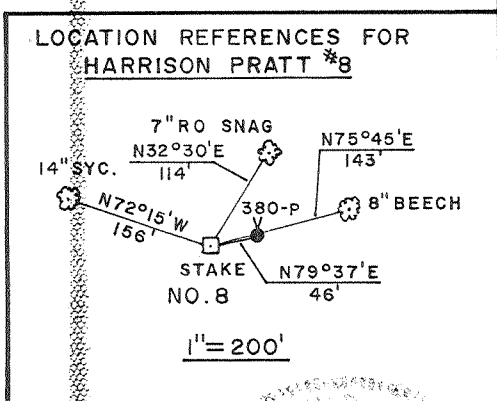
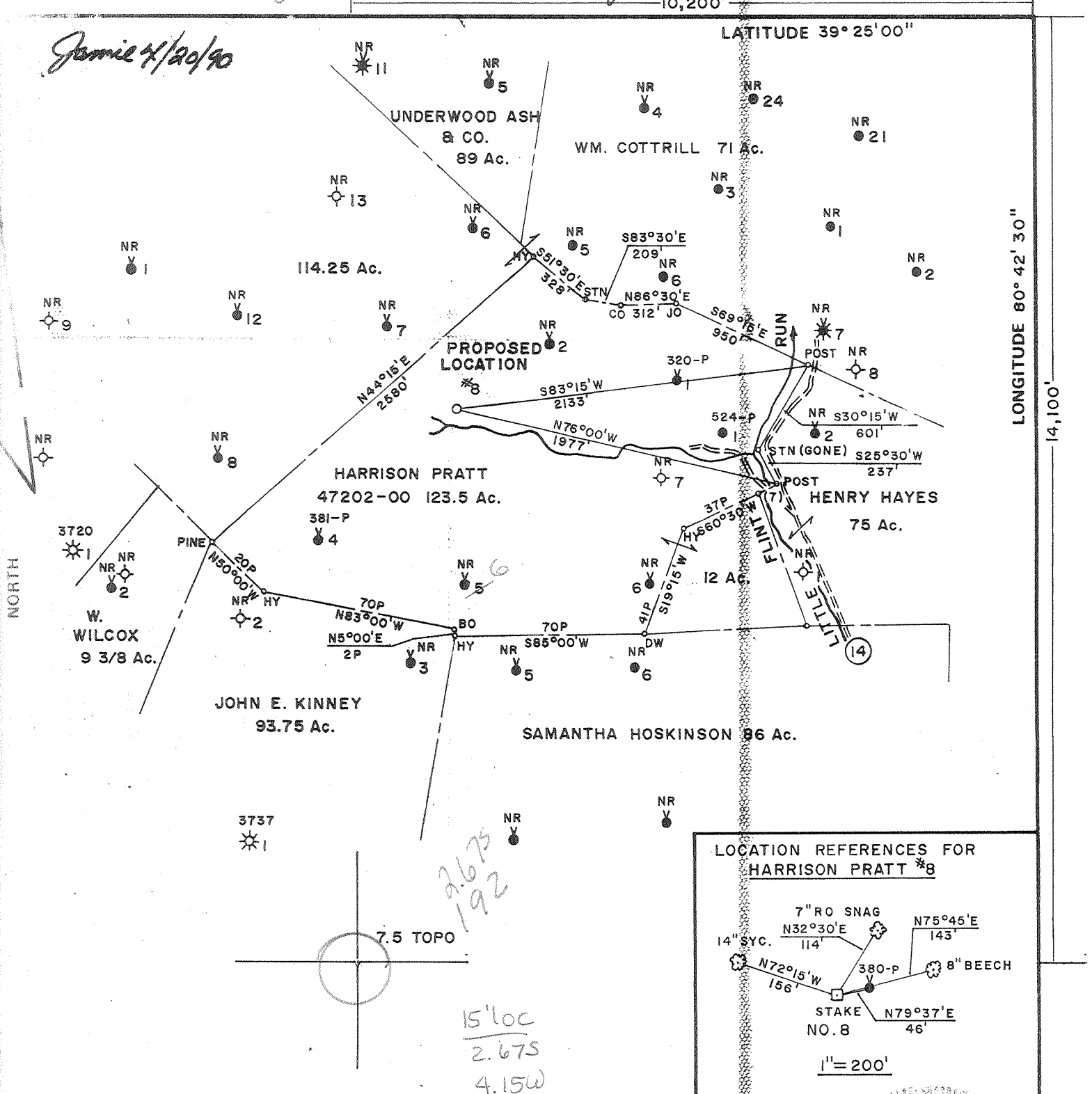


