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UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

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• AVAILABILITY OF PALYNOMORPH AND FORAMINIFERA MICROSCOPE SLIDES FROM TEST WELLS OF NATIONAL PETROLEUM RESERVE IN ALASKA:

GROUP I

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This report is preliminary and has not been edited or reviewed for conformity with Geological Survey standards and nomenclature.

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AVAILABILITY OF PALYNOMORPH AND FORAMINIFERA MICROSCOPE SLIDES FROM TEST WELLS OF NATIONAL PETROLEUM RESERVE IN ALASKA: GROUP I

Roger J. Witmer

SUMMARY

The first group of palynomorph (pollen, spores, dinoflagellates, acritarchs) and Foraminifera microscope slides prepared from test wells drilled during the National Petroleum Reserve in Alaska (N.P.R.A.) program and the earlier Naval Petroleum Reserve No. 4 (N.P.R.-4) program are now being made available for examination. Jurisdiction of N.P.R.-4 was transferred from the Department of the Navy to the Department of the Interior (U. S. Geological Survey) on June 1, 1977, when the reserve became known as N.P.R.A. Palynomorph microscope slides processed from well cuttings, sidewall cores, and conventional cores of 29 test wells may be borrowed one well at a time for a period of three weeks from the U. S. Geological Survey. Both palynomorph and Foraminifera slides may also be examined on-site at the laboratory of the subcontractor Anderson, Warren, and Associates Micropaleontology Consultants of San Diego, California. Slides from newly drilled test wells will be announced in upcoming open-file reports.

INTRODUCTION

An area of approximately 37,000 square miles in northern Alaska was established as the Naval Petroleum Reserve No. 4 (N.P.R.-4) in 1923. Thirty-six test wells and 45 core tests were drilled in and adjacent to N.P.R.-4 from 1944 to 1953 (Gryc, 1970). One replacement well was drilled at Barrow in 1955. Drilling again resumed in N.P.R.-4 in 1964 and continued until 1977 during which time 17 additional test wells were. completed. Then on June 1, 1977, the jurisdiction of N.P.R.-4 was transferred from the Department of the Navy to the Department of the Interior (U. S. Geological Survey), and the reserve has subsequently been known as the National Petroleum Reserve in Alaska (N.P.R.A.). As drilling contractor for N.P.R.A., Husky Oil N.P.R. Operations, Inc. has completed 11 test wells to date and is currently drilling four new wells. Additional test wells are planned for next year.

This first report provides an inventory of palynomorph and Foraminifera microscope slides prepared from well cuttings (ditch), sidewall cores, and conventional cores of test wells completed to date since June, 1977, under the N.P.R.A. drilling program, as well as from cores of wells drilled earlier during the N.P.R.-4 program. Figure 1 is a map of N.P.R.A. showing the test wells for which slides are presently being made available for loan. Palynomorph microscope slides prepared previously from cores of N.P.R.-4 test wells and core tests can also

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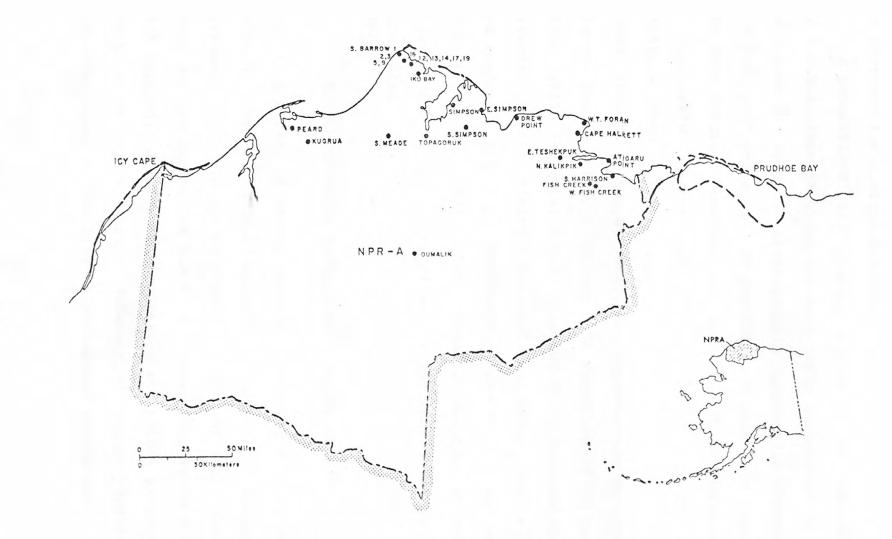


