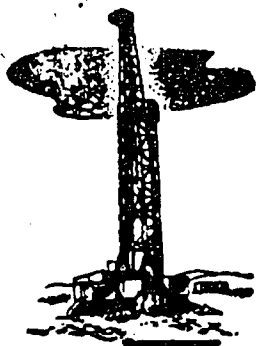


221029512

DHC

NA

**YATES DRILLING COMPANY**

105 SOUTH FOURTH STREET - ARTESIA, NEW MEXICO 88210

(505) 748-1471 • FAX (505) 748-4579

PEYTON YATES  
PRESIDENTS. P. YATES  
VICE PRESIDENTRANDY G. PATTERSON  
SECRETARYDENNIS G. KINSEY  
TREASURER

May 24, 2002

David Catanach  
State of New Mexico  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

Dear Mr. Catanach,

Yates Drilling Company hereby seeks administrative approval to downhole commingle the production from the Grayburg Morrow and the Undesignated Atoka pools in the Millennium 34 Federal Com #1 located in Unit M of Section 34, Township 17 South, Range 29 East, Eddy County, NM.

If you have any questions or need additional information, please call me at (505) 746-0308. Thank you.

Sincerely,

Tobin L. Rhodes  
Petroleum Engineer

TLR/kjl

enclosures

OIL CONSERVATION DIV.  
02 JUL 26 PM 1:32~~UNDG - GRAYBURG - ATOKA~~

District I  
1625 N. Fifth Drive, Hobbs, NM 88240

District II  
811 South First Street, Artesia, NM 88210

District III  
1000 Rio Brazos Road, Artec, NM 87410

District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107A  
Revised May 15, 2000

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, New Mexico 87505

APPLICATION TYPE

☒ Single Well  
☐ Establish Pre-Approved Pools  
EXISTING WELLBORE  
☒ Yes ☐ No

APPLICATION FOR DOWNHOLE COMMINGLING

YATES DRILLING COMPANY 105 South Fourth Street, Artesia, NM 88210  
Operator Address  
Millennium 34 Federal Com #1 M 34-17S-29E Eddy  
Lease Well No. Unit Letter-Section-Township-Range County  
OGRID No. 025513 Property Code 028164 API No. 30-015-31883 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	<del>Grayburg</del> Undesignated/Atoka		Grayburg Morrow
Pool Code			77840
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	10677-10688 Proposed		10874-10882 Perforated 10914-10919 Perforated
Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	Not required		48 hr. shut-in 1298 psig @10,897 5/18/02
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1123 BTU estimated		1123 BTU
Producing, Shut-In or New Zone	New zone, not completed		Producing
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data)	Date: Rates Not completed  (See attachments)	Date: Rates:	Date: 5/16/02 Rates 25 mcf/d 0 bopd 0bwud
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required)	Oil Gas  %(See attachments)	Oil Gas  % %	Oil Gas  %(See attachments) %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ☒ No ☐  
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes ☐ No ☐  
Are all produced fluids from all commingled zones compatible with each other? Yes ☒ No ☐  
Will commingling decrease the value of production? Yes ☐ No ☒  
If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes ☒ No ☐  
NMOCD Reference Case No. applicable to this well: DHC-2208 DHC-2782

Attachments:  
C-102 for each zone to be commingled showing its spacing unit and acreage dedication.  
Production curve for each zone for at least one year. (If not available, attach explanation.)  
For zones with no production history, estimated production rates and supporting data.  
Data to support allocation method or formula.  
Notification list of working, royalty and overriding royalty interests for uncommon interest cases.  
Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

List of other orders approving downhole commingling within the proposed Pre-Approved Pools  
List of all operators within the proposed Pre-Approved Pools  
Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.  
Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Tobin L. Rhodes TITLE Petroleum Engineer DATE 5/24/02  
TYPE OR PRINT NAME \_\_\_\_\_  
TELEPHONE NO. (505) 746-0308

## ATTACHMENTS

### Application for Administrative Approval of Downhole Commingling

Yates Drilling Company  
Millennium 34 Federal Com #1  
M 34 17S 29E  
Eddy County, NM

#### C-102s

C-102 Forms for the Undesignated Atoka and the Grayburg Morrow are attached.

