API NO. 45 - 051 - 21027 WELL NAME: J. M. Colley, PC-416 DATE February 27, 1991

DJ-374

(May 28, 1991)

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
WELL TYPE: Oil / Gas _x / Enhanced Recovery / Waste Disposal If Gas-Production _x / Underground Storage / Exempt by Code Section 45.1-300.B.l. 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
BYJ. Matthew Conrad
ITSGeologist
ADDRESS 1989 East Stone Dr., Kingsport, TN 37660
TELEPHONE (615) 378-5101

## COMPLETION REPORT

Enhanced Recovery ( ) Wa	(X) Gas-Underground Storage ( ) aste Disposal ( )
LOCATION Dickenson	DISTRICT Ervinton
	•
SURFACE ELEVATION 2207.25'	QUADRANGLE Nora
LATITUDE 6425 'S 37° 05' 00"	LONGITUDE 675 W 82° 20 00 "
DRILLING DATA	
DATE DRILLING COMMENCED 4-2-90	DRILLING CONTRACTOR Union Drilling
DATE DRILLING COMPLETED 4-7-90	ADDRESS Drawer 40, Buckhannon, WV 26201
DATE WELL COMPLETED 5-25-90	TELEPHONE NUMBER (304) 472-4610
TOTAL DEPTH OF COMPLETED WELL 2536'	RIG TYPE X ROTARY CABLE TOOL
GEOLOGICAL DATA	
FRESH WATER AT (1)FEET	GPM: (2) FEET GPM
SALT WATER AT (1) 1830 FEET 1" St	r.CRMX (2) 2440 FEET 2" Str. CPM
COAL SEAMS:	
COIL DAILE.	MIN <del>IN</del> G IN AREA
NAME TOP BOTTOM THICK	NESS YES (NO) MINED OUT
Lower Horsepen 1909 1911 2	
OIL AND GAS SHOWS:	
	IPF(MCFD/BOPD) PRESSURE HOURS TESTED
1411	15 MCFD
2440	49 MCFD
	15 11012
CELUII MION DECORD D 40 2 2	
STIMULATION RECORD Poco #2, L. Horsepen	, Unnamed C, Warcreek, C-Seam, TION STIMULATED WITH
using 525 bbls. fluid, 1,022,800 SCF N2 +	
PERFORATED 1628 TO 2404 NO. OF PERF	ORATIONS 14 PERFORATION SIZE34
	IG AVERAGE INJECTED RATE 56 BPM
INITIAL SHUT IN PRESSURE 1780 PSIG	MINUTE SHUT IN PRESSURE 1590 PSIG
STIMULATION RECORD	
ZONE (2)FORMA	TION STIMULATED WITH
DEDECDATED TO NO OF DEE	FORATIONS DEPENDATION SIZE
FORMATION BROKE DOWN AT PS	FORATIONS PERFORATION SIZE SIG AVERAGE INJECTED RATE BPM MINUTE SHUT IN PRESSURE PSIG
INITIAL SHIP IN PRESSURE PSIG	MINUTE SHUT IN PRESSURE PSIG
FINAL PRODUCTION: ( ) NATURAL (X	) AFTER STIMULATION
BOD MCFD HOUDS TESTE	D ROCK PRESSURE HOURS TESTED
	310 48
ZONE (2)	
FINAL PRODUCTION IF GAS ZONES ARE CO	MINGLED MCFD HOURS TESTED
	PSIG HOURS TESTED

## CASING AND TUBING

PACKERS OR

	SIZE	TOP	BOTTOM	LENGTH	PERFORATIONS FEET TO FEET		
CONDUCTOR							
CASING Circulated and Cement to Surface	ed						
WATER PROT (Casing Se According Section 45.1-334)	to	,	387'				
COAL PROTE (Casing Se According Section 45.1-334)	et			*			
OTHER CASI Tubing Lef In Well	t 4 1/2"		2498' 2469'				
LINERS Remaining In Well			IAL TOTAL				
OTHER used	d and no	ot					
Is the well					No, If Ye	es, was coal	L
REMARKS:	Shut do	own, fi	shing job	os, depths	and dates, o	aving, etc.	•
		er en					
				,			

Form 16, Appendix A Sheet 3 Well Name MColley, PC-416
Samples and Cuttings Will X Will not be available for examination by a member of the
Virginia Division of Mineral Resources Will X Will not be furnished to the Virginia Division of Mineral
Resources upon request  Will Will not X require sacks to be furnished by the Virginia  Division of Mineral Resources
Electric Logs and Surveys: Type of Electric Log(s) Ran: CDL-GR
Did log disclose vertical location of a coal seam? Yes _X_ No
Was log made at request of a coal owner according to Section 45.1-333.B.1 of the Virginia Code? Yes No $\underline{X}$
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 X 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:  Depth Feet/Degree Deviated Depth Feet/Degree Deviated
of Survey From True Vertical of Survey From True Vertical
See Attachment
A continuous survey waswas not X 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 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.
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
X Ninety (90) days two (2) years, if the well is exploratory

Geological		General		De	pth		
Age	Formation	Lithology	Color	Top	Bottom	Thickness	Remarks
				.,			
Pennsylvania	n Sand, Sh	ale, Thin Coa	ls	0	1909	1909	
11	L. Horse	pen Coal		1909	1911	2	
"	Sand, Sh	ale, Thin Coa	ls	1911	2527	616	
Mississippiar	n Red Rock			2527	2536	9	
	Logger's	Total Depth			2536		

# Directional Survey PC-416

Depths	Degrees
200'	1°
1195'	1 1/4°
1830'	1 1/2°
2404	3/4°

(FOE	OFFICE	API Well	No. 45	
(USI	ONLY:		State	County Permi

Date: December / , 1986

Operator's Well No. P-4/6

VIRGINIA OIL AND GAS INSPECTOR
DEPARTMENT OF LABOR AND INDUSTRY
DIVISION OF MINES

OIL AND CAS SECTION
205 W. WAIN 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 lengitude 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 E. Stone Drive, Address 2 Executive Park Place, Kingsport, TN 37660 Farm J. M. Colley Tract 7-18 Acres 797.88 Lease No. PO-148 Elevation 2207.25 Quadrangle Nora District Ervinton County Dickenson Registered Engineer X Registration No. 6992 Certified Land Surveyor Cert. No. File No. Drawing No. 184/ Date 12-1-86 Scale /" = 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.

N.L. Baldudge
Registered Engineer or Certified Land Surveyor
in Charge