Figure 1. Map of N.P.R.A. showing locations of 29 test wells.

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be borrowed for limited periods.

A generalized stratigraphic section of the coastal plain of N.P.R.A. through which the test wells penetrated is depicted in Figure 2. Specific stratigraphic information concerning N.P.R.A. test wells will be published as open-file reports in the near future. Numerous publications are presently available on test wells and core tests of the N.P.R.-4 program. Collins (1958a-c, 1959, 1961), Collins and Robinson (1967), Robinson (1956, 1958a,b, 1959a,b, 1964), and Robinson and Collins (1959) discuss the location, lithology, and stratigraphy of these wells, while Bergquist (1956, 1958a,b, 1966) records the micropaleontological (primarily Foraminifera) data. Test well data and the general geologic framework of the reserve are summarized by Carter et al. (1977). Bibliographies compiled by Maher and Trollman (1970) and Carter et al. (1975) include additional references.

NAVAL PETROLEUM RESERVE NO. 4 MICROSCOPE SLIDES

In a series of twenty open-file reports, Scott (1967a,b, 1968a-j, 1969a-f, 1970a,b) enumerates the sets of palynomorph microscope slides prepared from cores of test wells and core tests drilled during the N.P.R.-4 program (see Table 1 of this report). Samples were processed and slides prepared by the U. S. Geological Survey in Denver, Colorado. Information regarding loans of N.P.R.-4 palynological slides may be obtained

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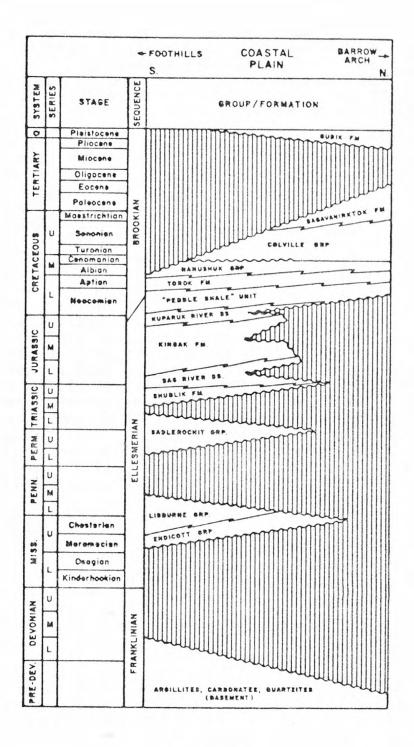


Figure 2. Generalized north-south stratigraphic section of N.P.R.A. coastal plain.

Table 1: Test wells and core tests of N.P.R.-4 program for which palynomorph microscope slides are available

Arcon Barrow Core Test No. 1 Avak Test Well No. 1 S. Barrow Test Well Nos. 1, 2, 3, 4 Fish Creek Test Well No. 1 Grandstand Test Well Gubik Test Well Nos. 1, 2 Kaolak Test Well No. 1 Knifeblade Test Well Nos. 1, 2, 2A Meade Test Well No. 1 Oumalik Test Well No. 1 E. Oumalik Test Well No. 1 Sentinel Hill Core Test No. 1 Simpson Core Test Nos. 13, 14, 21, 25, 30, 30A Simpson Test Well No. 1 N. Simpson Test Well No. 1 Skull Cliff Core Test No. 1 Square Lake Test Well No. 1 Titaluk Test Well No. 1 Topagoruk Test Well No. 1 E. Topagoruk Test Well No. 1 Umiat Test Well Nos. 1, 2, 3, 8, 9, 11 Wolf Creek Test Well Nos. 1, 2, 3

by writing to U. S. Geological Survey, Paleontology and Stratigraphy Branch, Denver Federal Center, Denver, Colorado 80225 (Attn: Richard A. Scott). Foraminifera slides are not presently available for loan.

