

RL-0025

API NO. 45 - 167 - 21670  
WELL NAME: J. W. RASNAKE VC 1863  
DATE MAY 8, 1992

Virginia Oil and Gas Inspector  
P. O. Box 141  
Abingdon, VA 2210  
703 628-8115

**ENTERED**

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 NEW GARDEN District RUSSELL County, Virginia on 31ST day, OCTOBER month, 1991.

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 Joseph D. King  
ITS SR. ENGINEER

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 RUSSELL DISTRICT NEW GARDEN

SURFACE ELEVATION 2584.86' QUADRANGLE BIG A MOUNTAIN

LATITUDE 1020 'S 37° 02 ' 30 " LONGITUDE 10500 'W 82° 05 ' 00 "

DRILLING DATA

DATE DRILLING COMMENCED 9-22-91 DRILLING CONTRACTOR UNION DRILLING  
 DATE DRILLING COMPLETED 9-27-91 ADDRESS P.O. DRAWER 40, BUCKHANNON, WV  
 DATE WELL COMPLETED 10-31-91 TELEPHONE NUMBER 304-472-4610  
 TOTAL DEPTH OF COMPLETED WELL LTD=2668 RIG TYPE X ROTARY CABLE TOOL  
 DTD=2670

GEOLOGICAL DATA

FRESH WATER AT (1) 820 FEET 1/4"STR GPM: (2) 1806 FEET 1/4"STR GPM  
 SALT WATER AT (1) \_\_\_\_\_ FEET \_\_\_\_\_ GPM: (2) \_\_\_\_\_ FEET \_\_\_\_\_ GPM

COAL SEAMS:

NAME	TOP	BOTTOM	THICKNESS	MINING IN AREA		
				YES	NO	MINED OUT
GREASY CREEK	1177	1179	2			X
C-SEAM RIDER	1653	1655	2			
WARCREEK RIDER	1675	1677	2			
WARCREEK	1693	1695	2			
BECKLEY (SPLIT)	1764	1766	2			

OIL AND GAS SHOWS:

FORMATION	TOP	BOTTOM	THICKNESS	IPF (MCFD/BOPD)	PRESSURE	HOURS TESTED
		2670		ODOR		

STIMULATION RECORD

ZONE (1) POCO #6, X-SEAM, X-SEAM RIDER, I. HORSEPEN, BECKLEY, WARCREEK, W.C. RIDER, C-SEAM RIDER  
 FORMATION STIMULATED WITH 70 Q FOAM/LE  
W/20060 # 12/20 SAND - 1265148 SCF N2 - 956 BF  
 PERFORATED 1653.5 TO 2225 NO. OF PERFORATIONS 15 PERFORATION SIZE .34"  
 FORMATION BROKE DOWN AT 944 PSIG AVERAGE INJECTED RATE 17.5 (56 DH) BPM  
 INITIAL SHUT IN PRESSURE 1770 PSIG 5 MINUTE SHUT IN PRESSURE 1570 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

ZONE	BOD	MCFD	HOURS TESTED	ROCK PRESSURE	HOURS TESTED
ZONE (1)					
ZONE (2)					
FINAL PRODUCTION IF GAS ZONES ARE COMMINGLED		<u>31</u> MCFD	<u>6</u> HOURS TESTED		
COALSEAMS: CONT'D		<u>275</u> PSIG	<u>48</u> HOURS TESTED		
BECKLEY (SPLIT)	1770	1773	3		
LOWER HORSEPEN	1833	1835	2		
X-SEAM	1877	1880	3		
POCO #9	1952	1954	2		

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: SLD/GR/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

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 SIZE SET AT</u>

CONDUCTOR

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CASING

Circulated  
and Cemented  
to Surface 11 3/4" 38'

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WATER PROTECTION

(Casing Set  
According to  
Section  
45.1-334) 8 5/8" 880' 870'

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COAL PROTECTION

(Casing Set  
According to  
Section  
45.1-334)

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OTHER CASING &

Tubing Left  
In Well 4 1/2" 2620' 2610'  
2 3/8" 2340'

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LINERS

Remaining  
In Well

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OTHER used and not  
left

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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.

