

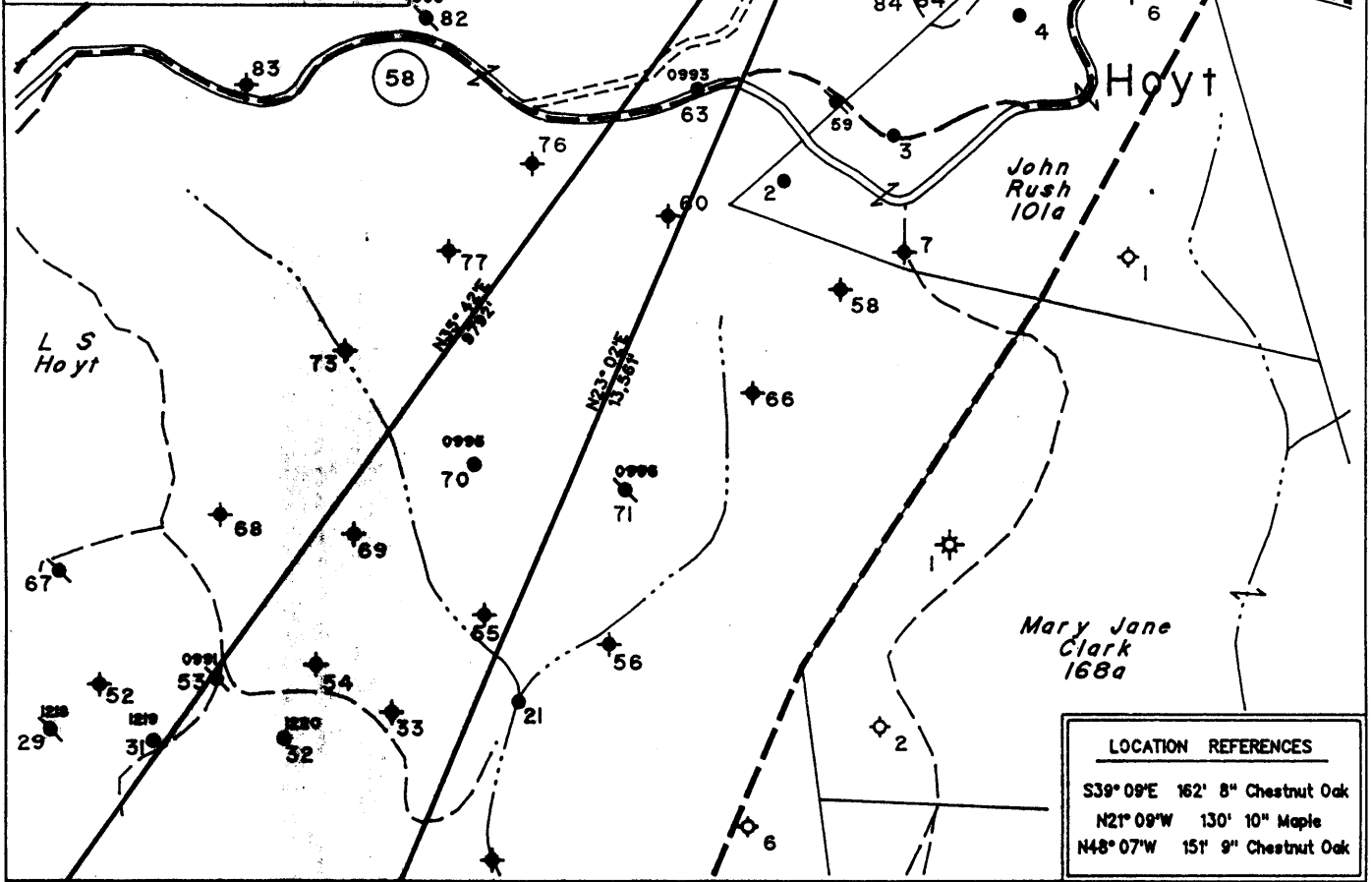
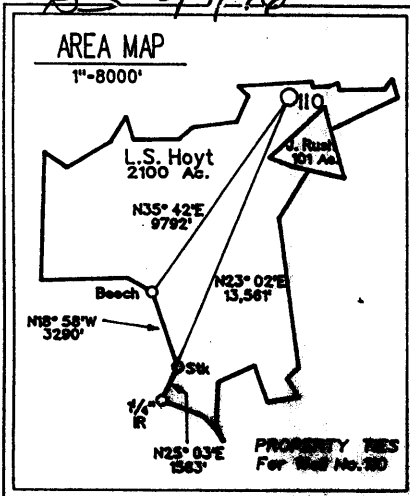
4,500'