NATIONAL PETROLEUM RESERVE IN ALASKA MICROSCOPE SLIDES

Introduction

Rock samples of well cuttings (ditch), sidewall cores, and conventional cores from the test wells shown on the map in Figure 1 have been processed for palynomorphs and Foraminifera by the subcontractor Anderson, Warren, and Associates Micropaleontology Consultants of San Diego, California. The various types of microscope slides prepared from these samples are now available for loan.

Palynomorph Microscope Slides

Palynomorph assemblages include terrigenous plant spores and pollen grains, as well as marine dinoflagellates and acritarchs. Samples were chemically macerated with hydrochloric (cold and hot), hydrofluoric, and nitric acids. Residues were sieved with a 10 micrometer mesh. The unstained palynomorphs were mounted on the coverslips with Cellosize; coverslips were bonded to the glass slides with Coverbond. Generally, four microscope slides were prepared from the ditch and/or sidewall and conventional core samples, provided sufficient residue material was present.

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The approximately 3,400 palynomorph microscope slides were prepared from the 29 test wells included in this report. Table 2 lists the types of samples and the numbers of slides for each of the depth intervals (in ft.) sampled.

Foraminifera Microscope Slides

Samples were processed for Foraminifera using standard techniques. Rock material was boiled in Quaternary-O solution and washed over 20 and 200 mesh screens. Picked slides and thin-sections were prepared from ditch samples and/or sidewall and conventional core material. Some lith slides were made from well cuttings. In most cases one microscope slide was prepared for each sample.

Over 6,800 Foraminifera microscope slides were produced from 28 of the test wells included in this report. The types of samples, as well as the types of slides (i.e., picked, thin-sections, lith) and numbers of slides for each of the depth intervals sampled are enumerated in Table 2.

Loan and On-Site Examination Policy

Of the four nearly identical sets of palynomorph microscope slides prepared, one set is being made available for loan directly from the U. S. Geological Survey, Office of National Petroleum Reserve in Alaska, Mailstop 87, 345 Middlefield Road, Menlo Park, California 94025 (Attn: Roger J. Witmer); telephone (415) 323-8111, ext. 2138. Slides from one well at a time may be borrowed for a period of three

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weeks. Requests for loans should be made by letter only. Slide boxes will be shipped, and should be returned, by certified or registered mail. On-site examination of palynomorph slides at the U. S. Geological Survey cannot be accommodated at the present time.

A second set of palynomorph slides may be examined on-site at the subcontractor facilities: Anderson, Warren, and Associates, Inc., 11526 Sorrento Valley Road, Suite "G", San Diego, California 92121; telephone (714) 755-1524. Although they will provide office and desk space, microscopic equipment will not be available for use. Interested individuals should contact Anderson, Warren, and Associates directly regarding available times and laboratory usage fees.

Of the two remaining sets of palynomorph slides, one will be incorporated into the U. S. Geological Survey's permanent collections, while the other will remain at the subcontractor's laboratory as a reference collection until the N.P.R.A. program is terminated.

The Foraminifera microscope slides are not presently available from the U. S. Geological Survey. The single prepared set of slides will be kept at Anderson, Warren, and Associates for the duration of the N.P.R.A. program. These slides may be examined on-site at the subcontractor's facilities. Arrangements should be made directly through Anderson, Warren, and Associates at the address given above.

