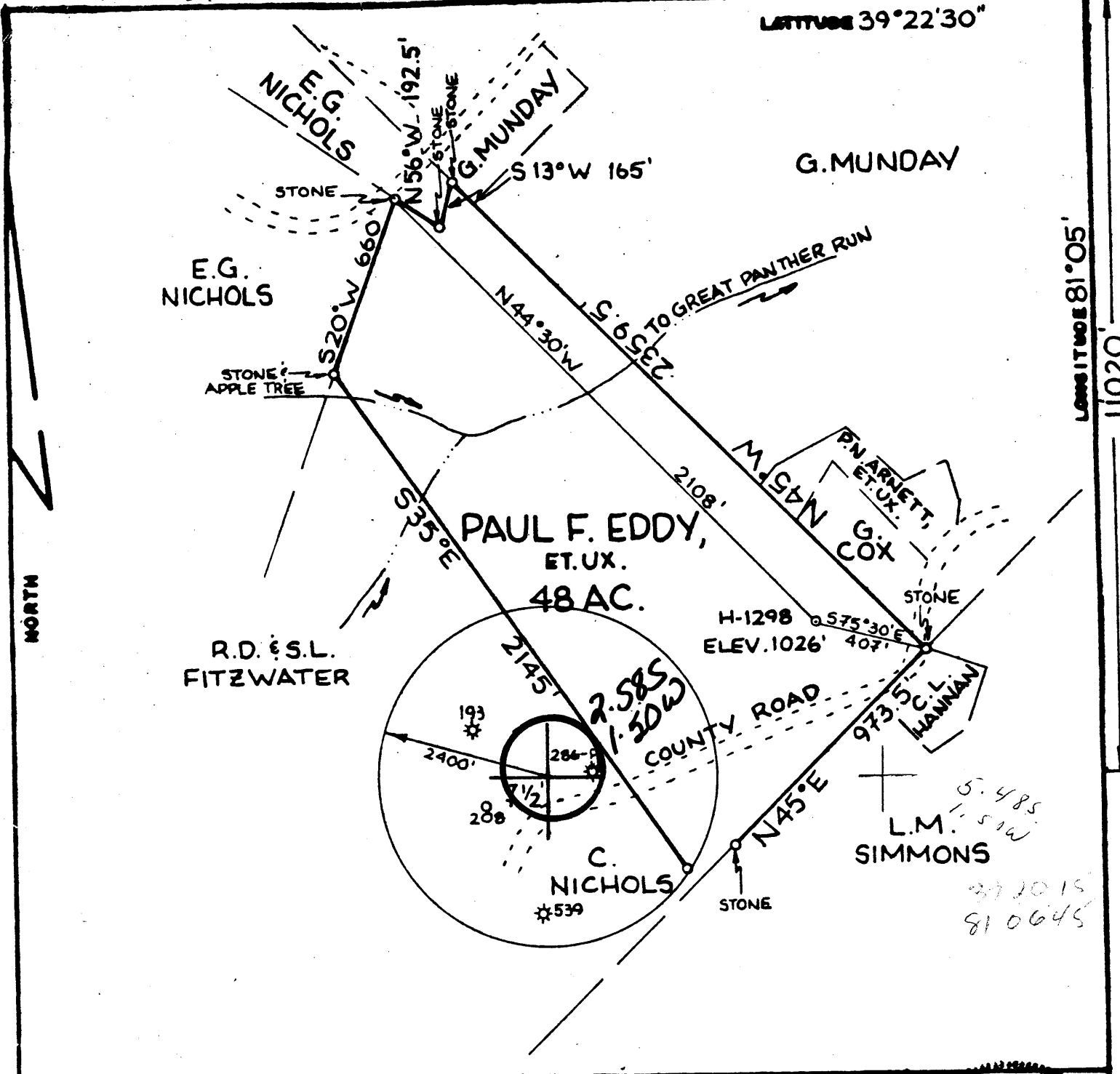


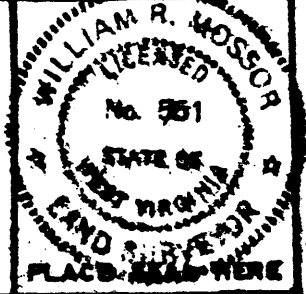
LATITUDE 39°22'30"

LONGITUDE 81°05' 11020



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION BR. INT. 1058'

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. Mosser*
 R.P.E. _____ L.L.S. 551