LATITUDE 39° 37' 30"

LONGITUDE 80° 37' 30"

3,100'

AS 8/7/96



LOCATION REFERENCES	
S39° 09'E	162' 8" Chestnut Oak
N21° 09'W	130' 10" Maple
N48° 07'W	151' 9" Chestnut Oak

Note: No Known Water Supply Sources Are Located Within 1000' Of Proposed Well

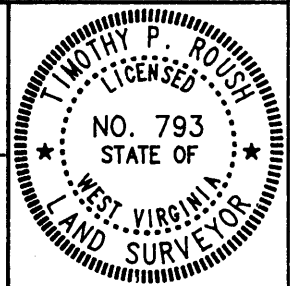
◆ - Denotes a Water Supply Source

(H) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. 325  
 MAP NO. N68 N 11 S E W 2  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION USGS BM - 838'

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  
 DIVISION OF ENERGY  
 OIL AND GAS SECTION



DATE July 30, 19 96  
 FARM L.S. Hoyt NO. 110  
 API WELL NO. 47-103-01711-5

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1314' WATERSHED Little Fishing Creek  
 DISTRICT Grant COUNTY Wetzel  
 QUADRANGLE Pine Grove

SURFACE OWNER Dallison Lumber Inc. ACREAGE 2099.3 Ac.  
 OIL & G.S. ROYALTY OWNER The Hoyt Foundation LEASE ACREAGE 2100 Ac.  
 LEASE NO. 52265-50

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 Gordon ESTIMATED DEPTH 3304'  
 WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT Philip S. Ondrusek  
 ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519  
Vienna, W.Va. 26105 4670 Vienna, W.Va. 26105

AUG 28 1996

6-0-10

FORM IV-6

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: Dallison Lumber Company Operator Well No.: L.S. Hoyt #110

LOCATION: Elevation: 1,314.00 Quadrangle: Pine Grove  
District: Center County: Wetzel  
Latitude: 3,100 Feet south of 39 Deg 37 Min 30 Sec.  
Longitude: 4,500 Feet west of 80 Deg 37 Min 30 Sec.

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

Agent: PHILIP S. ONDRUSEK

Inspector: Randal Mick

Permit Issued: 8/19/96  
Well work Commenced: 10/5/96  
Well work Completed: 11/1/96

Verbal plugging permission granted on:

Rotary  Cable  Rig

Total Depth (feet) 3406'

Fresh water depths (ft) NA

Salt water depths (ft) NA

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

Coal Depths (ft): 1216-1230

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8-5/8"	1275'	1275'	365 Sacks
4 1/2"	3321.90'	3321.90'	275 Sacks

OPEN FLOW DATA

\*Well was drilled as a waterflood injection well. No open-flow data was obtained

Producing formation Gordon Pay zone depth (ft) 3271-3282

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

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.

For: PENNZOIL PRODUCTS COMPANY  
By: [Signature] NOV 15 1996  
Date: 11/8/96

**Treatment :**

Perforations:

3276-3280 -4 holes/ft. (16 holes)

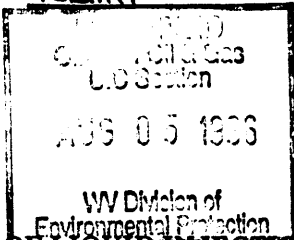
Treatment:

Treated via 4.5" Casing with 300 gals. 15% HCl, 217 bbls.

Borate cross-linked gelled water and 11,000 lbs. of 20/40 sand.

