

API NO. 45 - 051 - 21336
WELL NAME: E. W. Durvea, PC-117
DATE July 25, 1990

DI 46.9

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 Ervinton District Dickenson County, Virginia on 8 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 2675.08' QUADRANGLE Duty

LATITUDE 7,550'S 37° 05' 00" LONGITUDE 11,750'W 82° 12' 30"

DRILLING DATA

DATE DRILLING COMMENCED 1/22/90 DRILLING CONTRACTOR Union Drilling
DATE DRILLING COMPLETED 1/29/90 ADDRESS Drawer 40, Buckhannon, WV 26201
DATE WELL COMPLETED 5/8/90 TELEPHONE NUMBER 304-472-4610
TOTAL DEPTH OF COMPLETED WELL 2879' RIG TYPE x ROTARY CABLE TOOL

GEOLOGICAL DATA

FRESH WATER AT (1) 177 FEET Wet X GPM: (2) FEET GPM
SALT WATER AT (1) 1560 FEET Damp X GPM: (2) FEET GPM

COAL SEAMS:

NAME	TOP	BOTTOM	THICKNESS	MINING IN AREA			
				YES	NO	MINED OUT	
Greasy Creek	1645	1646	1	Beckley	2102	2104	2
C-Seam	2009	2010	1	X-Seam	2225	2226	1
Warcreek	2042	2044	2				
Unnamed C	2076	2077	1				

OIL AND GAS SHOWS:

FORMATION	TOP	BOTTOM	THICKNESS	IPF(MCFD/BOPD)	PRESSURE	HOURS TESTED
None Recorded						

STIMULATION RECORD

X-Seam, Beckley, Unnamed C, Warcreek,
ZONE (1) C-Seam, Greasy Creek FORMATION STIMULATED WITH 75Q Foam Frac
using 556 bbls fluid, 1,076,000 ScfN₂ & 18,000# 12/20 sand.
PERFORATED 1645 TO 2226 NO. OF PERFORATIONS 15 PERFORATION SIZE .36
FORMATION BROKE DOWN AT 1090 PSIG AVERAGE INJECTED RATE 15.7 BPM
INITIAL SHUT IN PRESSURE 2220 PSIG 5 MINUTE SHUT IN PRESSURE 1410 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 *185 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>PERFORATIONS FEET TO FEET</u>	<u>PACKERS OR BRIDGE PLUGS KIND SIZE SET AT</u>
CONDUCTOR	11 3/4"		39'			

CASING

Circulated
and Cemented
to Surface

WATER PROTECTION

(Casing Set
According to
Section
45.1-334)

8 5/8" 334'

COAL PROTECTION

(Casing Set
According to
Section
45.1-334)

OTHER CASING &

Tubing Left 4 1/2" 2669'
In Well 2 3/8" 2300'

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: LDT-TEMP

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.

