

API NO. 45 051 - 21036
WELL NAME: David Smith, PC-419
DATE May 10, 1990
DI-381

Virginia Oil and Gas Inspector
P. O. Box 1416
Abingdon, VA 24210
703 628-8115



DI-381

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 23 day, March 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 Ervington

SURFACE ELEVATION 2421.93' QUADRANGLE Nora

LATITUDE 12,185'S 37° 05' 00" LONGITUDE 11,340'W 82° 20' 00"

DRILLING DATA

DATE DRILLING COMMENCED 2/15/90 DRILLING CONTRACTOR Union Drilling
 DATE DRILLING COMPLETED 2/20/90 ADDRESS Drawer 40, Buckhannon, WV 26201
 DATE WELL COMPLETED 3/23/90 TELEPHONE NUMBER 304-472-4610
 TOTAL DEPTH OF COMPLETED WELL 2737 RIG TYPE x ROTARY CABLE TOOL

GEOLOGICAL DATA

FRESH WATER AT (1) 275 FEET 1 1/2" str. GPM: (2) FEET GPM
 SALT WATER AT (1) FEET GPM: (2) FEET GPM

COAL SEAMS:

NAME	TOP	BOTTOM	THICKNESS	YES	MINING IN AREA	
					NO	MINING IN AREA
Middle Horsepen	1806-1807	1	X-Seam		2135-2136	1
C-Seam	1936-1937	1	Poco #8		2231-2232	1
Warcreek	1963-1964	1	Poco #4		2482-2483	1
Unnamed "C"	1997-1998	1	Poco #2		2589-2590	1
Lower Horsepen	2078-2079	1	Poco #1		2621-2623	2

OIL AND GAS SHOWS:

FORMATION	TOP	BOTTOM	THICKNESS	IPF (MCFD/BOPD)	PRESSURE	HOURS TESTED
Pocahontas		2515		73 MCFD		
Mississippian		2731		84 MCFD		

STIMULATION RECORD M.Horsepen, C-Seam, Warcreek, Unnamed "C", L.Horsepen, X-Seam,
 ZONE (1) Poco #1, 2, 4, 8 FORMATION STIMULATED WITH 75Q Limited Entry
Foam Frac using 534 bbls fluid, 14,000# 12/20 sand and 1,217,300 Scf N2.
 PERFORATED 1856 TO 2622 NO. OF PERFORATIONS 15 PERFORATION SIZE .36
 FORMATION BROKE DOWN AT 1800 PSIG AVERAGE INJECTED RATE 13.0 BPM
 INITIAL SHUT IN PRESSURE 2000 PSIG 5 MINUTE SHUT IN PRESSURE 1650 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 * 60 MCFD 6 HOURS TESTED
400 PSIG 12 HOURS TESTED

* This is not an absolute open flow.

CASING AND TUBING

	SIZE	TOP	BOTTOM	LENGTH	PACKERS OR	BRIDGE PLUGS
					PERFORATIONS	FEET TO FEET
CONDUCTOR	11 3/4"		28'			

CASING
Circulated
and Cemented
to Surface

WATER PROTECTION

(Casing Set
According to
Section
45.1-334)

8 5/8" 327'

COAL PROTECTION

(Casing Set
According to
Section
45.1-334)

OTHER CASING &

Tubing Left 4 1/2" 2680'
In Well 2 3/8" 2627'

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>
	<u>See Attachment</u>		

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/Coal		0	1200	1200	
		Jawbone Coal		1200	1204	4	
		Sand/Shale/Thin Coal		1204	2240	1036	
Mississippian	Pocahontas	Sand/Shale/Thin Coal		2240	2727	487	Top Salt Sand
	Bluestone	Red Rock		2727	2731	4	

