST OFFICE BOX 2180 - HOUSTON, TEXAS 77001

EXPLORATION DEPARTMENT
OFFSHORE/ALASKA DIVISION
CRANDALL D. JONES
MANAGER

November 18, 1977

Plan of Further Development
and Operation
Point Thomson Unit
Arctic Slope, Alaska

Mr. Joseph Green
Director, Division of Minerals
and Energy Management
Department of Natural Resources
State of Alaska
323 East 4th Avenue
Anchorage, Alaska 99501

Dear Mr. Green:

By letter dated September 21, 1977, Exxon Corporation, as Unit Operator, filed an application with the Director, Division of Oil and Gas Conservation, Department of Natural Resources, for a Permit to Drill the Point Thomson Unit No. 2 well. Concurrently, we filed with you a Plan of Operations, with various Exhibits, for such well. A copy of said Plan is enclosed.

By Decision letter dated November 4, 1977, your office certified that the test conducted October 30, 1977 demonstrated that the Point Thomson Unit No. 1 well is capable of producing in paying quantities as per paragraph 9, "Drilling to Discovery", of the Point Thomson Unit Agreement.

Article 10 of the Point Thomson Unit Agreement provides in part that within six months after completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall submit for the approval of the Director an acceptable Plan of Development and Operation for the unitized land which, when approved by the Director, shall constitute the further drilling and operating obligations of the Unit Operator under the agreement for the period specified therein.

Exxon Corporation, as Unit Operator of the Point Thomson Unit, hereby requests that you consider the enclosed Plan of Operations as its proposed Plan of Further Development and Operation specified in

said Article 10. This Plan, upon approval by you, will constitute the further drilling and operating obligations of the Unit Operator under the Unit Agreement for the duration of the drilling of the Point Thomson Unit No. 2 well and for six (6) months after completion thereof.

Very truly yours,

VV:kll

Enclosure

CONTINGENCY PLAN
EXXON NO. 2, POINT THOMSON UNIT

The objective of this plan is to list major operating and contingency requirements to ensure a safe and efficient operation throughout the drilling activity. Equipment and material stockpile requirements for operating after breakup are tabulated for operational planning.

The location has been designed to provide containment of any drilling operation effluents that could be considered as pollutants. The 200' x 200' x 10' deep reserve pit will receive and contain all drill cuttings, excess mud material, wash and drain water from around the rig, and have the capacity for use in the event of a severe well control problem. Sewage from the camp will be processed through an activated sludge extended aeration system with the solids being incinerated and the disinfected liquid contained in a sanitary waste pit; a separate sanitary holding pit is provided to divert the treating plant effleunt in the event of a system malfunction. A burning pit is located clear of the rig to permit burning any waste oil recovered from the drainage system and any produced hydrocarbons resulting from well testing or an upset. Fuel will be stored in steel tanks in impermeably lined fuel storage area.

A primary feature of the drilling plan is to provide 9-5/8" x 13-3/8" annular injection capability before breakup. The well casing program is designed to set 13-3/8" surface casing through the major gravel sections and below any possible fresh water zones. The 9-5/8" protective casing will be set into the antitipated pressure transition zone and cemented to isolate the salt water sand sections from below the surface casing shoe to approximately 6000 feet for injection of excess mud, melt, waste waters collected in the pits and hydrocarbons. Liquid levels in the sanitary waste pit, sanitary holding pit, and burning pit will be maintained below ground level after breakup to prevent migration of any liquid out of the pit while the reserve pit will be maintained at a minimum level at all times to provide for containment of well fluids in the event of an upset. All pits will be pumped out to a minimum level and waste water injected into the injection zone before abandoning the location. The entire operation is planned so that no fluids associated with the operation will be discharged on the surface outside the location.

The drilling contractor, Loffland Bros., will be required to develop a comprehensive SPCC plan to prevent pollution as a result of any drilling rig operations. In addition to drip pans under the engines and rig machinery, the rig area will be located within a drainage system to direct any rig waste into the reserve pit. All oils, greases, and chemicals are to be stored within the rig drainage area. Good housekeeping will be stressed on all parts of the location with emphasis on minimizing contamination of the peripheral drainage from the pad. Any minor spill of oil will be collected using absorbent material for disposal in the burning pit.

Personnel safety and well control are the uppermost factors in well design and operational planning. Sufficient data are available to plan the well for evaluation of the geologic objectives, provide for subsurface disposal of waste water, and conduct a safe drilling operation. Advanced abnormal pressure technology will be used to predict and detect changes in formation pressure to permit adjusting the casing and drilling fluid program to control the well.

Emphasis will be placed on well control equipment and procedures to permit circulating out a formation "kick" in an orderly manner if it should be necessary; any hydrocarbons in the influx will be diverted to the burning pit and burned. In the event of an unplanned upset resulting in uncontrolled well flow, the following basic procedures will be followed:

1. Divert flow to burning pit as the first defense against a spill. Switch the flow to the reserve pit when the safe working level is approached in the burning pit. The design capacity of the reserve pit is 71,000 barrels which will be maintained at a maximum, practical working capacity at all times by keeping mud and fluids use at a minimum and pumping fluids into the annular injection well when possible.

2. Prepare plans for drilling a relief well from an alternate location.

3. The well will be ignited, if the situation warrants, only after discussion with proper governmental agencies and Exxon management.

Major supplies of mud, cement, casing, fuel, and miscellaneous supplies will be transported over winter roads or flown directly to location before spring breakup. After breakup light consumables will be transported by helicopter. A Rolligon will be on location for any local movement of water or fuel as permitted by land conditions. Equipment and material stockpile requirements are tabulated below:

Equipment Requirements - (Normal Operations)

1. Aircraft - A DHC 6 series 300 Twin Otter will be used to transport personnel, material, and supplies up to a maximum 4,000 pound payload.

2. On-Site Support Equipment

   1 - Rolligon with detachable fuel and water tanks
   2 - 966 Front Loaders
   1 - Combination Flat Bed Truck with winch
   1 - Bull Dozer

Material Stockpiles

1. Mud Supplies

   a. Barite - 20,000 sks.
   b. Bentonite - 3,000 sks.
   c. Lignosulfonate - 500 sks.
   d. Lignite - 500 sks.
   e. Lost Circulation Material - 500 sks.
   f. Casing Pack Material - Minimum requirements for 150 bbl. mixture.

2. Cement - minimum of 3,000 sks. of Class G.

3. Casing and Tubing

   14,000' - 7", 32/35#, P-110, BT Casing
   3,500' - 4-1/2", 15.1#, C-95, LTC Casing
   14,000' - 2-7/8", 8.7#, N-80, Hydril PG-6 Tubing
   3,500' - 2-3/8", 5.95#, N-80, Hydril PG-6 Tubing

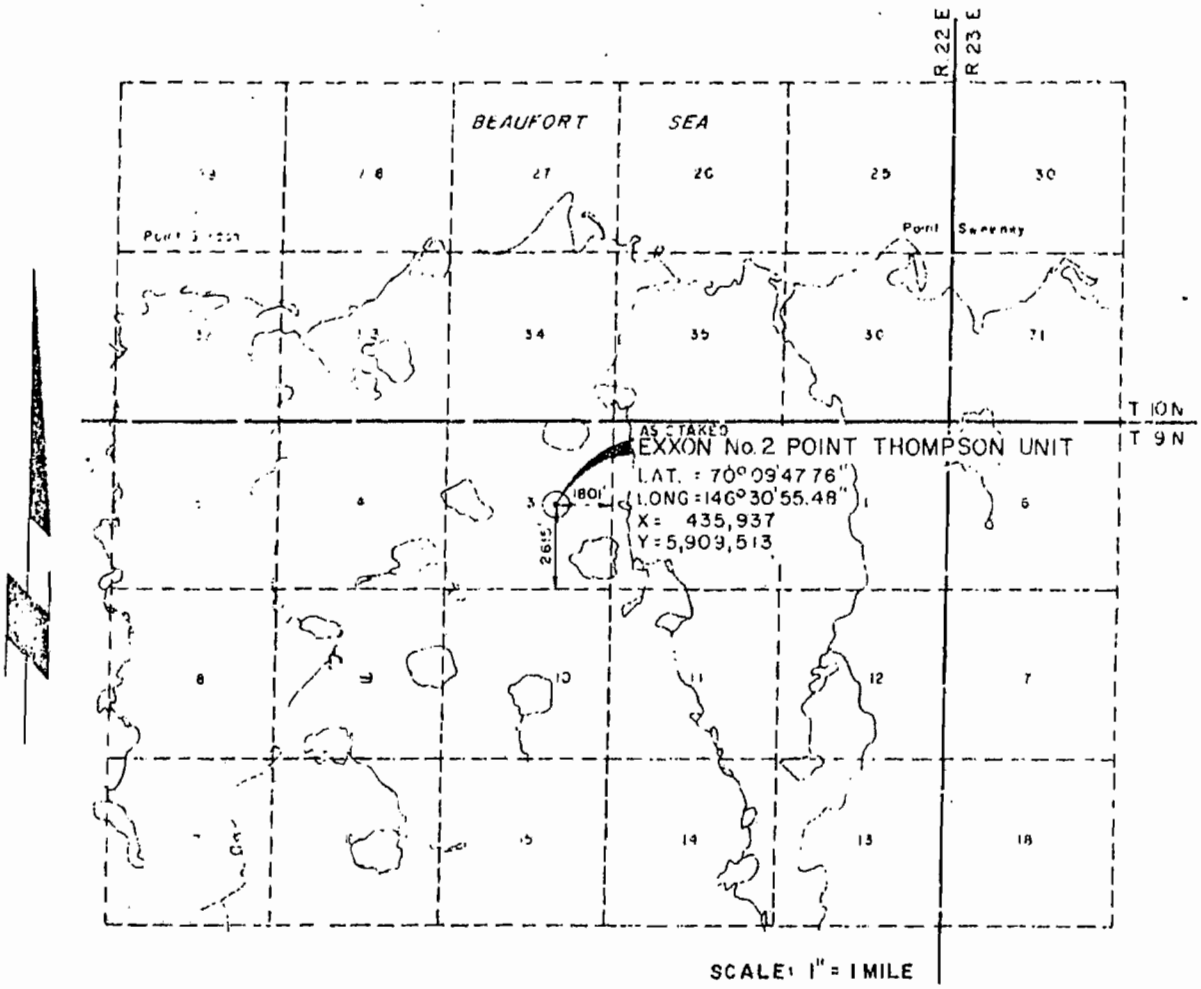
4. Drill Pipe and Drill Collars

   14,000' - 5", 19.5#, Grade E&G
   14,000" - 3-1/2", 13.30#, Grade E drill pipe
      900' - 4-1/8" drill collars

5. 7-1/16", 10,000 psi WP BOP Stack and choke manifold 10,000 psi WP christmas tree and wellhead equipment

6. Fuel - Minimum 200,000 gals. in steel tanks

GLA:jh
12/27/77



CERTIFICATE OF SURVEYOR

I hereby certify that I am properly registered and licensed to practice land surveying in the State of Alaska and that this plat represents a location survey made by me or under my supervision, and that all dimensions and other details are correct.

11 / 1 / 1111
Date

SURVEYOR

AS STAKED

EXXON No. 2
POINT THOMSON UNIT
Located in
SE 1/4 PROTRACTED SEC. 3, T 11 N, R 22 E, U.M., ALASKA
Surveyed for
EXXON COMPANY U.S.A.
Surveyed by
F. M. LINDSEY & ASSOC.
LAND & HYDROGRAPHIC SURVEYORS
2502 West Northern Lights Boulevard Box 4-0[illegible]
Anchorage Alaska

PTU Rec_011370

PLAN OF OPERATIONS
EXXON NO. 2, POINT THOMSON UNIT

RECEIVED
JAN - 3 1978
Div. of Minerals & Energy Mgt.
Anchorage, Ak.

