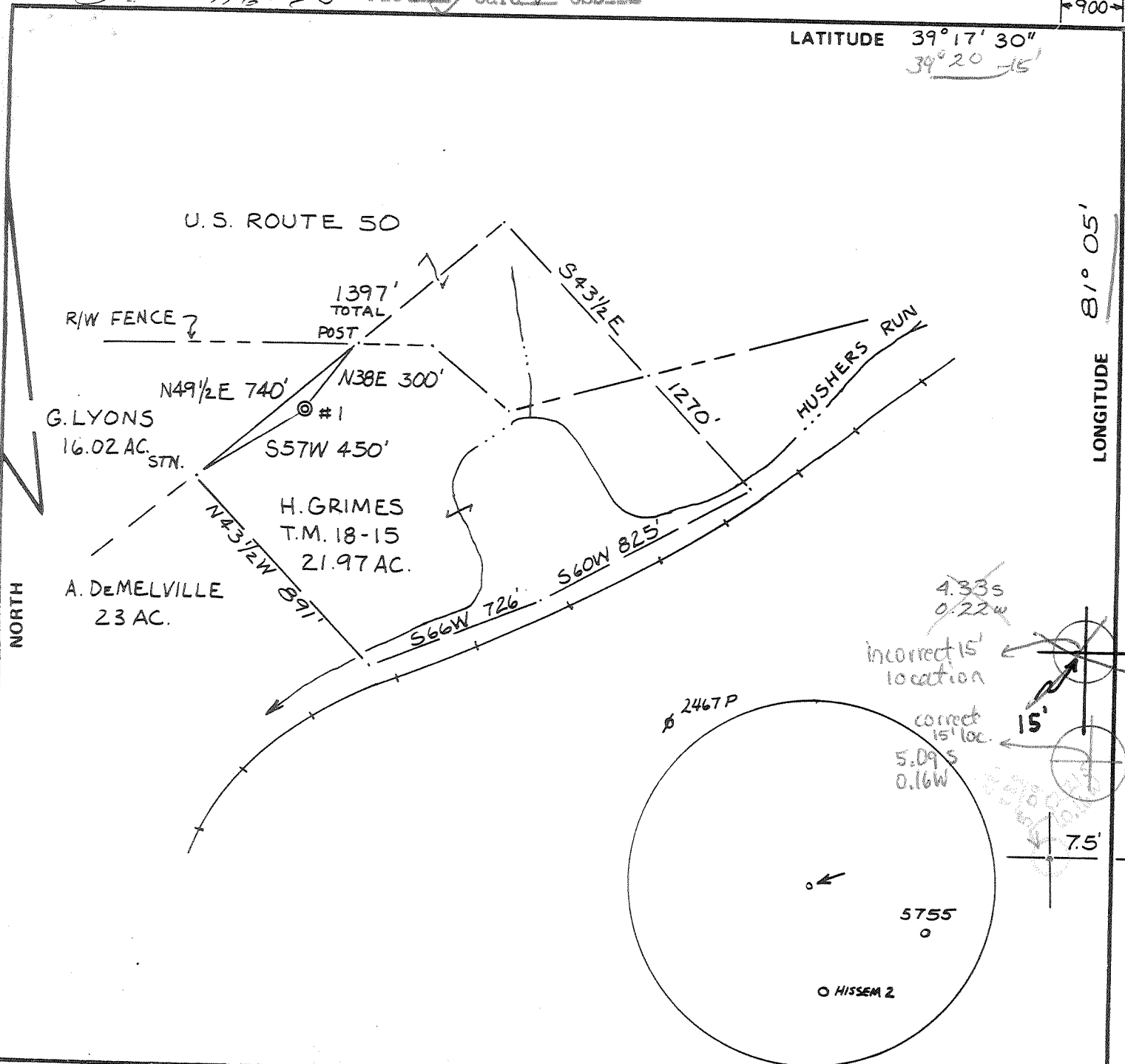
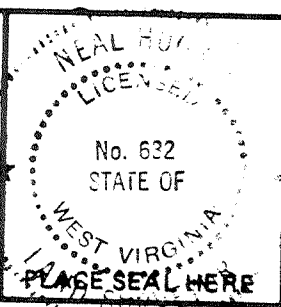


LATITUDE 39° 17' 30"
39° 20' 15"



FILE NO. 82-76
DRAWING NO. _____
SCALE 1" = 500'
MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION RD. INTER. 1044

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) Neal Hughes
R.P.E. _____ L.L.S. 632