Availability of microscope slides prepared from samples

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of currently drilling, as well as subsequently drilled, test wells will be announced in future press releases and open-file reports of the U. S. Geological Survey.

N.P.R.A. TEST WELL	LOCATION	PENETRATION	PALYNOMOR	PH MICROSCOPE	SLIDES	FORAMINIFERA MICROSCOPE SLIDES				
(A.P.I. No.)	Latitude Longitude Sec.Twp.Rge.	Total Depth Deepest Horizon Date Completed	Depths	Type Sample	No. Slides	Depths	Type Sample	Type Slide	No. Slide	
ATIGARU POINT No. 1 (59-103-20008)	Lat. 70 ⁰ 33'22.03"N Long. 151 ⁰ 43'1.85"W Sec. 19, T14N, R2E	11,535' Argillite Basement (Devonian/older) March, 1977	530'-11520' 4221'- 8069' 8712'- 8739' 4064'-10964'	Ditch Sidewall Cores Sidewall	122 21 3 12	530'- 9610' 9430'-11520' 9490'-11520' 4221'- 8069' 4064'-10805' 8713'- 8742'	Ditch Ditch Ditch Sidewall Sidewall Cores	Picked Thin Section Lith Picked Picked Picked	300 75 55 21 7 4	
5.BARROW No. 1 (50-023-10009)	Lat. 71 ⁰ 19'12"N Long. 156 ⁰ 42'16"W Sec. 28, T23N, R18N	3,553' Argillite Basement (Devonian/older) November, 1948	3036'- 3376'	Cores	14	3036'- 3376'	Cores	Picked	14	
5. BARROW No. 2 50-023-10010)	Lat. 71 ⁰ 15'49"N Long. 156 [°] 38'03"W Sec. 14, T22N, R18W	2,505' Argillite Basement (Devonian/older) April, 1949	2440'- 2443' 1950'- 2375' 2410'- 2443'	Core Cores Cores	1 75 3	1950'- 2375' 2410'- 2443'	Cores Cores	Picked Picked	75 3	
5. BARROW No. 3 (50-023-10011)	Lat. 71 ⁰ 09'47"N Long. 156 [°] 34'44"W Sec. 24, T21N, R18W	2,900' Argillite Basement (Devonian/older) August, 1949	1216'- 2799' 200'- 2801'	Cores Cores	14 38	1216'- 2799' 200'- 2801'	Cores Cores	Picked Picked	26 38	
5. BARROW No. 5 (50-023-10014)	Lat. 71 ⁰ 15'51"N Long. 156 ⁰ 37'59"W Sec. 14, T22N, R18W	2,456' Argillite Basement (Devonian/older) June, 1955	2410'- 2425'	Core	1	2410'- 2425'	Core	Picked	4	

Table 2. Inventory of palynomorph and Foraminifera microscope slides from test wells drilled during N.P.R.A. and earlier N.P.R.-4 programs.