Location: 2615 NSL and 1801' WEL
Section 3, T9N, R22E
Umiat Meridian
North Slope, Alaska

The enclosed plats show all available information regarding:

1. Local and area topography around location. (Exhibit A)
2. Planned winter access roads which are to be constructed. (Exhibit B)
3. Proposed location layout including well position, reserve pit, sanitary waste pits, burning pit, and fuel storage area. (Exhibits C and D)
4. Location of gravel airstrip. (Exhibit C)
5. Location and type of water supply. (Exhibit A)
6. Location of gravel sources. (Exhibit B)

There are no existing facilities (roads, camps, etc.) within a three mile radius of the proposed location.

Natural Setting

The proposed drilling location shown on the attached Exhibit A is situated on a relatively flat area approximately 8000 feet inland from the Beaufort Sea Coastline. The surrounding terrain is low lying coastal plain with scattered small lakes. Surface vegetation is typical tundra type with mosses, lichens, grasses, and sedges being most dominant. Elevation of the proposed drill site is approximately 24 feet above sea level. The proposed well is in the continuous permafrost zone of Northern Alaska. Depth of permafrost in the area under consideration is approximately 1600 feet. The active surface layer or thaw zone is from one to three feet. The ground cover acts as insulation limiting the depth of the active layer. Removal or damage to the ground cover especially in areas of any appreciable slope is a major factor in causing erosion; consequently, every possible effort will be made to preserve the ground cover and protect the surface from unnecessary damage.

Arctic climatic conditions include relatively cold temperatures year round. Strong winds, small annual precipitation, and visibility strongly influenced by the combination of winds and coastal sea ice condition are factors contributing to an extremely harsh environment.

Temperatures vary from a high in the 40 to 60°F range in the summer to a low of -50 to -60°F in winter which, with the chill factor, may reach -100°F or lower

depending on the severity of winds. Surface winds predominate from the east at an average velocity of 12 miles per hour along the coast with a velocity range of 35 to 50 mph associated with winter storms. Total annual precipitation is in the range of 4 to 6 inches which includes 12 to 48 inches of snowfall.

Various species of wildlife exist in the area. During the winter months, when the major part of activities are planned, wolves, wolverines, foxes, polar bears, and caribou may be present. Bird life is limited primarily to the raven and ptarmigan, with waterfowl and most other birds having migrated from the area for the winter.

There are no roads, airstrips, housing, or other facilities in the area. Surface travel, because of the fragile nature of the surface active zone, can only take place during the winter season while the ground, streams, and lakes are frozen. Prudhoe-Deadhorse, located approximately 45 miles west of the location, is the nearest staging area and airstrip with limited facilities for handling cargo and housing personnel. The nearest supply center with limited machine shop facilities is Fairbanks. The only known use of the area by man is the occasional use by oil and gas exploration people, naturalists, government resource and management personnel, and very occasional visits for hunting, trapping, and recreation purposes.

Construction and Operating Plan

A new 78 man camp, recently purchased by Exxon from Frontier Companies, Inc., will be used with Loffland Bros. Rig No. 162 (presently on location at Pt. Thomson No. 1) in the drilling of Pt. Thomson No. 2. The existing Loffland Bros. Camp will continue to be used to house all personnel during the establishment of the new camp and the construction of the site; thereafter it will be removed by Loffland to another location and the new camp will house all personnel. Location work will be started in late November 1977, consistent with State approval, provided freeze-up is sufficient to facilitate movement of heavy equipment to the location using Rolligons. It is planned to move the rubber-tired vehicles over the Rolligon road after a suitable route has been established. The Rolligon route is shown on Exhibit B. The camp at No. 1 Point Thomson Unit drill site will provide housing during the construction of the No. 2 Point Thomson Unit drill site located approximately four miles west of the present location. After completion of the location, the camp and drill rig will be moved in from No. 1 Point Thomson. In order to protect the personnel during the latter move, it may be necessary to utilize a self-sustaining camp unit. Rolligon has such a unit that has a kitchen, electric toilet unit, and generator system that will sustain eight (8) men and provide shelter for more if necessary on an emergency basis. This can be hauled and set up by one Rolligon. Also it is anticipated that for operation during this period, emergency shelters should be provided along the overland route.

The sequence of moving camp and equipment to the area should be as follows:

- o Lay out road route with an empty Rolligon at earliest possible time.
- o Continue camp site at Exxon No. 1 Pt. Thomson Unit, per above.
- o Start construction of ice roads for rig move and gravel haul using equipment currently located at Pt. Thomson Unit No. 1.

- o Move in dozers and other equipment with Rolligons.
- o Move in new camp with Rolligons.
- o With two water trucks haul camp water and repair bad spots in haul roads during construction operations.
- o With gravel from Pt. Thomson Unit No. 1 construct the pad for the new camp at Pt. Thomson No. 2.

Two specific things will be kept in mind when it is desirable to move across the overland route. These are that, in order to protect the tundra, adequate snow cover must be available at the time a move is made, and freezing at the river crossings will be enhanced by removing snow cover and exposing the ice to ambient temperatures.

The Pt. Thomson Unit No. 2 location in Exhibit C will be approximately 700' x 700' overall and with a 5' gravel pad will require approximately 37,000 cubic yards of gravel with the airstrip requiring an additional 15,000 cubic yards. The proposed gravel sources are listed below in the order of planned usage:

- o Approximately 20,000 cubic yards of gravel will be salvaged from the Exxon Pt. Thomson Unit No. 1 site.
- o Remainder from gravel bars in the vicinity of Sections 14, 23, 25 and 26, T9N, R20E above one foot above grade.

The gravel removal and hauling will be accomplished using rubber-tired loaders and belly-dumps for direct movement; however, when necessary, the gravel will be placed in piles for convenient loading using dozers. Movement will be over ice roads constructed of snow and water to protect the existing land surface.

The planned drilling location, as shown on Exhibit C, will accommodate the rig and equipment, camp, and support facilities. The site is to be overlain with sufficient gravel to act as an insulation barrier to prevent thawing of the permafrost during summer operations. Wooden matting will be used under drilling rig and mud pumps for stability and as a further aid in preventing permafrost degradation. All pits are to be diked with gravel. A 200' x 200' x 10' deep reserve pit will be used to retain cuttings, excess drilling fluid, and drainage around the rig. The well will be designed for annular injection before breakup which will permit subsurface disposal of wash and melt water, excess drilling fluid and hydrocarbons. The level in this pit will be kept as low as possible to prevent migration of fluids and provide capacity in case of an emergency such as a severe well control problem. A 60' x 60' x 10' deep burning pit will be located a safe distance from the rig to permit burning of all hydrocarbon test liquids. Fuel storage will be approximately 300,000 gallons in welded steel tanks located within a 60' x 130' x 6' deep, impermeably lined area. All excavated topsoil or tundra from the pits will be stockpiled at an accessible site adjacent to the location in order that the area may be restored as nearly as possible to the original condition at the time of back-fill and clean-up operations.

As stated, Loffland Bros Rig No. 162 has been selected for the drilling operation and will be moved from Exxon's No. 1 Point Thomson Unit. Transportation of the

rig will be over the ice road. Exxon will move the selected rig to the well site location depicted on Exhibit C as soon as the location is ready, to permit spudding the well on or before the first of February 1978. Actual drilling and evaluation operations will require four to five months and plans are to stockpile materials and supplies to permit operation after breakup. After completion of the well, the rig will be left on location until the following winter.

Major supplies of mud, cement, casing, fuel, and miscellaneous drilling supplies will be transported to the location and stockpiled before spring breakup. In this regard, when bulky equipment is to be delivered on short notice or large shipments can be accumulated, it is planned to construct an ocean ice landing strip off the coast for Hercules aircraft. After breakup, personnel and light consumables will be resupplied by fixed wing aircraft utilizing the gravel airstrip described above. All support equipment not required for summer operations will be moved out before breakup.

Camp Facilities

It is planned to activate the 65-man camp system at Exxon's No. 1 Point Thomson Unit as early as possible to provide facilities during location construction. Upon the removal of said camp as noted above Exxon will shift personnel to the new 78 man camp. Sewage and gray water from the kitchen and shower areas will be discharged in separate lines and will be introduced into an approved waste disposal unit installed at the site. Sewage, water, and garbage use and disposition will be as follows:

1. A sewage disposal unit will be installed as outlined in our letter of Dec. 19, 1977, to the Department of Environmental Conservation, a copy of which was placed in your file LO/NS 77-144.

   A 75' x 60' x 10' deep sanitary waste pit is provided for the treated liquids discharge. Also, a 25' x 60' x 10' holding pit is planned to allow diverting the unit discharge in the event of a treating plant upset.

2. Potable water for the camp facilities will be hauled from small lakes near the rig and a large, eight-foot deep lake approximately seven miles southeast of the location. A snow melter will be used to supplement the rig requirements until shallow lakes closer to the rig thaw in the summer. The water will be processed as outlined in said letter of Dec. 19, 1977, to the Department of Environmental Conservation.

3. Burnable garbage and trash will be incinerated through a separate Incineration Unit.

4. Products such as paper, wood, and cardboard will be open burned.

5. Cans, glass, and other items will be compacted and bagged by means of a standard kitchen type compactor and will be stored and buried in the bottom of the burning pit area prior to the time of backfill.

6. Scrap metal, tires, drums, batteries, and other non-burnable items will be hauled to Prudhoe Bay area for further disposition.

Development Plans

If oil is discovered in sufficient quantities to warrant future development, the Prudhoe Bay to Valdez oil pipeline will be the probable marketing outlet from the area. Oil and casinghead gas would be processed through central oil gathering facilities with oil being pipelined to the Trans-Alaska line passing approximately 46 miles to the west.

If commercial quantities of gas are discovered, development of a gas market outlet will be related to studies to market gas from the Prudhoe area.

Surface Protection and Restoration Plan

As previously mentioned, precautions will be taken to protect the surface by not beginning operations until after freeze-up, by use of existing roads and winter trails where possible, and by construction of a graveled well site, storage location, pits, and dikes.

At the completion of the well, the location and adjoining area will be cleared of all waste materials. All pits will be backfilled and leveled in accordance with governmental regulations. After leveling the location, stockpiled topsoil or tundra will be spread over the site as it is available.

Special construction of surface facilities, procedures for drilling, and subsurface equipment are needed to allow for the unique characteristics of the permafrost area. On the surface, the gravel pad and wooden mats are placed under the drilling equipment to reduce heat loss, melting, and settling. For future permanent construction, sufficient gravel or other insulation must be used to prevent thawing and damage to the tundra and facilities during elevated summer temperature. Casing cement used through the permafrost zones is of special composition to reduce possibility of freezing and other casing problems. Casing is run and cemented through the permafrost, and in the event of production or interruption of operation, the casing must be protected by non-freezing fluid.

GLA:jh

12/27/77

EXXON COMPANY, U.S.A.
POST OFFICE BOX 2180 · HOUSTON, TEXAS 77001

EXPLORATION DEPARTMENT
ALASKA/PACIFIC DIVISION
CRANDALL D. JONES
MANAGER

9/26

September 13, 1978

Plan of Further Development
and Operation
Point Thomson Unit
Arctic Slope, Alaska

Mr. Thomas Cook
Director
Division of Minerals and Energy Management
323 East Fourth Avenue
Anchorage, Alaska 99501

Dear Mr. Cook:

By letter dated November 18, 1977, Exxon Corporation, as Unit Operator, filed an application with the Director, Division of Minerals and Energy Management, for approval of a Plan of Further Development and Operation for the Point Thomson Unit, consisting of operations for drilling and testing the proposed Point Thomson Unit No. 2 well. By letter dated May 25, 1978, the Director approved such Plan until January 1, 1979, at which time another Plan is to be due. This Plan was complied with by the drilling and testing of the No. 2 well, which was suspended on August 12, 1978.

On January 12, 1978, Exxon Corporation, as Unit Operator, filed an application with the State Oil and Gas Conservation Committee for a Permit to Drill the proposed Point Thomson Unit No. 3 well, and on the same date a lease Plan of Operations with various exhibits was filed with the Director, Division of Minerals and Energy Management. For your ready reference, a further copy of said Plan and its subsequent amendments are enclosed. On March 9, 1978, your Division approved the Plan, as amended under your reference, LO/NS 78-6, and on July 13, 1978, the Oil and Gas Conservation Committee issued the Permit to Drill.

