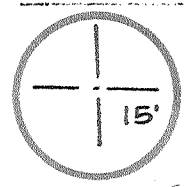


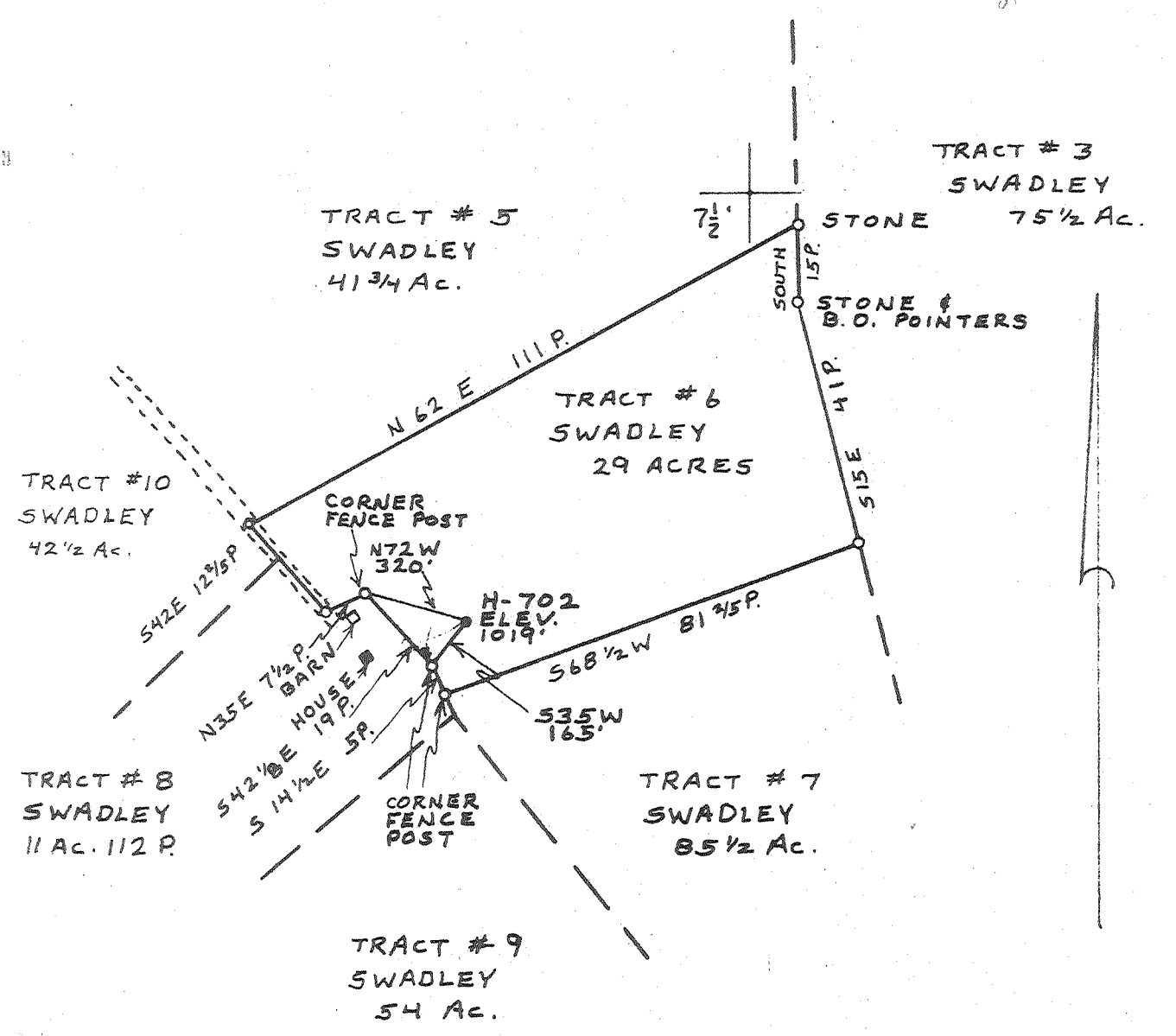
6740 S
5790 W



1.285
1.07W

39 0855
81 0610

Longitude 81 05



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

Source of Elevation ROAD INTERSECTION ELEV. 1182'

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

Minimum accuracy, one part in 200

William R. Mossor

Company GLENN L. HAUGHT & SONS
 Address SMITHVILLE, W.VA. 26178
 Farm SWADLEY
 Tract 6 Acres 29 Lease No. _____
 Well (Farm) No. H-702 Serial No. _____
 Elevation (Spirit Level) 1019'
 Quadrangle HARRISVILLE, W.VA. 15' QUAD.
 County RITCHIE District MURPHY
 Surveyor or Engineer WILLIAM R. MOSSOR, L.L.S.
 Surveyor's or Engineer's Registration No. 551
 File No. _____ Drawing No. _____
 Date 21 DEC. 1978 Scale 1" = 30P.