#### Morrow Production

The Morrow formation has been producing since January 2002. A decline curve for this production is attached.

#### Atoka Production

The zone of interest in the Atoka Formation has not been perforated, so a production history is not available. We expect the Atoka to initially produce between 500 and 1,000 mcf/d of dry gas based on log evaluation. Copies of the logs covering the Atoka zone of interest are attached for the subject well.

#### Fixed Allocation Percentage

After perforating, stimulating, and producing the Atoka zone of interest an allocation formula will be submitted to the NMOCD for approval.

#### Parties Notified of Application

The United States BLM has been mailed a copy of this application.

#### NMOCD Cases of Interest

Case DHC-2208 approved the commingling of production from the Loco Hills Chester, South Empire Morrow and the Undesignated Atoka pools in the Loco ASI Com #1 well in Unit L, 10-18S-29E, Eddy County, NM.

Case DHC-2782 approved the commingling of production from the Loco Hills Chester, South Empire Morrow and the Undesignated Atoka pools in the Cabeza AUD Federal Com #1 well in Unit D, 10-18S-29E, Eddy County, NM.

District I  
PO Box 1980, Hobbs, NM 88241-1980  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102  
Revised February 10, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-015-31833		2 Pool Code 77840		3 Pool Name Grayburg Morrow	
4 Property Code 028164		5 Property Name Millenium 34 Federal Com			6 Well Number 1
7 OGRID No. 025513		8 Operator Name Yates Drilling Company			9 Elevation 3531

10 Surface Location

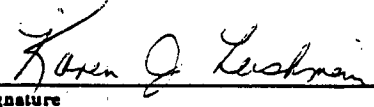
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	34	17S	29E		990	South	990	West	Eddy

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16					17 OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i>   Signature Karen J. Leishman Printed Name Engineering Technician Title 5/23/2002 Date
18 SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i>  Refer to original plat Date of Survey Signature and Seal of Professional Surveyor:  Certificate Number					

District I  
PO Box 1980, Hobbs, NM 88241-1980  
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PO Drawer DD, Artesia, NM 88211-0719  
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State of New Mexico  
Energy, Minerals & Natural Resources Department

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Santa Fe, NM 87504-2088

Form C-102  
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-015-31833		2 Pool Code		3 Pool Name Undesignated Atoka	
4 Property Code 028164		5 Property Name Millenium 34 Federal Com			6 Well Number 1
7 OGRID No. 025513		8 Operator Name Yates Drilling Company			9 Elevation 3531

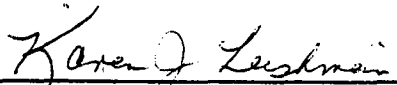
10 Surface Location

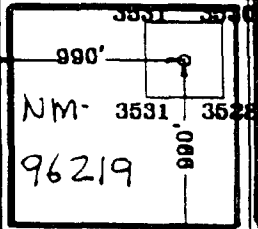
UL or lot no. M	Section 34	Township 17S	Range 29E	Lot Idn	Feet from the 990	North/South line South	Feet from the 990	East/West line West	County Eddy
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11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres									
13 Joint or Infill									
14 Consolidation Code									
15 Order No.									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16				17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief   Signature Karen J. Leishman Printed Name Engineering Technician Title 5/23/2002 Date	
				18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Refer to original plat Date of Survey Signature and Seal of Professional Surveyor	
				Certificate Number	

NM- 065108	NM- 028775		
	NM- 064073		
 <p>990' NM- 3531 3522 96219 990'</p>			

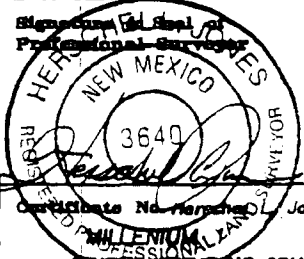
**OPERATOR CERTIFICATION**

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

*Cy Cowan*  
Signature  
Cy Cowan  
Printed Name  
Regulatory Agent  
Title  
April 12, 2001  
Date