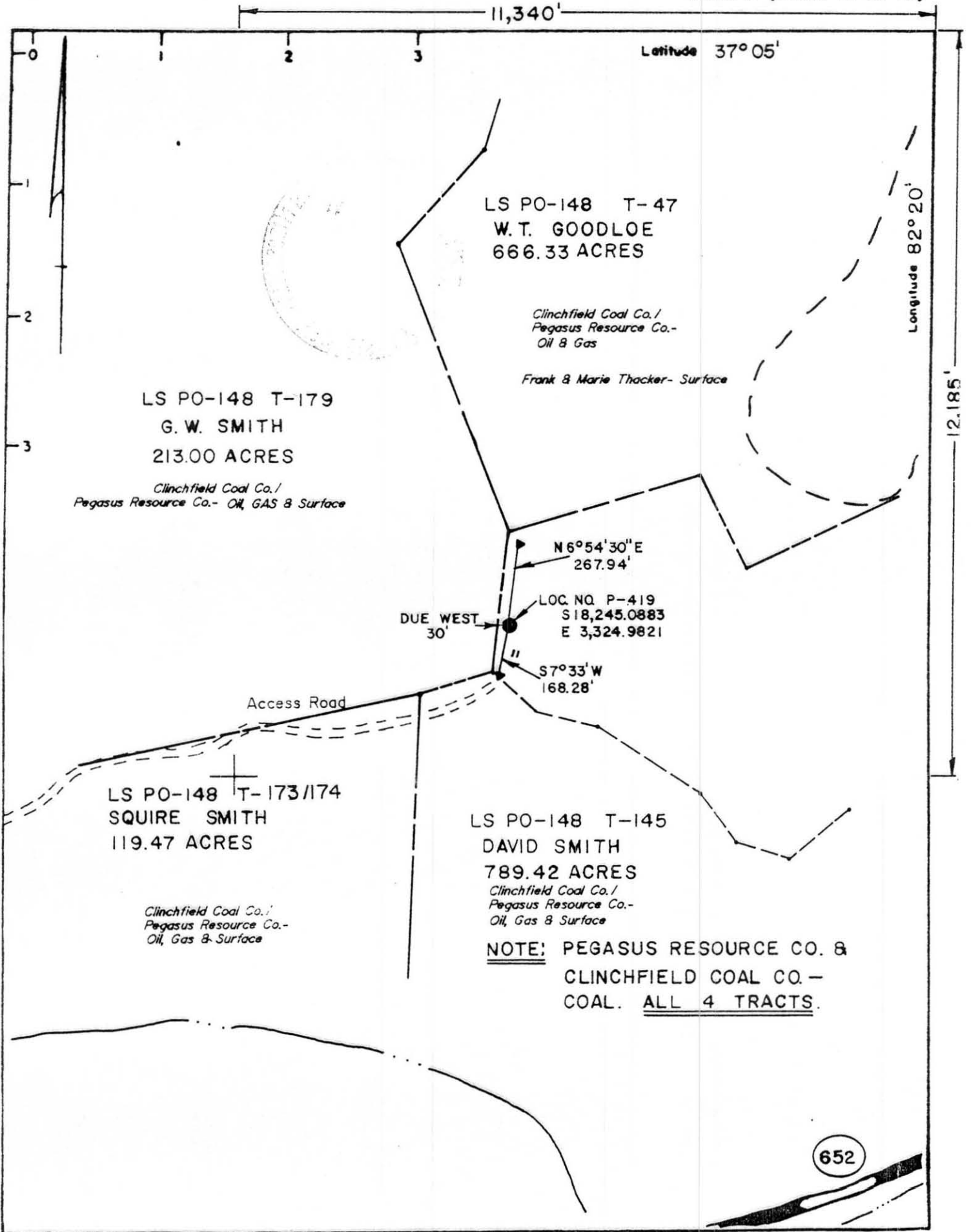
DIRECTIONAL SURVEYS
PC-419

DEPTH

299'
343'
370'
638'
822'
1068'
1276'
1462'
1679'
1864'
2081'
2297'
2515'
2731'

DEGREES

$\frac{1}{2}^{\circ}$
 $\frac{3}{4}^{\circ}$
 $\frac{3}{4}^{\circ}$
 $\frac{3}{4}^{\circ}$
 1°
 1°
 $\frac{3}{4}^{\circ}$
 1°
 $\frac{1}{4}^{\circ}$
 $\frac{1}{4}^{\circ}$
 1°
 $1\frac{1}{2}^{\circ}$
 $1\frac{1}{2}^{\circ}$
 1°



LS PO-148 T-47
 W.T. GOODLOE
 666.33 ACRES

*Clinchfield Coal Co./
 Pegasus Resource Co.-
 Oil & Gas*

Frank & Marie Thacker- Surface

LS PO-148 T-179
 G.W. SMITH
 213.00 ACRES

*Clinchfield Coal Co./
 Pegasus Resource Co.- Oil, GAS & Surface*

LOC. NO. P-419
 S 18,245.0883
 E 3,324.9821

DUE WEST
 30'

N 6°54'30" E
 267.94'

S 7°33' W
 168.28'

Access Road

LS PO-148 T-173/174
 SQUIRE SMITH
 119.47 ACRES

*Clinchfield Coal Co./
 Pegasus Resource Co.-
 Oil, Gas & Surface*

LS PO-148 T-145
 DAVID SMITH
 789.42 ACRES

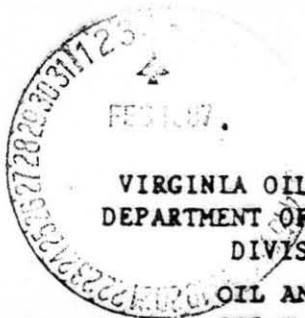
*Clinchfield Coal Co./
 Pegasus Resource Co.-
 Oil, Gas & Surface*

**NOTE: PEGASUS RESOURCE CO. &
 CLINCHFIELD COAL CO. -
 COAL. ALL 4 TRACTS.**

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

Date: Nov. 17, 1986

Operator's Well No. P-419



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 Co.
1989 E. Stone Drive, 2 Executive
Address Park Place Kingsport, Tenn. 37660
Farm David Smith
Tract T-145 Acres 789.42 Lease No. PO-148
Elevation 2421.93
Quadrangle Nora, Va.
County Dickenson District Ervinton
Registered Engineer Registration No.
Certified Land Surveyor X Cert. No. 986
File No. Drawing No. 683
Date 11-17-86 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.

Donald O. Spores VA. # 986
~~Registered Engineer~~ of Certified Land Surveyor
in Charge