

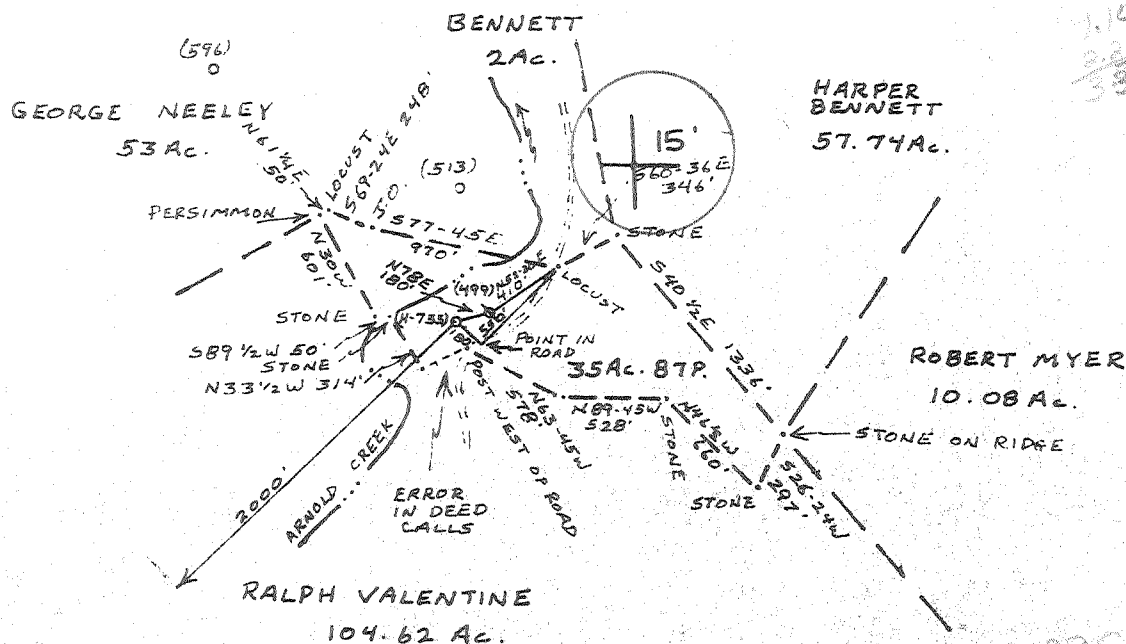
LATITUDE  $39^{\circ} 17' \frac{1}{2}''$   
 (15)  $39^{\circ} 20'$   
 2560 SOUTH  
 5930 WEST

(593)

(H-742)  
 7  $\frac{1}{2}$ '

0.505  
 1.140

$80^{\circ} 45'$   
 $80^{\circ} 47' \frac{1}{2}''$



~~3.44 S~~ 3.32 S  
~~3.22 W~~ 3.27 W

1" = 1000'

1:200

WELL # (499)

*William R. Masser*

551

DATE 11 APRIL 79  
 OPERATOR WELL H-735  
 WELL NO. 47-017 2425  
 STATE COURT

DEPARTMENT OF MINES

OIL AND GAS DIVISION

WELL TYPE OIL & GAS OR PRODUCTION X STORAGE WASTE DISPOSAL

DEPT. OF ENVIRONMENTAL CONTROL

WELL ELEVATION 814' WATER BED ARNOLD CREEK

DISTRICT CENTRAL COUNTY DODDRIDGE

LOCALITY WEST UNION, W. VA. 7 1/2' QUAD. SE

ADJACENT LANDS ROBERT MYER ACRES 35 Ac. 87 P.

