

A-22

LATITUDE **39° 10'**

9210' SOUTH

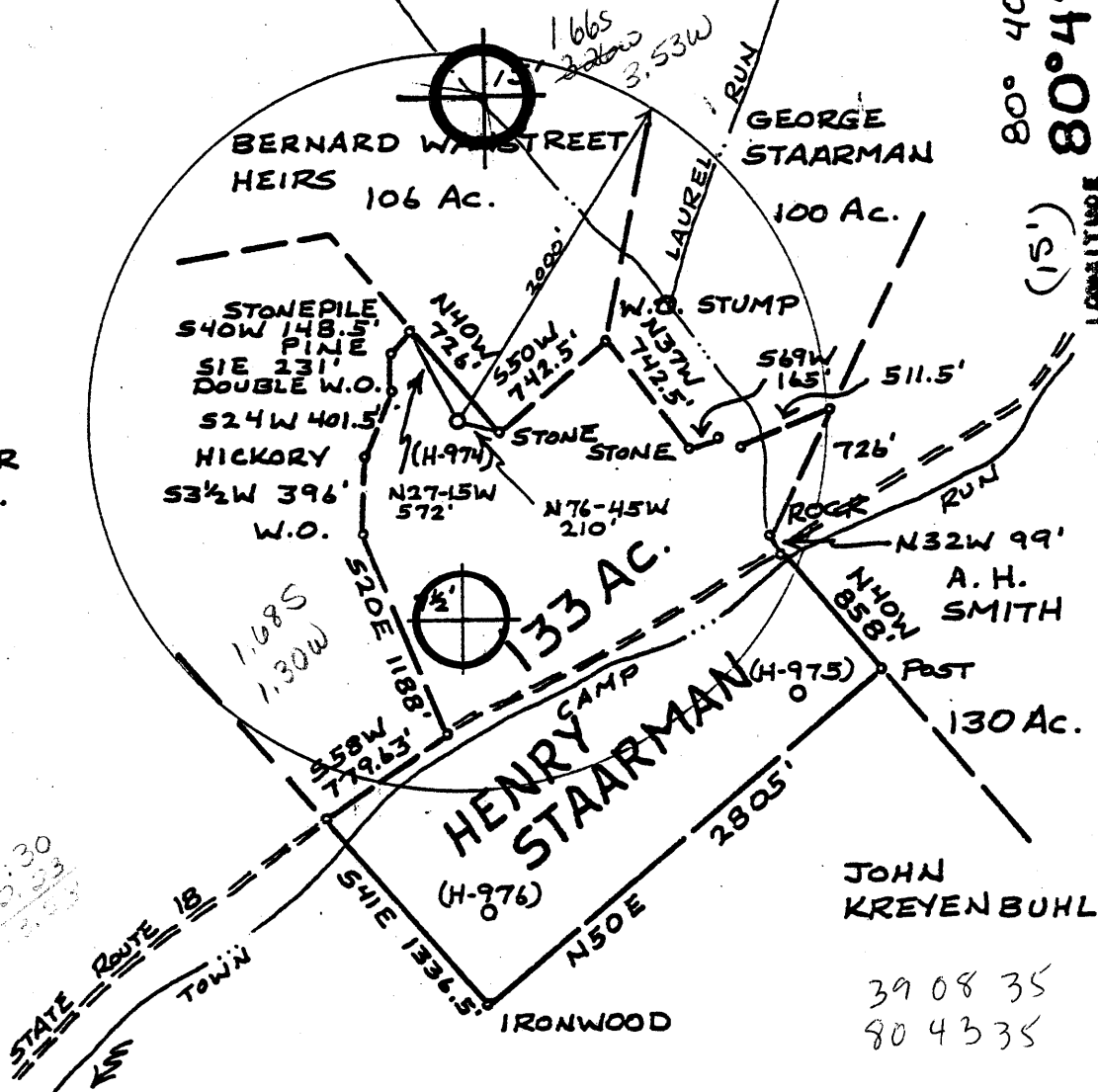
7090' WEST

80° 40' (15')
80° 42 1/2'
 LONGITUDE

NORTH

L. HINTER
 94 1/2 Ac.

1.30
 2.23
 2.23



FILE NO. _____
 DRAWING NO. _____
 SCALE 1"=1000'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION ROAD ELEV. 896'

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) William Moscoe
 R.P.E. _____ L.L.S. 551

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6
 (8-78)