N.P.R.A. TEST WELL	N.P.R.A. TEST WELL LOCATION PENETRATION			PH MICROSCOPE	SLIDES	FORAMINIFERA MICROSCOPE SLIDES					
(A.P.I. No.)	Latitude Longitude Sec.Twp.Rge.	Total Depth Deepest Horizon Date Completed	Depths	Type Sample	No. Slides	Depths	Type Sample	Type Slide	No. Slides		
S. BARROW No. 9 (50-023-20003)	Lat. 71 ⁰ 16'04"N Long. 156 [°] 36'53"W Sec. 11, T22N, R18W	2,449' Barrow Sand (Jurassic) April, 1970	2016'-2450'	Cores	10	2016'-2450'	Cores	Picked	10		
S. BARROW No. 12 (50-023-20006)	Lat. 71 ⁰ 14'14"N Long. 156 ⁰ 20'16"W Sec. 23, T22N, R17W	2,285' Argillite Basement (Devonian/older) March, 1974	460'-1930' 1971'-2266'	Ditch Cores	12 7	460'-2255' 1965'-2282'	Ditch Cores	Picked Picked	78 44		
S. BARROW No. 13 (50-023-20008)	Lat. 71 ⁰ 15'13.84"N Long. 156 ⁰ 37'40.4"W Sec. 14, T22N, R18W	2,535' Argillite Basement (Devonian/older) January, 1977	200'-2535' 2411'-2526' 2159'-2525'	Ditch Cores Cores	25 8 14	200'-2535' 2411'-2526' 2159'-2525'	Ditch Cores Cores	Picked Picked Picked	72 8 14		
S. BARROW No. 14 (50-023-20009)	Lat. 71 ⁰ 31'58.79"N Long. 156 ⁰ 18'11.02W Sec. 25, T22N, R17W	2,257' Sag River? Sand (Triassic) March, 1977	53'-2250' 1553'-2050'	Ditch Sidewall	25 3	53'-2250' 1553'-2133'	Ditch Sidewall	Picked Picked	72 3		
S. BARROW No. 16 (50-023-200010)	Lat. 71 ⁰ 16'56.68'N Long. 156 ⁰ 32'46.8"W Sec. 1, T22N, R18W	2,400' Argiilite Basement (Devonian/older) February, 1978	200'-2399' 2395'-2398' 1505'-2356'	Ditch Core Sidewall	32 1 25	200'-2399' 2395'-2398' 2395'-2398' 1505'-2350'	Ditch Core Core Sidewall	Picked Thin Section Picked Picked	73 1 1 20		

Table 2 (con't.).

Inventory of palynomorph and Foraminifera microscope slides from test wells drilled during N.P.R.A. and earlier N.P.R.-4 programs.

N.P.R.A. TEST WELL	LOCATION	PENETRATION	PALYNOMOR	PH MICROSCOPE	SLIDES	FORAMINIFERA MICROSCOPE SLIDES				
(A.P.I. No.)	Latitude Longitude Sec.Twp.Rge.	Total Depth Deepest Horizon Date Completed	Depths	Type Sample	No. Slides	Depths	Type Sample	Type Slide	No. Slides	
S. BARROW No. 17 (50-023-20011)	Lat. 71 ⁰ 14'0.506"N Long. 156 ⁰ 15'34.33"W Sec. 30, T22N, R16W	2,382' Argillite Basement (Devonian/older) April, 1978	100'-2382' 2096'-2345' 1550'-2271'	Ditch Cores Sidewall	31 86 11	100'-2382' 2096'-2345' 1550'-2271'	Ditch Cores Sidewall	Picked Picked Picked	78 86 9	
S. BARROW No. 19 (50-023-20012)	Lat. 71 ⁰ 14'29.47"N Long. 156 ⁰ 20'1.687"W Sec. 14, T22N, R17W	2,300' Argillite Basement (Devonian/older) May, 1978	100'-2300' 1330'-2245' 1348'-2153'	Ditch Cores Sidewall	28 93 27	100'-2300' 1330'-2245' 1348'-2153'	Ditch Cores Sidewall	Picked Picked Picked	69 93 27	
CAPE HALKETT No. 1 (50-103-20004)	Lat. 70 ⁰ 46'2.702"N Long. 152 ⁰ 27'59.28"W Sec. 5, T16N, R2W	9,990' Argillite Basement (Devonian/older) May, 1975	510'-9900' 2517'-9890'	Ditch Sidewall	111 67	510'-9900' 8700'-9900' 2517'-8865' 9004'-9890'	Ditch Ditch Sidewall Sidewall	Picked Thin Section Picked Thin Section	316 42 114 7	
DREW POINT No. 1 (50-279-20002)	Lat. 70 ⁰ 52'47.147"N Long. 153 ⁰ 53'59.93"W Sec. 26, T18N, R8W	7,946' Argillite Basement (Devonian/older) March, 1978	80'-7946' 4130'-7901' 2703'-7830'	Ditch Cores Sidewall	91 310 50	80'-7946' 4130'-7901' 7882'-7901' 2703'-7830'	Ditch Cores Cores Sidewall	Picked Picked Thin Section Picked	220 310 20 46	
FISH CREEK No. 1 (50-103-10001)	Lat. 70 ⁰ 18'36"N Long. 151 ⁰ 52'40"W Sec. 15, T11N, R1E	7.020' Nanushuk Group (U. Cretaceous) September, 1949	6002'-7017'	Cores	5	6002'-7017'	Cores	Washed Residue	4	