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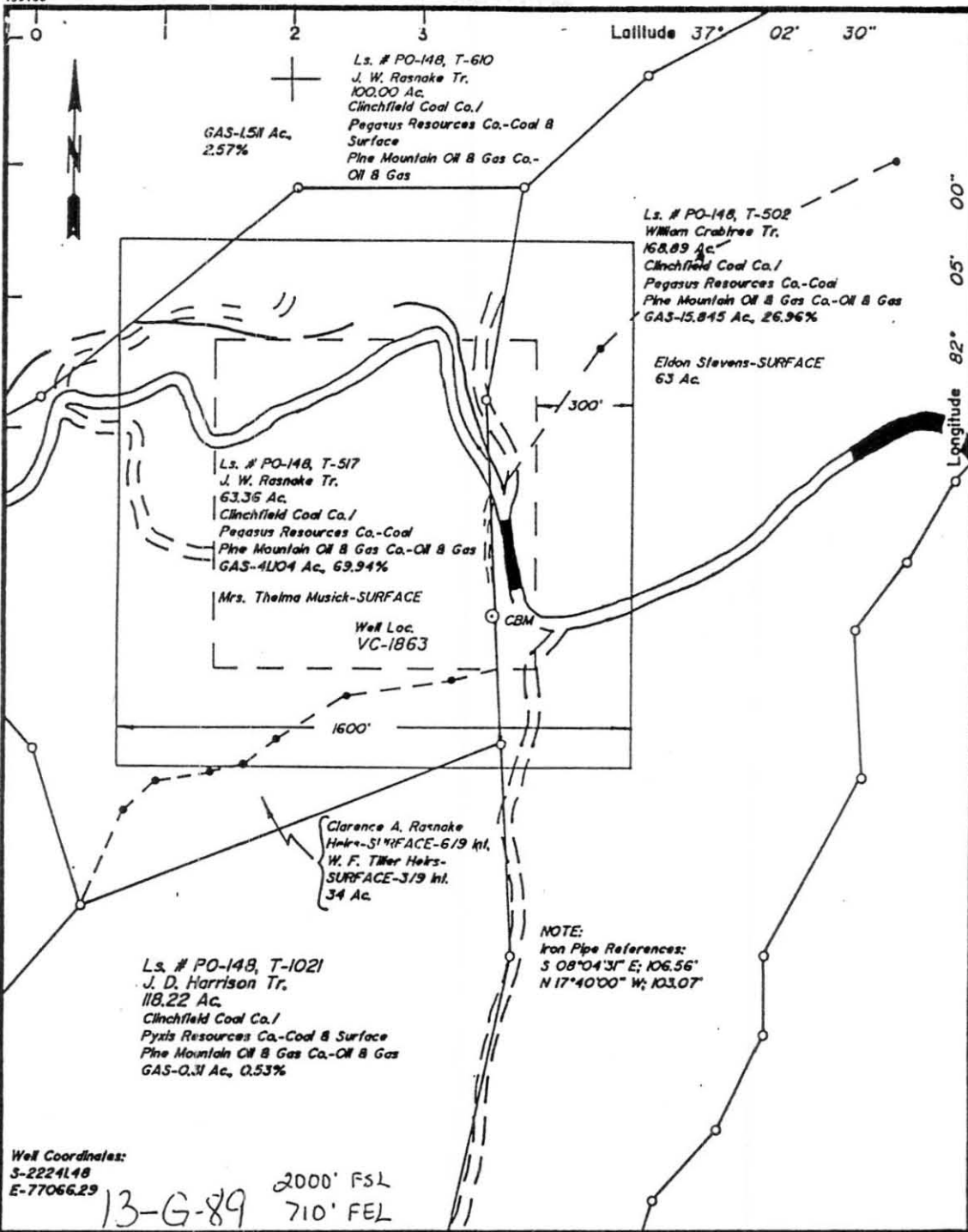
DIRECTIONAL SURVEY  
WELL VC1863

<u>DEPTH</u>	<u>DEGREES</u>
204	3/4 <sup>a</sup>
419	3/4
630	1°
800	1°
990	3/4°
1216	1 1/2°
1460	1°
1600	1°
1800	1 1/4°
2000	2°
2145	2°
2360	1 1/2°
2550	1 1/2°

## DRILLER'S LOG

Compiled by ENGINEERING

Geological Age	Formation	General Lithology	Color	Depth		Thickness	Remarks
				Top	Bottom		
PENNSYLVANIAN ↓	SAND, SHALE & THIN COALS			0	1177	1177	
	GREASY CREEK COAL			1177	1179	2	
	SAND, SHALE & THIN COALS			1179	1653	474	
	C-SEAM RIDER COAL			1653	1655	2	
	SAND, SHALE & THIN COALS			1655	1675	20	
	WARCREEK RIDER COAL			1675	1677	2	
	SAND, SHALE & THIN COALS			1677	1693	16	
	WARCREEK COAL			1693	1695	2	
	SAND, SHALE & THIN COALS			1695	1764	69	
	BECKLEY COAL (SPLIT)			1764	1766	2	
	SAND, SHALE & THIN COALS			1766	1770	4	
	BECKLEY COAL (SPLIT)			1770	1773	3	
	SAND, SHALE & THIN COALS			1773	1833	60	
	LOWER HORSEPEN COAL (SPLIT)			1833	1835	2	
	SAND, SHALE & THIN COALS			1835	1877	42	
	X-SEAM COAL			1877	1880	3	
	SAND, SHALE & THIN COALS			1880	1952	72	
	POCO # 9 COAL			1952	1954	2	
	SAND, SHALE & THIN COALS			1954	2223	269	
	POCO #6 COAL			2223	2226	3	
SAND, SHALE & THIN COALS			2226	2668	442		
	LOGGER'S TOTAL DEPTH				2668		



COMPANY Equitable Resources Exploration

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

WELL NAME VC-1863

FARM J. W. Rasnake TRACT T-517

LEASE NO. PO-148 ELEVATION 2584.86

ACRES 63.36 QUADRANGLE Big A Min.

