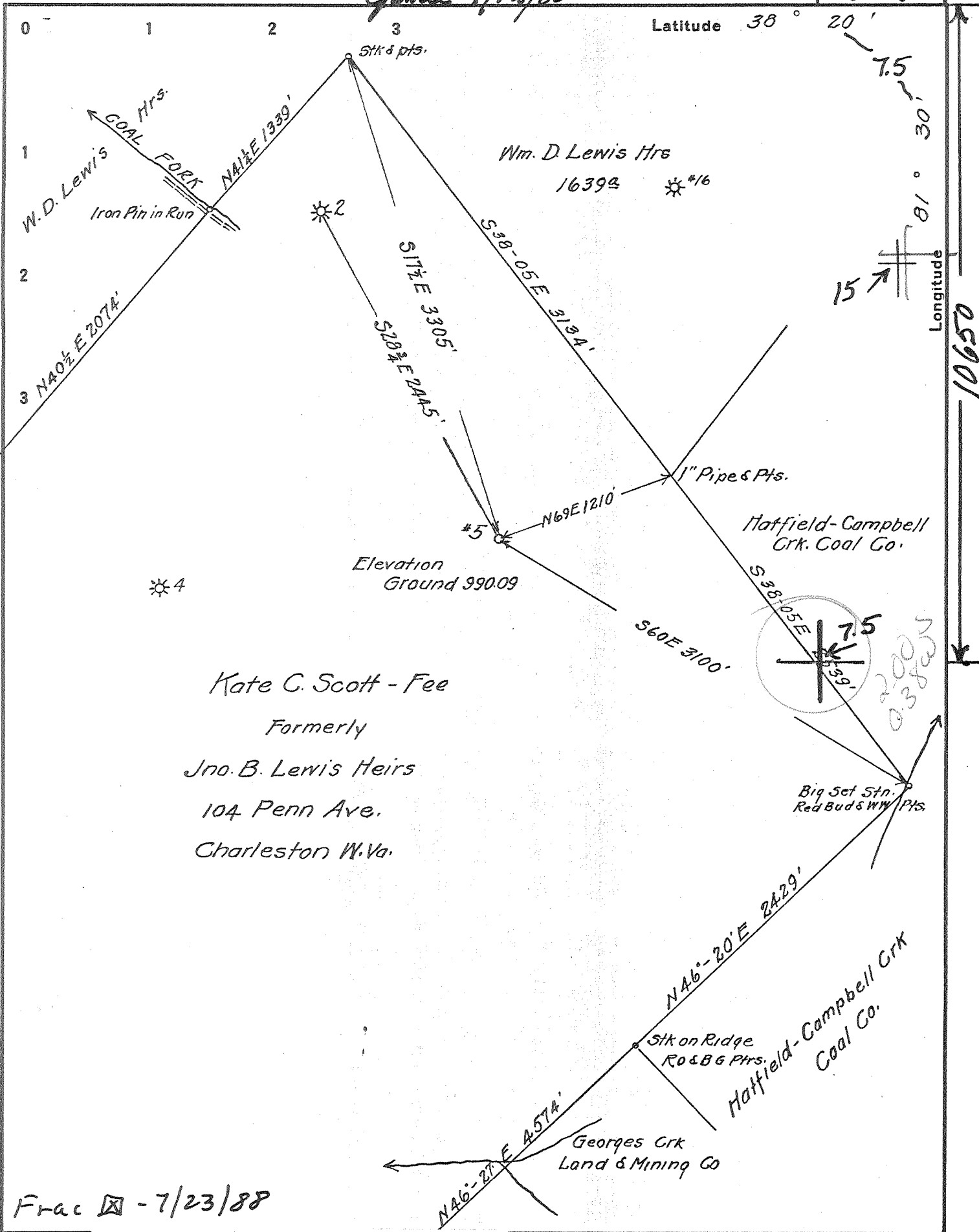


Jan 7/12/88

← 2050 →



Kate C. Scott - Fee
Formerly
Jno. B. Lewis Heirs
104 Penn Ave.
Charleston W. Va.

Frac - 7/23/88

Company: Pennzoil Products, Inc.
 Address: P.O. Box 5519- Vienna, WVA. 26105
 Surface: I.V. Cunningham, Sr. 673
 Farm: Kate C. Scott
 Tract: _____ Acres: 970 Lease No. 79261
 Well (Farm) No. 5 Serial No. _____
 Quadrangle: Charleston East 7.5 289,024 SE4
 County: Kanawha
 District: Malden 7
 Engineer: E. C. Tabler
 Engineer's Registration No. _____
 File No. _____ Drawing No. _____
 Date: 9-17-37 Scale: 1" = 800'

