

OIL AND GAS WELL
SUMMARY REPORT

API No. 45-169-20784-00-03 VDMR Well Rep. No. W-7125

DMQ File No. SC-18

Operator EARLY GROVE GAS COMPANY

Farm N. L. BAKER

Co. Well No. #1 BAKER

County SCOTT Quadrangle MENDOTA 7 1/2'

Location (UTM) N4,055,820; E381,570 UTM Zone 17

(Lat. and Long.) _____

Field EARLY GROVE Province VALLEY AND RIDGE

Elev. (specify) 1602' GR. TD 4135 Form. at TD PRICE

INITIAL FLOW 12,000 CU. FT. Age MISSISSIPPIAN

Date compl. or abandoned JUNE 24, 1985

Result GAS WELL

Gas Shows _____

Gas Pays _____

Main Production _____ Prod. Form. LITTLE VALLEY

FINAL FLOW ON 500,000 CU. FT. Age MISSISSIPPIAN

Treatment: LITTLE VALLEY-WATER FRAC.; 30,000 POUNDS OF 20/40 SAND; 656 BARRELS OF TOTAL FLUID.

Initial Production _____

Oil shows _____

Water FW YES at 30' at 400' at _____
SW _____ at _____ at _____ at _____

Coal _____

Plat _____ Plotted _____ Completion Report X

Drillers Log X Geologic Log _____

Samples X Interval Sheet X

Sample Interval 540' TO 4140'

Remarks _____

Geophysical Logs S.P. _____ Res _____ Gamma _____ Neutron _____

Density _____ Sonic _____ Other _____

Stratigraphic Data Source

BARTLETT ENERGY INC.

Formation	Top	Datum (Subsea)	Thickness
COVE CREEK	0	+ 1602	134
FIDO	134	+ 1468	66
GASPER	200	+ 1402	860
STE. GENEVIEVE	1060	+ '542	1395
ST. LOUIS	2455	- 853	404
LITTLE VALLEY	2859	- 1257	824
MACCRADY	3683	- 2081	159
PRICE	3842	- 2240	293

Remarks

References

Released to Open File: Completion

SEPTEMBER 22, 1985

Samples

~~NONE~~ YES

(Note: UTM measurements in meters, all others in feet)

N.L. BAKER
#1 BAKER
SUR. EL. - 1602'
MENDOTA 7 1/2
SC-18

Date: July 18, 1985, 19__

Operator's Well No. N. L. Baker #1

VIRGINIA OIL AND GAS INSPECTOR
DEPARTMENT OF LABOR AND INDUSTRY
OIL AND GAS SECTION
205 W. Main Street
Abingdon, Virginia 24210
Phone 703 628-8115

REPORT OF COMPLETION OF WELL WORK

Pursuant to Regulation 4.06 of the Regulations under the Virginia Oil and Gas Act, the undersigned well operator reports completion of the type(s) of well work specified below on the referenced well in Fulkerson District, Scott County, Virginia on 24th day, June Month, 19 85.

WELL TYPE: Oil___/ GasX/ Enhanced recovery___/ Waste disposal___/
If "Gas", ProductionX/ Underground storage___/

Exempt by Code § 45.1-300.B.1 from general oil and gas conservation law: Yes___/ No___/

WELL WORK: Drill X/ Deepen___/ Redrill___/ StimulateX/
Plug off old formation___/ Perforate new formation___/
Plug___/ Replug___/
Other physical change in well (specify) _____

The well work was done as shown in the Appendix(es) applicable to the type(s) of well work involved.

CONFIDENTIALITY STATUS UNDER CODE OF VIRGINIA § 45.1-332:

X Ninety days from the filing of this report,

or

Two years from _____, 19__, the date on which the referenced well was completed, the well being an exploratory well as defined in Code of Virginia § 45.1-288.21.

