

- Fracture...
- Redrill...
- New Location
- Drill Deeper
- Abandonment

Source of Elevation BRIDGE CEDAR RUN ELEV. 679'

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

*William R. Mossor* Minimum accuracy, one part in 200

Company Hought, Inc. 368  
 Address 4424 Emerson, Ave, Pksb.WVa. 26104  
 Farm WARREN R. HAUGHT  
 Tract Acres 125 Lease No. \_\_\_\_\_  
 Well (Farm) No. H-592 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 685, HARRISVILLE 15'  
 Quadrangle SMITHVILLE 7 1/2' QUAD.  
 County RTCHIE District MURPHY  
 Surveyor or Engineer WILLIAM R. MOSSOR, L.L.S  
 Surveyor's or Engineer's Registration No. 551  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date 7 FEB. 1978 Scale 1" = 40P.

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

WELL LOCATION MAP  
 FILE NO. RIT-3828 - Frac  
**FRAC CANCELLED**

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.

47-085

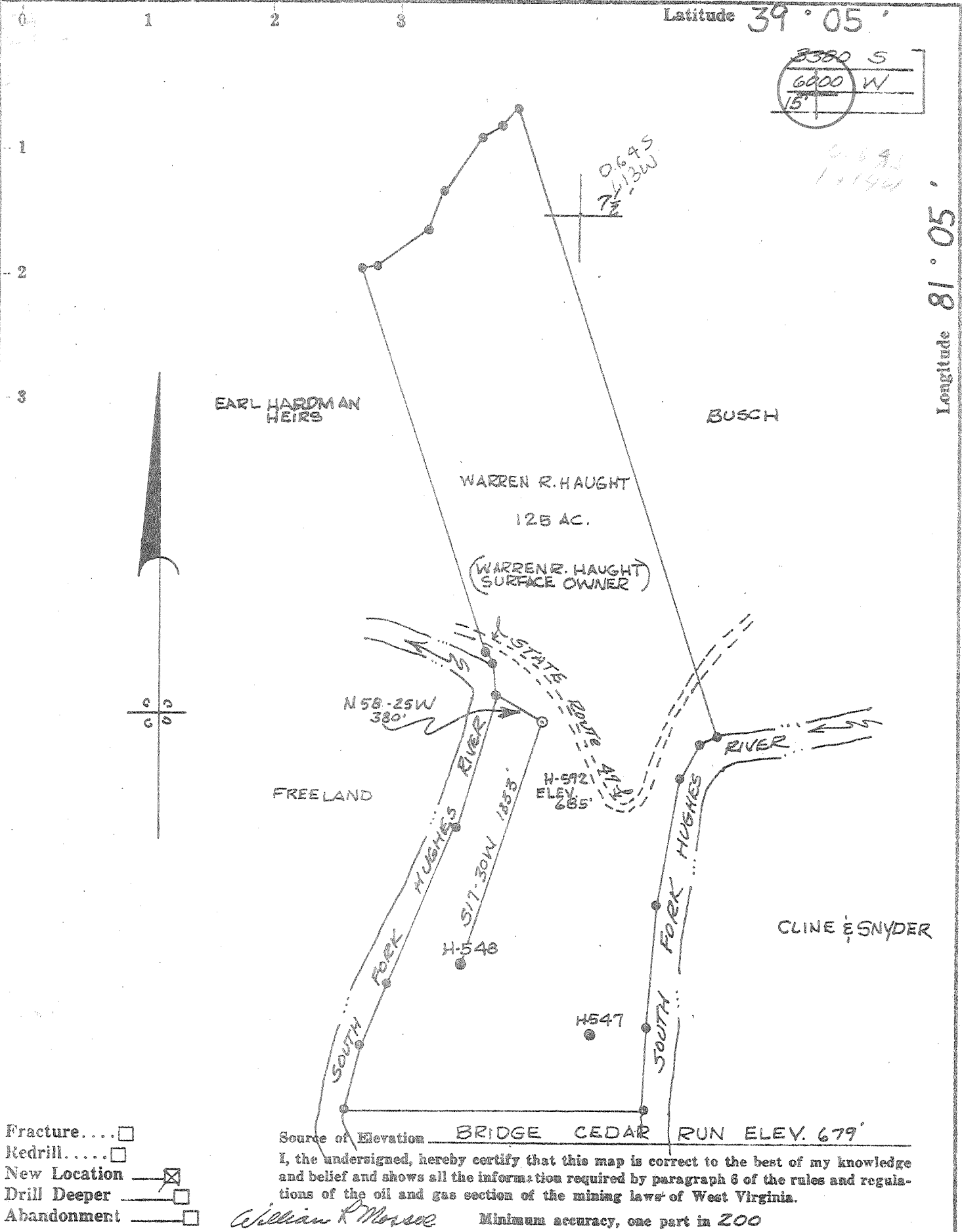
*5990' Benson  
 DEEP WELL*

RIT. 3828 FRAC

Latitude 39° 05'

3380 S  
6000 W  
15'

Longitude 81° 05'



Company GLENN L. HAUGHT & SONS  
 Address SMITHVILLE, W.VA. 26178  
 Farm WARREN R. HAUGHT  
 Fract. Acres 125 Lease No. \_\_\_\_\_  
 (Farm) No. H-592 Serial No. SC  
 Elevation (Spirit Level) 685, HARRISVILLE 15'  
 Quadrangle SMITHVILLE 7 1/2' QUAD.  
 County PTCHIE District MURPHY  
 Surveyor or Engineer WILLIAM R. MOSSOR, L.L.S.  
 Surveyor's or Engineer's Registration No. 551  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date 7 FEB. 1978 Scale 1" = 40p.

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

WELL LOCATION MAP  
 FILE NO. RIT-3828

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.  
 - Denotes one inch spaces on border line of original tracing.

47-085 FEB 21 1978

Deep well? 3-3 Leatherbank Creek (125)



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MAR 17 1978

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