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



DATE 11 NOVEMBER 1981
 OPERATOR'S WELL NO H-1298
 API WELL NO. 47-073-1380
 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 1026' WATER SHED GREAT PANTHER RUN
 DISTRICT MC/KIM COUNTY PLEASANTS
 QUADRANGLE ELLENBORO 3 1/2' QUAD. St. Marys 15' C
 SURFACE OWNER PAUL F. EDDY ACREAGE 48
 OIL & GAS ROYALTY OWNER PAUL F. EDDY LEASE ACREAGE 48
 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 SHALE ESTIMATED DEPTH 5400'
 WELL OPERATOR HAUGHT, INC. DESIGNATED AGENT WARREN HAUGHT
 ADDRESS SMITHVILLE, W.VA. 26178 ADDRESS SMITHVILLE, W.VA. 26178

JAN 8 1982

RECEIVED

Operator's Well No. H-1298

OCT 22 1982

API Well No. 073-1380
STATE COUNTY PERMIT

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

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

Revised

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

WELL TYPE: Oil ___ / Gas X / Liquid Injection ___ Waste Disposal ___
(If "Gas", Production X / Underground storage ___ / Deep ___ / Shallow X)

LOCATION: Elevation: 1026 Watershed: Great Panther Run
District: McKIM County: Pleasants Quadrangle: Ellenboro, WV

WELL OPERATOR Huaght, Inc. Paul G. Eddy H-1298
Address 4424 Emerson Avenue Parkersburg, WV 26104
Designated Agent Warren R. Haught
Address 4424 Emerson Avenue Parkersburg, WV 26104

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

PERMIT ISSUED ON December 4, 1981 OIL & GAS INSPECTOR FOR THIS WORK:
Name Robert A. Lowther
Address General Delivery
Middlebourne, WV 26149

GEOLOGICAL TARGET FORMATION: Shale Depth 4242-5248 feet
Depth of completed well, 5248 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 Dec. 23, 1981, and completed January 4, 1982

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	REMARKS
	Size	Grade	Weight per ft	New	Used	For drilling		
Conductor								Hands
Fresh water	8-5/8	K-55	20#	X		600	600	240 Sacks
Coal								Sizes
Intermediate								
Production	4 1/2	J-55	10.5#	X			4995	345 Sacks
Tubing								
Liners								Perforations:
								Top Bottom
								4660 4965

OPEN FLOW DATA

Producing formation Shale Pay zone depth 4660-4965
Gas: Initial open flow, ___ Mcf/d Oil: Initial open flow, ___ Bbl/d
Final open flow, 250 Mcf/d Final open flow, ___ Bbl/d
Time of open flow between initial and final tests, 8 hours
Static rock pressure, 450 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

1982

DETAILS OF PERFORATED INTERVALS, FRACTURING OF COUPLERS, PHYSICAL CHANGE, ETC.

Nitrogen fraced by B.J. Hughes
700,000 SCF
500 Gal. Acid

Perforations: 24--4660--4965

Well 203

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	ASBESTOS Including indication of all fresh and salt water, sand, etc. and gas
Red Rock/Sand/Shale/Slate			0	1850	
Big Injun			1850	1962	
Squaw			1988	2022	
Wier			2342	2350	
Berea			2493	2498	
Gantz			2576	2579	
50 Ft.			2652	2656	
30 Ft.			2683	2694	
Stray			2771	2774	
Gordon			2792	2800	
Speechley			3661	3668	
Balltown		3	2852	3860	
Riley			4012	4019	
Benson			4242	4258	
Alexander			4738	4746	
Shale/Sand Angola			4747	5248	T.D.

5248
1026
3222 subsea TD

4660
2498
2162 < Berea

5248
2498
2750 < Berea

(Attach separate sheets as complete as necessary)

Haught, Inc.
Well Operator
By Beth A. Wilson
Well Administration Agent

NOTE: Regulation 2.0212 provides as follows:
"The term 'top of well log' shall mean a systematic, detailed geologic record of all formations, including sand, encountered in the drilling of a well."

RECEIVED

Operator's Well No. H-1298

OCT 22 1982

APR Well No. 073 - 1380

OIL AND GAS DIVISION WV DEPARTMENT OF MINES

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

RECEIVED DEC 02 1982

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

DIVISION OF OIL & GAS DEPT. OF ENERGY

WELL TYPE: Oil / Gas X / Liquid Injection / Waste Disposal

LOCATION: Elevation: 1026 Watershed: Great Panther Run

District: McKim County: Pleasants Quadrangle: Ellenboro, WV

WELL OPERATOR: Huaght, Inc. DESIGNATED AGENT: Warren R. Haught

Address: 4424 Emerson Avenue Parkersburg, WV 26104

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

PERMIT ISSUED ON December 4, 1981

(IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED)

GEOLOGICAL TARGET FORMATION: Shale Depth 4242-5248 feet

Depth of completed well, 5248 feet Recovery XX / Sable Tools

Water strata depth: Fresh, 75 feet; salt, feet.