**SURVEYOR CERTIFICATION**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

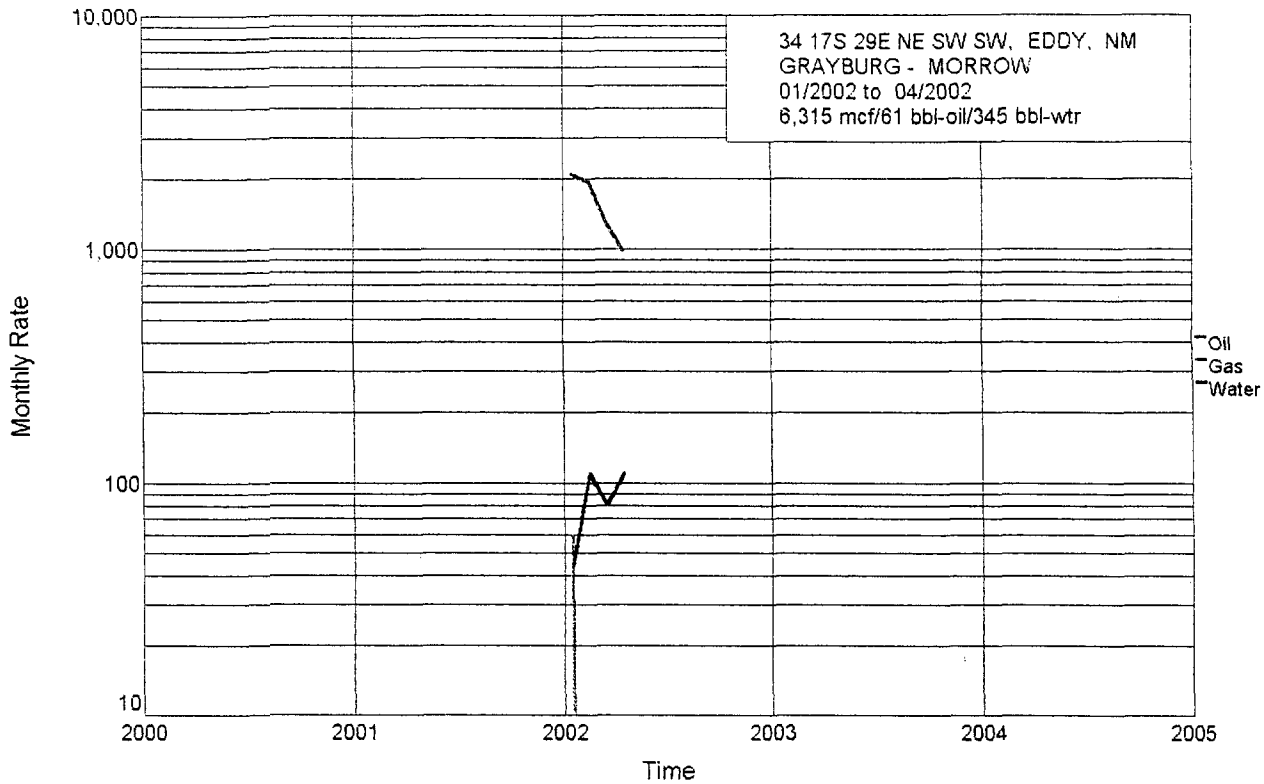
3/06/2001  
Date Surveyed  
Signature and Seal of Professional Surveyor  
  
