AOGCC Pool Statistics

Colville River Unit, Nanuq Undef Oil Pool

Operator: ConocoPhillips Alaska, Inc.

Discovery Well: Sinclair Oil & Gas Company
Colville No. 1
Permit #165-031
API No. 50-103-10002-00-00
Sec. 25, T11N, R07W, UM
Depth: 9,930' MD / 9,930' TVD
March 8, 1966

Status: **Shut-in**

Location: **Central Arctic Slope** Area Location Map DNR Unit Map

Orders: Spacing Exceptions Only

Summary: The Nanuq Undefined Oil Pool was discovered in 2000 by the Nanuq 2 well, which tested 1,750 barrels of oil and 1.2 million cubic feet of gas per day from both Nanuq and Kuparuk reservoir sands. The Colville River Unit CD1-NQ1 delineation well (subsequently renamed Colville River Unit CD1-229) was drilled during 2001, and it tested 460 barrels of oil and 6.5 million cubic feet of gas per day from a horizontal completion. Sustained production is recorded from only CD1-229. Between February and July of 2001, the well produced a total of 60 days, yielding 19,312 barrels of oil and 298 million cubic feet of gas, for an average rate of 332 barrels of oil per day and 4,869 million cubic feet of gas per day.

Geology: The reservoir consists of the Cretaceous-age Nanuq sands: Nanuq 2 and CD1-229 encountered 50 and 19 vertical feet of oil-bearing sandstone, respectively. Nanuq 2 also opened 9 vertical feet of Kuparuk reservoir sand for the commingled production test discussed above. Oil gravity from Nanuq 2 and CD1-229 measured 40 and 41 degrees API, respectively.

Orig. Oil in Place: Not Reported

Production: Prod Chart Prod Report Prod Data

	Oil (bbls)	NGL (bbls)	Gas (mcf)	Water (bbls)
Cumulative	**19,582**	**0**	**299,846**	**0**
2001 Total	0	0	0	0
2002 Total	0	0	0	0
2003 Total	0	0	0	0
2004 Total	270	0	1,374	0
2003 Daily Rate	0	0	0	0
2004 Daily Rate	1	0	4	0
Change (%)	-	0	-	0

Continued: 1 > 2 > 3

AOGCC Pool Statistics

Colville River Unit, Nanuq Undef Oil Pool

EOR Injection:

	Gas (Mcf)	Water
Cumulative	**0**	**0**
2001 Total	0	0
2002 Total	0	0
2003 Total	0	0
2004 Total	0	0
2003 Rate (per day)	0	0
2004 Rate (per day)	0	0
Change (%)	0	0

Disposal Injection in Field:

Chart Report Data

	Disposed Fluids
Cumulative	**2,131,379**
2001 Total	446,862
2002 Total	421,143
2003 Total	407,691
2004 Total	384,326
2003 Rate (per day)	1,117
2004 Rate (per day)	1053
Change (%)	-6%

Field Development Information:

Wells In Field

Type Well	Status	2004	2003	2002	2001	2000
Producer	Oil Producer	48	39	32	24	20
Injector	Water Injector	8	2	2	0	0
	Gas Injector	1	1	1	3	2
	WAG Injector	40	35	27	13	11
	Water Supply	0	0	0	0	0
	Observation	1	0	0	0	0
	Disposal	2	2	2	2	2
Non-Operating	Suspended	0	0	2	2	3
	Abandoned	5	5	3	3	1
Total		**105**	**84**	**69**	**47**	**39**

Active Completions in Pool (Month of December):

Type Well	Status	2004	2003	2002	2001	2000
Oil Producer	Flowing	0	0	0	0	0
	Gas Lift	0	0	0	0	0
	Shut-In	1	0	0	0	0
Service Well	Water Injector	0	0	0	0	0
	Gas Injector	0	0	0	0	0
	WAG Injector	0	0	0	0	0
	Water Supply	0	0	0	0	0
	Shut-In	0	0	0	0	0
Disposal Undef.	Disposal Injector	0	0	0	0	0
	Shut-In	0	0	0	0	0
Total		**1**	**0**	**0**	**0**	**0**