ADJACENT LANDS RUBY FARR MAXWELL ACRES 45

APPROVED BY STATE X COUNTY

DEVIATION FROM TYPE OR  
 LOCATION DATE RATE  
 CHANGE IN WELL

REPLUG  
 LIMITED BY 5200'

MAY 8 1979  
 WARREN HAUGHT  
 SMITHVILLE, W. VA. 26178

6- G.C. CENTRAL STATION 9T

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

Date June 7

FORM IV-35  
(Obverse)

Operator's  
Well No. H-735

WELL OPERATOR'S REPORT 13

API Well No. 47 - 017-2425  
State County Franklin

(08-78)

OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

TYPE: Oil      / Gas X / Liquid Injection      / Waste Disposal      /  
(If "Gas", Production X / Underground storage      / Deep      / Shallow X /)

LOCATION: Elevation: 814' Watershed: Arnold Creek  
District: Central County: Doddridge Quadrangle: West Union 7 1/2'  
Ruby Farr Maxwell # H-735

OPERATOR Glenn L. Haught & Sons DESIGNATED AGENT Warren R. Haught  
Address Smithville, WV 26178 Address Smithville, WV 26178

PERMITTED WORK: Drill X / Convert      / Drill deeper      / Redrill      / Fracture or stimulate       
Plug off old formation      / Perforate new formation      /  
Other physical change in well (specify)     

PERMIT ISSUED ON April 24, 19 79

OIL & GAS INSPECTOR FOR THIS WORK:

APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED

Name Kenneth Paul Goodnight  
Address Smithville, WV 26178  
477-3660

LOGICAL TARGET FORMATION: Devonian Shale Depth 3310-5243 feet

Depth of completed well, 5243 feet Rotary X / Cable Tools     

Water strata depth: Fresh, 35-40 feet; salt,      feet.

Coal seam depths: None Is coal being mined in the area? No

Work was commenced May 8, 19 79, and completed May 20, 19 79

LOGGING AND TUBING PROGRAM

LOGGING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	REMARKS
	Size	Grade	Weight per ft	New	Used	For drilling	Left in well		
Conductor									Hinds
Sh water	16"				X	10'	10'	10 Sacks	
1	11 3/4			X		127'	127'	45 Sacks	Sizes
Intermediate	8 5/8	K-55	20#	X		597'	597'	150 Sacks	
Production	4 1/2"	J-55	10.5	X			5147'	466 Sacks	Depth set
Lines									
Perforations									Perforations: Top <u>    </u> Bottom <u>    </u> <u>3718 - 5063</u>

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 3310-5243 feet

Gas: Initial open flow,      Mcf/d Oil: Initial open flow,      Bbl/d  
Final open flow, 820 Mcf/d Final open flow,      Bbl/d

Time of open flow between initial and final tests, 8 hours

Static rock pressure, 1600 psig (surface measurement) after 12 hours shut in.

[If applicable due to multiple completion--]

Second producing formation      Pay zone depth      feet

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

OCT 9 1979

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Hydrafraced by Halliburton - 5-29-79 -- 1,750 Gal. Acid -- 1402 Bbls.  
Water -- 64,000 Lbs. 20/40 Mesh Sand -- 25,500 Lbs. 80/100 Mesh Sand.

Perforations 3--4704-4706  
11--5043-5071  
12--4118-4233  
12--3712-3735

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Shale			312	350	
Sand		Hard	350	385	
Shale			385	400	
Sand		Hard	400	460	
Shale			460	510	
Sand			510	580	
Red Rock			580	586	
Sand			586	620	
Shale			620	665	
Red Rock			665	672	
Shale			672	705	
Sand			705	743	
Shale			743	811	
Sand			811	826	
Red Rock			826	874	
Shale			874	975	
Red Rock			975	1022	
Slate & Shells			1022	1410	
Red Rock			1410	1450	
Shale			1450	1730	
Sand			1730	1760	
Shale			1760	1772	
Big Lime			1772	1836	
Big Injun			1836	1910	
Shale			1910	2070	
Weir Sand			2070	2180	
Shale			2180	2268	
Sand			2268	2274	
Shale			2274	2400	
Sand			2400	2600	
Shale			2600	2775	
Sand			2775	2830	
Shale			2830	2864	
Sand			2864	2908	
Shale			2908	2956	
Sand			2956	2990	
Shale			2990	2961	
Sand			2961	2984	
Shale			2984	3003	
Sand			3003	3064	
Shale			3064	3100	
Sand			3100	3152	
Shale			3152	3240	
Sand			3240	3310	
Shale			3310	3510	
Sand			3510	3640	
Shale			3640	3710	
Sand			3710	3740	
Shale			3740	4110	
Sand			4110	4160	
Shale			4160	4215	
Sand			4215	4250	
Shale			4250	4320	
Sand			4320	4380	
Slate			4380	4695	
Sand			4695	4705	
Shale			4705	5010	
Sand			5010	5085	
Shale			5085	5243	

Benson

Alex.