Article 10 of the Point Thomson Unit Agreement provides in part that from time to time before the expiration of any existing Plan of Further Development and Operation, the Unit Operator shall submit

for the approval of the Director a Plan for an additional specified period for the development and operation of the unitized land.

Exxon Corporation, as Unit Operator of the Point Thomson Unit, hereby requests that you consider the enclosed Plan of Operations, with its various amendments, as its proposed Plan of Further Development and Operation specified in said Article 10, such Plan, upon approval by you, to constitute the further drilling and operating obligations of the Unit Operator under the Unit Agreement from the date of its approval by you until January 1, 1980, at which time another Plan shall be due.

Very truly yours,

EXXON CORPORATION
Unit Operator

Enclosures:
1. Plan of Operations
2. Amendment dated January 20, 1978
3. Amendment dated August 10, 1978

al
10/29

EXXON COMPANY, U.S.A.
POST OFFICE BOX 2180 - HOUSTON, TEXAS 77001

EXPLORATION DEPARTMENT
ALASKA/PACIFIC DIVISION

CRANDALL D. JONES
MANAGER

October 18, 1979

Third Plan of Further Development
and Operation
Point Thomson Unit
Arctic Slope, Alaska

Mr. Thomas Cook
Director, Division of Minerals and
Energy Management
323 East Fourth Avenue
Anchorage, Alaska 99501

Dear Mr. Cook:

Exxon Corporation as Unit Operator by letter dated November 18, 1977 filed an application with the Director, Division of Minerals and Energy Management, for approval of a Plan of Further Development and Operation for the Point Thomson Unit, consisting of operations for drilling and testing the proposed Point Thomson Unit No. 2 well. By letter dated May 25, 1978, the Director approved such Plan until January 1, 1979, at which time another Plan was to be due. This Plan was complied with by the drilling and testing of the No. 2. well, which was suspended on August 12, 1978.

On January 12, 1978, Exxon Corporation, as Unit Operator, filed an application with the State Oil and Gas Conservation Committee for a Permit to Drill the proposed Point Thomson Unit No. 3 well, and on the same date a lease Plan of Operations with various exhibits was filed with the Director, Division of Minerals and Energy Management. On March 9, 1978, your Division approved the Plan, as amended under your reference, LO/NS 78-6, and on July 13, 1978, the Oil and Gas Conservation Committee issued the Permit to Drill. This plan was complied with by the drilling and testing of Well No. 3. Operations were concluded with the removal of miscellaneous drilling equipment July 21, 1979. A second Plan of Further Development and Operation dated September 13, 1978 was filed and subsequently approved October 9, 1978 for the period until January 1, 1980.

Article 10 of the Point Thomson Unit Agreement provides in part that from time to time before the expiration of any existing Plan of Further Development and Operation, the Unit Operator shall submit for the approval of the Director a Plan for an additional specified period for the development and operation of the unitized land.

Exxon Corporation, as Unit Operator of the Point Thomson Unit, hereby requests that you consider the enclosed Plan of Operations, as its proposed Third Plan of Further Development and Operation specified in said Article 10, such Plan, upon approval by

you to constitute the further drilling and operating obligations of the Unit Operator under the Unit Agreement from the date of its approval by you until January 1, 1981, at which time another Plan shall be due.

Sincerely,

EXXON CORPORATION
Unit Operator

By: Crandall D. Jones

OCR:cb

Enclosure

PTU Rec_011307

EXXON COMPANY, U.S.A.
POST OFFICE BOX 2180 · HOUSTON, TEXAS 77001

EXPLORATION DEPARTMENT
ALASKA/PACIFIC DIVISION

CRANDALL D. JONES
MANAGER

October 18, 1979

Point Thomson Unit No. 4
Section 29, T10N, R22E, U. M.
ADL 47563
Arctic Slope, Alaska

LO/NS 79-155

Mr. Tom C. Cook
Director, Division of Minerals and
Energy Management
Department of Natural Resources
State of Alaska
323 East 4th Avenue
Anchorage, Alaska 99501

Dear Mr. Cook:

Exxon Corporation filed an application with the Alaska Oil and Gas Conservation Commission for a permit to drill the subject well together with our check in the amount of $100.00 in payment of the required permit fee. It will be drilled as a directional sidetrack to a bottom hole location on the same lease, ADL 47563.

Additionally, and in accordance with the requirements of the subject oil and gas lease and applicable regulations, we submit the following:

(1) A plan of operations describing the drilling pad, rig supply, water supply, waste and sewage disposal and pollution prevention.

(2) Plats showing the location and vicinity of the pad and well. scale 1"=1 mile.

Exhibit A - Location and area topography plat showing pad layout. Exxon No. 4. Point Thomson Unit, scale 1"=2000'.

Exhibit B - Ice Road and Rolligon Haul Route.

As stated herein, it is our plan, State approval permitting, to commence initial operations about mid December, 1979; rig move in and actual drilling operations are to be commenced in mid February, 1980, and conclude five to six months later, and the rig removed the following winter.

Sincerely,

OCR:cb
Enclosures

C: EPA Region X-Mr. Danford G. Bodien, P. E.
Alaska Oil & Gas Conservation Commission-Mr. Hoyle H. Hamilton
U. S. Corps of Engineers-Lt. Colonel Lee Roy Nunn, Jr.

PTU Rec_011308

PLAN OF OPERATIONS
POINT THOMSON UNIT, EXXON NO. 4

Surface Location: 2700' NSL and 2900' WEL
Section 32, T10N, R22E
UPM, North Slope, Alaska

Bottom Hole Location: 850' SNL and 3860' WEL
Section 29, T10N, R22E
UPM, North Slope, Alaska

Attached Exhibits show the following:

Local and area topography around location (Exhibit A).

Planned winter access roads which are to be constructed and gravel sources (Exhibit B).

Proposed location layout including well position, reserve pit, sanitary waste pits, burning pit, and fuel storage area (Exhibit A).

Location and type of water supply (Exhibit A).

Natural Environment

The proposed drilling location shown on the attached Exhibit A lies approximately three miles west of Point Thomson Unit Exxon No. 2 and is situated 800 feet inland from the Beaufort Sea coastline. The surrounding terrain is low lying coastal plain with mud flats and scattered small lakes. Surface vegetation is typical tundra with mosses, lichens, grasses, and sedges being most dominant. Elevation of the proposed drill site is approximately 8.3 feet above sea level. The proposed well is in the continuous permafrost zone of Northern Alaska where the depth of permafrost is approximately 1,600 feet and the active surface layer or thaw zone is from one to three feet. Since the ground cover acts as insulation limiting the depth of the active layer, removal or damage to the ground cover especially in areas of any appreciable slope is a major factor in causing erosion. Consequently, every possible effort will be made to protect the surface from unnecessary damage.

There are no established roads, airstrips, housing, or other facilities in the area and, because of the fragile nature of the terrain, heavy vehicular traffic can operate only during the winter season while the ground, streams, and lakes are frozen. Prudhoe-Deadhorse, located approximately 41 miles west of the location, is the nearest staging area and airstrip with facilities for handling cargo and housing personnel.

Arctic climatic conditions include relatively cold temperatures year round. Strong winds, small annual precipitation, and visibility strongly influenced by the combination of winds and coastal sea ice condition are factors contributing to an extremely harsh environment.

Temperatures vary from a high in the 40 to 60°F range in the summer to a low of -50 to -60°F in the winter which, with the chill factor, may reach -100°F or lower depending on the severity of winds. Surface winds are predominantly from the east at an average velocity of 12 miles per hour along the coast with a velocity range of 35 to 50 mph associated with winter storms. Total annual precipitation is in the range of 4 to 6 inches which includes 12 to 48 inches of snowfall.

Various species of wildlife exist in the area. During the winter months, when the major part of activities are planned, wolves, wolverines, foxes, polar bears, and caribou may be present. Bird life is limited primarily to the raven and ptarmigan, with waterfowl and most other birds having migrated from the area for the winter.

Construction and Operating Plan

A 78 man camp owned by Exxon will be used with Loffland Rig No. 162 in the drilling of Point Thomson Unit Exxon No. 4. The camp and rig are presently located at Point Thomson Unit Exxon No. 3 site, 8-1/2 miles east of the proposed location.

Location work will be started in mid-December 1979, contingent upon State and Federal approval, provided freeze-up is sufficient to facilitate movement of heavy equipment to the location using Rolligons. It is planned to move the rubber-tired vehicles over the Rolligon road after a suitable route has been established. The tentative Rolligon route is shown on Exhibit B. It is currently planned to utilize a self-sustaining construction camp until Exxon's camp at Point Thomson Exxon No. 3 can be moved and activited to provide housing during the construction of the drill site. After completion of the location, the drill rig will be moved in. In order to protect personnel during the latter move, it may be necessary to utilize the self-sustaining camp unit. Also it is anticipated that for operation during this period, emergency shelters may be provided along the overland route.

The sequence of moving camp and equipment to the area should be as follows:

* Lay out road route with an empty Rolligon at earliest possible time.
* Activate the self-sustaining camp site at Exxon No. 4 Point Thomson Unit.
* Construct ice roads for water and gravel haul.
* Move in earthmoving equipment.

* Commence pad construction.
* Move in the Exxon camp at suitable time thereafter.
* Move in additional earthmoving equipment (if required) and finish pad.
* Move rig.
* Water trucks will be used to complete and maintain haul roads during construction operations.

The Point Thomson Unit Exxon No. 4 location shown in Exhibit A will be approximately 730' x 710' overall and, with a five foot gravel pad, will require approximately 60,000 cubic yards of gravel. The proposed gravel source is from gravel bars in the vicinity of Sections 4 and 5, T9N, R22E, UPM, Sections 32 and 33, T10N, R22E, UPM, Sections 3, 10 and 11, T9N, R21E, UPM, and Sections 11, 14, 23, 25, 26 and 36, T9N, R20E, UPM. In addition it may be necessary to reclaim gravel from the drill site of Point Thomson Unit, Exxon No. 2 located in Section 3, T9N, R22E, UPM. Locations are shown on Exhibit B.

Gravel removal and hauling will be accomplished using rubber-tired loaders and belly-dumps for direct movement; however, when necessary, the gravel will be placed in piles for convenient loading. Movement will be over sea ice roads along the coast and ice roads constructed of snow and water to protect the existing land surface. Only the exposed gravel deposits above the water line will be removed to ensure that no holes remain at the borrow area which could cause fish or animal entrapment after spring flooding.

The planned drilling location will accommodate the rig and equipment, camp, and support facilities. The site is to be overlain with sufficient gravel to act as an insulation barrier to prevent thawing of the permafrost during summer operations. Wooden matting will be used under the drilling rig and mud pumps for stability and as a further aid in preventing permafrost degradation. All pits are to be diked. A 190' x 190' x 10' deep reserve pit will be used to retain cuttings, excess drilling fluid, and drainage around the rig. The level in this pit will be kept as low as possible to prevent migration of fluids and provide capacity in case of an emergency such as a severe well control problem. The well will be designed for annular injection which will permit subsurface disposal of wash and melt water, excess drilling fluid, and well test liquids. A 60' x 60' x 6' deep burning pit will be located a safe distance from the rig to permit emergency burning of hydrocarbon test liquids. Fuel storage will be approximately 300,000 gallons in welded steel tanks located within a 60' x 130' x 6' deep, plastic lined pit area. All excavated topsoil or tundra from the pits will be stockpiled at an accessible site adjacent to the location in order that the pits may be restored as nearly as possible to the original condition at the time of back-fill and clean-up operations as required by applicable regulations.

An ice landing strip approximately 2,000 feet long will be constructed with snow and water to provide air transportation during winter operations. Helicopters will be the primary mode of transportation during summer operations.

The Loffland Rig 162 will be moved in as soon as pad is ready from Point Thomson Unit Exxon No. 3 over an ice road. Actual drilling and evaluation operations will require six to seven months and plans are to stockpile materials and supplies to permit operation after breakup. After completion of the well, the rig may be left on location until the following winter.

Major supplies of mud, cement, casing, fuel, and miscellaneous drilling supplies will be transported to the location and stockpiled before spring breakup. If bulky equipment must be delivered on short notice or large shipments can be accumulated, an ocean ice landing strip off the coast for Hercules aircraft may be constructed. After breakup, personnel and light consumables will be transported by helicopters or other State approved means. All support equipment not required for summer operations will be moved out before breakup.