Continued: 1 > 2 > 3

AOGCC Pool Statistics

Colville River Unit, Nanuq Undef Oil Pool

Permitted Wells in Field:

Type Well	Status	2004	2003	2002	2001	2000
Development	New	8	5	8	9	13
	Sidetrack	0	0	0	1	1
	Multilateral	3	1	0	0	2
Service	New	8	12	10	4	5
	Sidetrack	0	0	1	0	0
	Multilateral	2	0	0	0	0
Exploration	New	0	0	0	1	0
	Sidetrack	0	0	0	1	0
Total		**21**	**18**	**19**	**16**	**21**

Reservoir Properties:

Description	2004	2003	2002	2001	2000
Reference Datum - ft. below sea level	-	-	-	-	-
Temperature - ° F	-	-	-	-	-
Porosity - %	-	-	-	-	-
Permeability - md	-	-	-	-	-
Swi - %	-	-	-	-	-
Oil Viscosity @ Orig. Press. cp	-	-	-	-	-
Oil Viscosity @ Sat. Press. cp	-	-	-	-	-
Orig. Press. - psi	-	-	-	-	-
Bubble Point - psi	-	-	-	-	-
Current Reservoir Press. - psi	-	-	-	-	-
Oil Gravity - ° API	-	-	-	-	-
Gas Specific Gravity (Air = 1.0)	-	.-	-	-	-
Gross Pay - ft.	-	-	-	-	-
Net Pay - ft.	-	-	-	-	-
Orig. FVF - RB/STB	-	-	-	-	-
Bubble Point FVF - RB/STB	-	-	-	-	-
Orig. GOR - SCF/STB	-	-	-	-	-
GOR (current yr.) - SCF/STB	5089	-	-	15455	-
*Operator will provide reservoir data when pool rules are established.					

References / Summary

Continued: 1 > 2 > 3

State of Alaska, Oil and Gas Conservation Commission

Production History for: COLVILLE RIVER, NANUQ UNDF OIL Pool

Jan 1958 Dec 2004

Month	DaysProd	Oil (BBL)	Gas (MCF)	Water (BBL	Producing Wells
Feb 2001	19	6404	97646	0	1
Mar 2001	23	7036	105742	0	1
Apr 2001	12	3766	67142	0	1
May 2001	4	1366	20242	0	1
Jul 2001	2	740	7700	0	1
Year Total		**19312**	**298472**	**0**	
Oct 2004	1	270	1374	0	1
Year Total		**270**	**1374**	**0**	
Pool Total		**19,582**	**299,846**	**0**	

