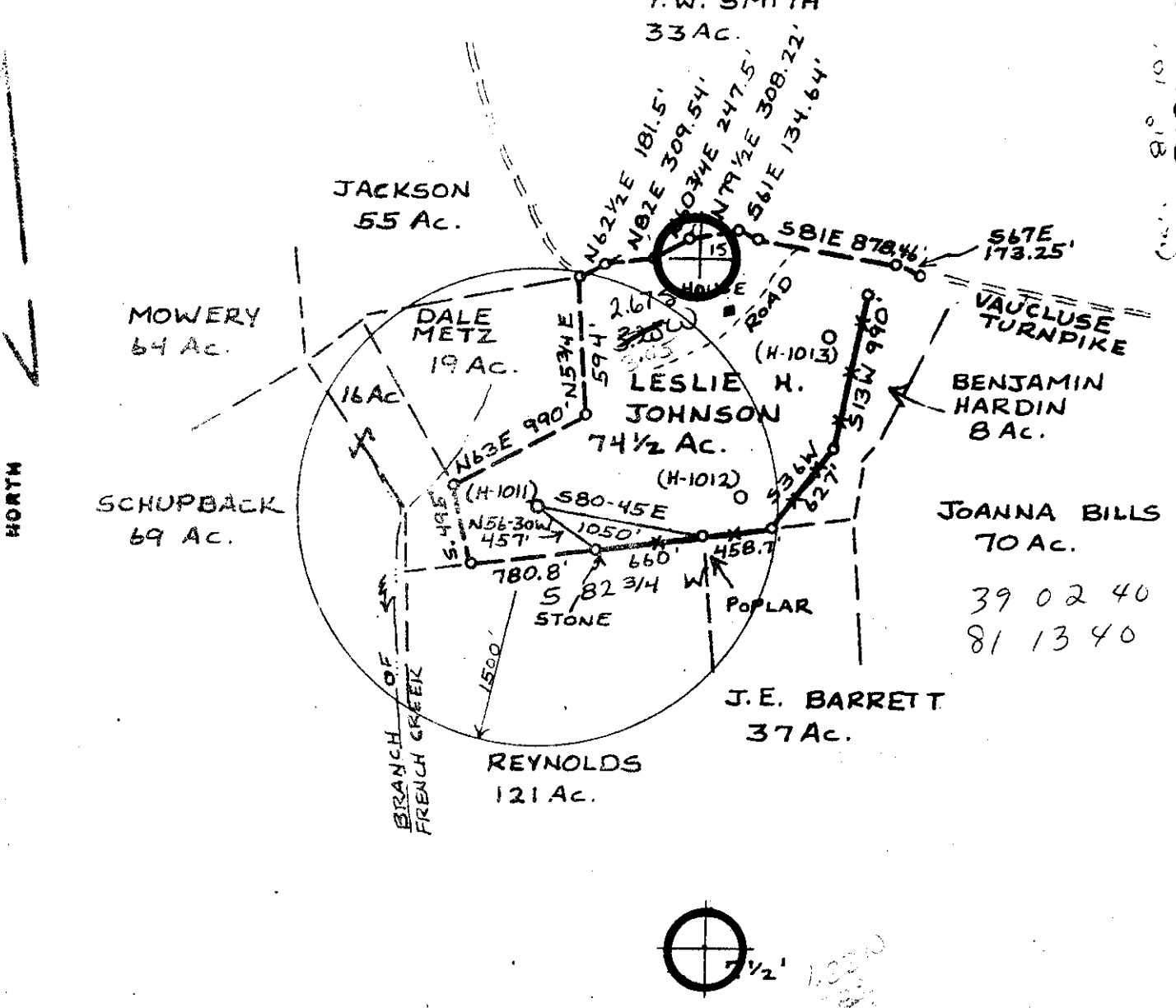


39° 25'
14,030' SOUTH
6,350' WEST

81° 12 1/2'



| | | |
|---|--|---------------------------------|
| FILE NO. _____ | 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) <u>William A. Mosser</u> R.P.E. _____ L.S. <u>551</u> | DATE <u>26 MAY</u> 19 <u>80</u> |
| DRAWING NO. _____ | | OPERATOR'S WELL NO. <u>1011</u> |
| SCALE <u>1" = 1000'</u> | | API WELL NO. <u>47-073-0869</u> |
| MINIMUM DEGREE OF ACCURACY <u>1:200</u> | | STATE COUNTY PERMIT _____ |
| PROVED SOURCE OF ELEVATION <u>B.M. 629'</u> | | |