COUNTY Russell DISTRICT New Garden

REG. ENGINEER X REG. NO. 6992

CERT. LAND SURVEYOR \_\_\_\_\_ CERT. NO. \_\_\_\_\_

FILE NO. \_\_\_\_\_ DRAWING NO. 2828

DATE April 23, 1991 SCALE 1" = 400'

This plat is  new \_\_\_\_\_ updated  
This plat  is \_\_\_\_\_ is not based on a mine coordinate  
system established for the area of the well location.

FORM 5

WELL LOCATION MAP

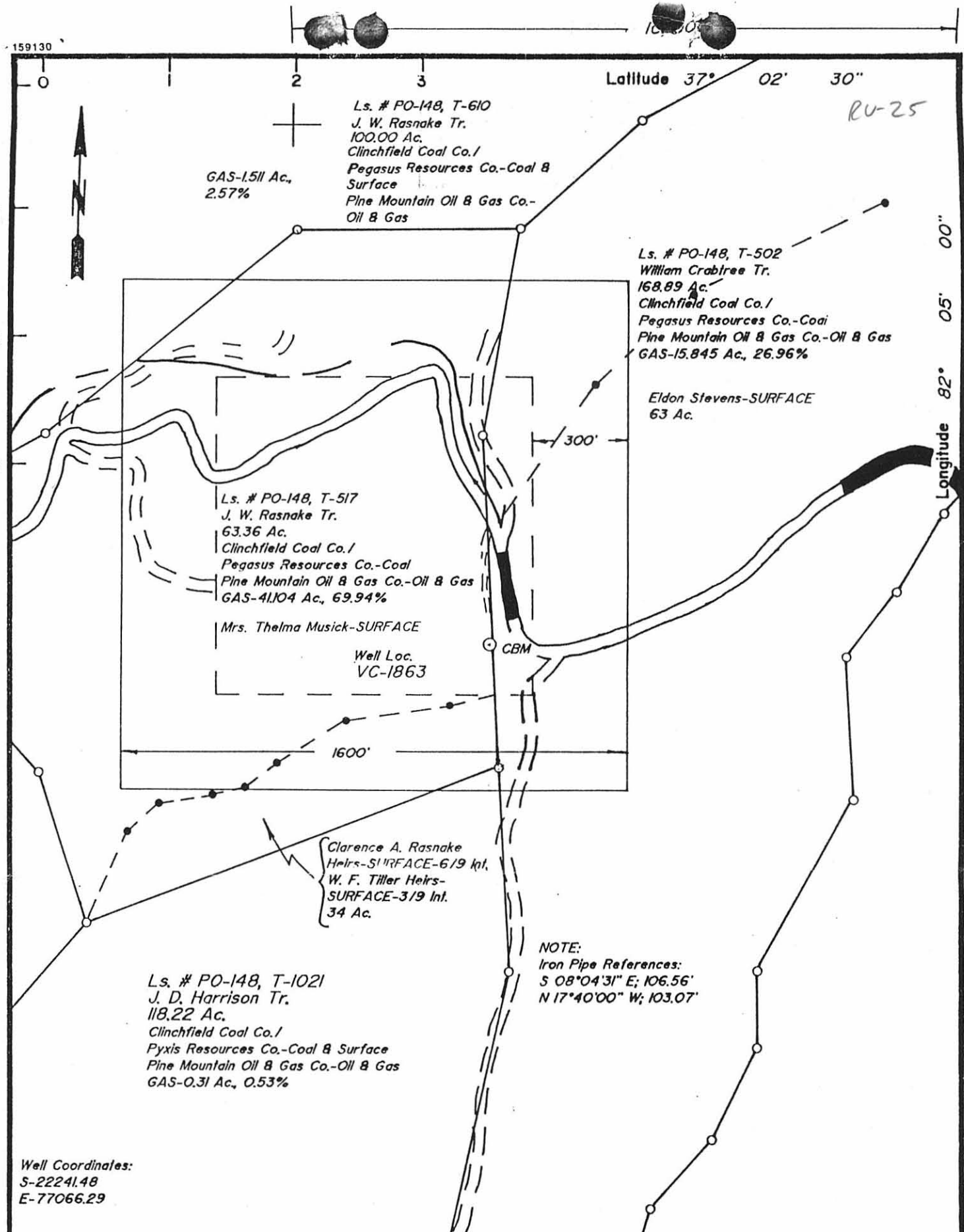
WELL NO. VC-1863

+ Denotes location of well on United States  
Topographic Map, scale 100,000, lati-  
tude and longitude lines being represented  
by border lines as shown.

H. L.  
BALDRIDGE  
CERTIFICATION OF WELL PLAT

I, the undersigned, hereby certify that this  
plat is correct to the best of my knowledge  
and belief, and in accordance with the  
requirements of the Va. Well Review Board.

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



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+ Denotes location of well on United States Topographic Map, scale 100,000, latitude and longitude lines being represented by border lines as shown.

H. L. BALDRIDGE  
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.

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