Table 2 (con't.). Inventory of palynomorph and Foraminifera microscope slides from test wells drilled during N.P.R.A. and earlier N.P.R.-4 programs.

N.P.R.A. TEST WELL	LOCATION	PENETRATION	FORAMINIFERA MICROSCOPE SLIDES						
(A.P.I. No.)	Latitude Longitude Sec.Twp.Rge.	Total Depth Deepest Horizon Date Completed	Depths	Type Sample	No. Slides	Depths	Type Sample	Type Slide	No. Slides
W. FISH CREEK No. 1 (50-103-20009)	Lat. 70 ⁰ 19'35.99"N Long. 152 ⁰ 03'38.03'W Sec. 11, T11N, R1W	11,427' Kayak Shale (Mississippian) May, 1977	500'-11420' 4220'- 8818'	Ditch Sidewall	119 9	500'-10500' 10410'-11420' 10470'-11420' 4220'- 9016'	Ditch Ditch Ditch Sidewall	Picked Thin Section Lith Picked	327 34 32 4
S. HARRISON BAY No.1 (50-103-20007)	Lat. 70 ⁰ 25'29.31"N Long. 151 ⁰ 43'52.48"W Sec. 6, T12N, R2E	11,290' Lisburne Group (Mississippian) February, 1977	500'-11290' 7022'- 7052' 3213'- 8866'	Ditch Cores Sidewall	119 2 22	500'-10300' 10150'-11290' 10240'-11290' 7022'- 7052' 3213'- 8866'	Ditch Ditch Ditch Cores Sidewall	Picked Thin Section Lith Picked Picked	313 38 35 2 11
IKO BAY No. 1 (50-023-20007)	Lat. 71 ⁰ 10'13"N Long. 156 ⁰ 10'01"W Sec. 16, T21N, R16W	2,731' Argillite Basement (Devonian/older) March, 1975	180'- 2540' 2337'- 2467' 1764'- 2683'	Ditch Cores Sidewall	29 9 4	180'- 2540' 2337'- 2467' 1644'- 2683'	Ditch Cores Sidewall	Picked Picked Picked	70 9 19
N. KALIKPIK No. 1 (50-103-20011)	Lat. 70 ⁰ 30'33.023"N Long. 152 [°] 22'04.17"W Sec. 3,T13N, R2W	7,395' Kingak Shale (Jurassic) April, 1978	80'- 7330' 3810'- 7395' 2757'- 7374'	Ditch Cores Sidewall	80 337 35	80'- 7330' 3810'- 7395' 2757'- 7374'	Ditch Cores Sidewall	Picked Picked Picked	241 337 26
KUGRUA No. 1 (50-163-20002)	Lat. 70 ⁰ 35'13.283"N Long. 158 ⁰ 39'43.26"W Sec. 8. T14N, R26W	12,592 Lisburne Group (Mississippian) May, 1978	100'-12594' 7197'-11032' 3732'- 8579'	Ditch Cores Sidewall	143 35 34	100'-11240' 11130'-12594' 11240'-12594' 7197'-11032' 3732'- 8637'	Ditch Ditch Ditch Cores Sidewall	Picked Thin Section Lith Picked Picked	392 61 46 35 32

Table 2 (con't.). Inventory of palynomorph and Foraminifera microscope slides from test wells drilled during N.P.R.A. and earlier N.P.R.-4 programs.