Certificate No. RLS Jones RLS 3640  
MILLENNIUM PROFESSIONAL SURVEYING COMPANY

# Historic Production and Well Count Detail Report

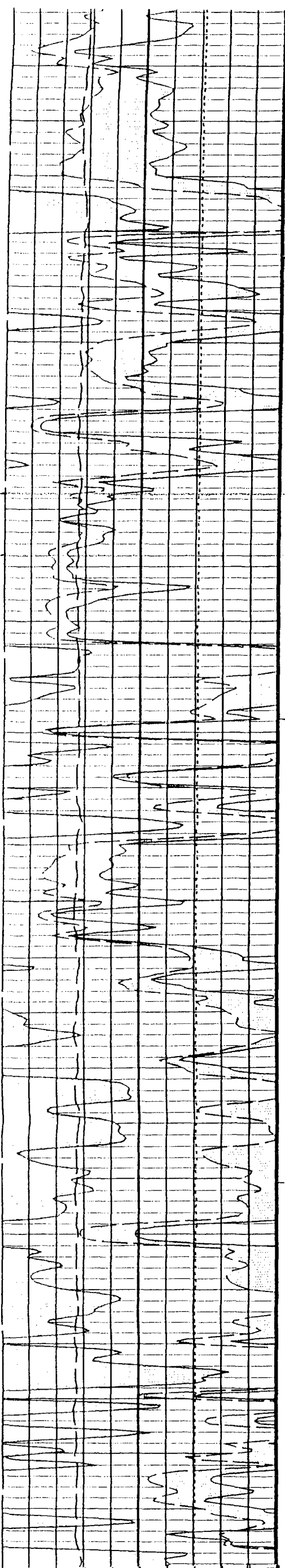
Project: C:\Program Files\IHS Energy\PowerTools v5.0\Projects\Millennium.MDB

Lease Name: MILLENNIUM 34 FEDERAL COM #1 (1) Operator: YATES DRILLING COMPANY  
 County, ST: EDDY, NM Field Name: GRAYBURG  
 Location: 34 17S 29E NE SW SW

## 30015318330000 - MILLENNIUM 34 FEDERAL COM #1



<u>Date</u>	<u>Oil</u> <u>(bbl)</u>	<u>Gas</u> <u>(mcf)</u>	<u>Water</u> <u>(bbl)</u>	<u>Well Count</u>	<u>Total Oil</u> <u>(bbl)</u>	<u>Total Gas</u> <u>(mcf)</u>	<u>Total Water</u> <u>(bbl)</u>
01/2002	59	2,078	44	1	59	2,078	44
02/2002	0	1,946	110	1	59	4,024	154
03/2002	0	1,306	81	1	59	5,330	235
04/2002	2	985	110	1	61	6,315	345
05/2002	0	0	0	0	61	6,315	345
06/2002	0	0	0	0	61	6,315	345
07/2002	0	0	0	0	61	6,315	345
08/2002	0	0	0	0	61	6,315	345
09/2002	0	0	0	0	61	6,315	345
10/2002	0	0	0	0	61	6,315	345
11/2002	0	0	0	0	61	6,315	345
12/2002	0	0	0	0	61	6,315	345
Total:	61	6,315	345				