**Well Log :**

Sand & Shale	0	-	1216
Coal	1216	-	1230
Sand	1230	-	1250
Shale	1250	-	1311
Sand	1311	-	1323
Shale	1323	-	1370
Sand	1370	-	1420
Shale	1420	-	1709
Sand	1709	-	1749
Shale	1749	-	1756
Sand	1756	-	1760
Shale	1760	-	1822
Sand	1822	-	1850
Shale	1850	-	1880
Sand	1880	-	1920
Shale	1920	-	1926
Sand	1926	-	1943
Shale	1943	-	2174
Sand	2174	-	2201
Shale	2201	-	2233
Sand	2233	-	2314
Shale	2314	-	2362
L. Lime	2362	-	2400
B. Lime	2400	-	2460
B Injun	2460	-	2558
Shale	2558	-	3236
Gordon Stray	3236	-	3261
Shale	3261	-	3271
Gordon	3271	-	3282
Shale	3282	-	3406



1) Date July 30, 1998  
 2) Well No. L.S. Hoyt No.110  
 3) SIC Code \_\_\_\_\_  
 4) API Well No. 47 - 103 - 1711-LJ  
                   State      County      Permit  
 5) UIC Code \_\_\_\_\_

STATE OF WEST VIRGINIA  
 NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION  
 for the  
 DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

*Issued 08/20/96*  
*Expires 08/20/98*

22412

WELL TYPE:      Liquid Injection X      Gas Injection \_\_\_\_\_      Waste Disposal \_\_\_\_\_

LOCATION:      Elevation 1314      Watershed Little Fishing Creek  
                   District Grant (4) County Wetzel      Quadrangle Pine Grove 548

WELL OPERATOR: Pennzoil Products Company 4070      9) DESIGNATED AGENT: Philip S. Ondrusek  
                                   P.O. Box 5519      P.O. Box 5519  
                                   Vienna, WV 26105      Vienna, WV 26105

10) OIL & GAS INSPECTOR TO BE NOTIFIED:      11) DRILLING CONTRACTOR:  
                   Name Randal Mick      Name \_\_\_\_\_  
                   Address 111 Blackshere Drive      Address \_\_\_\_\_  
                                   Mannington, WV 26582      \_\_\_\_\_

12) PROPOSED WELL WORK:      Drill X      Drill Deeper \_\_\_\_\_      Redrill \_\_\_\_\_      Stimulate X  
                                   Plug Off Old Formation \_\_\_\_\_      Perforate New Formation \_\_\_\_\_      Convert \_\_\_\_\_  
                                   Other Physical Change in Well (specify) \_\_\_\_\_

13) Geological target formation Gordon 419      Depth 3204      Ft. (Top) t 3219      Ft. (Bottom) \_\_\_\_\_

14) Estimated depth of completed well (or actual depth of existing well) 3304      Ft.

15) Approximate water strata depths:      Fresh 494      Ft.      Salt 1614      Ft.

16) Approximate coal seam depths: 1114      Ft.

17) Is coal being mined in the area?      Yes      X      No

18) Virgin reservoir pressure in target formation: 1400      psig.      Source Estimated

19) Estimated reservoir fracture pressure: 3500      psig.

20) Maximum proposed injection operations:      Volume per hour 25 bbl.      Bottom Hole Pressure 2332 psig.

21) Detailed identification of materials to be injected, including additives: Fresh water, produced water, bactericides and other chemicals as needed to maintain water quality and improve oil recovery.

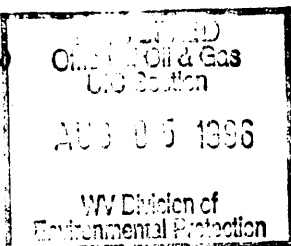
22) Filters (if any): Cartridge filters and/or coal bed filters

23) Specifications for cathodic protection and other corrosion control: \_\_\_\_\_

24) CASING AND TUBING PROGRAM:

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILLUP OR SACKS	PACKERS
	Size	Grade	Weight	New	Used	For Drilling	Left in Well		
Conductor									Kinds
Fresh Water	8 5/8"	L.S.	20#	X		1164	1164	Cement To	
Coal								Surface	Sizes
Intermediate									
Production	4 1/2"	J-55	10.5#	X		3304	3304	Cement Over	Depths Set
Tubing								Salt Sand	
Liners									Perforations
									Top      Bottom