Jamie 4/20/90



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 PS. 793



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE APRIL 6, 1990
 WELL NO. HARRISON PRATT NO. 8
 API WELL NO. 47-017-3812
 STATE COUNTY PERMIT

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS,") PRODUCTION X STORAGE DEEP SHALLOW X
 LOCATION: ELEVATION 847' 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 X 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 6-6 Swiger (Flint Run)
 TARGET FORMATION BENSON ESTIMATED DEPTH 5,050' (097) MAY 04 1990
 WELL OPERATOR PENNZOIL PRODUCTS CO. DESIGNATED AGENT JAMES A. CREWS
 ADDRESS P.O. BOX 5519 ADDRESS P.O. BOX 5519
VIENNA, WV 26105 VIENNA, WV 26105

RECEIVED
Division of Energy

JUL 30 90

Permitting
Oil and Gas Section

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

26-Apr-90
API # 47- 17-03812

Well Operator's Report of Well Work

Farm name: DOAK, DUANE Operator Well No.: H. PRATT #8

LOCATION: Elevation: 847.00 Quadrangle: CENTER POINT

District: GRANT County: DODDRIDGE
Latitude: 14100 Feet South of 39 Deg. 25Min. 0 Sec.
Longitude 10200 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: 06/12/90
Well work Completed: 06/18/90
Verbal Plugging
Permission granted on: _____
Rotary x Cable _____ Rig
Total Depth (feet) 5117
Fresh water depths (ft) N/A

Salt water depths (ft) N/A

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8-5/8"	1121'	1121'	to surface
4-1/2"	5091'	5091'	250 sks.

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 4910
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 230 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ 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 1720 psig (surface pressure) after 66 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 Techn.
Date: July 26, 1990

AUG 6 1990

Perforated: 4910-4918' - 16 holes

Fractured: 2/500 gal. 15% HCl, 686 Bbls. H₂O, 10,500# 80/100 sand, 25,000# 20/40 sand

Sand & Shale	0 - 1099
Shale	1099 - 1382
Sand	1382 - 1408
Shale	1408 - 1463
Sand	1463 - 1474
Shale	1474 - 1534
Sand	1534 - 1567
Shale	1567 - 1638
Sand	1638 - 1600
Shale	1660 - 1780
Big Lime	1780 - 1898
Big Injun	1898 - 2040
Shale	2040 - 2174
Weir	2174 - 2250
Shale	2250 - 2378
Berea	2378 - 2400
Shale	2400 - 2590
Gordon	2590 - 2624
Shale	2624 - 4910
Benson	4910 - 4922
Shale	4922 - 5117
Total Depth	5117
Plug Back Depth	5063

10422

APR 09 1990

017-3812
issued 4/30/90

FORM WW-2B

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

Page 3 of 4

Expires 4/30/92

- 1) Well Operator: ⁶⁷³ Pennzoil Products Company 39450 3 286
- 2) Operator's Well Number: HARRISON PRATT NO. 8 3) Elevation: 847'
- 4) Well type: (a) Oil ___ / or Gas X /
(b) If Gas: Production X / Underground Storage ___ /
Deep ___ / Shallow X /
- 5) Proposed Target Formation(s): Benson 435
- 6) Proposed Total Depth: 5050 feet
- 7) Approximate fresh water strata depths: N/A 90'
- 8) Approximate salt water depths: N/A 11235'
- 9) Approximate coal seam depths: 537
- 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						300000-11.3
Fresh Water	8-5/8"	H-40	24#	1090'	1090'	To surface
Coal						300000-11.2.2
Intermediate						
Production	4-1/2"	K-55	11.6#	5050'	5050'	50 Sks.
Tubing						300000-11.1
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 Blanket sure Agent
 (Type)

RECEIVED
APR 09 1990
DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Date: April 6, 1990
Operator's well number
HARRISON PRATT NO. 8
API Well No: 47 - 017 - 3812
State - County - Permit

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 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 _____
6) Inspector Mike Underwood
Address Rt. 2, Box 135
Salem, W. Va. 26426
Telephone (304)- 782-1043

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 _____

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: _____ 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

Delia K. Bailey
My commission expires June 10, 1991 Notary Public