

*Jamie H/20/90*

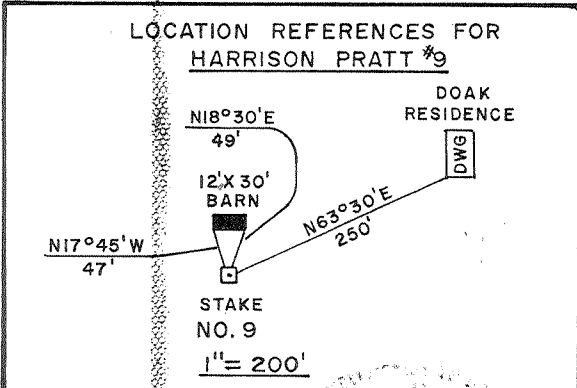
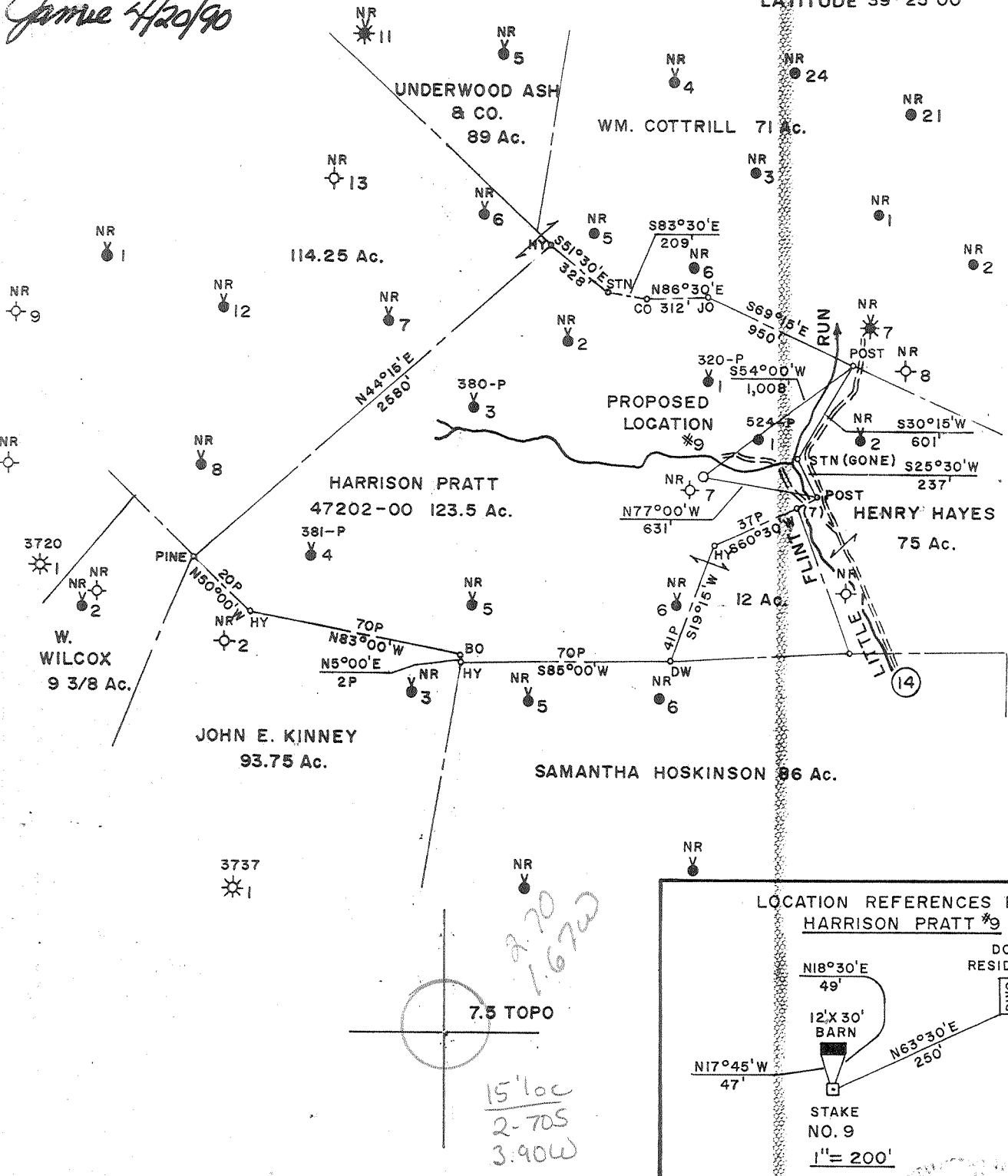
8,875'