State of Alaska, Oil and Gas Conservation Commission

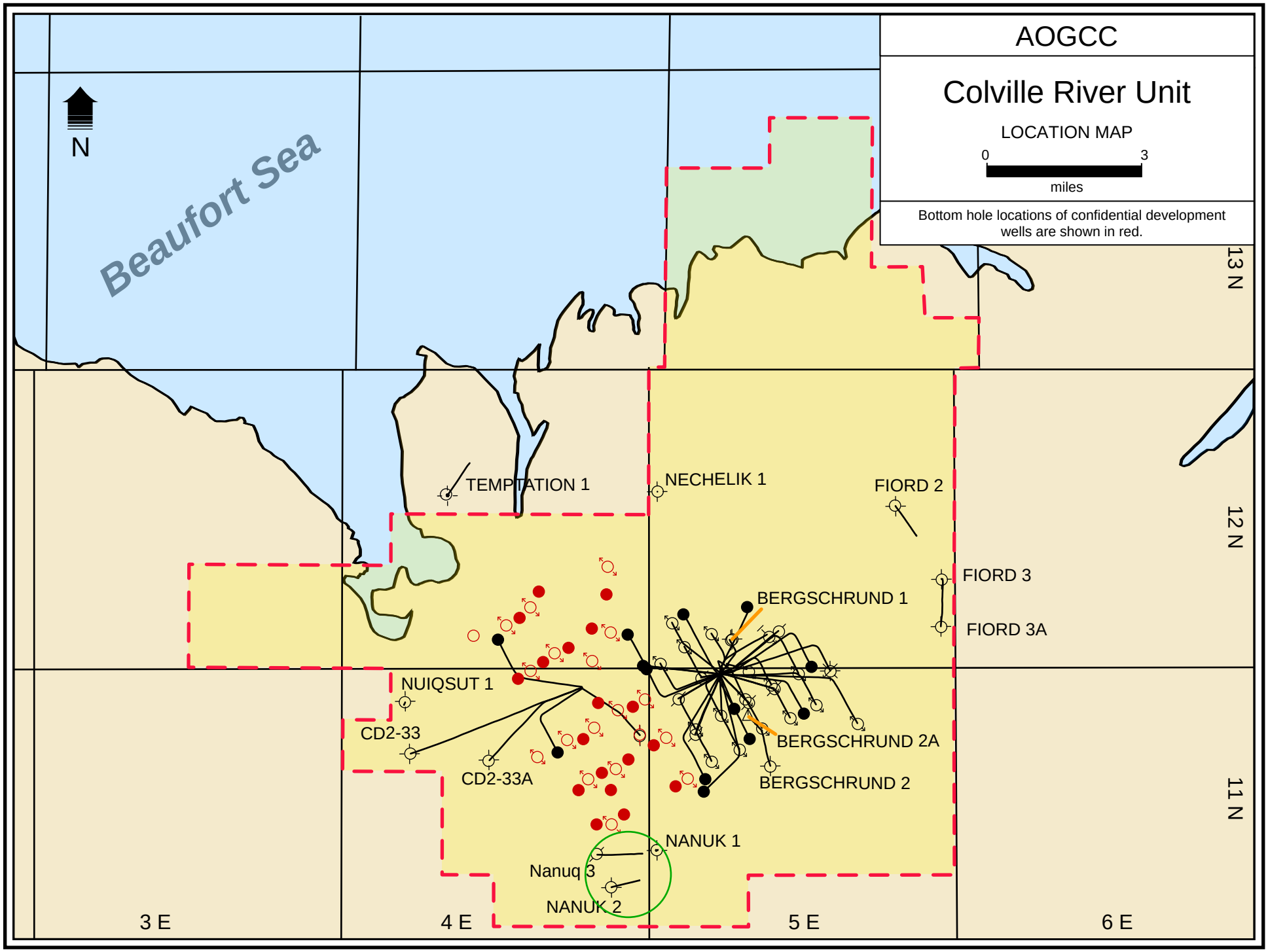
Injection History for: COLVILLE RIVER, UNDEFINED WDSP Pool

