

API NO. 45 - 051 - 21088  
WELL NAME: David Colley, PC-431  
DATE July 25, 1990

DI-399

DI-399

Virginia Oil and Gas Inspector  
P. O. Box 1416  
Abingdon, VA 24210  
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 Ervington District Dickenson County, Virginia on 15 day, May month, 19 90.

WELL TYPE: Oil \_\_\_/ Gas x/ Enhanced Recovery \_\_\_/ Waste Disposal \_\_\_  
If Gas-Production x/ Underground Storage \_\_\_/ Exempt by Code Section 45.1-300.B.1. from general Oil and Gas Conservation Law yes x/ no \_\_\_  
WELL WORK: Drill x/ Deepen \_\_\_/ Redrill \_\_\_/ Stimulate x/ Plug Off Old Formation \_\_\_/ Perforate New Formation x/ 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 SECTION 45.1-332

x Ninety days from the filing of this report

OR

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

APPLICANT Equitable Resources Exploration

BY J. Matthew Conrad

ITS Geologist

ADDRESS 1989 E. Stone Dr., Kingsport, TN 37660

TELEPHONE 615-378-5101



COMPLETION REPORT

WELL TYPE: Oil ( ) Gas Production ( x ) Gas-Underground Storage ( )  
Enhanced Recovery ( ) Waste Disposal ( )

LOCATION

COUNTY Dickenson DISTRICT Ervinton

SURFACE ELEVATION 2228.17' QUADRANGLE Nora

LATITUDE 11,880'S 37° 05' 00" LONGITUDE 11,810'W 82° 17' 30"

DRILLING DATA

DATE DRILLING COMMENCED 4/8/90 DRILLING CONTRACTOR Union Drilling  
DATE DRILLING COMPLETED 4/13/90 ADDRESS Drawer 40, Buckhannon, WV 26201  
DATE WELL COMPLETED 5/15/90 TELEPHONE NUMBER 304-472-4610  
TOTAL DEPTH OF COMPLETED WELL 2557 RIG TYPE x ROTARY        CABLE TOOL

GEOLOGICAL DATA

FRESH WATER AT (1)        FEET        GPM: (2)        FEET        GPM  
SALT WATER AT (1) 1852 FEET 1/2" str GPM: (2)        FEET        GPM

COAL SEAMS:

NAME	TOP	BOTTOM	THICKNESS	MINING IN AREA			
				YES	NO	MINED OUT	
U. Horsepen	1659	1660	1	Unnamed C	1829	1830	1
M. Horsepen	1687	1688	1	L. Horsepen	1926	1927	1
C- Seam	1763	1764	1	Poco #2	2440	2441	1
Warcreek	1795	1796	1	Poco #1	2475	2476	1

OIL AND GAS SHOWS:

FORMATION	TOP	BOTTOM	THICKNESS	IPF(MCFD/BOPD)	PRESSURE	HOURS TESTED
T.D.		2556		21 MCF		

STIMULATION RECORD Poco 1, Poco 2, L. Horsepen, Unnamed C, Warcreek, C-Seam,  
ZONE (1) M. Horsepen, U. Horsepen FORMATION STIMULATED WITH 75Q Limited Entry  
foam frac using 525 bbls fluid, 927,400 ScfN2 & 12,095# 12/20 sand.  
PERFORATED 1659 TO 2476 NO. OF PERFORATIONS 14 PERFORATION SIZE .36  
FORMATION BROKE DOWN AT 2030 PSIG AVERAGE INJECTED RATE 13.6 BPM  
INITIAL SHUT IN PRESSURE 1760 PSIG 5 MINUTE SHUT IN PRESSURE 1390 PSIG

STIMULATION RECORD

ZONE (2)        FORMATION STIMULATED WITH         
PERFORATED        TO        NO. OF PERFORATIONS,        PERFORATION SIZE         
FORMATION BROKE DOWN AT        PSIG AVERAGE INJECTED RATE        BPM  
INITIAL SHUT IN PRESSURE        PSIG        MINUTE SHUT IN PRESSURE        PSIG  
FINAL PRODUCTION: ( ) NATURAL ( x ) AFTER STIMULATION  
       BOD        MCFD        HOURS TESTED        ROCK PRESSURE        HOURS TESTED

ZONE (1)         
ZONE (2)         
FINAL PRODUCTION IF GAS ZONES ARE COMINGLED \*12 MCFD        HOURS TESTED  
       PSIG        HOURS TESTED  
\* - This is not an absolute open flow.