DATE 25 MARCH, 1980
 OPERATOR'S WELL NO. MC H-974
 API WELL NO. 47-017 2911
 STATE COUNTY PERMIT

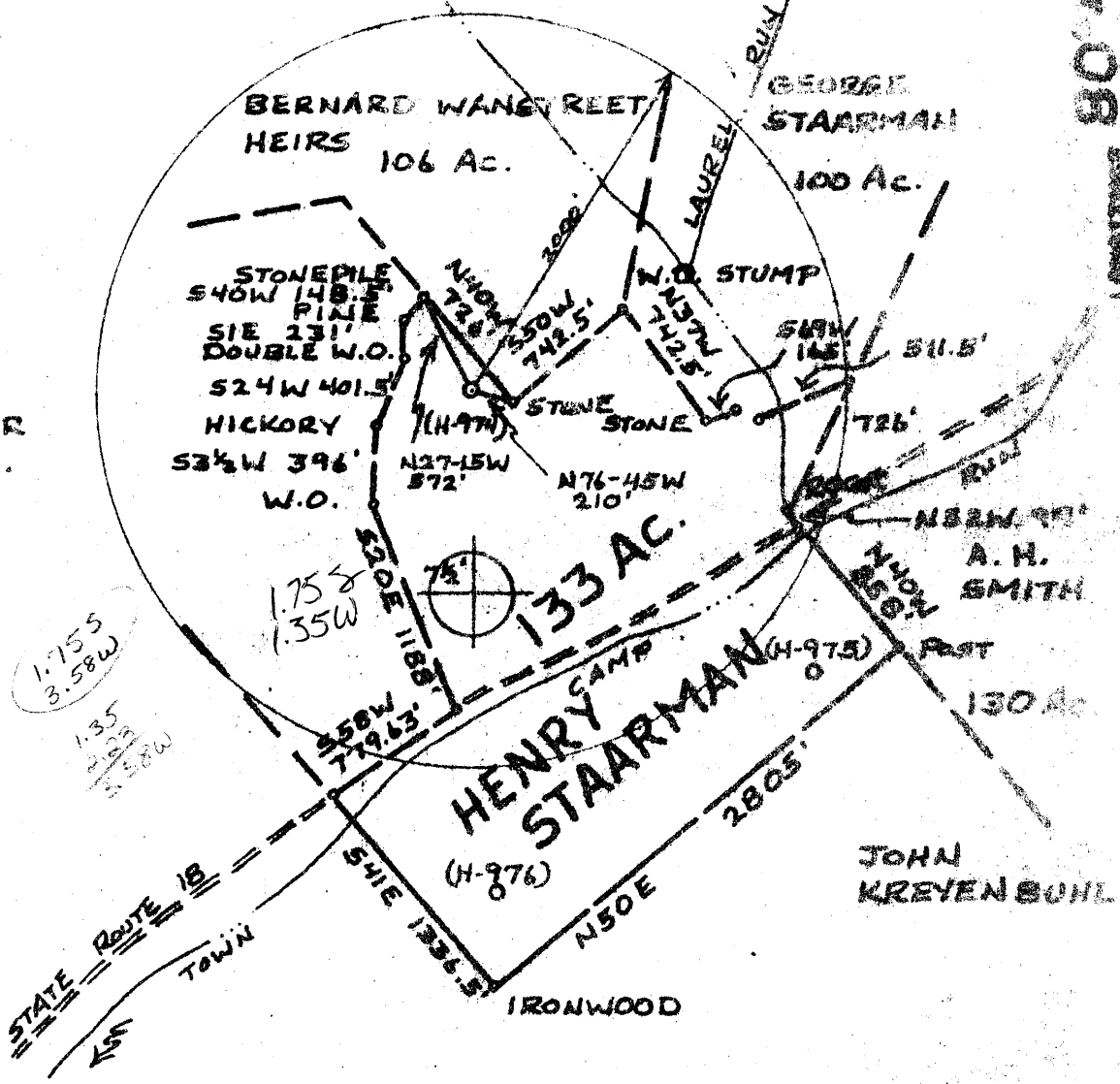
STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