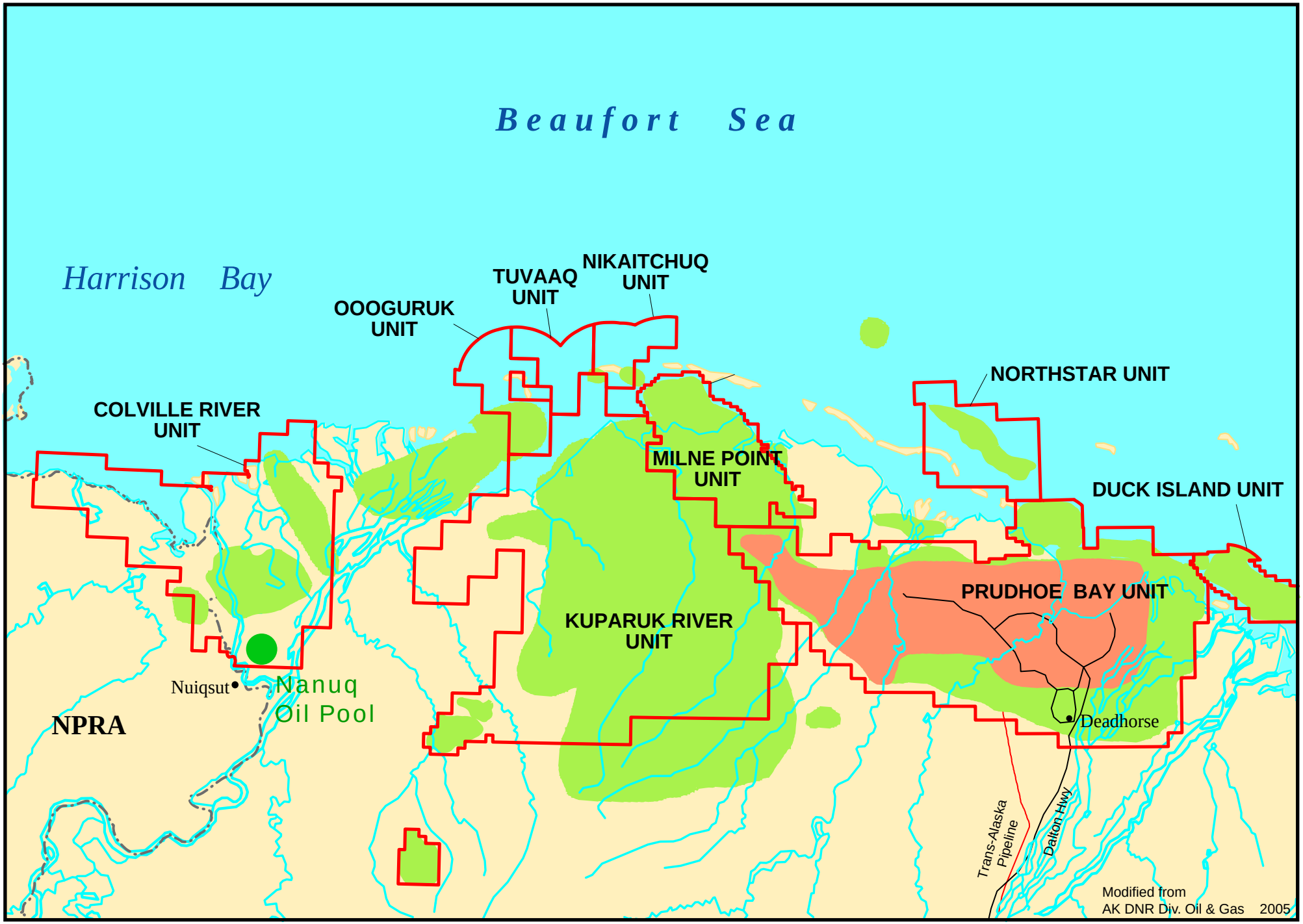
Month	DaysInj	Liquid (BBL)	Gas (MCF)	Injecting Wells
May 1999	17	4639	0	1
Jun 1999	30	11550	0	1
Jul 1999	31	11971	0	1
Aug 1999	31	12776	0	1
Sep 1999	30	11978	0	1
Oct 1999	31	11555	0	1
Nov 1999	30	13747	0	1
Dec 1999	31	13770	0	1
Year Total		**91986**	**0**	
Jan 2000	31	16163	0	1
Feb 2000	29	19551	0	1
Mar 2000	31	28506	0	1
Apr 2000	30	22318	0	1
May 2000	31	32116	0	1
Jun 2000	30	34241	0	1
Jul 2000	31	37572	0	1
Aug 2000	34	32632	0	2
Sep 2000	31	31613	0	2
Oct 2000	47	31040	0	2
Nov 2000	34	70753	0	2
Dec 2000	37	22866	0	2
Year Total		**379371**	**0**	
Jan 2001	36	20731	0	2
Feb 2001	32	22413	0	2
Mar 2001	62	53966	0	2
Apr 2001	59	71398	0	2
May 2001	53	49059	0	2
Jun 2001	39	33071	0	2
Jul 2001	31	29138	0	1
Aug 2001	43	40979	0	2
Sep 2001	45	34971	0	2
Oct 2001	43	38930	0	2
Nov 2001	38	29239	0	2
Dec 2001	33	22967	0	2
Year Total		**446862**	**0**	
Jan 2002	35	23351	0	2
Feb 2002	34	23742	0	2
Mar 2002	44	42996	0	2
Apr 2002	35	33102	0	2
May 2002	43	33254	0	2
Jun 2002	33	28205	0	2
Jul 2002	34	34865	0	2
Aug 2002	34	27493	0	2
Sep 2002	34	43033	0	2
Oct 2002	36	46387	0	2
Nov 2002	31	38000	0	2
Dec 2002	37	46715	0	2
Year Total		**421143**	**0**	