CASING AND TUBING

	<u>SIZE</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>LENGTH</u>	<u>PACKERS OR</u>		
					<u>PERFORATIONS</u>	<u>BRIDGE PLUGS</u>	
					<u>FEET TO FEET</u>	<u>KIND</u>	<u>SIZE SET AT</u>
<u>CONDUCTOR</u>	9 5/8"		22'				

CASING

Circulated  
and Cemented  
to Surface

WATER PROTECTION

(Casing Set  
According to  
Section  
45.1-334)

7" 350'

COAL PROTECTION

(Casing Set  
According to  
Section  
45.1-334)

OTHER CASING &

Tubing Left 4 1/2" 2546'  
In Well 2 3/8" 2511'

LINERS

Remaining  
In Well

OTHER used and not  
left

Is the well underlain by Red Shale  Yes \_\_\_ No, If Yes, was coal  
protection string set to Red Shales?  Yes \_\_\_ No

REMARKS: Shut down, fishing jobs, depths and dates, caving, etc.

Samples and Cuttings

Will  Will not  be available for examination by a member of the Virginia Division of Mineral Resources

Will  Will not  be furnished to the Virginia Division of Mineral Resources upon request

Will  Will not  require sacks to be furnished by the Virginia Division of Mineral Resources

Electric Logs and Surveys:

Type of Electric Log(s) Ran: CDL-TEMP-GR

Did log disclose vertical location of a coal seam? Yes  No

Was log made at request of a coal owner according to Section 45.1-333.B.1 of the Virginia Code? Yes  No

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

Deviation Surveys

Deviation surveys were  were not  required under Section 45.1-333.C of the Virginia Code "to the bottom of the lowers published coal seam depth."

Note: If a deviation survey(s) was/were required, the survey results are as follows:

<u>Depth of Survey</u>	<u>Feet/Degree Deviated From True Vertical</u>	<u>Depth of Survey</u>	<u>Feet/Degree Deviated From True Vertical</u>
	See Attachment		

A continuous survey was  was not  required, under Section 45.1-333.C of the Virginia Code.

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

Changes in the Permitted Well Work:

The well operator did  did not  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.

Confidentiality Status:

Confidentiality status under Section 45.1-332, of the Virginia Code:

The operator requests that information herein and log(s) be kept confidential (after COMPLETION DATE of the well) for a period of

Ninety (90) days  
 two (2) years, if the well is exploratory

DRILLER'S LOG

Compiled by J. Matthew Conrad

Geological Age	Formation	General Lithology	Color	Depth		Thickness	Remarks
				Top	Bottom		
Pennsylvanian	Lee	Sand/Shale/Thin Coal		0	2474	2474	
		Poco #1 Coal		2474	2477	3	
		Sand/Shale/Thin Coal		2477	2556	79	
Mississippian	Bluestone	Red Shale		2556	2557	1	

DIRECTIONAL SURVEY  
PC-431

DEPTH	DEGREES
199	$3/4^\circ$
431	$1/2^\circ$
883	$3/4^\circ$
1075	$3/4^\circ$
1256	1 °
1343	1 °
1474	3 °
1660	$1\frac{1}{2}^\circ$
1908	$1\frac{1}{2}^\circ$
2125	$3/4^\circ$
2338	$1\frac{1}{2}^\circ$
2560	1 °

Date: January 28, 1987.

Operator's  
Well No. P-431

*24-399*

VIRGINIA OIL AND GAS INSPECTOR  
DEPARTMENT OF LABOR AND INDUSTRY  
DIVISION OF MINES  
OIL AND GAS SECTION  
205 W. MAIN STREET  
ABINGDON, VIRGINIA 24210  
PHONE 703 628-8115



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 X / updated     /

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

Well operator Philadelphia Oil Company  
1989 East Stone Drive  
Address 2 Executive Park Place, Kingsport, TN 37660  
Operator David Colley  
Tract T-17 Acres 571.14 Lease No. PO-148  
Elevation 2228.17  
Quadrangle Nora  
County Dickenson District Ervinton  
Registered Engineer X Registration No. 6992  
Certified Land Surveyor     Cert. No.      
Plate No.     Drawing No. 1850  
Date 1-28-87 Scale 1" = 400'

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.

*H. L. Baldridge*  
Registered Engineer or Certified Land Surveyor  
in Charge