Camp Facilities

An Exxon owned 78 man camp for rig personnel will be moved in from Point Thomson Unit Exxon No. 3. Sewage and gray water from the kitchen and shower areas will be discharged in separate lines and will be introduced into an approved waste disposal unit installed at the site. Sewage, water, and garbage use and disposition will be as follows:

1. Sewage Disposal

   A Steel Fabricators, Inc. biological sewage disposal unit, owned by Exxon, which complies with the requirements of the State of Alaska and the EPA for water quality in the area of operation will be installed.

   A 75' x 60' x 10' deep sanitary waste pit is provided for the treated liquids discharge. Also, a 25' x 60' x 10' holding pit is planned to allow diverting the unit discharge in the event of a treating plant upset.

2. Water Supply

   Potable water for the camp facilities will be hauled from small lakes near the rig and a large, eight-foot deep lake in Sections 22 and 23, T9N, R23E, UPM, approximately nine miles east-southeast of the location. A snow melter will be used to supplement the rig requirements until shallow lakes closer to the rig thaw in the summer. The water will be processed through a Steel Fabricators, Inc. water treating unit before use in the camp. Additionally, gray water from the camp will be used for mud and rig wash water.

3. Garbage and Waste Disposal

Burnable garbage and wastes will be disposed of in a McNaulin-Goder Model-1510 trash incinerator unit. Some of the more readily combustible products, such as paper, wood, and cardboard, may also be open burned. Noncombustible wastes, such as scrap metal, tires, batteries, and drums, will be hauled to Deadhorse and final disposal will be in accordance with State Waste Management requirements.

Development Plans

If oil is discovered in sufficient quantities to warrant future development, the Prudhoe Bay to Valdez oil pipeline will be the probable marketing outlet from the area. Oil and casinghead gas would be processed through central oil gathering facilities with oil being pipelined to the Trans-Alaska line passing approximately 41 miles to the west.

If commercial quantities of gas are discovered, development of a gas market outlet will be related to studies to market gas from the Prudhoe area.

Surface Protection and Restoration Plan

As previously mentioned, precautions will be taken to protect the surface by not beginning operations until after freeze-up and by using snow and ice roads during winter.

At the completion of the well, the location and adjoining area will be cleared of all waste materials. All pits will be backfilled and leveled.

Special procedures for drilling and subsurface equipment are required by the unique characteristics of the permafrost area. Casing cement used through the permafrost zones is of special composition to reduce possibility of freezing and other casing problems. Casing is run and cemented through the permafrost, and in the event of production or interruption of operation, the uncemented casing must be protected by the use of non-freezing fluid.

TLP:JGW:et
10/24/79

CONTINGENCY PLAN
POINT THOMSON UNIT EXXON NO. 4

The objective of this plan is to list major operating and contingency requirements to ensure a safe and efficient operation throughout the drilling activity.

The location has been designed to provide containment of any drilling operation effluents that could be considered as pollutants. The 190' x 190' x 10' deep reserve pit will receive and contain all drill cuttings, excess mud material, wash and drain water from around the rig, and have the capacity for use in the event of a severe well control problem. Sewage and kitchen waste water will be processed through a Steel Fabricators, Inc. biological treating system with excess sludge being incinerated and the disinfected liquid contained in a sanitary waste pit; a separate sanitary holding pit is provided to divert the treating plant effluent in the event of a system malfunction. A burning pit is located clear of the rig to permit flaring of gas during production testing. The burning pit may also be used for the open burning of wood, paper, and other burnable trash, and for the burning of well fluids in emergencies. Production test fluids will normally be produced to tanks and disposed of by subsurface injection. All fuel will be stored in steel tanks; primary fuel tanks will be located in a plastic membrane lined fuel storage area.

An important feature of the drilling plan is the provision of annular injection capability for subsurface injection of waste fluids. Two injection zones will be provided as follows. After setting and cementing the 20-inch conductor at 2200 feet (below the permafrost zone) 17-1/2-inch surface hole will be drilled to 3400 feet and 13-3/8-inch casing set and cemented back to about 2700 feet. The interval from 2200 to 2700 feet will then be available for injection while the 12-1/4-inch intermediate hole is drilled to the expected pressure transition zone of about 12,000 feet. Prior to setting intermediate casing the 13-3/8 x 20 inch annulus will be cemented through full opening sleeves at 2550 or 2700 feet. After the 9-5/8-inch intermediate casing is set and cemented back to about 7000 feet, the interval from 3400 to 7000 feet will be used for injection for the duration of drilling. Excess mud, well waste waters and collected well test fluids will be injected in the zones provided. Liquid levels in the sanitary waste pit, sanitary holding pit, and burning pit will be maintained below ground level after breakup to prevent migration of any liquid out of the pits. The reserve pit will be maintained at a minimum level at all times to provide for containment of well fluids in the event of an upset. All pits will be pumped out to a minimum level and waste water injected into the injection zone before abandoning the location. The entire operation is planned so that no fluids associated with the operation will be discharged on the surface outside the location.

The drilling contractor will be required to develop a comprehensive SPCC Plan to prevent pollution as a result of any drilling rig operations. In addition to drip pans under the engines and rig machinery, the rig area will be located within a drainage system to direct any rig waste into the reserve pit. All oils, greases, and chemicals are to be stored within the rig drainage area. Good housekeeping will be stressed on all parts of the location with emphasis on minimizing contamination of the peripheral drainage from the pad. Any minor spill of oil will be collected using sorbent material for disposal in the incinerator.

Personnel safety and well control are the uppermost factors in well design and operational planning. Sufficient data are available to plan the well for evaluation of the geologic objectives, provide for subsurface disposal of waste water, and conduct a safe drilling operation. Advanced abnormal pressure technology will be used to predict and detect changes in formation pressure to permit adjusting the casing and drilling fluid program to control the well. Emphasis will be placed on well control equipment and procedures to permit circulating out a formation "kick" in an orderly manner if it should be necessary and any hydrocarbons in the influx will be diverted to the burning bit and burned. In the event of an unplanned upset resulting in uncontrolled well flow, the following basic procedures will be followed:

1. Divert flow to burning pit as the first defense against a spill. Switch the flow to the reserve pit when the safe working level is approached in the burning pit. The design capacity of the reserve pit is 64,000 barrels which will be maintained at a maximum, practical working capacity at all times by keeping mud and fluids use at a minimum and pumping fluids into the annular injection well whenever possible.

2. Prepare plans for drilling a relief well from an alternate location.

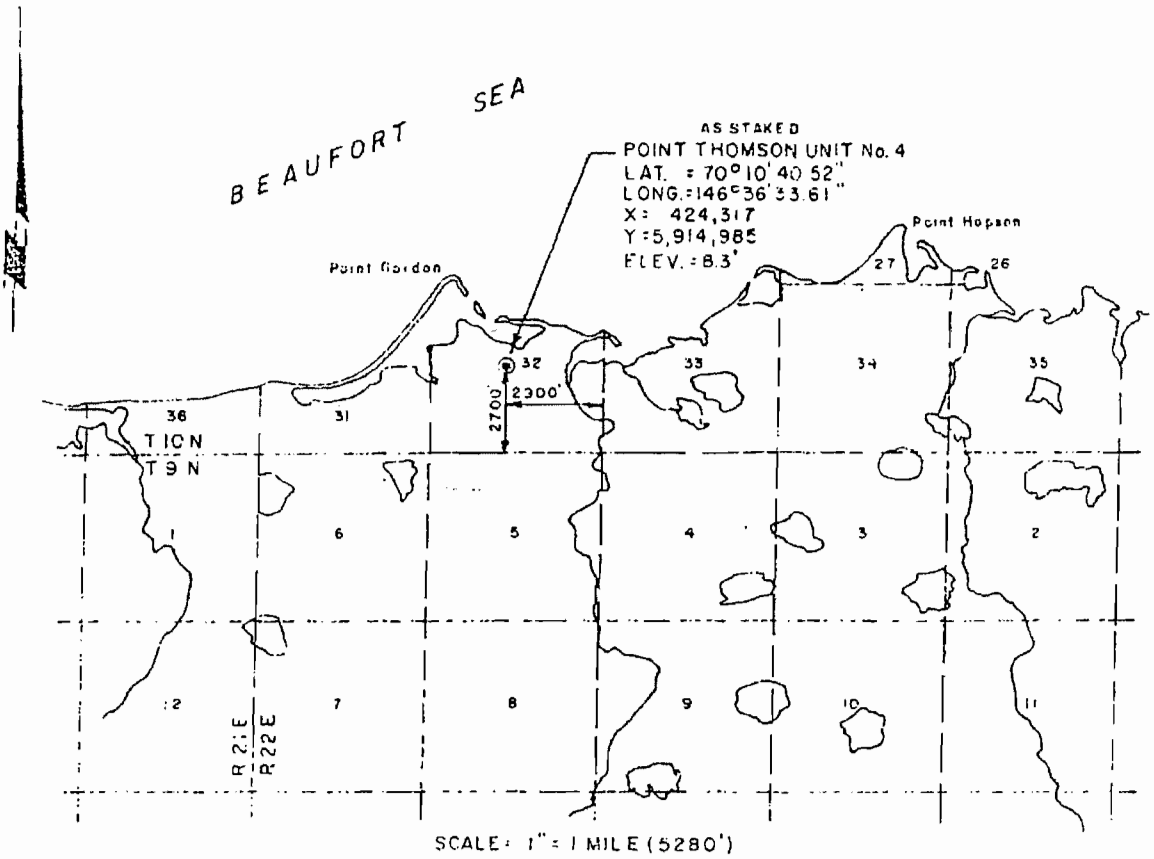
3. The well will be ignited, if the situation warrants, only after discussion with proper governmental agencies and Exxon management.

Major supplies of mud, cement, casing, fuel, and miscellaneous supplies will be transported over winter roads or flown directly to location. After breakup, light consumables will be transported by helicopter or other State approved means. A Rolligon will be on location for any local movement of water or fuel as permitted by land conditions.

A Catastrophe Organization consisting of specifically designated personnel will be activated to cope with an emergency such as an out-of-control drilling well. The Drilling Section of the Catastrophe Organization is responsible for performing the well control function which includes all surface well control procedures as well as plans for a relief well. Immediate action will be taken to minimize environmental damage and institute cleanup operations.

The basic relief well plan involves construction of another surface location approximately 3,000 feet west of the original well's surface location. The most likely time for a severe well control problem to develop would be before May, prior to setting 9-5/8-inch protection casing, which would allow sufficient time to construct the location and spud the relief well before breakup. The planned relief well location would permit the relief wellbore to penetrate the flowing zone near the out-of-control well with a 7,000 foot or less horizontal displacement. In the event insufficient time is available to initiate the relief well, a rig could be mobilized using barges after breakup to drill a relief well. Both relief well plans are predicated on emergency approval of all phases of the operation by all state and federal regulatory agencies.

TLP:JGW:et
10/24/79



CERTIFICATE OF SURVEYOR

I hereby certify that I am properly registered and licensed to practice land surveying in the State of Alaska and that this plat represents a location survey made by me or under my supervision, and that all dimensions and other details are correct.

Oct 11, 1979
Date

Surveyor

AS STAKED
POINT THOMSON UNIT No 4
Located in
NE 1/4 SEC. 32, T10N, R22E, UMIAK
Surveyed for
EXXON COMPANY U.S.A.
Surveyed by
F. M. LINDSEY & ASSOC.
LAND & HYDROGRAPHIC SURVEYORS

PTURec_011316

EXXON COMPANY, U.S.A.
POST OFFICE BOX 2180 · HOUSTON, TEXAS 77001

EXPLORATION DEPARTMENT
ALASKA/PACIFIC DIVISION

CRANDALL D. JONES
MANAGER

October 18, 1979

Point Thomson Unit No. 4
Section 29, T10N, R22E, UM
ADL 47563
Arctic Slope, Alaska

Mr. Hoyle H. Hamilton
Chairman, Alaska Oil and Gas Conservation Commission
State of Alaska
3001 Porcupine Drive
Anchorage, Alaska 99504

LO/NS 79-155

Dear Mr. Hamilton:

Exxon Corporation submits the following in regard to the captioned well:

(1) State of Alaska, Oil and Gas Conservation Committee Permit to Drill, Form 10-401, in triplicate with triplicate copies of the location plat and contingency plan.