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION
CHARLESTON

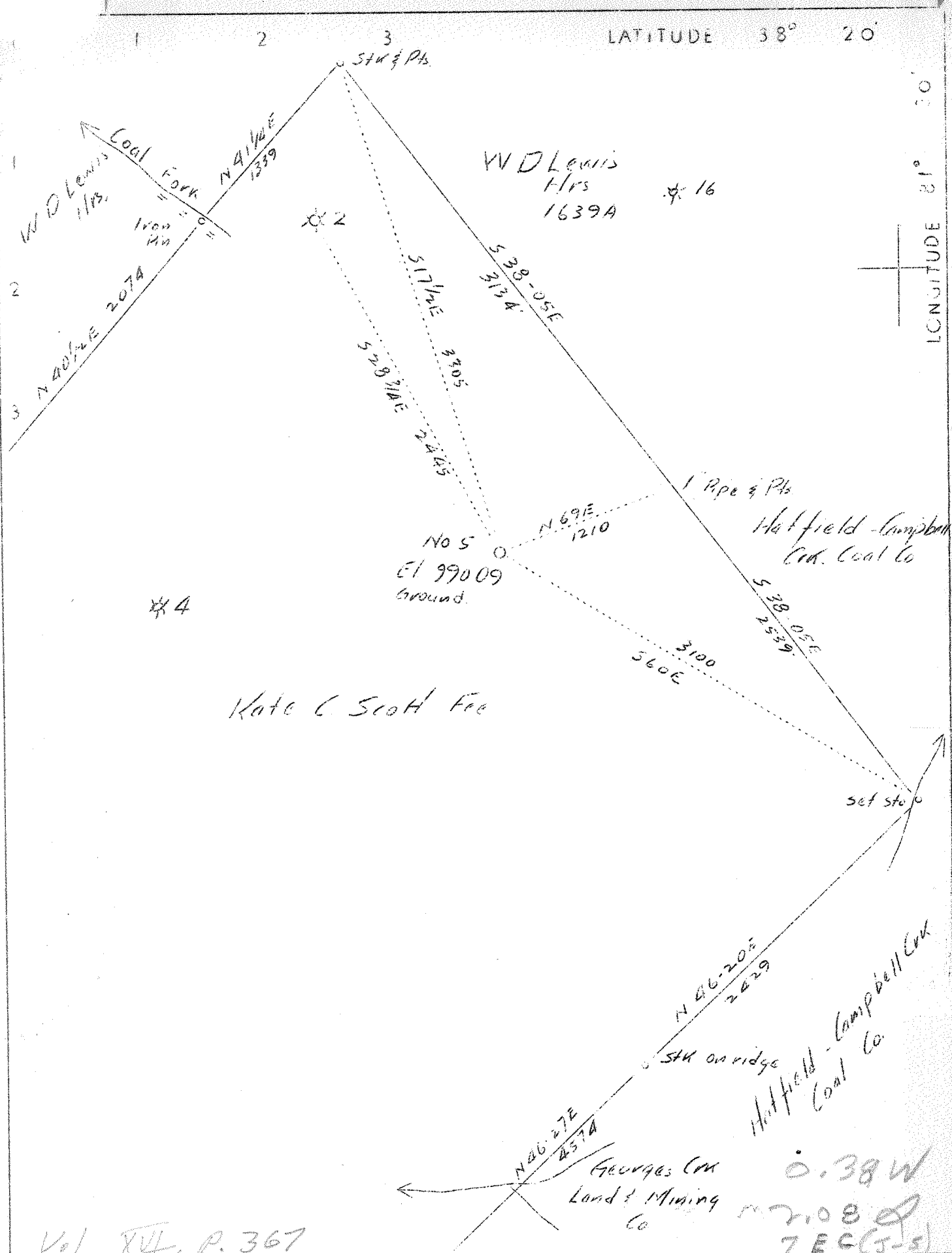
WELL LOCATION MAP

FILE NO. KAN-477

47-039-0477-Frac.

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.



Company South Penn Oil Co
 Address 411-7th Ave., Pittsburgh, Pa
 Farm Kate C. Scott
 Tract Acres 970 Lease No. 79261
 Well(Farm) No. 5 Serial No. _____
 Quadrangle Charleston
 County Kanawha
 District Malden
 Engineer E. C. Tabler
 Engineer's Registration No. _____
 File No. _____ Drawing No. _____
 Date 9-17-37 Scale 1" = 800'

STATE OF WEST VIRGINIA
 Department of Mines
 OIL AND GAS DIVISION
 Charleston

WELL LOCATION MAP
 File No. KAN-477

+ Denotes location of well on U. S. Topographic Maps, scale 1 to 62,500 latitude and longitude lines being represented by border lines as shown

— Denotes one inch spaces on border line of original tracing.