APPLICANT: Early Grove Gas Company

By William B. Runfro
Its Authorized Agent

Address: P. O. Box 1280, Bristol, VA 24203

Telephone: 703-466-3322

FORM 16
APPENDIX A,
SHEET 1, (OBVERSE)

API WELL NO. 45 - 169 - 20784
State County Permit
Date: July 18, 1985
Operator's Well
Name N. L. Baker #1

REPORT OF COMPLETION OF WELL WORK
IF DRILLING, REDRILLING, OR DEEPENING IS INVOLVED

DRILLING CONTRACTOR Keen Drilling Company
ADDRESS P. O. Box 565, Keen Mountain, VA 24624
TELEPHONE 703-498-4551

GEOLOGICAL TARGET FORMATION Little Valley Formation and Price Sands
DEPTH OF COMPLETED WELL 4135 FEET
DATE DRILLING COMMENCED 5-20-85
DATE DRILLING COMPLETED 6-05-85
DRILLING RIG: ROTARY X / CABLE TOOL /

GEOLOGICAL DATA	Depth		Thickness
	Top	Bottom	
Fresh Water	30' (est)	400 (est)	
Salt water			

Salt water

Coal Seams

Name	MINING IN AREA		
	Yes	No	Mined Out
		X	

Oil

Formation

Gas

Formation
Little Valley Formation
Price Sands

The data on depth of strata is based on the source(s) checked below:

- Applicant's own drilling experience in the area
- Information supplied by the coal operator in the area
- Information already in possession of the Inspector
- Other (as follows) Interpretation by Bartlett Energy
Abingdon, VA 24210

OTHER GENERAL INFORMATION

An electric log survey was X / was not ___ / conducted pursuant to Code of Virginia § 45.1-333.B.2, at the coal owner's or operator's request.

An electric log survey was ___ / was not X / run for other purposes. This survey did ___ / did not ___ / disclose the vertical location of a coal seam.

Note: If a coal seam was located, the part of the survey from the surface through the coal is attached in accordance with Code of Virginia § 45.1-333.B.3.

Deviation surveys were ___ / were not X / required under Code of Virginia § 45.1-333.C "to the bottom of the lowest published coal seam depth".

Note: If deviation surveys were required, the survey results are attached.

A continuous survey was ___ / was not ___ / required under Code of Virginia § 45.1-333.C.

Note: If a continuous directional survey was required, the survey results are attached.

CHANGES IN THE PERMITTED WELL WORK

The well operator did ___ / did not X / make any change(s) in the permitted well work, verbally approved by the Inspector or Assistant Inspector under Regulation 4.03 of the Regulations under the Virginia Oil and Gas Act, for the purpose of insuring successful completion of the well work.

Note: The nature and purpose of each such change, if any, is set out below or on additional sheets if such are required.

CASING AND TUBING PROGRAM

PRELIMINARY INFORMATION

Is the subject well underlaid by the red shales? Yes ___ / No X /
If "Yes", was a coal protection string set to the red shales? Yes ___ / No ___ /

PROGRAM DETAILS

Conductor	Size	Top	Bottom	Length	Perforated	
					From	To
	12 3/4"	Surface	20'	20'		
<u>Casing circulated and cemented in to the surface:</u>						
	9 5/8"	Surface	601'	601'		
	7"	Surface	3094'	3094'		

Coal protection casing set under the special rule of Code of Virginia § 45.1-334.B:
N/A

Other casing and tubing left in the well:

4 1/2"	Surface	4065'	4065'	3465	3511 (12 Shots)
2 3/8"	Surface	NONE			

Liners left in well, under Code of Virginia § 45.1-336 or otherwise:

Other casing used in drilling but not left in the well:

<u>Packers or bridge plugs:</u>	<u>Kind</u>	<u>Size</u>	<u>Set At</u>

REMARKS (SHUT DOWN DEPTHS, DATES; FISHING JOB DEPTHS, DATES; CAVING; ETC.)

SAMPLES AND CUTTINGS

will X / will not ___ / be available for examination by a member of the Virginia Geological Survey;

will X / will not ___ / be furnished the Virginia Geological Survey upon request;

will ___ / will not ___ / require sacks to be furnished by the Survey.