LATITUDE 39° 25' 00"

LONGITUDE 80° 42' 30"

14,300'

NORTH



FILE NO. 550  
 MAP NO. N37 SQ. S6 W7  
 SCALE 1" = 800'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION HARRISON PRATT NO. 3 (47-017-0380-P) = 854.9'

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 ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.

(SIGNED) *Timothy P. Roush*  
 TIMOTHY P. ROUSH P.S. 793



STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION



DATE APRIL 6, 1990  
 WELL NO. HARRISON PRATT NO. 9  
 API WELL NO. 47-017-3813  
 STATE 47 COUNTY 017 PERMIT 3813

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS,") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 783' WATER SHED LITTLE FLINT RUN  
 DISTRICT GRANT 3 COUNTY DODDRIDGE  
 QUADRANGLE CENTERPOINT 7.5' *+15' WC*  
 SURFACE OWNER DUANE DOAK ACREAGE 120.3 Ac.  
 OIL & GAS ROYALTY OWNER BEULAH & ASHBY L. CAYTON LEASE ACREAGE 123.5 Ac.  
 LEASE NO. 47202-00  
 PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON  CLEAN OUT AND REPLUG   
 TARGET FORMATION BENSON ESTIMATED DEPTH 5,000'  
 WELL OPERATOR PENNZOIL PRODUCTS CO. DESIGNATED AGENT JAMES A. CREWS  
 ADDRESS P.O. BOX 5519 ADDRESS P.O. BOX 5519  
VIENNA, WV 26105 *673 Swiger (Flint Run) (097)* VIENNA, WV 26105

MAY 04 1990

RECEIVED  
Division of Energy

26-Apr-90  
API # 47- 17-03813

JUL 3 0 00  
State of West Virginia  
DEPARTMENT OF ENERGY  
Division of Oil and Gas

Well Operator's Report of Well Work

Farm name: DOAK, DUANE Operator Well No.: H. PRATT #9

LOCATION: Elevation: 783.00 Quadrangle: CENTER POINT

District: GRANT County: DODDRIDGE  
Latitude: 14300 Feet South of 39 Deg. 25Min. 0 Sec.  
Longitude 8875 Feet West of 80 Deg. 42 Min. 30 Sec.

Company: PENNZOIL PRODUCTS COMPANY  
P. O. BOX 5519  
VIENNA, WV 26105-5519

Agent: JAMES A. CREWS

Inspector: MIKE UNDERWOOD  
Permit Issued: 04/30/90  
Well work Commenced: 06/19/90  
Well work Completed: 06/25/90  
Verbal Plugging  
Permission granted on:  
Rotary  Cable \_\_\_\_\_ Rig  
Total Depth (feet) 5054  
Fresh water depths (ft) 21', 93'  
Salt water depths (ft) N/A

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size 13-3/8"	73'	73'	to surface
8-5/8"	1022'	1022'	to surface
4-1/2"	4988'	4988'	600 sks.

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): \_\_\_\_\_

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 4854  
 Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
 Final open flow 280 MCF/d Final open flow 0 Bbl/d  
 Time of open flow between initial and final tests \_\_\_\_\_ Hours  
 Static rock Pressure 1440 psig (surface pressure) after 61 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 \_\_\_\_\_ psig (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.