(2) Exxon Check No. FC 50998, dated October 18, 1979, in the amount of $100.00 in payment of the required permit fee.

Concurrently with this application, we are filing with the State Division of Energy and Minerals Management the following:

(1) A plan of operation describing the drilling pad, rig, supply, waste and sewage disposal, and pollution prevention.

(2) Vicinity and location plats.

It is our plan to commence work in mid December, 1979; the drilling rig is to be on location and drilling operations commenced in mid February, 1980, and will be completed in five to six months. An application dated October 18, 1979 was submitted to the U. S. Army Corps of Engineers to conduct operations in the navigable waters of the Beaufort Sea for the drilling of Well No. 4.

Sincerely,

C. D. Jones

OCR:cb
Attachments
c: EPA Region X-Attention: Mr. Danford G. Bodien, P. E
U. S. Corps of Engineers -Attention: Lt. Colonel Lee Roy Nunn, Jr.

Form 10-401
REV. 1-1-71

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

STATE OF ALASKA

OIL AND GAS CONSERVATION COMMITTEE

PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [ ] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Exxon Corporation

3. ADDRESS OF OPERATOR: P. O. Box 2180, Houston, Texas 77001

4. LOCATION OF WELL
At surface: 2,700' NSL and 2,900' WEL, Sec. 32, T10N, R22E, U.M.
At proposed prod. zone: (BHL: 850'SNL 3860'WEL) 2000' SNL and 3,700' WEL, Sec. 29, T10N, R22E, U.M.

5.

6. LEASE DESIGNATION AND SERIAL NO.: ADL 47563

7. IF INDIAN, ALLOTTEE OR TRIBE NAME:

8. UNIT FARM OR LEASE NAME: Point Thomson Unit

9. WELL NO.: Exxon No. 4

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., (BOTTOM HOLE OBJECTIVE): Sec. 29, T10N, R22E, U.M.

12.

13. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 45 miles East of Deadhorse, Alaska

14. BOND INFORMATION: TYPE Oil & Gas Conservation Surety and/or No. 5134049 State Bond File B-1-4 Amount $100,000.00

15. DISTANCE FROM PROPOSED * LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drg. unit, if any): 850' SNL of Lease (BHL)

16. No. OF ACRES IN LEASE: 2560(each lease)

17. NO. ACRES ASSIGNED TO THIS WELL: -

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DRILLING, COMPLETED, OR APPLIED FOR, FT.: Approx. 13,200' West of Exxon #2 Pt. Thomson

19. PROPOSED DEPTH: 14,470' TVD 16,725' MD

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, CR, etc.): Approx. 8.3' G.L.

22. APPROX. DATE WORK WILL START: Location:12-15-79 Spud:3-1-80

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	GRADE	SETTING DEPTH	Quantity of cement
40"	36"x32"x28	Insulated/Refrigerated		85'	To Surface.
26"	20"	94	H-40	2,200'	To Surface.
17-1/2"	13-3/8"	72	N-80	3,400'	(see "Subsurface Injection" below)
12-1/4"	9-5/8"	47	Soo95	± 12,000'	Approx. TOC @ 7,000'
8-1/2"	7"	32/35	P110	± 16,725'	500' above potential hydrocarbon zone

Subsurface Injection: It is planned to drill the 26" hole to 2,200' (below predicted permaforst) and cement 20" casing to surface with permafrost cement. 17-1/2" hole will then be drilled to 3,400'. A 13-3/8" string of casing with FO cementing tools at 2,700' and 2,550' will be run to 3,400' and cemented with top of cement at approximately 2,700'. Sands between 2,200' and 2,700' will provide a wastewater injection zone. While drilling the 12-1/4" hole for 9-5/8" casing, wastewater and other surplus fluids will be injected into these sands through the 20" x 13-3/8" annulus. Before the 9-5/8" casing is run into the hole, a second stage cement job will seal the 13-3/8" casing to surface with permafrost cement. It is planned to set the 9-5/8" casing into the pressure transition

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program.

(cont'd. reverse side)

24. I hereby certify that the Foregoing is True and Correct

SIGNED Crandall D. Jones DATE October 18, 1979 TITLE Manager, Alaska/Pacific Division

(This space for State office use)

CONDITIONS OF APPROVAL, IF ANY:

SAMPLES AND CORE CHIPS REQUIRED	MUD LOG	OTHER REQUIREMENTS
[ ] YES [ ] NO	[ ] YES [ ] NO	
DIRECTIONAL SURVEY REQUIRED	A.P.I. NUMERICAL CODE	
[ ] YES [ ] NO		

PERMIT NO. _____ APPROVAL DATE _____

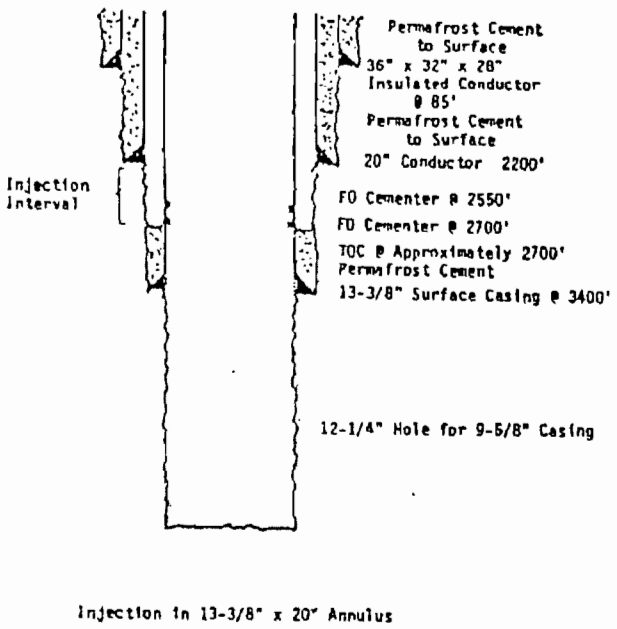
APPOVED BY _____ TITLE _____ DATE _____

*See Instruction On Reverse Side

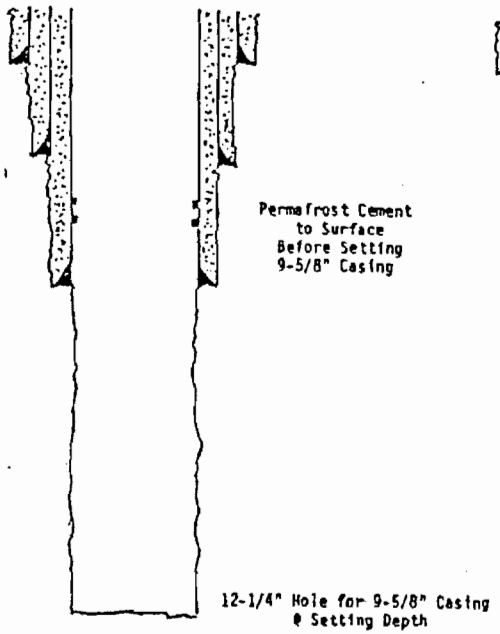
PTU Rec_011318

Point Thomson No. 4

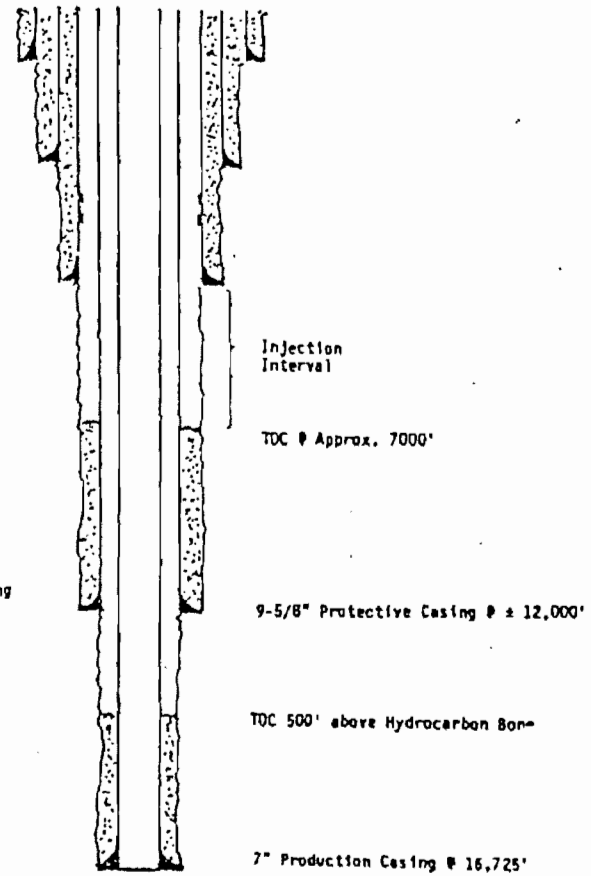
WELLBORE SKETCH



Injection in 13-3/8" x 20" Annulus



Second Stage Cementing of
20" x 13-3/8" Annulus



Wellbore Sketch
@ TD
Before Testing

PTU Rec_011319

Exc. 000095

EXXON COMPANY, U.S.A.
POST OFFICE BOX 2180 - HOUSTON, TEXAS 77001

EXPLORATION DEPARTMENT
ALASKA/PACIFIC DIVISION

CRANDALL D. JONES
MANAGER

October 18, 1979

Point Thomson Unit No. 4
Section 29, T10N, R22E, UM
ADL 47563
Arctic Slope, Alaska

LI/NS 79-155

Mr. Ernst W. Mueller
Commissioner
Department of Environmental Conservation
State of Alaska
Pouch O
Juneau, Alaska 99801

Dear Mr. Mueller:

Exxon's application to drill the subject well was filed today with the Alaska Oil and Gas Conservation Commission; the related plan of operation was filed with the Division of Minerals and Energy Management. This well will be drilled directionally to a bottom hole location within lease ADL 47563. The plan of operation describes proposals for potable water supply, waste and sewage disposal, pollution prevention and supply programs. Highlighted below are the details of the proposed operation which we believe will be of principal concern to your department and for which we respectfully request your approval.

(1) Water Supply

Water for the camp facilities will be hauled from small nearby lakes and a large eight foot deep lake in sections 22 & 23, T9N, R23E (nine mile ESE). A snow melter will be used (as necessary) to supplement the rig water requirement. The water will be processed through a treating unit which meets State of Alaska Department of Conservation requirements.

(2) Sewage Disposal Permit

Sewage and gray water discharged from the camp will be collected separately and will be treated through a Steel Fabricators, Inc. biological sewage disposal unit which complies with State of Alaska requirements. Effluent from the sewage treating unit will be used for rig water or injected into the 7" x 13-3/8" casing annulus. We request that Waste Disposal Permit (Liquid Waste) No. WPC 78-3 be extended for Well No. 4.

(3) Garbage and Solid Waste Disposal Permit

Burnable garbage and wastes will be disposed of in a McNaulin-Gooder Model 1510 incinerator unit. Some of the more readily combustible products, such as paper, wood, and cardboard, may also be open burned on the island. Non-combustible wastes, such as scrap metal, tires, batteries, and drums will be backhauled to Deadhorse and final disposal will be in accordance with State Waste Management requirements. We request that Waste Disposal Permit (Solid Waste Management) No. 45-77 be extended.

(4) Air Quality Control Permit

This well is being drilled for the exploration of oil and gas. None of the equipment at the site is of a size requiring an Air Quality Control Permit according to 18 AAC 50; however, Exxon requests such a permit to open burn hydrocarbon test liquids into a flare pit. We request that Air Quality Control Permit to Operate/Open Burn No. AQL 419 B be extended.