25) APPLICANTS OPERATING RIGHTS were acquired from L.S. Hoyt et al.  
 by Deed \_\_\_\_\_ Lease X Other Contract \_\_\_\_\_ Dated Jan. 6, 1902 of record in the  
                                   Wetzel County Clerk's Office in Lease Book 76 at Page 300



1) Date July 30, 1996  
2) Well No. L.S. Hoyt No.110  
3) SIC Code \_\_\_\_\_  
4) API Well No. 47 - 103 - 103r1711-01  
State County Permit

STATE OF WEST VIRGINIA  
NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION  
for the  
DIVISION OF OIL AND GAS, DEPARTMENT OF ENERGY

6) SURFACE OWNER(S) OF RECORD TO BE SERVED

(i) Name Dallison Lumber Inc.  
Address Route 2, Box 50  
Jacksonburg, WV 26377  
(ii) Name Delbert E. Rush  
Address H.C. 62, Box 63  
Pine Grove, WV 26419  
(iii) Name \_\_\_\_\_  
Address \_\_\_\_\_

7 (i) COAL OPERATOR:

Name N/A  
Address \_\_\_\_\_

7 (ii) COAL OWNER WITH DECLARATION ON RECORD:

Name DUPECH, Inc.  
Address 6451 Pleasant St.  
Library, PA 15129

7(iii) COAL LESSEE WITH DECLARATION ON RECORD:

Name N/A  
Address \_\_\_\_\_

TO THE PERSON(S) NAMED ABOVE: You should have received this Form and the following documents:

- (1) The Application for a Liquid Injection or Waste Disposal Well Work Permit on Form WW-3(B), which sets out the parties involved in the drilling or other work, and
- (2) The plat (surveyor's map) showing the well location on Form WW-6; and
- (3) The Construction and Reclamation Plan on Form WW-9 (unless the well work is only to plug a well), which sets out the plan for erosion and sediment control and for reclamation for the site and access road.

The date proposed for the first injection or waste disposal is \_\_\_\_\_

THE REASON YOU RECEIVED THESE DOCUMENTS IS THAT YOU HAVE RIGHTS REGARDING THE APPLICATION WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS" ON THE REVERSE SIDE OF THE COPY OF THE APPLICATION (FORM WW-3(B)) DESIGNATED FOR YOU. HOWEVER, YOU ARE NOT REQUIRED TO TAKE ANY ACTION AT ALL.

Take notice that under Chapter 22B of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a Well Work Permit with the Director of the Division of Oil and Gas, West Virginia Department of Energy, with respect to a well at the location described on the attached Application and depicted on attached Form WW-6. Copies of this Notice, the Application, the plat, and the Construction and Reclamation Plan have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Director.

The person signing this document shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document 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."

Pennzoil Products Company  
Well Operator  
By [Signature]  
Its Timothy P. Roush  
Supervisor, Surveying/Mapping  
Telephone (304) 422-6565

OFFICE USE ONLY  
DRILLING PERMIT

Permit number 47-103-1711-LI

Date August 20th. 1996 19

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and (if required) construction and reclamation plan, subject to any modifications and conditions specified below.

Permit expires 8-20-98 unless well work is commenced prior to that date and prosecuted with due diligence

Bond: <u>—</u>	Agent: <u>✓</u>	Plat: <u>AS</u>	Casing: <u>AS</u>	Fee: <u>CK#</u>
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0301284747

*Michael D. Jauris*  
CHIEF, OFFICE OF OIL AND GAS

NOTE: Keep one copy of this permit posted at the drilling location.

PERMIT MODIFICATIONS AND CONDITIONS (IF ANY) TO THE PROPOSED WELL WORK

OFFICE USE ONLY

This part of form IV-3(b) is to record the dates of certain occurrences and any follow-up inspections.

	Date	Follow-up inspection(s)	Date(s)
Application received			
Well work started		" "	
Total depth reached		" "	
Well Record received		" "	
Reclamation completed		" "	
OTHER INSPECTIONS			

Reason: \_\_\_\_\_

Reason: \_\_\_\_\_