N.P.R.A. TEST WELL	LOCATION	PENETRATION	PALYNOMOF	RPH MICROSCOPE	SLIDES	FOR	MINIFERA MIC	ROSCOPE SLIDES	
(A.P.I. No.)	Latitude Longitude Sec.Twp.Rge.	Total Depth Deepest Horizon Date Completed	Depths	Type Sample	No. Slides	Depths	Type Sample	Type Slide	No. Slide
S. MEADE No. 1 (50-163-20001)	Lat. 70 ⁰ 36'53.92"N Long. 156 ⁰ 53'23.6"W Sec. 31, T15N, R19W	9,942' Chert conglomerates (Age indeterminate) January, 1979	95'- 8060' 3010'- 7503' 5872'- 7840'	Ditch Cores Sidewall	71 37 11	95'- 8060' 3010'- 7053' 5872'- 7840'	Ditch Cores Sidewall	Picked Picked Picked	256 37 11
S. MEADE No. 1 (Redrill No. 1)			7750'- 8510' 8489'- 8519'	Ditch Cores	9 31	7750'- 8510' 8489'- 8519'	Ditch Cores	Picked Picked	26 31
S. MEADE No. 1 (Redrill No. 2)			8520'- 9943' 8819'- 9327'	Ditch Cores	18 36	8520'- 9770' 9500'- 9943' 8819'- 9327'	Ditch Ditch Cores	Picked Thin Section Picked	42 17 35
OUMALIK No. 1 (50-119-10005)	Lat. 69 ⁰ 50'18'N Long. 155 ⁰ 59'36"W Sec. 30, T16N, R16W	11,872' Pebble shale unit (L. Cretaceous) April, 1950	10669'-11872'	Cores	5				
PEARD BAY No. 1 (50-301-20002)	Lat. 70 ⁰ 42'56.32"N Long. 159 ⁰ 00'2.52"W Sec. 25, T16N, R28W	10,225° Argillite Basement (Devonian/older) April, 1979	90'-10225' 3034'-10225' 5834'- 9663'	Ditch Cores Sidewall	112 92 44	90'-10225' 9630'-10225' 3034'- 9520' 10215'-10225' 5834'- 9625'	Ditch Ditch Cores Cores Sidewall	Picked Thin Section Picked Thin Section Picked	336 20 88 4 43

Table 2 (con't.).

Inventory of palynomorph and Foraminifera microscope slides from test wells drilled during N.P.R.A. and earlier N.P.R.-4 programs.