State of Alaska, Oil and Gas Conservation Commission

Injection History for: COLVILLE RIVER, UNDEFINED WDSP Pool

Month	DaysInj	Liquid (BBL)	Gas (MCF)	Injecting Wells
Jan 2003	33	39831	0	2
Feb 2003	34	39104	0	2
Mar 2003	29	34461	0	2
Apr 2003	31	43108	0	2
May 2003	39	50719	0	2
Jun 2003	39	55763	0	2
Jul 2003	36	21923	0	2
Aug 2003	39	38143	0	2
Sep 2003	43	25497	0	2
Oct 2003	39	22776	0	2
Nov 2003	34	17802	0	2
Dec 2003	38	18564	0	2
Year Total		**407691**	**0**	
Jan 2004	38	17674	0	2
Feb 2004	35	18352	0	2
Mar 2004	35	27331	0	2
Apr 2004	35	26788	0	2
May 2004	34	36791	0	2
Jun 2004	43	51069	0	2
Jul 2004	40	31713	0	2
Aug 2004	35	31272	0	2
Sep 2004	36	28857	0	2
Oct 2004	32	22584	0	2
Nov 2004	52	47895	0	2
Dec 2004	49	44000	0	2
Year Total		**384326**	**0**	
Pool Total		**2,131,379**	**0**	


AOGCC
Colville River Unit
LOCATION MAP
0
3
miles
Bottom hole locations of confidential development wells are shown in red.
N
Beaufort Sea
TEMPTATION 1
NECHELIK 1
FIORD 2
FIORD 3
FIORD 3A
BERGSCHRUND 1
BERGSCHRUND 2A
BERGSCHRUND 2
NUIQSUT 1
CD2-33
CD2-33A
NANUK 1
Nanuq 3
NANUK 2
13 N
12 N
11 N
3 E
4 E
5 E
6 E



North Slope, Alaska

COLVILLE RIVER, NANUQ UNDF OIL

Reference List

Alaska Oil and Gas Conservation Commission, 2004, Production Database

Nelson, K., 2001, Second Alpine Satellite Discovery Announced, Petroleum News, Vol. 6, No. 7, July 30, 2001; available online at: http://www.petroleumnews.com/pnads/794858618.shtml

Phillips Petroleum Company, 2001, Phillips and Anadarko Announce New Satellite Discovery at Alpine, Phillips Petroleum Company Newsroom - 2001 News Release, 7/25/2001; http://www.phillips66.com/newsroom/NewsReleases/rel348.html

PI/Dwights, 2004, ConocoPhillips, Anadarko Approve Development of Alpine Satellites; in PI/Dwights Drilling Wire, V. 50, No. 52, December 28, 2004

Nanuq Undef Oil Pool

Summary

The Nanuq Undefined Oil Pool was discovered in 2000 by the Nanuq 2 well, which tested 1,750 barrels of oil and 1.2 million cubic feet of gas per day from both Nanuq and Kuparuk reservoir sands. The Colville River Unit CD1-NQ1 delineation well (subsequently renamed Colville River Unit CD1-229) was drilled during 2001, and it tested 460 barrels of oil and 6.5 million cubic feet of gas per day from a horizontal completion.[1] Sustained production is recorded from only CD1-229. Between February and July of 2001, the well produced a total of 60 days, yielding 19,312 barrels of oil and 298.5 million cubic feet of gas, for an average rate of 332 barrels of oil per day and 4,869 million cubic feet of gas per day.[2]