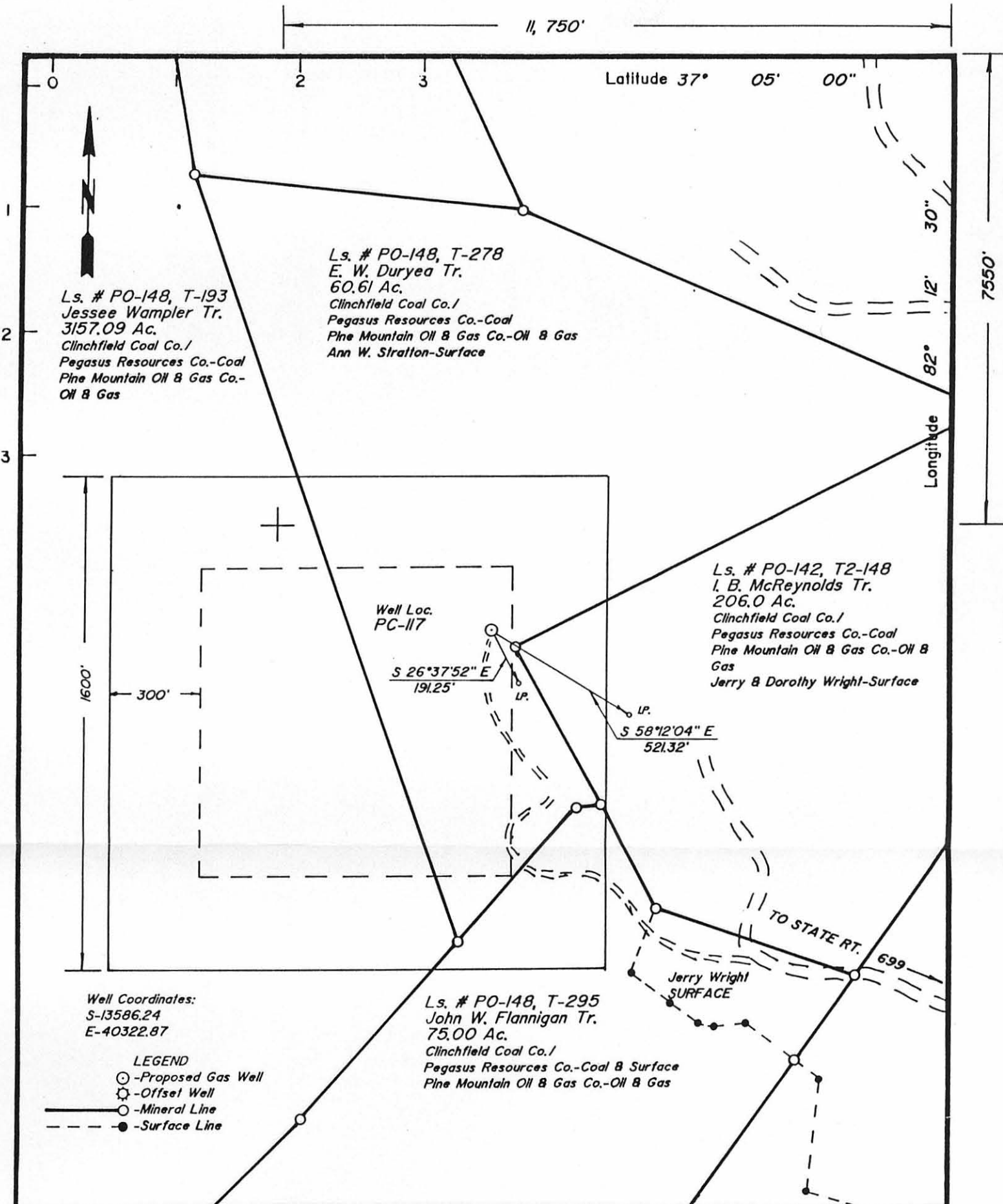
Confidentiality Status:

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	2101	2101	
		Beckley Coal		2101	2105	4	
		Sand/Shale/Thin Coal		2105	2275	270	
Mississippian	Pocahontas	Sand/Shale/Thin Coal		2275	2890	615	
	Bluestone	Red Shale		2890	2892	2	



COMPANY Equitable Resources Exploration

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

WELL NAME PC-117

FARM E. W. Duryea TRACT 278

LEASE NO. PO-148 ELEVATION 2675.08

ACRES 60.61 QUADRANGLE Duty

COUNTY Dickenson DISTRICT Ervinton

REG. ENGINEER X REG. NO. 6992

CERT. LAND SURVEYOR _____ CERT. NO. _____

FILE NO. _____ DRAWING NO. 1949

DATE 10-16-89 SCALE 1" = 400'

This plat is new _____ updated

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

FORM 5

WELL LOCATION MAP

WELL NO. PC-117 DF-469

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

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 Va. Well Review Board.

A. S. Baldridge
Registered Engineer or Certified Land Surveyor in Charge