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



DATE DEC. 20 19 82
OPERATOR'S WELL NO. GRIMES # 1
API WELL NO. 47-085-6148
STATE COUNTY PERMIT

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 940 WATER SHED HUSHERS RUN
DISTRICT GRANT COUNTY RITCHIE
QUADRANGLE ELLENBORD 7.5' St. Marys 15' 50'
SURFACE OWNER: HOSEA GRIMES ACREAGE 21.97
OIL & GAS ROYALTY OWNER HOSEA GRIMES LEASE ACREAGE 21.97
LEASE NO. P-159
PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

JAN 10 1983

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
TARGET FORMATION Marcellus Shale ESTIMATED DEPTH 5'990
WELL OPERATOR PANTHER FUEL CO. DESIGNATED AGENT PANTHER FUEL CO.
ADDRESS P.O. BOX 850 BRIDGEPORT, W.VA. 26330 ADDRESS P.O. BOX 850 BRIDGEPORT, W.VA. 26330

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

4 stages: Nowsco 750 mscf of N₂ per stage, approximately 40 holes.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Big Lime			1,822	1,870	
Keener Sand			870	1,912	Gas show
Big Injun			1,920	2,032	Show oil & gas
Weir Sandy Shale			2,122	2,220	Show gas
Gantz Sand			2,260	2,370	
Gordon Sand			2,510	2,550	Show gas
Fifth Sand			2,810	2,820	Show oil & gas
Brallier Shale Top			2,990		
Warren Shale			3,400	3,565	Oil & gas
Brallier Shale Bottom				4,050	Oil & gas
Harrell Shale Top			4,050		Oil & gas
Benson Horizon			4,710	4,780	Gas
Harrell Shale Bottom				5,122	
Hamilton Shale			5,122	5,784	Gas Rhinestreet @ TR

(Attach separate sheets as necessary)

Panther Fuel Co.
Well Operator
By: [Signature], Vice President
Date: January 7, 1983

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



1) Date: 12-22, 1982
 2) Operator's Well No. P-159 #1
 3) API Well No. 47 State 080 County 6148 Permit

DRILLING CONTRACTOR:
unknown

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

OIL AND GAS WELL PERMIT APPLICATION

- 4) WELL TYPE: A Oil _____ / Gas _____ /
 B (If "Gas", Production _____ / Underground storage _____ / Deep _____ / Shallow X /)
- 5) LOCATION: Elevation: _____ Watershed: _____
 District: _____ County: _____ Quadrangle: _____
- 6) WELL OPERATOR _____ Address _____
 11) DESIGNATED AGENT _____ Address _____
- 7) OIL & GAS ROYALTY OWNER _____ Address _____
 12) COAL OPERATOR _____ Address _____
- 8) SURFACE OWNER _____ Address _____
 13) COAL OWNER(S) WITH DECLARATION ON RECORD:
 Name _____ Address _____
 Name _____ Address _____
- 9) FIELD SALE (IF MADE) TO: _____ Address _____
 14) COAL LESSEE WITH DECLARATION ON RECORD:
 Name _____ Address _____
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name _____ Address _____
- 15) PROPOSED WORK: Drill _____ / Drill deeper _____ / Redrill _____ / Fracture or stimulate _____
 Plug off old formation _____ / Perforate new formation _____
 Other physical change in well (specify) _____
- 16) GEOLOGICAL TARGET FORMATION, _____
- 17) Estimated depth of completed well, _____ feet
- 18) Approximate water strata depths: Fresh, _____ feet; salt, _____ feet.
- 19) Approximate coal seam depths: _____ Is coal being mined in the area? Yes _____ / No _____

20) 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		Kinds	Sizes
Conductor										
Fresh water										
Coal										
Intermediate						1140	1140	240		
Production						5990	5990	As needed		
Tubing										Depths set
Liners										Perforations: Top Bottom

- 21) EXTRACTION RIGHTS
 Check and provide one of the following:
 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.
 The requirement of Code 22-4-1-(c) (1) through (4). (See reverse side for specifics.)
- 22) ROYALTY PROVISIONS
 Is the right to extract, produce or market the oil or gas based upon a lease or other continuing contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes No
- If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.
- 23) Required Copies (See reverse side.)
- 24) 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.

Notary: _____
 My Commission Expires _____

Signed: Richard E. Bultzford
 Its: Asst. to President 1/4/83

OFFICE USE ONLY
 DRILLING PERMIT

Permit number _____ Date _____

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. 10) 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.)

Permit expires _____ unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
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Administrator, Office of Oil and Gas