Geology

The reservoir consists of the Cretaceous-age Nanuq sands: Nanuq 2 and CD1-229 encountered 50 and 19 vertical feet of oil-bearing sandstone, respectively.[3] Nanuq 2 also opened 9 vertical feet of Kuparuk reservoir sand for the commingled production test discussed above.[4] Oil gravity from Nanuq 2 and CD1-229 measured 40 and 41 degrees API, respectively.[5]

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[1] Phillips Petroleum Company Newsroom, 2001 News Release dated 7/25/2001, available online at: http://www.phillips66.com/newsroom/NewsReleases/rel348.html

[2] Alaska Oil and Gas Conservation Commission, 2004, Production Database

[3] Nelson, K., 2001, Second Alpine Satellite Discovery Announced, Petroleum News, Vol. 6, No. 7, July 30, 2001; available online at: http://www.petroleumnews.com/pnads/794858618.shtml

[4] Phillips Petroleum Company, 2001, Phillips and Anadarko Announce New Satellite Discovery at Alpine, Phillips Petroleum Company Newsroom - 2001 News Release, 7/25/2001; http://www.phillips66.com/newsroom/NewsReleases/rel348.html

[5] Nelson, K., 2001, Second Alpine Satellite Discovery Announced, Petroleum News, Vol. 6, No. 7, July 30, 2001; available online at: http://www.petroleumnews.com/pnads/794858618.shtml