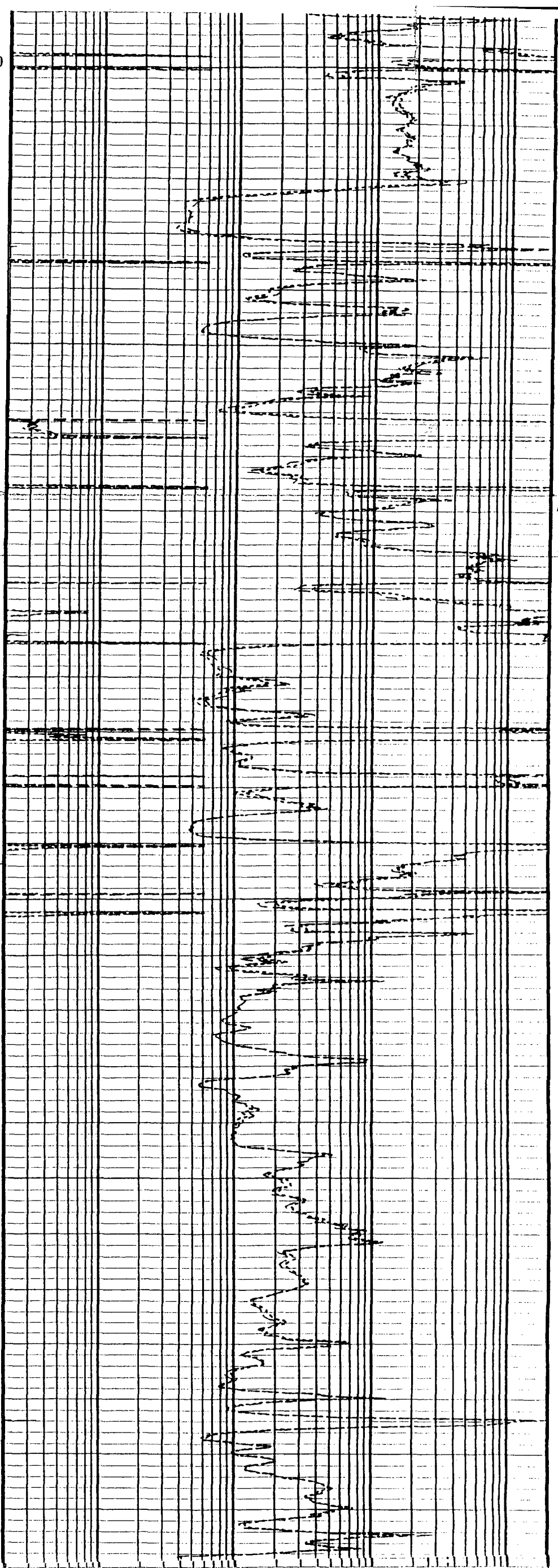


Spectroscopy Gamma Ray on Backup		
Uranium Indicator		
Computed Gamma Ray (CGR)		
0	(GAPI)	100
SPCS Caliper (CALI SPCS)		
2	(IN)	12
Spectroscopy Gamma Ray (SGR)		
0	(GAPI)	100
CGR (GAPI)		

10600

10700

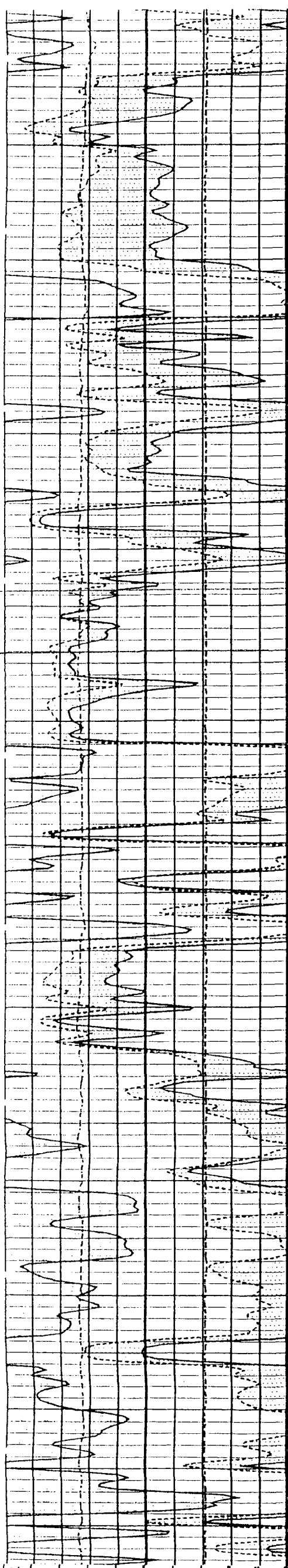
10800



0.2	HALS Computed Mud Resistivity (HRM)	2000
	(OHMM)	
0.2	Stan Res Deep Laterolog Resistivity (HLLD)	2000
	(OHMM)	
0.2	Stan Res Shallow Laterolog Resistivity (HLLS)	2000
	(OHMM)	