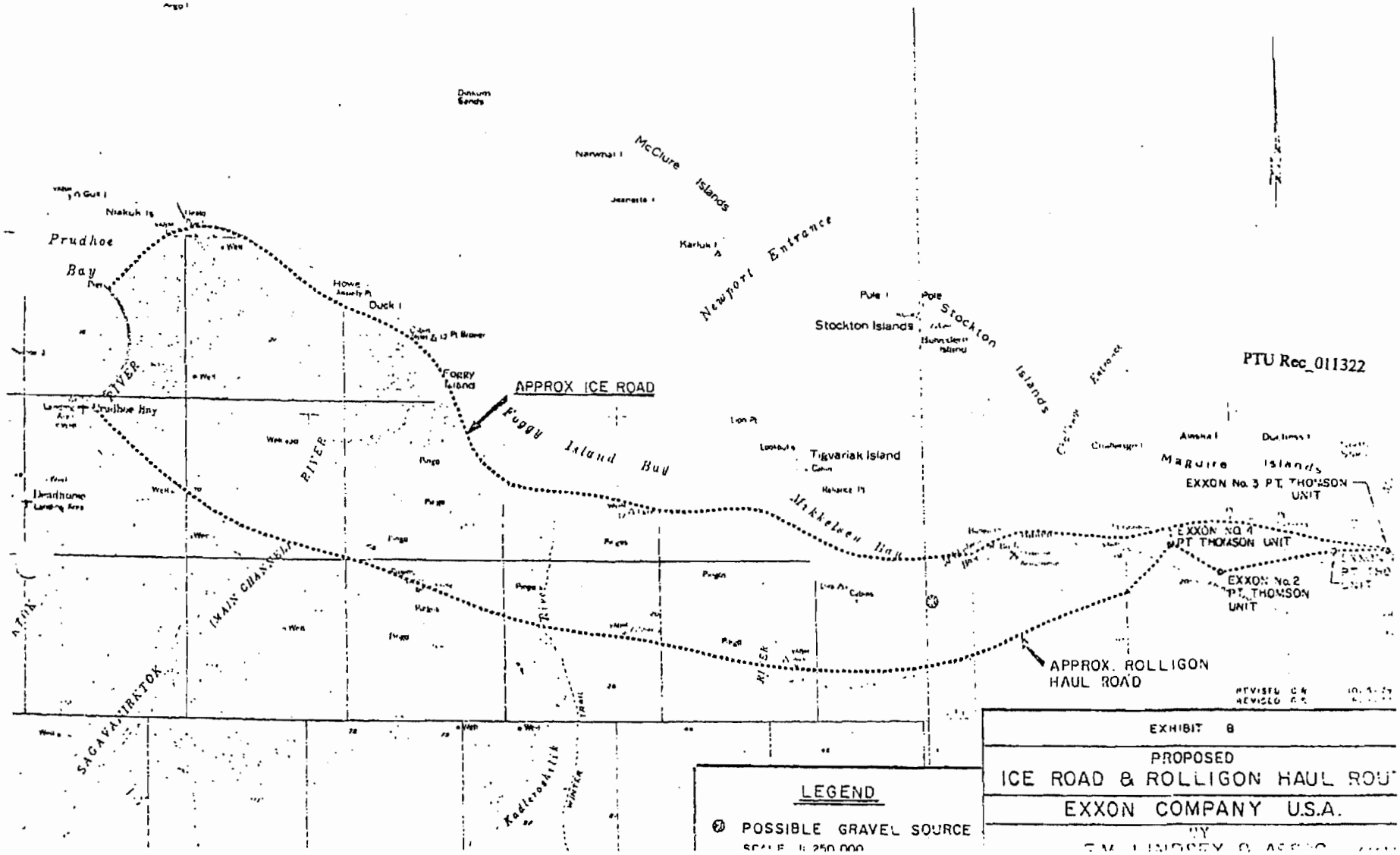
In the event any further information or materials are required in your processing of this request, please contact either Mr. Robert Riddle at 907/276-4552 or Mr. O. C. Rath at 713/656-1952. The early approval of the above features of our plan or operation will be greatly appreciated.

Sincerely,

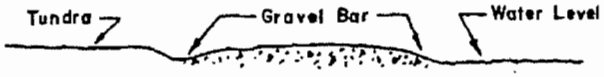
OCR:cb

Enclosures

c: EPA Region X - Mr. Danford G. Bodien, P. E.
U. S. Corps of Engineers - Lt. Colonel Lee Roy Nunn, Jr.

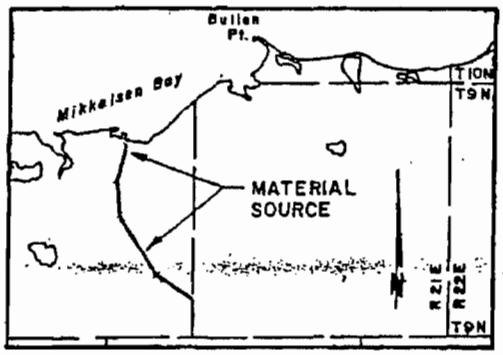

Prudhoe Bay
Niakuk Is
Duck I
Howe
McClure Islands
Narwhal I
Jeanette I
Karluk I
Newport Entrance
Pole I
Pole
Stockton Islands
Stockton Islands
Entrance
PTU Rec_011322
APPROX ICE ROAD
Foggy Island Bay
Foggy Island
Tigvariak Island
Mikkelsen Bay
Maguire Islands
Almond I
Duchess I
EXXON No. 3 PT. THOMSON UNIT
EXXON No. 4 PT. THOMSON UNIT
EXXON No. 2 PT. THOMSON UNIT
PT. THO UNIT
APPROX. ROLLIGON HAUL ROAD
REVISED
REVISED
EXHIBIT B
PROPOSED
ICE ROAD & ROLLIGON HAUL ROU
EXXON COMPANY U.S.A.
BY
LEGEND
POSSIBLE GRAVEL SOURCE
SCALE 1: 250,000
DRAWN
CHECKED
APPROVED
DATE
SCALE
JOB NO.
DRAWING NO.
Sagavanirktok River
Kadleroshilik River
Winter Trail

Exc. 000098



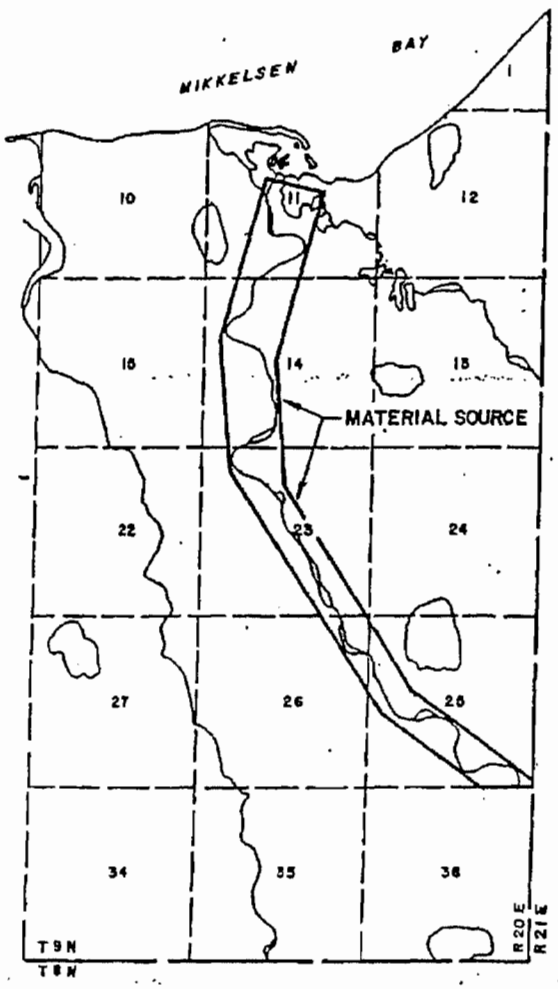
CROSS SECTION
No Scale

GRAVEL WILL NOT BE REMOVED BELOW THE ONE FOOT LEVEL, ABOVE MEAN WATER LEVEL.



VICINITY MAP
Scale 1:250,000

Topo taken from U.S.G.S. Flaxman Island & Beechey Point



NOTE: APPROXIMATELY 55,000 CUBIC YARDS OF GRAVEL TO BE REMOVED FROM EXISTING PAD LOCATIONS AND/OR GRAVEL SOURCES INDICATED, FOR USE OF PAD CONTRUCTION AT POINT THOMSON No. 4 LOCATION.

PROPOSED GRAVEL SOURCE

IN: W 1/2 SEC. 11, T 9 N, R 20 E, UM, AK.
NEAR: MIKKELSEN BAY, NORTH SLOPE
APPLICATION BY: EXXON COMPANY U.S.A.
SHEET 2 OF 2 DATE: OCT. 11, 1979

PTU Rec 011323

Exc. 000099

January 5, 1979

DECISION

Exxon Company, U.S.A.
Pouch 6601
Anchorage, Alaska 99502

Attention: R. L. Boane

Oil and Gas
ADL 47567

Determination of Well Capable of Producing in Paying Quantities

By letter of September 6, 1978, Exxon Company, U.S.A., requested that the Point Thompson Unit No. 2 Well be certified capable for producing in paying quantities.

It is hereby determined that the subject well, located on lands covered by lease ADL 47567, has demonstrated the capability of producing in paying quantities as that term is defined in 11 AAC 83.105. Therefore, minimum royalty payments are applicable in lieu of rental payments fo this lease, as more fully provided by 11 AAC 83.115.

Minimum royalties for the period beginning October 1, 1978 to October 1, 1979 will be due on or before October 1, 1979 for the subject lease.

Ethel H. Nelson
Leasing Manager

EXXON COMPANY, U.S.A.
POST OFFICE BOX 4279 · HOUSTON, TEXAS 77001

EXPLORATION DEPARTMENT
ALASKA/PACIFIC DIVISION

GRANDALL D. JONES
MANAGER

December 1, 1980

Fourth Plan of Further
Development and Operation
Point Thomson Unit
Arctic Slope, Alaska

Mr. Glenn Harrison
Director, Division of Minerals and
Energy Management
323 East Fourth Avenue
Anchorage, Alaska 99501

Dear Mr. Harrison:

Exxon Corporation, as Unit Operator of the Point Thomson Unit, currently is conducting operations on the Point Thomson Unit Well No. 4 pursuant to the Third Plan of Further Development and Operation which was approved on February 22, 1980 by the Division of Minerals and Energy Management. Such approval provided that the Third Plan will expire on January 1, 1981.

Unit wells Nos. 1, 2, and 3 were drilled and completed during the 1976-77, 1977-78, and 1978-79 drilling seasons, respectively. Locations of these and the No. 4 well are shown on the enclosed map.

Exxon currently is proceeding with operations on additional wells to attempt to define the areal limits, recoverable reserves and potential productivity of formations which have been tested in previous Point Thomson Unit wells. Included in these operations are the following.

(1) The Alaska State C-1 Well (red dot on enclosed map) on land covered by State of Alaska lease ADL 28382 will be spudded in the immediate future, if it has not already commenced by the time you receive this letter. The bottom hole location of this well is projected to a point 660 feet south of the south boundary of the Point Thomson Unit. This well is projected to a total vertical depth of 13,800 feet or to Pre-Mississippian rocks.

(2) Exxon currently is participating in the drilling of the Challenge Island well (blue dot) the bottom hole location of which is projected to be at or near the northwest corner of the land covered by State of Alaska lease ADL 312861, which adjoins the north boundary of the Point Thomson Unit. This well is projected to a total vertical depth of 13,850 feet or to Pre-Mississippian rocks.

(3) Applications were filed on August 29, 1980 for all necessary permits for operations for the anticipated drilling of the Alaska State D-1 well on land covered by State of Alaska lease ADL 312866 adjoining the north boundary of the Point Thomson Unit. Following issuance of all such permits, a gravel pad for this well will be constructed during this winter (1980-81) on the west end of Flaxman Island (yellow dot), and drilling is planned to commence the following winter (1981-82).

(4) Applications also were filed on August 29, 1980 for all necessary permits for operations for the anticipated drilling of the Alaska State E-1 well on land covered by State of Alaska lease ADL 312863, also adjoining the north boundary of the Point Thomson Unit. Following issuance of all such permits, a gravel pad for this well will be constructed during this winter (1980-81) on North Star Island (green dot), and drilling is planned to commence the following winter (1981-82).