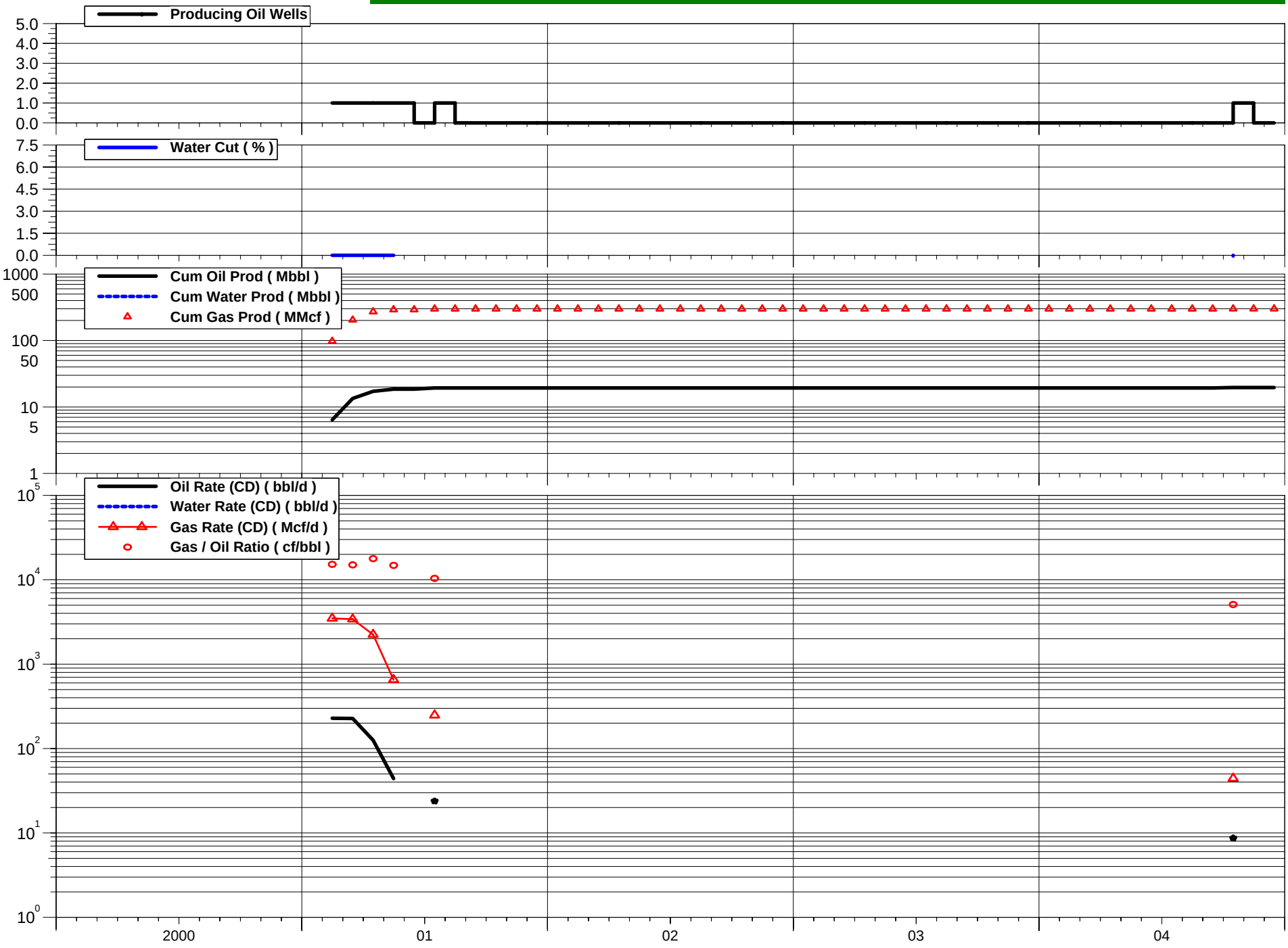
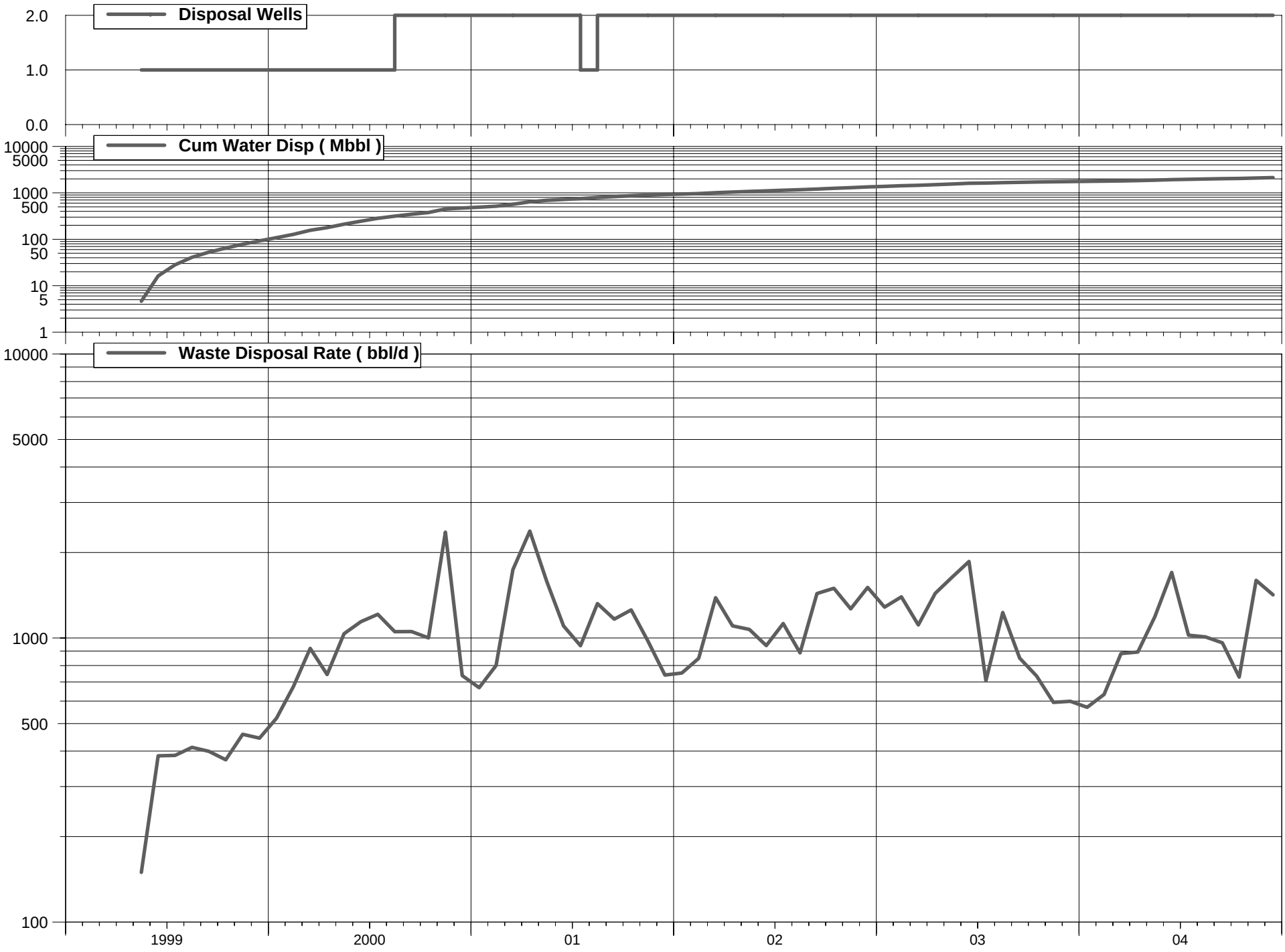
COLVILLE RIVER FIELD