6-6 214 deep well

RECEIVED
Division of Energy

State of West Virginia
DEPARTMENT OF ENERGY
Division of Oil and Gas

NOV 21 90

Permitting Section
Oil and Gas Section
Well Operator's Report of Well Work

Farm name: CUNNINGHAM, I. V. SR. Operator Well No.: KATE SCOTT 5

LOCATION: Elevation: 990.00 Quadrangle: CHARLESTON EAST

District: MALDEN County: KANAWHA
Latitude: 10650 Feet South of 38 Deg. 20Min. 0 Sec.
Longitude 2050 Feet West of 81 Deg. 30 Min. 0 Sec.

Company: PENNZOIL PRODUCTS COMPANY
P. O. BOX 5519
VIENNA, WV

Asent: JAMES A. CREWS

Inspector: CARLOS W. HIVELY

Permit Issued: 07/23/88

Well work Commenced: 10-1-88

Well work Completed: 11-11-88

Verbal Plugging

Permission granted on:

Rotary Cable X Ris

Total Depth (feet) 4927

Fresh water depths (ft) 439

Salt water depths (ft) 940

Is coal being mined in area (Y/N)?

Coal Depths (ft): 438

Casings & Tubing Size	Used in Drilling	Left in Well	Cement Fill Cu. Ft.

OPEN FLOW DATA

Producing formation Big Injun/Oriskany Pay zone depth (ft) 1560-4906

Gas: Initial open flow 92 MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure 190 psis (surface pressure) after 65 Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psis (surface pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: PENNZOIL PRODUCTS COMPANY
By: Timothy P. Roush
Date: November 19, 1990
NOV 21 1990

Perforated: 1560-1570' (10 holes)

Fractured: Big Injun: 484 Bbls. gelled water, 24,800# 20/40 sand.

1560-1570' (10 holes)
484 Bbls. gelled water
24,800# 20/40 sand

1560-1570' (10 holes)
484 Bbls. gelled water
24,800# 20/40 sand

1560-1570' (10 holes)
484 Bbls. gelled water
24,800# 20/40 sand

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24,800# 20/40 sand

1560-1570' (10 holes)
484 Bbls. gelled water
24,800# 20/40 sand

1560-1570' (10 holes)
484 Bbls. gelled water
24,800# 20/40 sand

23

039-0477-P

Issued 7/23/88 Expires 7/23/90

Page 3 of 4

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

- 1) Well Operator: Pennzoil Products Company 37450, 7, 289
- 2) Operator's Well Number: Kate Scott No. 5 3) Elevation: 990
- 4) Well type: (a) Oil / or Gas X/
(b) If Gas: Production X/ Underground Storage /
Deep / Shallow X/
- 5) Proposed Target Formation(s): Big Injun
- 6) Proposed Total Depth: feet
- 7) Approximate fresh water strata depths: 439; 740
- 8) Approximate salt water depths: 940
- 9) Approximate coal seam depths: 438
- 10) Does land contain coal seams tributary to active mine? Yes / No X/
- 11) Proposed Well Work: Perforate & frac Big Injun. Perforate 7" approx. 1850' - Est. circulation - spot 100 sks. cement (thru Big Injun).
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS	FOOTAGE INTERVALS	CEMENT
	Size Grade	Weight per ft. For drilling	Left in well Fill-up (cu. ft.)
Conductor			
Fresh Water	10	470	470
Coal			<i>Existing</i>
Intermediate	8-5/8	1414	1414 20 sks. (exist)
Production	7	4838	4838 50 sks. (exist)
Tubing			380SR18-11.1/2 100150.07
Liners			

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JUL 07 1988

PACKERS : Kind
Sizes
Depths set

For Division of Oil and Gas Use Only

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond 50 Blum bet Agent
 (Type)

07/04
AI
AI

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JUL 07 1988

- 1) Date: July 6, 1988
- 2) Operator's well number
Kate Scott No. 5
- 3) API Well No: 47 - 039 - 0477-FRAC
State - County - Permit

**DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY**

**STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS**

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
 - (a) Name I. V. Cunningham, Sr.
Address c/o Henry C. Bias
PO Box 188, Charleston, WV 25321
 - (b) Name _____
Address _____
 - (c) Name _____
Address _____
- 5) (a) Coal Operator:
 - Name _____
Address _____
 - (b) Coal Owner(s) with Declaration
 - Name _____
Address _____
 - (c) Coal Lessee with Declaration
 - Name _____
Address _____
- 6) Inspector Carlos Hively
Address 223 Pinch Ridge Rd.
Elkview, WV 25071
Telephone (304)- _____

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

_____ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR

X Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 4 on the above named parties, by:

- _____ Personal Service (Affidavit attached)
- X Certified Mail (Postmarked postal receipt attached)
- _____ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Pennzoil Products Company
 By: Curtis A. Lucas Curtis A. Lucas
 Its: Supervisor, Surveying/Mapping
 Address P.O. Box 5519
Vienna, WV 26105-5519
 Telephone 340-422-6565

Subscribed and sworn before me this 6th day of July, 19 88

Joyce M. Board Notary Public
 My Commission expires October 24, 1989