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

WELL LOCATION MAP
 FILE NO. 47-085-4423
FORMERLY RIT-4194

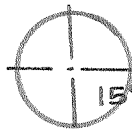
+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.
 - Denotes one inch spaces on border line of original tracing.

NOV 26 1979

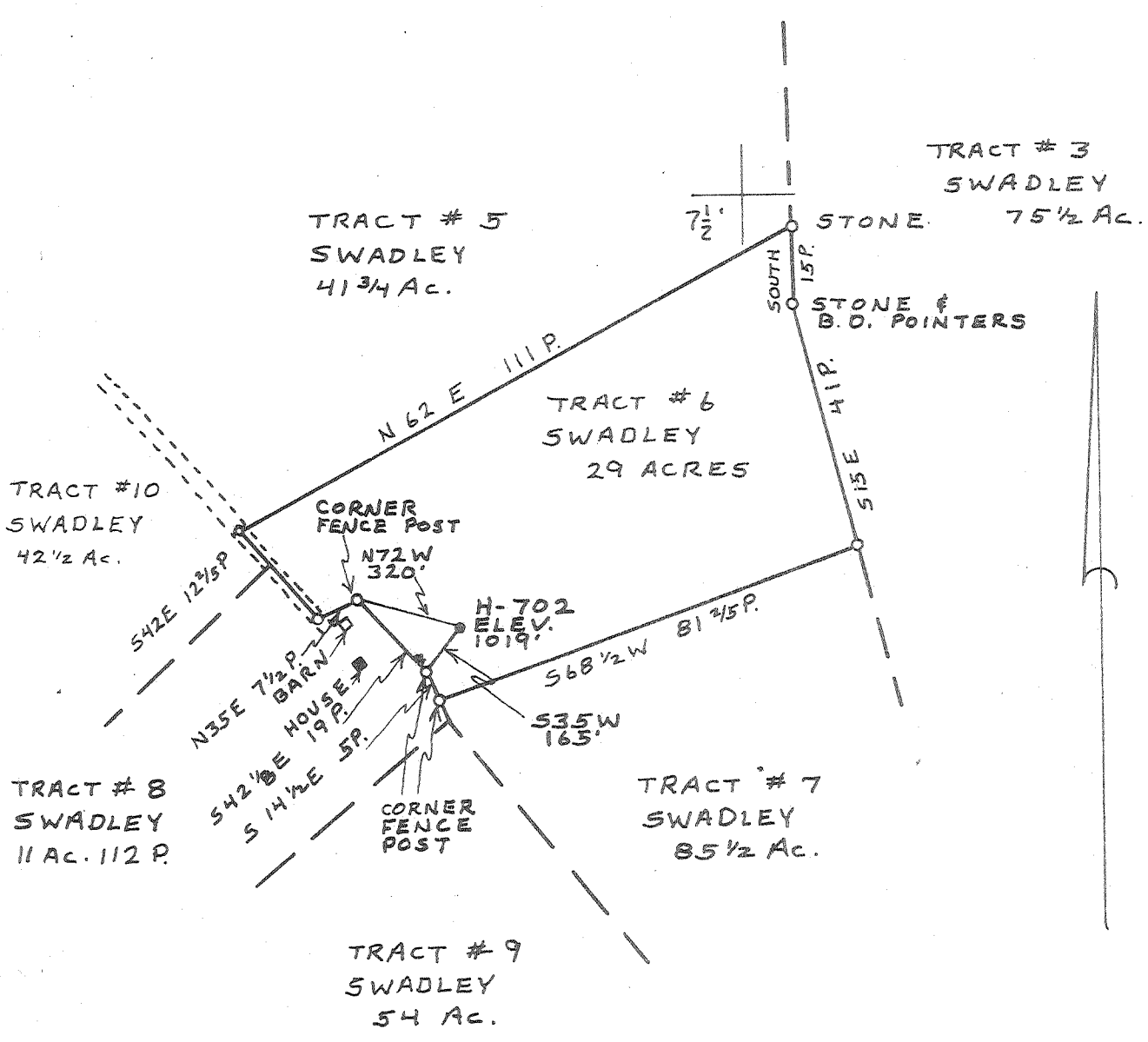
2100 - K 19 I 66 CATPO-RITCHIE 120 124

Latitude **39° 10'**

6740 S
5790 W



Longitude **81° 05'**



- Fracture
- Redill
- New Location
- Drill Deeper
- Abandonment

Source of Elevation ROAD INTERSECTION ELEV. 1182'

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.

Minimum accuracy, one part in 200

William R. Mossor

Company GLENN L. HAUGHT & SONS
 Address SMITHVILLE, W.VA. 26178
 Firm SWADLEY
 Tract 6 Acres 29 Lease No. _____
 Well (Farm) No. H-702 Serial No. _____
 Elevation (Spiral Level) 1019'
 Quadrangle HARRISVILLE, W.VA. 15 1/2 QUAD.
 County RITCHIE District MURPHY
 Surveyor or Engineer WILLIAM R. MOSSOR, L.L.S.
 Surveyor or Engineer's Registration No. 551
 File No. _____ Drawing No. _____
 Date 21 DEC. 1978 Scale 1" = 30 P.