Oil and Gas Division

OIL & GAS DIVISION  
DEPT. OF MINES

WELL RECORD 3/

Rotary XX Oil \_\_\_\_\_  
Cable \_\_\_\_\_ Gas XX  
Recycling \_\_\_\_\_ Comb. \_\_\_\_\_  
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind)

Quadrangle Smithville

Permit No. RIT-3828

Company Glenn L. Haught & Sons  
Address Smithville, WV 26178  
Farm Warren R. Haught Acres 125  
Location (waters) South Fork Hughes River  
Well No. H-592 Elev. 685'  
District Murphy County Ritchie  
The surface of tract is owned in fee by \_\_\_\_\_  
Warren R. Haught  
Address Smithville, WV 26178  
Mineral rights are owned by same  
Address \_\_\_\_\_  
Drilling Commenced 2-9-78  
Drilling Completed 2-26-78  
Initial open flow show cu. ft. \_\_\_\_\_ bbls.  
Final production 1,000,000 cu. ft. per day \_\_\_\_\_ bbls.  
Well open 8 hrs. before test 1450 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"			
9 5/8	202'	202'	125 sacks
8 5/8			
7	1835'	1835'	60 sacks
5 1/2			
4 1/2		4777'	50 sacks
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

Water frac by Halliburton 3-3-78 with 880 bbl. water, 500 gallons acid 495 sks. 20/40 sand, 125 sks. 80/100 sand

Coal was encountered at None Feet \_\_\_\_\_ Inches \_\_\_\_\_  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Benson Depth Perforations 12- 4120-4112  
12- 4660-4649

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand & gravel			0	40		
Shale			40	50		
Sand			50	71		
Red Rock			71	100		
Sand			100	110		
Red Rock			110	138		
Shell			138	151		
Sand			151	185		
Shell			185	191		
Red Rock			191	215		
Shale			215	226		
Red Rock			226	240		
Shale			240	278		
Red Rock			278	288		
Shale			288	296		
Red Rock			296	302		
Sand			302	322		
Red Rock			322	329		
Shale			329	336		
Red Rock			336	339		
Sand			339	390		
Red Rock			390	406		
Sand			406	415		
Red Rock			415	425		

(over)

\* Indicates Electric Log tops in the remarks section.