(+) INDICATES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FORM W-8 (8-78)

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
(IF "GAS", PRODUCTION STORAGE _____ DEEP _____ SHALLOW)

LOCATION: ELEVATION 1050' WATER SHEED FRENCH CREEK
DISTRICT WASHINGTON COUNTY PLEASANTS
QUADRANGLE RAVEN ROCK, OHIO-W.VA. 7 1/2' QUAD. ST. MARV 15' WC

SURFACE OWNER LESLIE H. JOHNSON ACREAGE 74 1/2
OIL & GAS ROYALTY OWNER LESLIE H. JOHNSON LEASE (CREAT) 74 1/2
LEASE NO. _____

PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ RE-DRILL _____ REMOVAL OF STIMULATE _____ PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (EXPLAIN): _____

PLUG AND ABANDON _____ CLEAN OUT AND RE-PLUG _____
THREE FORMATION OHIO SHALE ESTIMATED DEPTH 3500'
WELL OPERATOR HAUGHT, INC. ESTIMATED AGENT WARREN HAUGHT
ADDRESS SMITHVILLE, W.VA. 26178

JUL 25 1980

6-0 St. Marv's (77)

RECEIVED

MAR - 4 1981

Date: January 26 1981

Operator's Well No. H-1011

API Well No. 47 - 073 - 869

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

WELL OPERATOR'S REPORT 51
OF
DRILLING, REABSORBING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas / Liquid Injection Waste Disposal
(If "Gas", Production Underground storage Deep Shallow
LOCATION: Elevation: 1050' Watershed: French Creek
District: Washington County: Pleasants Quadrangle: Raven Rock, Ohio-WV 7 1/2

WELL OPERATOR Haight, Inc. LESLIE H. JOHNSON H-1011
Address Smithville, WV 26178 DESIGNATED AGENT Warren R. Haight
Address Smithville, WV 26178

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

PERMIT ISSUED ON June 19, 19 80, OIL & GAS INSPECTOR FOR THIS WORK:
Name Phillip Lee Tracy
IF APPLICABLE: PLUGGING OF DEEP HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED Address P.O. Box 173 Dodd Street
_____, 19 _____ Middlebourne, WV 26149

GEOLOGICAL TARGET FORMATION: Shale Depth 1850 to 4036 feet
Depth of completed well, 4036 feet Rotary / Cable Tools
Water strata depth: Fresh, _____ feet; salt, _____ feet.
Coal seam depths: None Is coal being mined in the area? No
Work was commenced October 9, 19 80, and completed October 13, 19 80

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 | | | | | | | | None |
| Fresh water | 8-5/8 | K-55 | 20# | X | | 1067' | 1067' | 160 Sacks |
| Coal | | | | | | | | Sizes |
| Intermediate | | | | | | | | |
| Production | 4 1/2 | J-55 | 10.5# | X | | | 3927' | 450 sacks |
| Tubing | | | | | | | | |
| Liners | | | | | | | | Perforations: |
| | | | | | | | | _____ |
| | | | | | | | | 3562 3780 |

OPEN FLOW DATA

Producing formation Shale Pay zone depth 1850 to 4036 feet
Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Bbl/d
Final open flow, 10 Mcf/d Final open flow, _____ Bbl/d
Time of open flow between initial and final tests, 8 hours
Static rock pressure, 300 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
Static rock pressure, _____ psig (surface measurement) after _____ hours shut in

MAR 23 1981

(Reference)
[RE-12]

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

Nitrogen Fraced by B.J. Hughes Production Services 10/17/80
900,000 SCF--- 500 Gal. Acid