RECEIVED

SEP - 4 1979

OIL & GAS DIVISION  
DEPT. OF MINES

T.D.

GLENN L. HAUGHT & SONS  
Well Operator

Glenn L. Haught

NOTE: Regulation 2.02(i) provides as follows:

The term "Well" or "Well Log"

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. H-735

API Well No. 47 - 017 - 2425  
State County Permit

WELL TYPE: Oil      / Gas X /  
(If "Gas", Production X / Underground storage      / Deep      / Shallow X /)

LOCATION: Elevation: 814' Watershed: Arnold Creek  
District: Central County: Doddridge Quadrangle: West Union, WV 7 1/2'

WELL OPERATOR Glenn L. Haught & Sons  
Address Smithville, WV 26178

DESIGNATED AGENT Warren R. Haught  
Address Smithville, WV 26178

OIL & GAS ROYALTY OWNER Ruby Farr Maxwell  
Address Route # 1  
West Union, WV

COAL OPERATOR None  
Address                     

Acreage 45  
SURFACE OWNER Robert Myer  
Address West Union, WV  
                      
Acreage                     

COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name                       
Address                       
APR 24 1979

FIELD SALE (IF MADE) TO:  
Name                       
Address                     

Name                       
Address                       
**OIL & GAS DIVISION  
DEPT. OF MINES**

OIL & GAS INSPECTOR TO BE NOTIFIED  
Name Paul Garrett  
Address Clarksburg, WV 26301  
622-3871

COAL LESSEE WITH DECLARATION ON RECORD:  
Name                       
Address                     

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed      / lease X / other contract      / dated March 28, 1978, to the undersigned well operator from Ruby Farr Maxwell et als

[If said deed, lease, or other contract has been recorded:]  
Recorded on                     , 19    , in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease Book 103 at page 723. A permit is requested as follows:

PROPOSED WORK: Drill X / Drill deeper      / Redrill      / Fracture or stimulate      /  
Plug off old formation      / Perforate new formation      /  
Other physical change in well (specify)                     

--planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code § 22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.

Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL  
GEOPHYSICAL LOGS DIRECTLY TO:  
WEST VIRGINIA OIL AND GAS  
CONSERVATION COMMISSION  
1615 WASHINGTON STREET EAST  
CHARLESTON, WV 25311  
TELEPHONE: (304) 348-3092

BLANKET BOND

Glenn L. Haught & Sons  
Well Operator  
By Warren R. Haught  
Its Partner

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:  
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) Glenn L. Haught & Sons  
Address Smithville, WV 26178

GEOLOGICAL TARGET FORMATION, Devonian Shale

Estimated depth of completed well, 5200 feet Rotary  / Cable tools  /

Approximate water strata depths: Fresh, 75 feet; salt,        feet.

Approximate coal seam depths: none Is coal being mined in the area? Yes  / No

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling		
Conductor								Kinds
Fresh water	11 3/4		42 lb.	x		250	250	100 sacks
Coal								Sizes
Intermediate	8 5/8		20 lb.	x		1800	1800	50 sacks
Production	4 1/2	K55	10.50	x			5200	150 sacks
Tubing								
Liners								Perforations:
								Top Bottom

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

**THIS PERMIT MUST BE POSTED AT THE WELL SITE**

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 12-24-79.

Deputy Director - Oil & Gas Division

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code § 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

The undersigned coal operator        / owner        / lessee        / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date:       , 19      

By         
Its