Coal seam depths: None Is coal being mined in the area: NO

Work was commenced Dec. 23, 1981, and completed January 4, 1982

CASING AND TUBING PROGRAM

Table with columns: CASING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight, New/Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), and FEETERS.

OPEN FLOW DATA

Producing formation: Shale

Gas: Initial open flow, Mcf/d Oil: Initial open flow, Bbl/d

Final open flow, 250 Mcf/d Final open flow, Bbl/d

Time of open flow between initial and final tests, 8 hours

Static rock pressure, 450 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

DEC 7 1982

Continued on reverse side.

Issued 12-4-81

on Fische

08-78

DETAILS OF PERFORATED INTERVALS, FRACTURING OF COE TREATING, PHYSICAL CHANGE, ETC.

Nitrogen fraced by B.J. Hughes
 700,000 SCF
 500 Gal. Acid
 Perforations: 24--4660--4965

Muron → Java

ELL 233

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	REMARKS Including indication of all casing and salt water, seal, etc. and gas
Red Rock/Sand/Shale/Slate			0	1850	
Big Injun			1850	1962	
Squaw			1988	2022	
Wier			2342	2350	
Berea			2493	2498	
Gantz			2576	2579	
50 Ft.			2652	2656	
30 Ft.			2683	2694	
Stray			2771	2774	
Gordon			2792	2800	
Speechley			3661	3668	
Balltown			2852	3860	
Riley			4012	4019	
Benson			4242	4258	
Alexander			4738	4746	
Shale/Sand			4747	5248	T.D.

(Attach separate sheets as complete as necessary)

Haight, Inc.

Well Operator

By Beth A. Wilson

Well Administration Agent

NOTE: Regulation 2.321: provides as follows:
 "The term 'log' or 'well log' shall mean a systematic, detailed geologic record of all formations, including seal, encountered in the drilling of a well."



STATE OF WEST VIRGINIA
OFFICE OF OIL AND GAS - DEPARTMENT OF MINES

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil X / Gas X /

(If "Gas", Production X / Underground storage ___ / Deep ___ / Shallow X /

LOCATION: Elevation: 1026' Watershed: Great Panther Run
District: McKim County: Pleasants Quadrangle: Ellenboro, WV 7 1/2

WELL OPERATOR Haught, Inc.
Address Rt. 3 Box 14
Smithville, WV 26178

DESIGNATED AGENT Warren R. Haught
Address Smithville, WV 26178

OIL AND GAS
ROYALTY OWNER Paul E. Eddy
Address Rt. 1 Box 301
St. Marys, WV 26170
Acreage 48

COAL OPERATOR None
Address _____

SURFACE OWNER Paul Eddy
Address Rt. 1 Box 301
St. Marys, WV 26170
Acreage 48

COAL OWNER(S) WITH DECLARATION ON RECORD:
NAME _____
Address _____

FIELD SALE (IF MADE) TO:
NAME Columbia Gas Transmission Corp.
Address Charleston, WV

NAME _____
Address _____

OIL AND GAS INSPECTOR TO BE NOTIFIED:

NAME Phillip L. Tracy
Address Rt. 23
Alma, WV 26320
Telephone 758-4573

RECEIVED

NOV 30 1981

OIL AND GAS DIVISION
WV DEPARTMENT 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 Dec. 29, 1980, to the undersigned well operator from Paul Eddy et ux

(If said deed, lease, or other contract has been recorded:)

Recorded on Dec. 29, 1980, in the office of the Clerk of County Commission of Pleasants County, West Virginia, in Deed Book 160 at page 385. 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 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 lessees on or before the day of the mailing or delivery of this 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
1613 WASHINGTON ST., E.
CHARLESTON, WV 25311
Telephone - 304/348-3092

BLANKET BOND

Haught, Inc.
Well Operator

By: Warren R. Haught

Its: President

(Revised 3-81)

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) Haight, Inc.
Address Rt. 3 Box 14
Smithville, WV 26178

GEOLOGICAL TARGET FORMATION Devonian Shale
Estimated depth of completed well 5400 feet. Rotary / Cable tools /
Approximate water strata depths: Fresh, _____ feet; salt, _____ feet.
Approximate coal seam depths: None
Is coal being mined in this area: Yes / No /

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL UP OR SACKS Cubic ft.	PACKERS
	Size	Grade	Weight per ft	New	Used	For Drilling	Left in Well		
Conductor									Kinds
Fresh water	8 5/8	K-55	20#	X		900'	900'	Cement to	Surface
Coal									Sizes
Intermed.									
Production	4 1/2	J-55	10.5	X			5400'	150 Sacks	Depths set
Tubing								or as needed	by
Liners								rule 15.01	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-9, "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 §22-4-8a 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 8-4-82.

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 regularions.

Date: _____, 19____.

By: _____

Its: _____