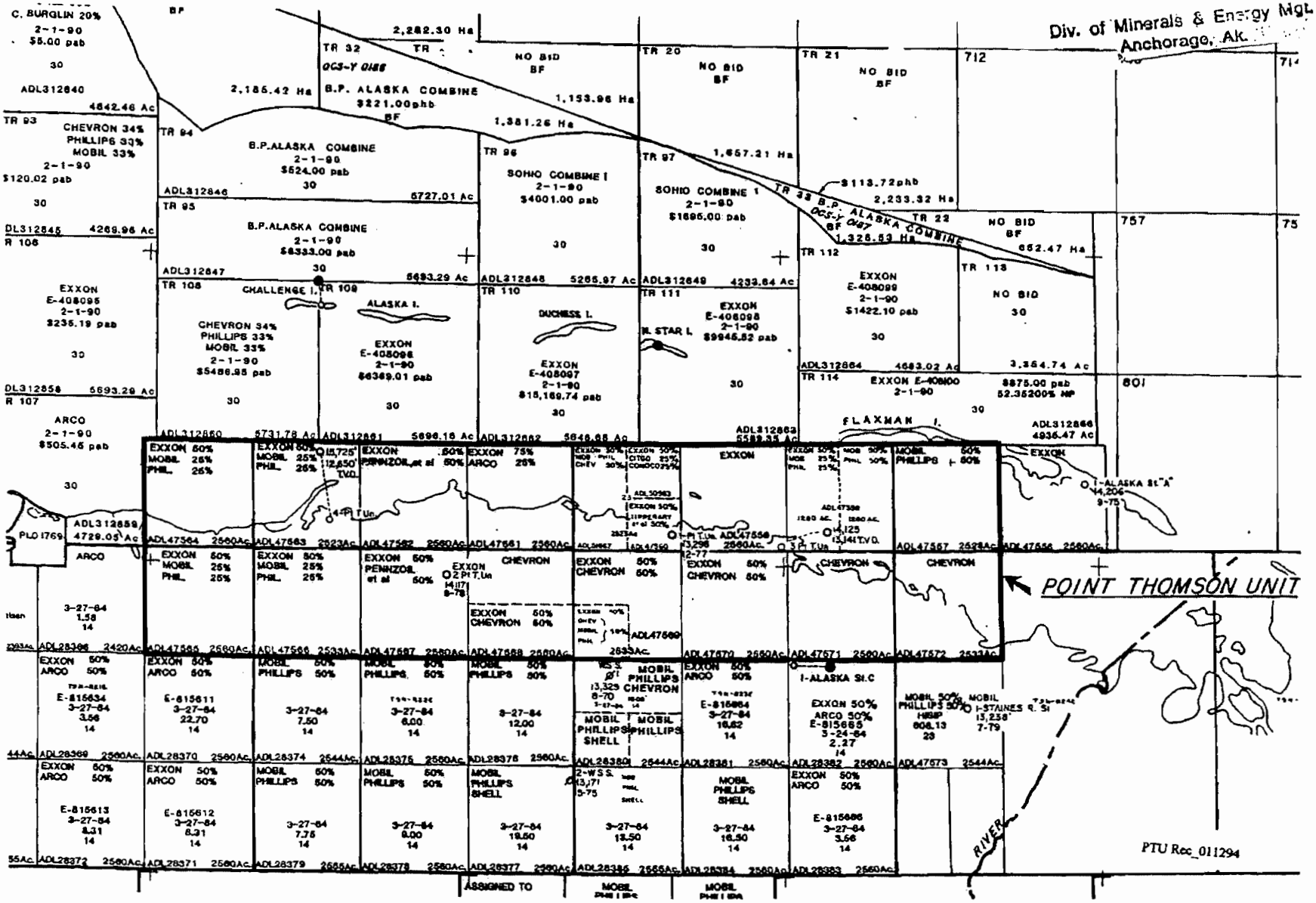
These operations will greatly assist in evaluating the acreage within the Unit area and represent a diligent and timely effort by Exxon and the other working interest owners of the Point Thomson Unit to explore the Unit area and define previously tested formations. We, therefore, request that paragraphs number (1) through (4), above, be considered and approved by you as our Fourth Plan of Further Development and Operation for the Point Thomson Unit, as required by Article 10 of the Unit Agreement, until January 1, 1982, at which time another Plan shall be due.

Very truly yours,

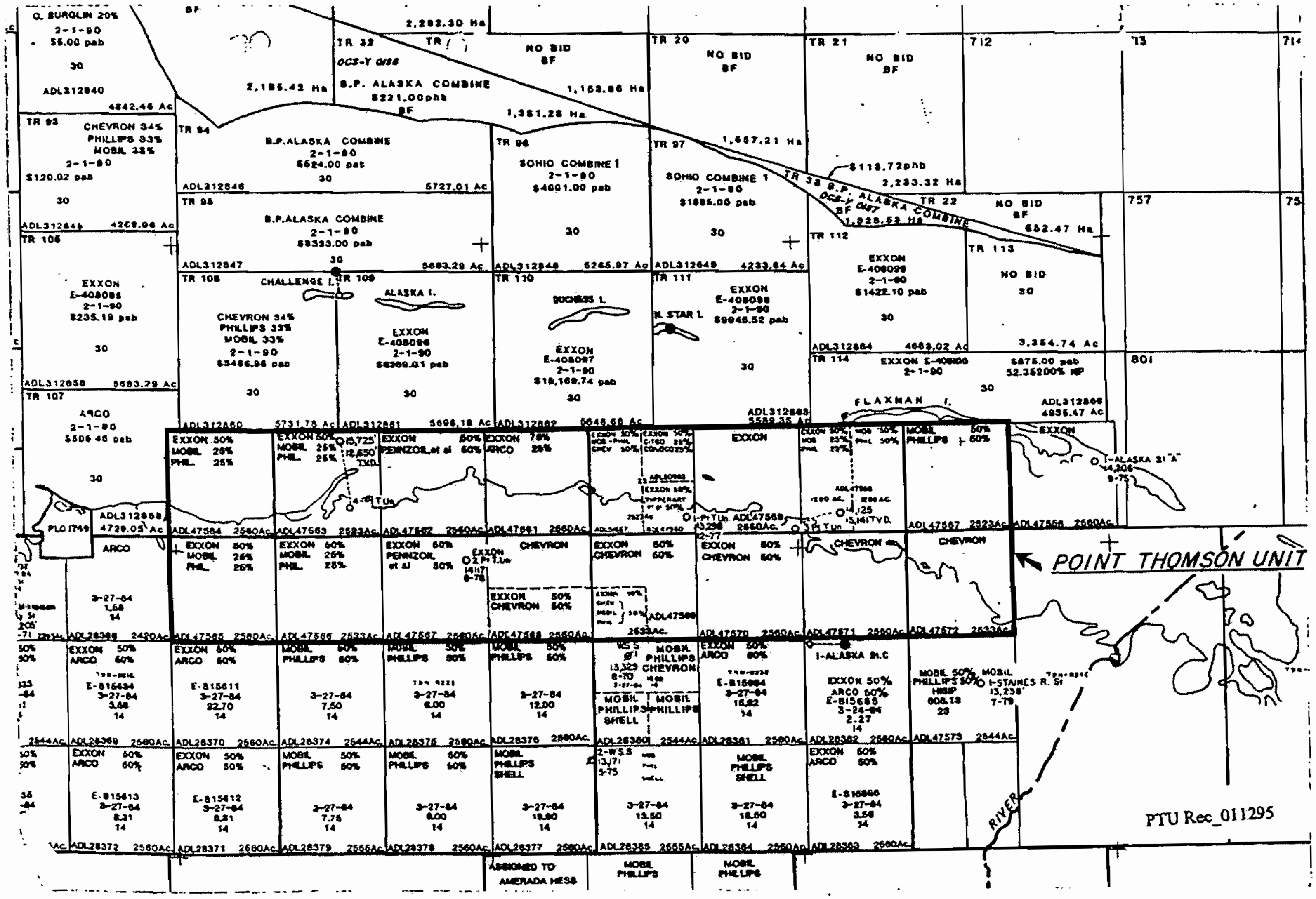
EXXON CORPORATION
Unit Operator

By: C. D. Jones

CDJ/VV/bc



Exc. 000103


POINT THOMSON UNIT
PTU Rec_011295
FLAXMAN I.
CHALLENGE I.
ALASKA I.
DUCHESS I.
N. STAR I.
RIVER
B.P. ALASKA COMBINE
SOHIO COMBINE 1
NO BID
EXXON
CHEVRON
MOBIL
PHILLIPS
ARCO
ASSIGNED TO AMERADA HESS
1-ALASKA St.C
1-ALASKA St "A"
1-STAINES R. St

Exc. 000104

EXXON COMPANY, U.S.A.
POST OFFICE BOX 4279 · HOUSTON, TEXAS 77001

EXPLORATION DEPARTMENT
ALASKA/PACIFIC DIVISION

CRANDALL D. JONES
MANAGER

December 1, 1980

Fourth Plan of Further
Development and Operation
Point Thomson Unit
Arctic Slope, Alaska

Mr. Glenn Harrison
Director, Division of Minerals and
Energy Management
323 East Fourth Avenue
Anchorage, Alaska 99501

Dear Mr. Harrison:

Exxon Corporation, as Unit Operator of the Point Thomson Unit, currently is conducting operations on the Point Thomson Unit Well No. 4 pursuant to the Third Plan of Further Development and Operation which was approved on February 22, 1980 by the Division of Minerals and Energy Management. Such approval provided that the Third Plan will expire on January 1, 1981.

Unit wells Nos. 1, 2, and 3 were drilled and completed during the 1976-77, 1977-78, and 1978-79 drilling seasons, respectively. Locations of these and the No. 4 well are shown on the enclosed map. by pink dots, other wells in the area are shown in purple

Exxon currently is proceeding with operations on additional wells to attempt to define the areal limits, recoverable reserves and potential productivity of formations which have been tested in previous Point Thomson Unit wells. Included in these operations are the following.

(1) The Alaska State C-1 Well (red dot on enclosed map) on land covered by State of Alaska lease ADL 28382 will be spudded in the immediate future, if it has not already commenced by the time you receive this letter. The bottom hole location of this well is projected to a point 660 feet south of the south boundary of the Point Thomson Unit. This well is projected to a total vertical depth of 13,800 feet or to Pre-Mississippian rocks.

has been spudded.

660' south of unit

PTU Rec_011296

drilling

(2) Exxon currently is participating in the drilling of the Challenge Island well (blue dot) the bottom hole location of which is projected to be at or near the northwest corner of the land covered by State of Alaska lease ADL 312861, which adjoins the north boundary of the Point Thomson Unit. This well is projected to a total vertical depth of 13,850 feet or to Pre-Mississippian rocks. 3 miles north of unit

(3) Applications were filed on August 29, 1980 for all necessary permits for operations for the anticipated drilling of the Alaska State D-1 well on land covered by State of Alaska lease ADL 312866 adjoining the north boundary of the Point Thomson Unit. Following issuance of all such permits, a gravel pad for this well will be constructed during this winter (1980-81) on the west end of Flaxman Island (yellow dot), and drilling is planned to commence the following winter (1981-82). ± 600' north of unit

(4) Applications also were filed on August 29, 1980 for all necessary permits for operations for the anticipated drilling of the Alaska State E-1 well on land covered by State of Alaska lease ADL 312863, also adjoining the north boundary of the Point Thomson Unit. Following issuance of all such permits, a gravel pad for this well will be constructed during this winter (1980-81) on North Star Island (green dot), and drilling is planned to commence the following winter (1981-82). 2 miles north of unit

These operations will greatly assist in evaluating the acreage within the Unit area and represent a diligent and timely effort by Exxon and the other working interest owners of the Point Thomson Unit to explore the Unit area and define previously tested formations. We, therefore, request that paragraphs number (1) through (4), above, be considered and approved by you as our Fourth Plan of Further Development and Operation for the Point Thomson Unit, as required by Article 10 of the Unit Agreement, until January 1, 1982, at which time another Plan shall be due.

RECEIVED
DEC 04 1980
Div. of Minerals & Energy Mgt.
Anchorage, Ak.