*Curtis A. Lucas*  
For: PENNZOIL PRODUCTS COMPANY

By: Curtis A. Lucas, Adv. Engineering Tech.  
Date: July 26, 1990

AUG 6 1990

Perforate: 4854-4862' - 16 holes

Fracture: w/500 gal. 15% HCl, 685 Bbls. gelled H<sub>2</sub>O, 10,500# 80/100 sand,  
25,000# 20/40 sand

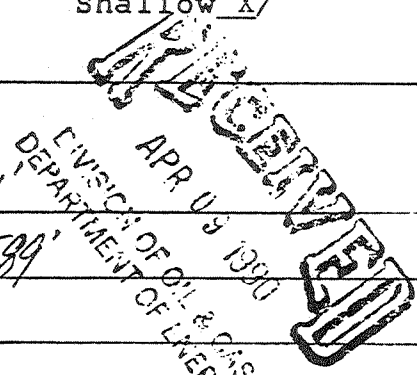
Sand & Shale	0 - 1068
Shale	1068 - 1295
Sand	1295 - 1345
Shale	1345 - 1407
Sand	1407 - 1428
Shale	1428 - 1505
Sand	1505 - 1542
Shale	1542 - 1602
Sand	1602 - 1653
Shale	1653 - 1718
Big Lime	1718 - 1821
Big Injun	1821 - 1942
Shale	1942 - 2118
Weir	2118 - 2190
Shale	2190 - 2322
Berea	2322 - 2344
Shale	2344 - 2532
Gordon	2532 - 2566
Shale	2566 - 4852
Benson	4852 - 4863
Shale	4863 - 5054
Total Depth	5054

10423

017-3813 *Issued 4/30/90*  
*Expires 4/30/92*

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

- 1) Well Operator: 673 Pennzoil Products Company 37450 (3) 286
- 2) Operator's Well Number: HARRISON PRATT NO. 9 3) Elevation: 783'
- 4) Well type: (a) Oil   / or Gas X/  
 (b) If Gas: Production X/ Underground Storage   /  
 Deep   / Shallow X/
- 5) Proposed Target Formation(s): Benson 485
- 6) Proposed Total Depth: 5000 feet
- 7) Approximate fresh water strata depths: N/A 44
- 8) Approximate salt water depths: N/A 1589
- 9) Approximate coal seam depths: 476'
- 10) Does land contain coal seams tributary to active mine? Yes    / No X/
- 11) Proposed Well Work: Drill and stimulate New Well
- 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						<u>38CSR18 11.3</u>
Fresh Water	<u>8-5/8"</u>	<u>H-40</u>	<u>24#</u>	<u>1025'</u>	<u>1025'</u>	<u>To surface</u>
Coal						<u>38CSR18 11.2.2</u>
Intermediate						
Production	<u>4-1/2"</u>	<u>K-55</u>	<u>11.6#</u>	<u>5000'</u>	<u>5000'</u>	<u>50 Skts.</u>
Tubing						<u>38CSR18 11.1</u>
Liners						

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 Surety Blanket  Agent  
 (Type)

**RECEIVED**  
APR 09 1990  
DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY  
STATE OF WEST VIRGINIA

Date: April 6, 1990  
Operator's well number  
HARRISON PRATT NO. 9  
API Well No: 47 - 017 - 3813  
State - County - Permit

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 Duane Doak  
Address Rt. 2, Box 285-A  
West Union, W. Va. 26456
  - (b) Name Mgt. Hayes %Robert Hayes  
Address 1004 - 32nd Street  
Vienna, W. Va. 26105
  - (c) Name \_\_\_\_\_  
Address \_\_\_\_\_
- 5) (a) Coal Operator:
  - Name No Commercial Coal  
Address \_\_\_\_\_
  - (b) Coal Owner(s) with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_
  - Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- 6) Inspector Mike Underwood  
Address Rt. 2, Box 135  
Salem, W. Va. 26426  
Telephone (304)-782-1043

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  
 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)  
 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 Peanzoil Products Company  
 By: Timothy P. Roush  
 Its: Supervisor, Surveying/Mapping  
 Address P.O. Box 5519  
Vienna, W. Va. 26105-5519  
 Telephone 304-422-6565

Subscribed and sworn before me this 6th day of April, 1990

Debra Bailey Notary Public  
 My commission expires June 10, 1997