No Pool

Spacing Exception Orders

Order No.		AA	Operator	Date	Description	Current
CO	442	0	ARCO ALASKA	18-Feb-99	Spacing exception for Fiord #4 & #5 exploratory oil wells to an undefined pool in the Colville River Unit.	Y
CO	438	0	ARCO ALASKA	07-Jan-99	Spacing exception for Alpine WD-2 deviated non-hazardous waste disposal well in the Colville River Unit.	Y
CO	414	0	ARCO ALASKA	12-Mar-98	Spacing exception FOR CD2-35 OIL WELL IN THE COLVILLE DELTA VICINITY.	Y
CO	410	0	ARCO ALASKA	29-Jan-98	Spacing exception FOR DRILLING CD1-22 OIL WELL IN THE COLVILLE DELTA VICINITY.	Y
CO	376	0	ARCO ALASKA	13-Mar-96	Spacing exception for Nanuk 1 delineation oil well in the Colville Delta Vicinity.	Y
CO	377	0	ARCO ALASKA	13-Mar-96	Spacing exception for Bergschrund 2A delineation oil well in the Colville Delta Vicinity.	Y
CO	373	0	ARCO ALASKA	26-Feb-96	Spacing exception for Neve 1A delineation oil well in Colville Delta Vicinity.	Y
CO	372	0	ARCO ALASKA	21-Feb-96	Spacing exception for Bergschrund 2A delineation oil well in Colville Delta Vicinity.	Y
CO	368	0	ARCO ALASKA	08-Jan-96	Spacing exception for the drilling of Nuiqsut #1 delineation well.	Y
CO	367	0	ARCO ALASKA	03-Jan-96	Spacing exception for 7 delineation wells; Nanuk #1, Neve #1, 1A & 1B, Temptation #1, Alpine #3 and Bergschrund #4.	Y
CO	354	0	ARCO ALASKA	18-Jan-95	Spacing exception for Alpine No. 1 exploratory oil well	Y
CO	18	0	SINCLAIR OIL A	11-Oct-65	Spacing exception, Well - Colville #1.	N

COLVILLE RIVER FIELD, NANUQ UNDEFINEDOIL POOL



COLVILLE RIVER FIELD, UNDEFINED WASTE DISPOSAL POOL