DRILLER'S LOG

Compiled by Bartlett Energy - Abingdon, VA

<u>Geologic Age</u>	<u>Formation</u>	<u>General Lithology</u>	<u>Color</u>	<u>Depth (feet)</u>		<u>Thickness</u>	<u>Remarks</u>
				<u>Top</u>	<u>Bottom</u>		
Mississippian	Cove Creek	Ls	gry.	Surface	134'	134'	
	Fido	Ss	rd.	134'	200'	66'	
	Gasper	Ls	gry.	200'	1060'	860'	
	Ste. Geneviene	Ls	rd. & gry.	1060'	2455'	1395'	
	St. Louis	Ls	dk. gry.	2455'	2859'	404'	
	Little Valley	Fm	-	2859'	3683'	824'	
	MacCrady	Fm	rd. - gry.	3683'	3842'	159'	
	Price	Fm	-	3842'	4135'	293'	

(Complete on supplemental sheets as necessary.)

APPENDIX TO REPORT OF COMPLETION OF WELL WORK
ON A WELL DRILLED IN SEARCH OF OIL OR GAS

DISCOVERY OF OIL OR INDICATIONS THEREOF

Indicated potential flow before stimulation _____ BOD
Gravity and grade: _____

DISCOVERY OF GAS OR INDICATIONS THEREOF

Indicated potential flow before stimulation 12 MCFD
Rock pressure: _____ psig _____ hour test

RECORD OF STIMULATION

Full description of stimulation:

Zone 1: Little Valley Formation
Water Frac - 30,000 #'s of 20/40 Sand 656 BBL. Total Fluid

Perforated 3465-3511 # Perfs. 12 Perf. Size _____
Breakdown 2520 psig. Avg. Injection 2468 psig.
Avg. I.R. 10.5 BPM Init. S.I.P. 2250 psig 15 Min. S.I.P. 1900 psig

Zone 2: _____ Formation

Perforated _____ # Perfs. _____ Perf. Size _____
Breakdown _____ psig. Avg. Injection _____ psig.
Avg. I.R. _____ BPM Init. S.I.P. _____ psig 15 Min. S.I.P. _____ psig

Zone 3: _____ Formation

Perforated _____ # Perfs. _____ Perf. Size _____
Breakdown _____ psig. Avg. Injection _____ psig.
Avg. I.R. _____ BPM Init. S.I.P. _____ psig 15 Min. S.I.P. _____ psig

Final production () natural (X) after stimulation

	BOD	MCFD	Hours Tested	Rock Pressure	Hours Tested
Zone 1:	<u>N/A</u>	<u>500</u>	<u>72</u>	<u>1400</u>	<u>48</u>
Zone 2:	_____	_____	_____	_____	_____
Zone 3:	_____	_____	_____	_____	_____

Final production if gas zones are comingled: _____ MCFD

_____ hours tested: _____ psig. _____ hours tested

VIRGINIA DIVISION OF MINERAL RESOURCES
 Box 3667, Charlottesville, VA 22903

INTERVAL SHEET

Page 1 of 2

Well Repository No: 7125

Date rec'd: Date Processed: 8/5/87

Sample Interval: from: ⁵⁴⁰ to: 4140

PROPERTY: N. L. Baber

Number of samples: 172

COMPANY: Early Grove Gas Co.

Total Depth: 4250

COUNTY: Scott
 #1BAKER SC-18

Oil or Gas: Water: Exploratory:

From-To	From-To	From-To	From-To
-	2300 - 20	20 - 30	70 - 80
-	20 - 40	30 - 40	80 - 90
-	40 - 60	40 - 50	90 - 2900
-	60 - 80	-	2900 - 10
-	80 - 2400	60 - 70	10 - 20
540 - 570	2400 - 20	70 - 80	20 - 30
-	20 - 40	80 - 90	30 - 40
-	40 - 50	90 - 2700	40 - 50
-	50 - 60	2700 - 10	50 - 60
690 - 720	60 - 70	10 - 20	60 - 70
720 - 750	70 - 80	20 - 30	70 - 80
750 - 780	80 - 90	30 - 40	80 - 90
780 - 810	90 - 2500	40 - 50	90 - 3000
-	2500 - 10	50 - 60	-
840 - 870	10 - 20	60 - 70	40 - 50
870 - 900	20 - 30	70 - 80	50 - 60
900 - 930	30 - 40	-	60 - 70
-	40 - 50	90 - 2800	70 - 80
980 - 1030	50 - 60	2800 - 10	80 - 90
-	60 - 70	10 - 20	90 - 3100
-	70 - 80	20 - 30	3100 - 10
-	80 - 90	30 - 40	10 - 20
-	90 - 2600	40 - 50	20 - 30
-	2600 - 10	50 - 60	30 - 40
2280 - 2300	-	60 - 70	40 - 50

VIRGINIA DIVISION OF MINERAL RESOURCES
 Box 3667, Charlottesville, VA 22903

INTERVAL SHEET
 Continued

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Well Repository No.: W- 7125

From-To	From-To	From-To	From-To	From-To
3150-60	50-60	50-60	-	-
60-70	60-70	60-70	-	-
70-80	70-80	70-80	-	-
80-90	80-90	80-90	-	-
90- <u>3200</u>	90- <u>3600</u>	90- <u>4000</u>	-	-
3200-10	3600-10	4000-10	-	-
10-20	-	10-20	-	-
20-30	20-40	20-30	-	-
30-40	-	30-40	-	-
40-50	40-50	40-50	-	-
50-60	50-60	50-60	-	-
60-70	60-70	60-70	-	-
70-80	70-80	70-80	-	-
80-90	80-90	80-90	-	-
90- <u>3300</u>	90- <u>3700</u>	90- <u>4100</u>	-	-
3300-10	-	4100-10	-	-
10-20	-	10-20	-	-
20-30	3700-30	20-30	-	-
30-40	30-40	30-40	-	-
40-50	40-50	-	-	-
50-60	50-60	-	-	-
60-70	60-70	-	-	-
70-80	70-80	-	-	-
80-90	80-90	-	-	-
90- <u>3400</u>	90- <u>3800</u>	-	-	-
3400-10	3800-10	-	-	-
10-20	10-20	-	-	-
20-40	20-30	-	-	-
-	30-40	-	-	-
40-50	40-50	-	-	-
50-60	50-60	-	-	-
60-70	-	-	-	-
70-80	70-80	-	-	-
80-90	80-90	-	-	-
90- <u>3500</u>	90- <u>3900</u>	-	-	-
-	3900-10	-	-	-
3500-20	10-20	-	-	-
-	20-30	-	-	-
30-40	30-40	-	-	-
40-50	40-50	-	-	-

(FOR OFFICE USE ONLY: API Well No. 45 - -
State County Permit

Date: _____, 19__

Operator's Well No. N.L. Baker #1

SC-018

VIRGINIA OIL AND GAS INSPECTOR
DEPARTMENT OF LABOR AND INDUSTRY
DIVISION OF MINES
219 Wood Avenue
Big Stone Gap, Virginia 24219-1799
Phone 703-523-0335

WELL PLAT

+ Denotes location of well on United States Topographic Maps, scale 1 to 24,000. Latitude and longitude lines are represented by border lines as shown.

This plat is new updated

This plat is is not based on a mine coordinate system established for the areas of the well location.

Well operator EARLY GROVE GAS CO

Address P.O. BOX 1280 BRISTOL, VA.

Farm N.L. BAKER

Tract - Acres ±139 Lease No. -

Elevation 1602

Quadrangle MENDOTA

County SCOTT District FULKERSON

Registered Engineer _____ Registration No. _____

Certified Land Surveyor Cert. No. VA #1177

File No. _____ Drawing No. _____

Date 5-1-85 Scale 1" = 200'

Certification of Well Plat

I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief, and shows all the information required by law and the regulations of the Virginia Well Review Board.

Joseph F. Barger #1177
Registered Engineer or Certified Land Surveyor
in Charge Joseph F. Barger
54-17-3(A) 1177
CERTIFIED LAND SURVEYOR