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

WELL LOCATION MAP
 FILE NO. **47-085-4194**
 now 4423

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 per 300 feet border line of original tracing.

JAN 25 1979

2107-1-1

[08-78]

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

Hydrafraced by Halliburton 11-27-79 -- 1000 Gal. Acid -- 800 Bbls. Water
32,000 Lbs. 20/40 Mesh Sand -- 12,000 Lbs. 80/100 Mesh Sand.

Perforations 9--2084--2131
8--2042--2058

WELL LOG

FORMATION	Color	Hard or Soft	40 Top Feet	Bottom Feet	Remarks Including indication of all and salt water, coal, oil an
Shale	Grey	Soft	189	320	
Red Rock	Red	Soft	320	325	
Shale	Grey	Soft	325	376	
Red Rock	Red	Soft	376	380	
Shale	Grey	Soft	380	465	
Red Rock	Red	Soft	465	499	
Shale	Grey	Soft	499	655	
Red Rock	Red	Soft	655	666	
Shale	Grey	Soft	666	708	
Red Rock	Red	Soft	708	725	
Shale	Grey	Soft	725	780	
Red Rock	Red	Soft	780	865	
Shale	Grey	Soft	865	915	
Red Rock	Red	Soft	915	986	
Shale	Grey	Soft	986	1029	
Red Rock	Red	Soft	1029	1098	
Shale	Grey	Soft	1098	1325	
Shale	Grey	Soft	1325	1495	
Sand	White	Hard	1495	1525	
Shale	Grey	Soft	1525	1920	
Lime	Grey	Hard	1920	2030	
<u>Sand</u> <i>BI</i>	White	Hard	2030	2136	
Shale	Grey	Soft	2136	2219	T. D.

NOTE: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log',

Glenn L. Haught & Sons
Well Operator

By *Glenn L. Haught*



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED
DEC 27 1978
OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE December 26, 1978

Surface Owner Charley Swadley

Company Glenn L. Haught & Sons

Address Harrisville, W.Va 26362

Address Smithville, W.Va 26178

Mineral Owner Charley Swadley

Farm Swadley Acres 29

Address Harrisville, W.Va 26362

Location (waters) Branch of Indian Run

Coal Owner _____

Well No. H- 702 Elevation 1019'

Address _____

District Murphy County Ritchie

Coal Operator NONE

Quadrangle Harrisville, W.Va 7.5'

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 for drilling. This permit shall expire if operations have not commenced by 4-28-79.

INSPECTOR
TO BE NOTIFIED Kenneth Paul Goodnight
ADDRESS Smithville, W.Va 26178
PHONE 477-3660

Robert R. Haught
Deputy Director - Oil & Gas Division

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 July 12th 1976 by Charley and Anna Swadley made to Warren R. Haught and recorded on the _____ day of _____ 19____, in Ritchie County, Book 121 Page 425

XX 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
Well Operator

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
Street Partner
Smithville, W.Va 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, the 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

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, W.Va 26178 ADDRESS Smithville, W.Va 26178
 TELEPHONE 304-477-3333 TELEPHONE 304-477-3333
 ESTIMATED DEPTH OF COMPLETED WELL: 2100' ROTARY XX CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Big Injun
 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			
9 - 5/8			
8 - 5/8	200'	200'	75 Sacks
7			
5 1/2			
4 1/2		2100'	100 Sacks
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

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

(Formerly: RIT-4194)

OIL AND GAS WELL PERMIT APPLICATION

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

LOCATION: Elevation: 1019' Watershed: Branch of Indian Run
District: Murphy County: Ritchie Quadrangle: Harrisville, WV 7 1/2

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

OIL & GAS ROYALTY OWNER Charley Swadley
Address Harrisville, WV 26362

COAL OPERATOR none
Address _____

Acreage 29
SURFACE OWNER Charley Swadley

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name _____

Address Harrisville, WV 26178
Acreage _____

Address _____
Name _____

FIELD SALE (IF MADE) TO:
Name _____
Address _____

Address _____
Name _____

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Kenneth Paul Goodnight
Address Smithville, WV 26178
Phone: 477-3660

COAL LESSEE WITH DECLARATION ON RECORD:
Name None
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 July 12, 19 76, to the undersigned well operator from Charley and Anna Swadley

[If said deed, lease, or other contract has been recorded:]
Recorded on _____, 19____, in the office of the Clerk of the County Commission of Ritchie County, West Virginia, in Lease Book 121 at page 425. 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 § 22-1-3 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) 342-3092

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, Big Injun

Estimated depth of completed well, 2100 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	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			2100	100 sacks	Deaths set
T 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 § 22-4-3a 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 6-30-80.


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 _____