Perforations: 17--3562--3780

WELL LOG

| FORMATION | Color | Hard, or Soft | 54 Top Feet | Bottom Feet | Remarks Including indication of all fresh and salt water, coal, oil and gas |
|------------------|-------|---------------|----------------|----------------|--|
| Top Clay | | | 0 | 6 | |
| Shale | | | 6 | 55 | |
| Red Rock | | | 55 | 60 | |
| Shale | | | 60 | 90 | |
| Red Rock | | | 90 | 95 | |
| Shale | | | 95 | 113 | |
| Red Rock | | | 113 | 130 | |
| Sand | | | 130 | 170 | |
| Shale | | | 170 | 180 | |
| Sand | | | 180 | 279 | |
| Shale | | | 279 | 380 | |
| Sandy Shale | | | 380 | 395 | |
| Shale | | | 395 | 497 | |
| Sandy Shale | | | 497 | 555 | |
| Shale | | | 555 | 570 | |
| Sandy Shale | | | 570 | 835 | |
| Red rock | | | 835 | 852 | |
| Shale | | | 852 | 883 | |
| Sandy Shale | | | 883 | 946 | |
| Shale | | | 946 | 956 | |
| Sandy Shale | | | 956 | 1030 | |
| Shale | | | 1030 | 1044 | |
| Sandy Shale | | | 1044 | 1108 | |
| Shale | | | 1108 | 1170 | |
| Sandy Shale | | | 1170 | 1230 | |
| Shale | | | 1230 | 1290 | |
| Red Rock | | | 1290 | 1340 | |
| Shale | | | 1340 | 1395 | |
| Sandy Shale | | | 1395 | 1450 | |
| Shale | | | 1450 | 1505 | |
| Sandy | | | 1505 | 1560 | |
| Sandy Shale | | | 1560 | 1610 | |
| Shale | | | 1610 | 1650 | |
| Red rock | | | 1650 | 1665 | |
| Shale | | | 1665 | 1710 | |
| Lime | | | 1710 | 1800 | |
| Sand | | | 1800 | 1850 | |
| Shale <i>Dev</i> | | | 1850 | 4036 | T.D. |

SEE: Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall mean a systematic, detailed geologic record of all formations, including coal, encountered in the

Haught, Inc.
Well Operator
By: *Harold R. Haught*
His President

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

OIL AND GAS WELL PERMIT APPLICATION

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

LOCATION: Elevation: 1050' Watershed: French Creek
District: Washington County: Pleasants Quadrangle: Raven Rock, Ohio-WV 7 1/2'

WELL OPERATOR Haught, Inc.
Address Smithville, WV 26178

DESIGNATED AGENT Warren R. Haught
Address Smithville, WV 26178

OIL & GAS ROYALTY OWNER Leslie H. Johnson
Address Route 3, Box 278

COAL OPERATOR None
Address _____

Address St. Mary's, WV
Acreage 74 1/2

COAL OWNER(S) WITH DECLARATION ON RECORD:

SURFACE OWNER same as above

Name _____

Address _____

Address _____

Acreage _____

Name _____

FIELD SALE (IF MADE) TO:

Address _____

Name _____

Address _____

COAL LESSEE WITH DECLARATION ON RECORD:

Name None

OIL & GAS INSPECTOR TO BE NOTIFIED

Address _____

Name Phillip Lee Tracy

Address P. O. Box 173 - Dodd Street
Middlebourne, WV 26149

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 3, 1980, to the undersigned well operator from Leslie H. Johnson et ux

[If said deed, lease, or other contract has been recorded:]

Recorded on March 3, 1980, in the office of the Clerk of the County Commission of Pleasants County, West Virginia, in Deed Book 155 at page 72. 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) 543-3092

RECEIVED

JUN 4 1980

BLANKET BOND

Haught, Inc.
Well Operator

OIL & GAS DIVISION
DEPT. OF MINES

By Warren R. Haught
President

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) Haught, Inc.
Address Smithville, WV 26178

GEOLOGICAL TARGET FORMATION, Ohio Shale

Estimated depth of completed well, 3500 feet Rotary Cable tools _____
Approximate water strata depths: Fresh, 50 feet; salt, _____ feet.
Approximate coal seam depths: None Is coal being mined in the area? Yes _____ No

CASING AND TUBING PROGRAM

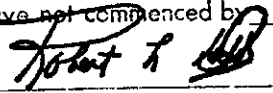
| CASING OR TUBING TYPE | SPECIFICATIONS | | | | | FOOTAGE INTERVALS | | CEMENT FILL-UP OR SACKS (Table Feet) | PACKERS |
|-----------------------|----------------|-------|---------------|-----|------|-------------------|--------------|--------------------------------------|---------------|
| | Size | Grade | Weight per ft | New | Used | For drilling | Left in well | | |
| Conductor | | | | | | | | | Kinds |
| Fresh water | 8 5/8 | K-55 | 20# | X | | 200' | 200' | 75 sacks | |
| Coal | | | | | | | | | Sizes |
| Intermediate | | | | | | | | | |
| Production | 4 1/2 | J-55 | 10.5# | X | | | 3500' | 100 sacks | Depths set |
| casing | | | | | | | | | |
| 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-3, "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 § 22-4-2c 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 2-19-81.


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 § 22-6-20, 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 _____