Formerly 017-2643

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF GAS, PRODUCTION STORAGE _____ DEEP SHALLOW _____
 LOCATION: ELEVATION 1181' WATER SHED TOWN CAMP RUN
 DISTRICT COVE COUNTY DODDRIDGE
 QUADRANGLE NEW MILTON, W.VA. 7 1/2' QUAD. VADIS 15' WC
 SURFACE OWNER HENRY STAARMAN ACRES 133
 OIL & GAS ROYALTY OWNER HENRY STAARMAN LEASE ACRES 133
 LEASE NO. _____
 PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE _____ PLUS OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUS AND ABANDON _____ CLEAN OUT AND REPLUS _____
 TARGET FORMATION ALEXANDER ESTIMATED DEPTH 5700'
 WELL OPERATOR GLENN L. HAUGHT & SONS LICENSED AGENT WARREN HAUGHT
 ADDRESS SMITHVILLE, W.VA. 26178 ADDRESS SMITHVILLE, W.VA. 26178

LATITUDE **39° 10'**
 9210' SOUTH
 7090' WEST



80° 42' 15"
 80° 40' 15"

FILE NO. _____
 DRAWING NO. _____
 SCALE 1"=1000'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION ROAD ELEV. 896'

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) William R. Moscoe
 R.P.E. _____ L.L.S. 551

PLACE SEAL HERE

(1) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-5
 (8-75)



DATE 25 MARCH, 1980
 OPERATOR'S WELL NO H-974
 API WELL NO. _____
 WAS: 47-017-2643
 STATE COUNTY PERMIT
 NOW: 017-2911

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 1181' WATER SHED TOWN CAMP RUN
 DISTRICT COVE 15' COUNTY DODDRIDGE
 QUADRANGLE NEW MILTON, W.VA. 7 1/2' QUAD. WC
 SURFACE OWNER HENRY STAARMAN ACRES 133
 OIL & GAS ROYALTY OWNER HENRY STAARMAN LEASE ACRES 133
 LEASE NO. _____
 PROPOSED WORK: DRILL 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 ALEXANDER ESTIMATED DEPTH 5700'
 WELL OPERATOR GLENN L. HAUGHT & SONS DESIGNATED AGENT WARREN HAUGHT
 ADDRESS SMITHVILLE, W.VA. 26178 ADDRESS SMITHVILLE, W.VA. 26178

MAY 6 1980

RECEIVED

AUG - 2 1982

Date: July 19 1982
 Operator's Well No. H-974
 App Well No. -017 - 29
 State County Federal
 2911

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES, OIL AND GAS CONSERVATION
 WV DEPARTMENT OF MINES

WELL OPERATOR'S REPORT
 OF
 DRILLING, FRACURING AND/OR STIMULATIONS, OR PHYSICAL CHANGE

WELL TYPE: Oil XX / Gas XX / Liquid Injection ___ Waste Disposal ___
 (If "Gas", Production XX / Underground storage ___ / Deep ___ / Shallow XX)
 LOCATION: Elevation: 1181' Watershed: Town Camp Run
 District: Cove County: Doddridge Quadrangle: New Milton, WV 7 1/2'
 Staarman H-974
 WELL OPERATOR Glenn L. Haught & Sons DESIGNATED AGENT Warren R. Haught
 Address 4424 Emerson Ave. Address 4424 Emerson Ave.
Parkersburg, WV 26104 Parkersburg, WV 26104

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

PERMIT ISSUED ON December 29, 1980 OIL & GAS INSPECTOR FOR THIS WORK:
 (IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED) Name Paul Garrett
 Address 321 Beech st.
Clarksburg, WV 26301

GEOLOGICAL TARGET FORMATION: Big Injun Depth 2310-2390 feet
 Depth of completed well, 2475' feet Rotary XX / Cable Tools ___
 Water strata depth: Fresh, 75 feet; salt, ___ feet.
 Coal seam depths: None Is coal being mined in the area? No
 Work was commenced July 9, 1981, and completed July 18, 1981

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		PERCENT FILLING OR SACKS (Cubic Feet)	REMARKS
	Size	Grade	Weight per ft.	New	Used	For drilling		
Conductor								Winds
Fresh water	8-5/8	K-55	20#	X		1381'	1381'	Cement to Surface
Coal								Sizes
Intermediate								
Production	4 1/2	J-55	10.5#	X			2429'	200 Sacks Cement set
Tubing								
Liners								Perforations: Top Bottom

OPEN FLOW DATA 2250-2400
 Producing formation Big Injun Pay zone depth 2310-2390
 Gas: Initial open flow, ___ Mcf/d Oil: Initial open flow, ___ Bbl/d
 Final open flow, 100,000 Mcf/d 100 mcf Final open flow, ___ Bbl/d
 Time of open flow between initial and final tests, 8 hours
 Static rock pressure, 380 psig (surface measurement) after 12 hours shut in
 [If applicable due to multiple completion--]
 Second producing formation _____ Pay zone depth _____
 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

DETAILS OF PERFORATED INTERVALS, FRACTURING OF ITS MATINGS, PHYSICAL CHANGE, ETC.