MAR 29 1978

Formation	Color	Hard or Soft	Top Feet 3/	Bottom Feet	Oil, Gas or Water	* Remarks
Shale			425	437		
Red Rock			437	558		
Slate			558	655		
Red Rock			655	665		
Slate	soft		665	691		
Slate	hard		691	703		
Slate	soft		703	785	5988	5980
Sand			785	817	1570	1570
Slate			817	850	4418	4350
Sand			850	970		
Shell			970	1080		
Sand			1080	1188		
Shell			1188	1360		
Sand			1360	1392		
Shell	soft		1392	1512		
Shell	hard		1512	1535	5988	
Sand			1535	1549	1745	
Shale			1549	1570	4243	
Big Lime			1570	1654		
Big Injun			1654	1745		
Slate			1745	1878		
Shale			1878	1931		
Slate			1931	2255		
Shells			2255	2280		
Shale			2280	2351		
Slate			2351	2396		
Shell			2396	2408		
Sand			2408	2434		
Slate			2434	2476		
Shale			2476	2487		
Sand			2487	2598		
Slate			2598	3460		
Slate & Shells			3460	4120		
Sand			4120	4130		
Slate & Shells			4130	4650		
Benson Sand			4650	4668		
Slate & Shells			4668	5610		
Shale			5610	5652		
Lime Onon			5652	5865		
Sand Orisk.			5865	5920		
Lime Held Onondaga?			5920	5988	T. D.	Onon - 5652 - GR log
Hole plugged back as follows:						
			5988	5750	Gel	
			5750	5650	Cement	
			5650	4800	Gel	
			4800	4700	Cement	

Date March 14, 1978

APPROVED Glenn L. Haught & Sons, Owner

By Warren R. Haught  
(Title) Partner



STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

Oil and Gas Division

RECEIVED

FEB - 8 1978

OIL & GAS DIVISION  
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,  
Charleston, W. Va.

DATE February 7, 1978

Surface Owner Warren R. Haught

Company Glenn L. Haught & Sons

Address Smithville, WV 26178

Address Smithville, WV 26178

Mineral Owner Warren R. Haught

Farm Warren R. Haught Acres 125

Address Smithville, WV 26178

Location (waters) South Fork Hughes River

Coal Owner \_\_\_\_\_

Well No. H-592 Elevation 685'

Address \_\_\_\_\_

District Murphy County Ritchie

Coal Operator None

Quadrangle Smithville

Address \_\_\_\_\_

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

INSPECTOR

for drilling. This permit shall expire TO BE NOTIFIED Kenneth P. Goodnight

operations have not commenced by 6-9-78 ADDRESS Smithville, WV 26178

*Robert W. ...*  
Deputy Director - Oil & Gas Division

PHONE 477-3660

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated \_\_\_\_\_ 19\_\_\_\_ by \_\_\_\_\_ made to \_\_\_\_\_ and recorded on the \_\_\_\_\_ day of \_\_\_\_\_ 19\_\_\_\_, in \_\_\_\_\_ County, Book \_\_\_\_\_ Page \_\_\_\_\_

~~NEW WELL~~ \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE  
OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. \*

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address \_\_\_\_\_ day \_\_\_\_\_ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

Very truly yours,

(Sign Name) GLENN L. HAUGHT & SONS

PLEASE SUBMIT COPIES OF ALL  
GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND  
ECONOMIC SURVEY  
P. O. BOX 879  
MORGANTOWN, WEST VIRGINIA 26505  
AC-304 - 292-6331

Address  
of  
Well Operator

BY: Warren R. Haught  
Well Operator  
Street Partner  
Smithville, WV 26178  
City or Town