Very truly yours,

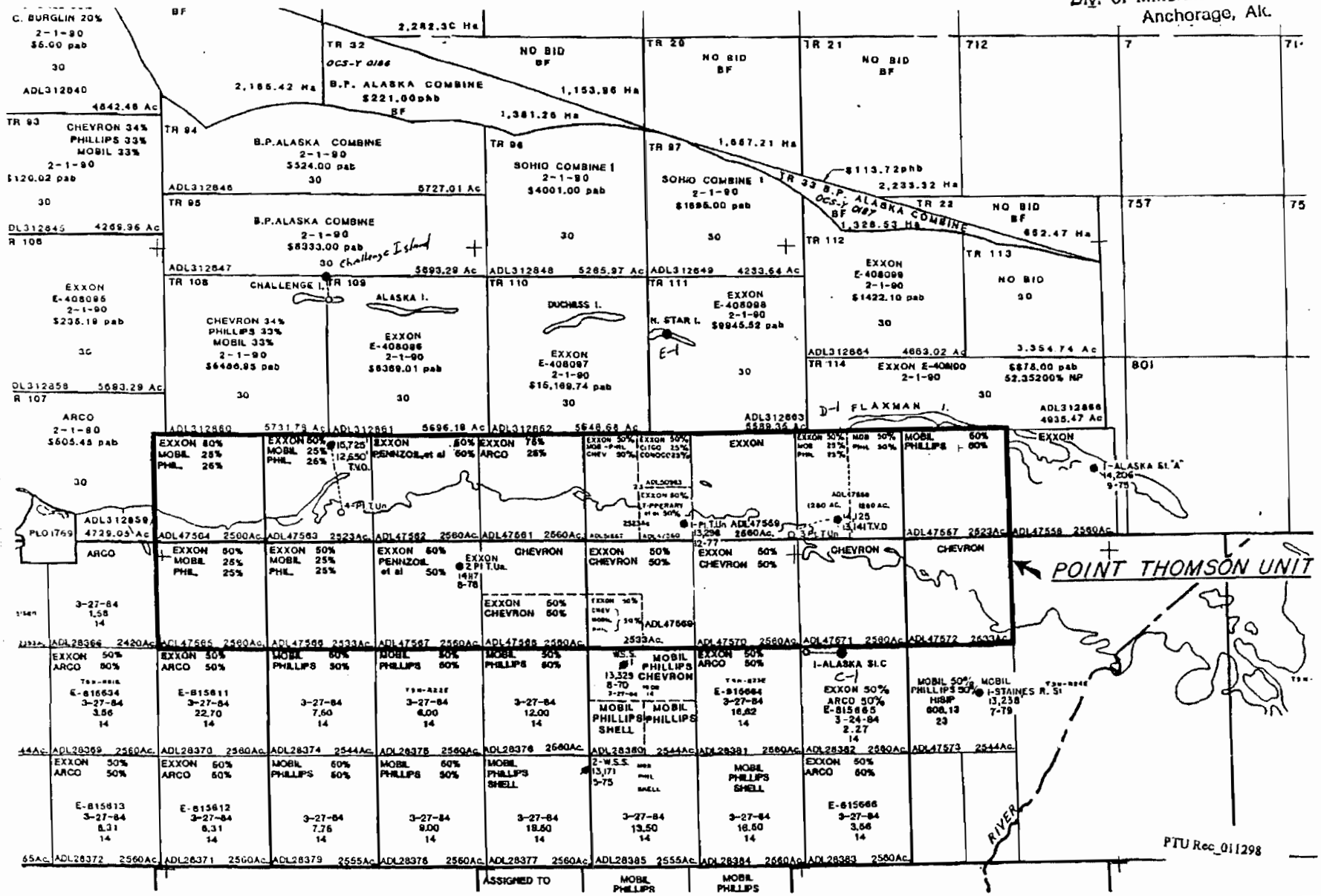
EXXON CORPORATION
Unit Operator

By: C. J. Jones

CDJ/VV/bc

PTU Rec_011297

Exc. 000106



Exc. 000107

EXXON COMPANY, U.S.A.
POST OFFICE BOX 4279 · HOUSTON, TEXAS 77001

EXPLORATION DEPARTMENT
ALASKA/PACIFIC DIVISION

R.D. WILSON
MANAGER

September 14, 1981

Fifth Plan of Further
Development and Operation
Point Thomson Unit
Arctic Slope, Alaska

Mr. Glenn Harrison, Director
Division of Minerals and Energy Management
555 Cordova Street
Anchorage, Alaska 99501

Dear Mr. Harrison:

Exxon Corporation, as Unit Operator of the Point Thomson Unit, recently concluded operations on the Alaska State C-1 well in accordance with the Fourth Plan of Further Development and Operation approved on December 19, 1980. The Fourth Plan will be in effect until January 1, 1982. On August 24, 1981, a representative of Exxon reviewed in your office the C-1 well and other current activity on and around the Point Thomson Unit.

Point Thomson Unit wells Nos. 1, 2, 3 and 4 were drilled and completed during the 1976-1977, 1977-1978, 1978-1979 and 1979-1980 drilling seasons, respectively. The Exxon Alaska State C-1 and the Sohio Challenge Island No. 1 wells were drilled and completed during the 1980-1981 drilling season. Locations for these wells are shown on the attached map.

Exxon currently is proceeding with plans to drill additional wells to define the northern productive limits of formations which have been tested in previous Point Thomson Unit and nearby wells. The following two wells will be drilled during the 1981-1982 season.

(1) On or about November 1, 1981, Exxon will begin drilling the Alaska State D-1 (red dot on attached map) on land covered by State of Alaska lease ADL 312866. This uncontrolled straight hole will be drilled from a gravel pad already constructed on the west end of Flaxman Island. The well will be drilled to 13,900 feet or to Pre-Mississippian rocks.

(2) On or about November 1, 1981, Exxon also will begin drilling the Alaska State F-1 well to a bottom hole location (green dot on attached map) on land covered by State of Alaska lease ADL 312862. The surface location for this well is 4,200 feet northeasterly on a gravel pad constructed on the west end of North Star Island. This well is projected to a true vertical depth of 14,870 feet in Pre-Mississippian rocks.

During the 1981-1982 drilling season, Phillips Petroleum Company is planning to drill a Point Thomson Unit well on land covered by State of Alaska lease ADL 47572. This proposed well (blue dot on attached map) will help to define the productive limits of reservoirs in the easternmost part of the Unit. Phillips has furnished or will furnish you with details regarding depth, objectives and location of this well.

The above operations will assist greatly in evaluating the acreage within the Unit area and represent a diligent and timely effort by Exxon and the other working interest owners of the Point Thomson Unit to explore the Unit area and surrounding State acreage and to define the productive limits of previously tested formations. We, therefore, request that the foregoing be considered and approved by you as our Fifth Plan of Further Development and Operation for the Point Thomson Unit, as required by Article 10 of the Unit Agreement, until January 1, 1983, at which time another Plan shall be due.

Very truly yours,

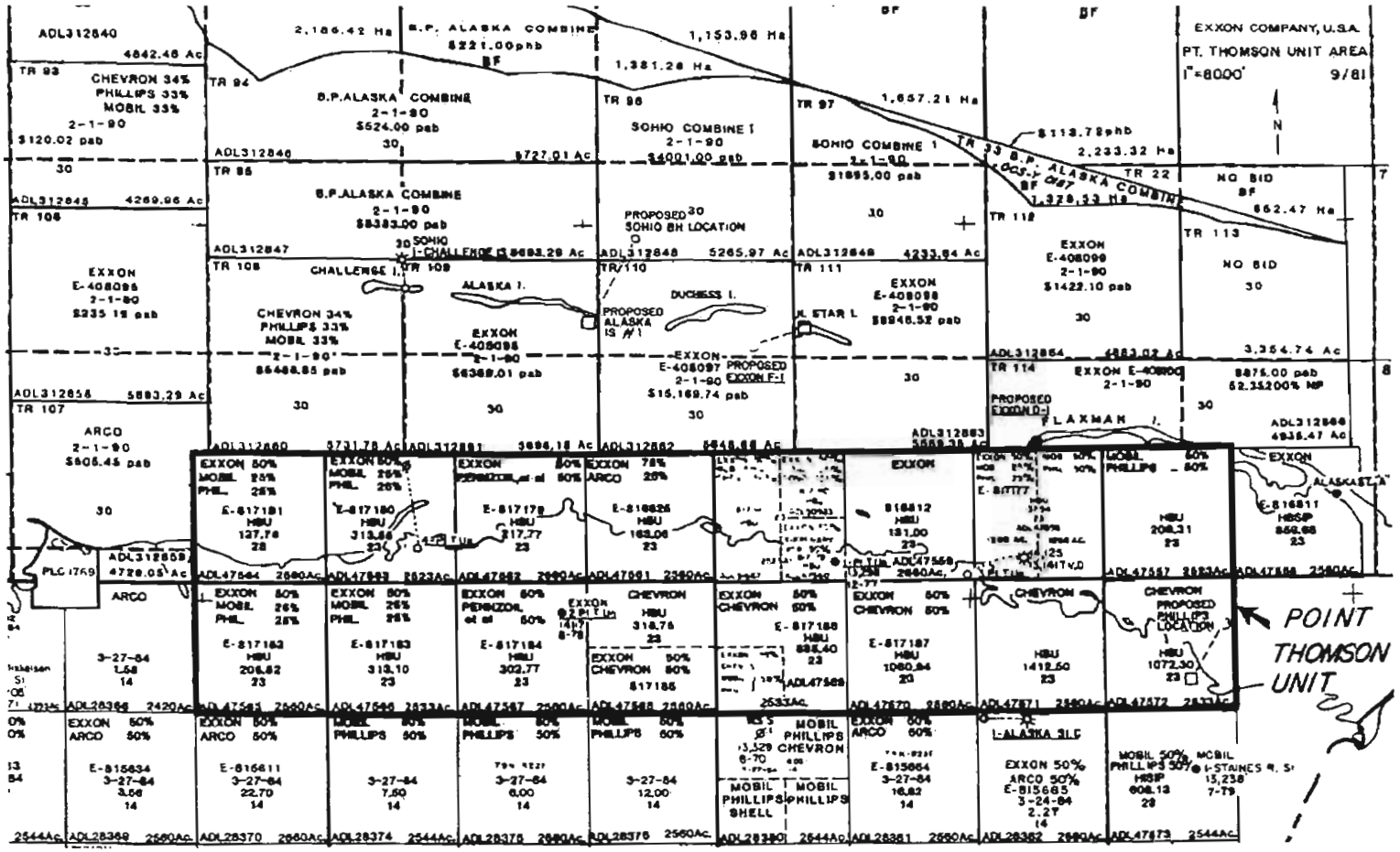
EXXON CORPORATION
Unit Operator

By: R. D. Wilson

RDW:bc
Enclosure

c - w/enclosure:

Working Interest Owners


EXXON COMPANY, U.S.A.
PT. THOMSON UNIT AREA
1"=8000'
9/81
POINT THOMSON UNIT
PROPOSED PHILLIPS LOCATION
PROPOSED SOHIO BH LOCATION
PROPOSED EXXON F-1
PROPOSED EXXON D-1
CHALLENGE I.
ALASKA I.
DUCHESS I.
FLAXMAN I.
N. STAR I.
TR 93
TR 94
TR 95
TR 96
TR 97
TR 98
TR 99
TR 107
TR 108
TR 109
TR/110
TR 111
TR 112
TR 113
TR 114
TR 22
B.P. ALASKA COMBINE
SOHIO COMBINE 1
NO BID
CHEVRON 34% PHILLIPS 33% MOBIL 33%
EXXON E-408095
ARCO 2-1-90 $605.45 psb
EXXON E-408099 2-1-90 $1422.10 psb
EXXON E-408098 2-1-90 $8946.52 psb
EXXON E-408097 2-1-90 $16,169.74 psb
EXXON 50% MOBIL 25% PHIL. 25%
EXXON 50% ARCO 50%
MOBIL 50% PHILLIPS 50%
EXXON 50% CHEVRON 50%
MOBIL PHILLIPS SHELL
MOBIL PHILLIPS CHEVRON
1-ALASKA SLF
1-STAINES R. ST
PTU Rec 011274

Exc. 000110