

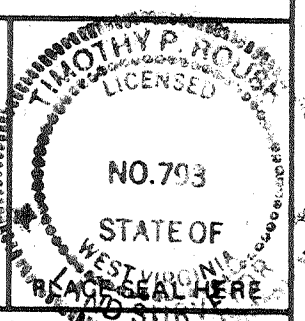
**LOCATION REFERENCES**

N19°50'E	162'	6" MAPLE
N60°01'W	112'	8" MAPLE
S71°12'W	149'	12" LOCUST

FILE NO. 1684  
 MAP NO. N37 sqs. S6 W7  
 SCALE 1" = 800'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION SILAS ASH #17 (47-017-2512) = 798.14'

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 JULY 19 1991  
 FARM SILAS ASH NO. 19  
 API WELL NO. 47-017-3904  
 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 992' WATER SHED LITTLE FLINT CREEK  
 DISTRICT GRANT 3 COUNTY DODDRIDGE  
 QUADRANGLE SMITHBURG Centerpoint WC  
 SURFACE OWNER JENNINGS THOMPSON ACREAGE 95  
 OIL & GAS ROYALTY OWNER KENNETH L. ASH LEASE ACREAGE 120  
 LEASE NO. 47199-00  
 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 \_\_\_  
 TARGET FORMATION BENSON ESTIMATED DEPTH 5,150' 66  
 WELL OPERATOR PENNZOIL PRODUCTS CO. DESIGNATED AGENT JAMES A. CREWS Swiger (Flint Run) 1991 (097)  
 ADDRESS P.O. BOX 5510 673

FORM WW-6

RECEIVED

JAN 29 1992

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

Reviewed TM6  
Recorded \_\_\_\_\_

Division of Energy  
Oil and Gas Section

Well Operator's Report of Well Work

Farm name: THOMPSON, JENNINGS I Operator Well No.: SILAS ASH 19

LOCATION: Elevation: 992.00 Quadrangle: SMITHBURG

District: GRANT County: DODDRIDGE  
Latitude: 1090 Feet South of 39 Deg. 22Min. 30 Sec.  
Longitude 6850 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: 08/08/91  
Well work Commenced: 8/26/91  
Well work Completed: 9/17/91  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary  Cable \_\_\_\_\_ Rig  
Total Depth (feet) 5280  
Fresh water depths (ft) N/A

Salt water depths (ft) N/A

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill U. Cu. Ft
8 5/8"	1250.85'	1250.85'	490 Sks.
4 1/2"	5171.65'	5171.65'	250 Sks.

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 5090-5101  
Gas: Initial open flow -- MCF/d Oil: Initial open flow -- Bbl/d  
Final open flow 110 MCF/d Final open flow -- Bbl/d  
Time of open flow between initial and final tests 0 Hours  
Static rock Pressure 1175 psig (surface pressure) after 16 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: Timothy P. Roush  
Date: January 23, 1992

FRACTURE RECORD

PERFORATED: Benson 5094-5100 w/ 12 holes

FRACTURED: Benson w/ 500 gal. 15% HCL, 640 Bbl. gelled water,  
10,000# 80/100 sand , & 25,000# 20/40 sand

WELL LOG

0 - 420	Sand & Shale
420 - 440	Sand
440 - 453	Shale
453 - 600	Sand
600 - 616	Shale
616 - 635	Sand
635 - 717	Shale
717 - 738	Sand
738 - 775	Shale
775 - 800	Sand
800 - 1161	Shale
1161 - 1168	Sand
1168 - 1298	Shale
1298 - 1317	Sand
1317 - 1442	Shale
1442 - 1450	Sand
1450 - 1517	Shale
1517 - 1554	Sand
1554 - 1640	Shale
1640 - 1646	Sand
1646 - 1705	Shale
1705 - 1773	Sand
1773 - 1810	Shale
1810 - 1818	Sand
1818 - 1840	Shale
1840 - 1850	Sand
1850 - 1950	Shale
1950 - 2068	Big Lime
2068 - 2179	Big Injun
2179 - 2344	Shale
2344 - 2432	Weir
2432 - 2544	Shale
2544 - 2553	Sand
2553 - 2562	Shale
2562 - 2568	Sand
2568 - 2746	Shale
2746 - 2774	Berea
2774 - 2974	Shale
2974 - 3010	Gordon
3010 - 5090	Shale
5090 - 5101	Benson
5101 - 5280	Shale
T.D. = 5280	

LS721

017- 3904  
 Issued 8/8/91

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

Expires 8/8/93

- 1) Well Operator: Pennzoil Products Company 37450 (3) 610
- 2) Operator's Well Number: SILAS ASH NO. 19 3) Elevation: 992
- 4) Well type: (a) Oil  / or Gas  /  
 (b) If Gas: Production  / Underground Storage  /  
 Deep  / Shallow  /
- 5) Proposed Target Formation(s): Benson 435
- 6) Proposed Total Depth: 5150 feet
- 7) Approximate fresh water strata depths: 278
- 8) Approximate salt water depths: 1300
- 9) Approximate coal seam depths: 696
- 10) Does land contain coal seams tributary to active mine? Yes  / No  /
- 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						
Fresh Water	8-5/8	H-40	20	750'	750'	To surface
Coal						
Intermediate						
Production	4-1/2	J-55	10.5	5150'	5150'	50 Sks.
Tubing						
Liners						

**RECEIVED**  
 Div. of Energy

PACKERS : Kind \_\_\_\_\_  
 Sizes \_\_\_\_\_  
 Depths set \_\_\_\_\_

JUL 23 91

12264  
 70  
 For Division of Oil and Gas Use Only

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

1) Date: July 19, 1991  
2) Operator's well number  
    SILAS ASH NO. 19  
3) API Well No: 47 - 017 - 3904  
    State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

RECEIVED  
Division of Energy  
JUL 23 91

4) Surface Owner(s) to be served:  
(a) Name Jennings I. Thompson  
    Address Rt. 2, Box 288-A  
            West Union, WV 26456  
(b) Name \_\_\_\_\_  
    Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
    Address \_\_\_\_\_

5) (a) Coal Operator:  
    Name \_\_\_\_\_  
    Address \_\_\_\_\_  
(b) Coal Owner(s) with Declaration  
    Name \_\_\_\_\_  
    Address \_\_\_\_\_  
    Name \_\_\_\_\_  
    Address \_\_\_\_\_

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

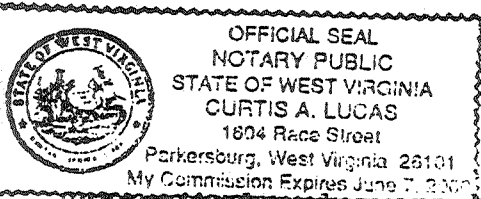
(c) Coal Lessee with Declaration  
    Name \_\_\_\_\_  
    Address \_\_\_\_\_

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:  
X 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: [Signature] 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 19th day of July, 1991  
[Signature] Notary Public  
My commission expires June 7, 2000