State

\*SECTION 3 . . . . If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

BLANKET BOND

RIT-3828

PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

47-085

Signed by Warren R. Haught

**THIS IS AN ESTIMATE ONLY**  
**ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION**

PROPOSED WORK ORDER TO XX DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT: \_\_\_\_\_  
 NAME Glenn L. Haught & Sons NAME Warren R. Haught  
 ADDRESS Smithville, WV 26178 ADDRESS Smithville, WV 26178  
 TELEPHONE 477-3333 TELEPHONE 477-3434  
 ESTIMATED DEPTH OF COMPLETED WELL: 5990' ROTARY XX CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Benson  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS XX COMB. \_\_\_\_\_ STORAGE \_\_\_\_\_ DISPOSAL \_\_\_\_\_  
 RECYCLING \_\_\_\_\_ WATER FLOOD \_\_\_\_\_ OTHER \_\_\_\_\_

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10	200'	200'	100 sacks
9 - 5/8			
8 - 5/8			
7	1800'	1800'	70 sacks
5 1/2			
4 1/2		5000'	
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 50 FEET \_\_\_\_\_ SALT WATER \_\_\_\_\_ FEET \_\_\_\_\_  
 APPROXIMATE COAL DEPTHS none  
 IS COAL BEING MINED IN THE AREA? no BY WHOM? \_\_\_\_\_

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for \_\_\_\_\_ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the \_\_\_\_\_ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

\_\_\_\_\_  
 For Coal Company

\_\_\_\_\_  
 Official Title



1) Date: XX July 8, 19 85  
 2) Operator's Well No. Haight H-592 W  
 3) API Well No. 47 085 3828F  
 State County Permit

**RECEIVED**  
**JUL 26 1985**

STATE OF WEST VIRGINIA  
 DIVISION OF OIL & GAS DEPARTMENT OF ENERGY  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION  
**APPLICATION FOR A WELL WORK PERMIT**

- 4) WELL TYPE: A Oil  / Gas   
 B (If "Gas", Production  / Underground storage  / Deep  / Shallow )
- 5) LOCATION: Elevation: 685 Watershed: South Fork Hughes River  
 District: Murphy County: Ritchie Quadrangle: Smithville 611
- 6) WELL OPERATOR Haight, Inc. 368 7) DESIGNATED AGENT Warren R. Haight  
 Address 4424 Emerson Ave. 21500 Address Rt. 3 Box 14  
Parkersburg, WV 26104 Smithville, WV 26178
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Samuel Hersman 9) DRILLING CONTRACTOR:  
 Address P. O. Box 66 Name Haight, Inc.  
Smithville, WV 26178 Address 4424 Emerson Ave.  
Smithville, WV 26178
- 10) PROPOSED WELL WORK: Drill  / Drill deeper  / Redrill  / Stimulate   
 Plug off old formation  / Perforate new formation   
 Other physical change in well (specify) \_\_\_\_\_
- 11) GEOLOGICAL TARGET FORMATION, Big Injun 371  
 12) Estimated depth of completed well, 1835 feet  
 13) Approximate trata depths: Fresh, N/A feet; salt, N/A feet.  
 14) Approximate coal seam depths: N/A Is coal being mined in the area? Yes  / No

15) 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	Left in well		
Conductor	10					Existing	202	125 sacks	Kinds
Fresh water	7					Existing	1835	60 sacks	
Coal									Sizes
Intermediate									
Production	4 1/2					Existing	4777	50 sacks	Depths set
Tubing									
Liners									Perforations:
Work Order: Cut off 4 1/2 at 3900', Plug back to bottom of 7", Set bridge plug at 1830', perforate and frac Big Injun									Top Bottom

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-085-3828 Frac W Date August 2 19 85

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 reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires August 2, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <input checked="" type="checkbox"/>	Agent: <u>AOB</u>	Plat: <u>MU MM</u>	Casing: <u>MM</u>	Fee: <u>831</u>
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[Signature]  
 DIRECTOR, ~~Division~~ Division of Oil and Gas

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

File