Hydra-Fraced by Halliburton Services

Perforations: 30 Holes 2250-2400

WELL 103

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	REMARKS Including indication of all fresh and salt water, sand, etc. and gas
Red Rock			0	40	
Red Rock/Slate			40	100	
Slate			100	113	
Sand			113	135	
Slate			135	175	
Sand			175	195	
Red Rock			195	225	
Sand			225	237	
Slate			237	330	
Red Rock			330	415	
Sand			415	445	
Red Rock			445	514	
Slate			514	545	
Red Rock			545	564	
Sand			564	586	
Red Rock			586	614	
Slate			614	640	
Sand			640	736	
Slate			736	786	
Red Rock			786	796	
Slate			796	820	
Lime			820	832	
Slate/Red Rock			832	1096	
Lime			1096	1102	
Slate/Sand			1102	2202	
Lime			2202	2310	
<u>Injun Sand</u>			2310	2390	
Slate			2390	<u>2475</u>	T.D.

(Attach separate sheets as complete as necessary.)

Glenn L. Haught & Sons

Well Operator

Warren R. Haught

By

its Co-Owner & Agent

NOTE: Regulation 2.021: provides as follows:
 "The term 'Cap' or 'Well Log' shall mean a systematic, detailed geological record of all formations, including sand, encountered in the drilling of a well."

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: 1181' Watershed: Town Camp Run
District: Cove County: Doddridge Quadrangle: New Milton, WV 7 1/2'

WELL OPERATOR Glenn L. Haught & Sons DESIGNATED AGENT Warren R. Haught
Address Route 3, Box 14 Address Smithville, WV 26178
Smithville, WV 26178

OIL & GAS ROYALTY OWNER Henry Staarman COAL OPERATOR None
Address Rt. 1 Box 78 Address
New Milton, WV

ACREAGE 108 COAL OWNER(S) WITH DECLARATION ON RECORD:
SURFACE OWNER same as above Name
Address Address
ACREAGE Name
Address

FIELD SALE (IF MADE) TO:
Name Consolidated Gas Supply Corp.
Address 445 West Main St.
Clarksburg, Wv 26301

DEC 29 1980
OIL & GAS DIVISION
DEPT. OF MINES

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Paul Garrett
Address 321 Beech Street
Clarksburg, WV 26301

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 January 12, 1980, to the undersigned well operator from Henry Staarman
[If said deed, lease, or other contract has been recorded:]

Recorded on Feb. 20, 1980, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease Book 113 at page 523. 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

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

BLANKET BOND

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

now: 017-2911

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil X / Gas X /
(If "Gas", Production X / Underground storage _____ Deep _____ Shallow X)
LOCATION: Elevation: 1181' Watershed: Town Camp Run
District: Cove County: Doddridge Quadrangle: New, Milton, 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 Henry Staarman
Address Route 1, Box 78
New Milton, WV

COAL OPERATOR None
Address _____

Acreage 108
SURFACE OWNER same as above

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

Address _____
Acreage _____

Address _____
Name _____

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

Address _____
Name _____

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Paul Garrett
Address 321 Beech Street
Clarksburg, WV 26301

COAL LESSEE WITH DECLARATION ON RECORD
Name None
Address _____
MAR 28 1980

OIL & GAS DIVISION
DEPT. OF MINES

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 January 12, 1980, to the undersigned well operator from Henry Staarman

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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.

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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) 542-3092

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

BLANKET BOND

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-3E UPON COMPLETION

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

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5700 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 (Cable feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling	Left in well		
Conductor									Kinds
Fresh water	10 3/4"			X		300'	300'	75 sacks	
Coal									Sizes
Intermediate	7"			X		2000'	2000'	50 sacks	
Production	4 1/2"	J-55	10.5#	X			5700	100 sacks	Depths set
Logging									
Miners									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 plan 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 § 22-6-2, (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 § 22-6-12a, and (v) if applicable, the consent required by Code § 22-6-3c 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 12-2-80.


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 § 22-6-20, 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 _____