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N.P.R.A. TEST WELL	LOCATION	PENETRATION	PALYNOMOR	PH MICROSCOPE	SLIDES	FORA	MINIFERA MIC	ROSCOPE SLIDES	
(A.P.I. No.)	Latitude Longitude Sec.Twp.Rge.	Total Depth Deepest Horizon Date Completed	Depths	Type Sample	No. Slides	Depths	Type Sample	Type Slide	No. Slides
E. SIMPSON No. 1 (50-279-20005)	Lat. 70 ⁰ 55'04.01"N Long. 154 ⁰ 37'04.75"W Sec. 18, T18N, R10W	7,739' Argillite Basement (Devonian/older) April, 1979	100'- 7735' 2674'- 7523' 3774'- 7048'	Ditch Cores Sidewall	83 65 18	100'- 7735' 7620'- 7735' 2674'- 7523' 7729'- 7738' 2774'- 7048'	Ditch Ditch Cores Cores Sidewall	Picked Thin Section Picked Thin Section Picked	24 4 4 51 4 15
SIMPSON No. 1 (50-279-10032)	Lat. 70 ⁰ 57'05"N Long. 155 ⁰ 21'45"W Sec. 32, T19N, R13W	7,002' Argillite Basement (Devonian/older) June, 1948	5074'- 6495' 5303'- 6487'	Cores Cores	18 8	5074'- 6495'	Cores	Picked	18
S. SIMPSON No. 1 (50-279-20001)	Lat. 70 ⁰ 48'24.75"N Long. 154 ⁰ 58'54.61"W Sec. 22, T17N, R12W	8,795' Argillite Basement (Devonian/older) May, 1977	510'- 8795' 2877'- 8718'	Ditch Sidewall	93 7	510'- 8795' 8590'- 8795' 6526'- 8146'	Ditch Ditch Sidewall	Picked Thin Section Picked	284 7 4
E. TESHEKPUK No. 1 (50-103-20006)	Lat. 70 ⁰ 34'11.66"N Long. 152 ⁰ 56'36.91"W Sec. 16, T14N, R4W	10,664' Granite Basement (Carboniferous) May, 1976	533'-10664' 2637'-10624'	Ditch Sidewall	117 36	533'- 9720' 9670'-10664' 9720'-10664' 2637'- 9621' 9655'-10624'	Ditch Ditch Ditch Sidewall Sidewall	Picked Thin Section Lith Picked Thin Section	276 43 32 38 7
TOPAGORUK No. 1 (50-279-10033)	Lat. 70 ⁰ 37'30"N Long. 155 ⁵ 53'36"W Sec. 25, T15N, R16W	10,503' Chert conglomerates (Devonian?) September, 1951	6501'- 8634' 6480'- 9821' 10228'-10503'	Cores Cores Cores	7 15 7	6380'- 9821' 10228'-10491' 10228'-10503' 6501'- 8634'	Cores Cores Cores Cores	Picked Picked Thin Section Picked	15 3 10 7

Table 2 (con't.). Inventory of palynomorph and Foraminifera microscope slides from test wells drilled during N.P.R.A. and earlier N.P.R.-4 programs.

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N.P.R.A. TEST WELL	LOCATION	PENETRATION	PALYNOMOR	PH MICROSCOPE	SLIDES	FOR	MINIFERA MICI	ROSCOPE SLIDES	
(A.P.I. No.)	Latitude Longitude Sec.Twp.Rge.	Total Depth Deepest Horizon Date Completed	Depths	Type Sample	No. Slides	Depths	Type Sample	Type Slide	No. Slides
W. T. FORAN No. 1 (50-103-20010)	Lat. 70 ⁰ 49'56.01"N Long. 152 ⁰ 18'11.23"W Sec. 13, T17N, R2W	8,864' Argillite Basement (Devonian/older) April, 1977	500'- 8864' 7539'- 8267' 7660'- 8168' 7510'- 7551'	Ditch Cores Sidewall Sidewall	93 5 2 2	500'- 8250' 8200'- 8864' 7551' 7510'- 7551' 7609'- 8206'	Ditch Core Sidewall	Picked Thin Section Picked Picked Picked	250 23 1 2 3

NOTE 1: Microscope slides are listed in the table exactly as they are labeled in the slide boxes. Overlapping depth intervals for the same sample/slide types merely reflect different processing periods.

NOTE 2: Of the 29 test wells listed in this report, the following were drilled during the N.P.R.-4 program:

Atigaru Point No. 1 S. Barrow Nos. 1,2,3,5,9,12,13,14 Cape Halkett No. 1 Fish Creek No. 1 W. Fish Creek No. 1 S. Harrison Bay No. 1 Iko Bay No. 1

Oumalik No. 1 Simpson No. 1 S. Simpson No. 1 E. Teshekpuk No. 1 Topagoruk No. 1 W. T. Foran No. 1

Test wells included in this report that were drilled during the N.P.R.A. program are as follows:

S. Barrow No. 16,17,19	S. Meade No. 1
Drew Point No. 1	Peard Bay No. 1
N. Kalikpik No. 1	E. Simpson No.
Kugrua No. 1	

Table 2 (con't.). Inventory of palynomorph and Foraminifera microscope slides from test wells drilled during N.P.R.A. and earlier N.P.R.-4 programs.

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