Atoka  
Proposed Perf  
Interval 10671-688



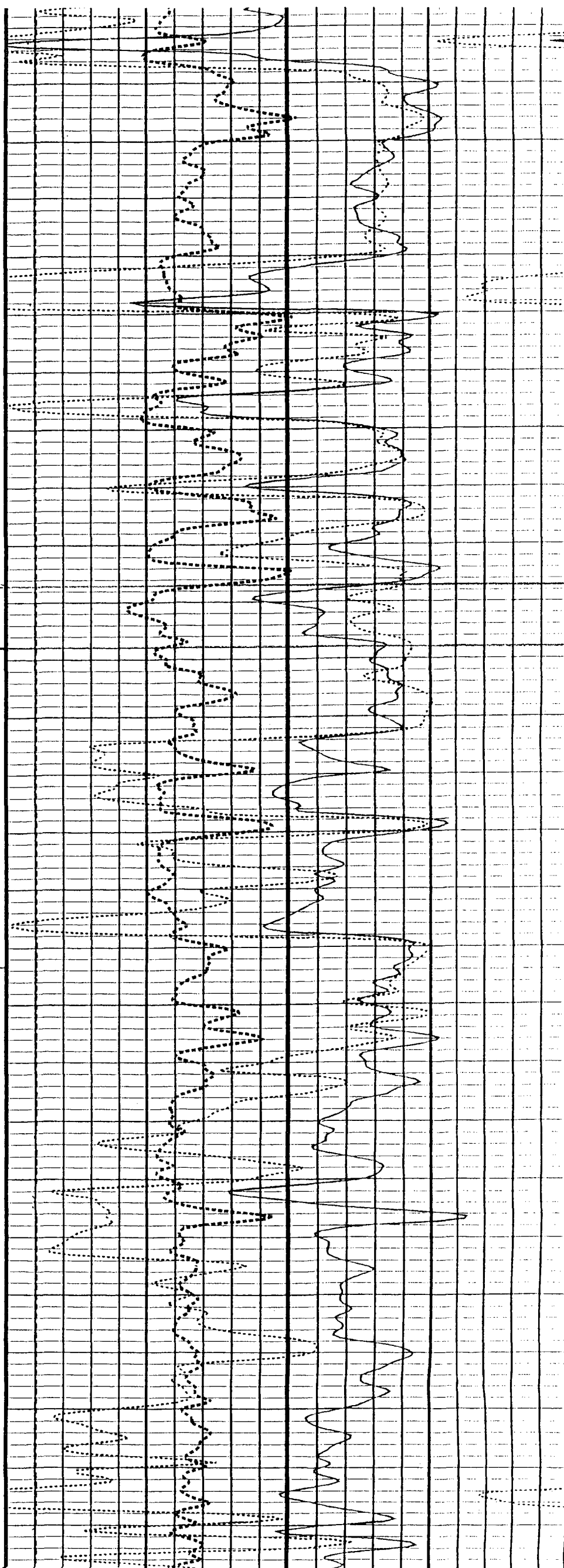


10600

10700

10800

Atoka  
Proposed Perf.  
Interval 10671-688



Spectroscopy Gamma Ray on Backup		
Uranium Indicator		
Computed Gamma Ray (CGR)		
0	(GAPI)	100
SPCS Caliper (CALI SPCS)		
2	(IN)	12
Spectroscopy Gamma Ray (SGR)		
0	(GAPI)	100
Cable Tension (TENS)		
10000	(LBF)	0

RUN 2

SLDT Density Porosity (DPHI SLDT)		
0.3	(V/V)	-0.1
Thermal Neutron Porosity (TNPH)		
0.3	(V/V)	-0.1
SLDT Perf (PEF SLDT)		
0	(---)	10
SLDT Density Quality Factor (QRHO SLDT)		
-0.05	(---)	0.45