



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 200'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION Road int.
 Elev. 928'

SITE 287.1

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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

William R. House
 ISSUED _____ R.P.E. _____ L.L.S. 551

PLACE SEAL HERE

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



DATE 29 April, 1985
 OPERATOR'S WELL NO. Hansford #1
 API WELL NO. _____
47 - 017 - 3433
 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 1101' WATER SHED Right Fork
 DISTRICT Central 1 COUNTY Doddridge
 QUADRANGLE Oxford 526 Holbrook 058 NE2
 SURFACE OWNER VIRGINIA & WILBUR GROSE ACREAGE 15 3/4
 OIL & GAS ROYALTY OWNER ANIO INVESTMENTS LEASE ACREAGE 50
 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 _____
 LOGS: MARCELLUS SHALE ESTIMATED DEPTH 5700'
 WELL OPERATOR FRENCH CREEK DEVELOPMENT DESIGNATED AGENT Lynn Gragg
 ADDRESS Rt 2 Box 57 D ADDRESS Rt 2 Box 57 D
Harrisville, WV 26362 308 Harrisville, WV 26362

MAY 20 1985

IV-35
(Rev 8-81)



State of West Virginia
Department of Mines
Oil and Gas Division

Date July 1, 1985
Operator's
Well No. One (1)
Farm Hansford
API No. 47 - 017 - 3433

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

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

LOCATION: Elevation: 1101 Watershed Right Fork
District: Central County Doddridge Quadrangle Oxford

COMPANY French Creek Development

ADDRESS Rt. 2, Box 57D, Harrisville, W. Va.

DESIGNATED AGENT Lynn Gragg

ADDRESS Rt. 2, Box 57D, Harrisville, W. Va.

SURFACE OWNER Virginia & Wilbur Groose

ADDRESS Rt. 1 Box 130, Pennshore W. Va.

MINERAL RIGHTS OWNER Anjo Investments

ADDRESS Smithville, W. Va.

OIL AND GAS INSPECTOR FOR THIS WORK Steve

Csey ADDRESS Rt. 2, Box 232D

Jane Lew, W. Va. 26378
PERMIT ISSUED May 10, 1985

DRILLING COMMENCED May 14, 1985

DRILLING COMPLETED May 22, 1985

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement fill up Cu. ft.
20-16 Cond.			
13-10"	314	314	
9 5/8"			
8 5/8"	1860	1860	To surface
7"			
5 1/2"			
4 1/2"		5277	585 sks.
3"			
2"			
Liners used			

GEOLOGICAL TARGET FORMATION Marcellus Shale Depth 5700 feet

Depth of completed well 5301 feet Rotary / Cable Tools _____

Water strata depth: Fresh 80 feet; Salt 500 feet

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

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth ? feet

Gas: Initial open flow Show Mcf/d Oil: Initial open flow show Ebl/d

Final open flow (100.000) Mcf/d Final open flow (10) Ebl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 1950 psig (surface measurement) after 24 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 _____ Ebl/d

Final open flow _____ Mcf/d Oil: Final open flow _____ Ebl/d

Time of open flow between initial and final tests _____ hours

Static rock pressure _____ psig (surface measurement) after NOV 4 1985 hours shut in

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

Halliburton Nitrogen Frac June 10, 1985

2 stages Million per/stage ?

perfs?

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
No Record			0	1880	
Shale			1880	2000	
Big Lime			2000	2060	
Keener			2060	2100	
Shale			2100	2106	
Big Injun			2106	2138	
Shale			2138	2296	
Weir			2296	2420	
Shale			2420	2492	
Berea			2492	2504	
Shale			2404	2612	
Gantz			2612	2628	
Siltstone & Shale			2628	2926	
Gorden			2926	2936	
Shale			2936	3354	
Warren			3354	3420	
Shale			3420	3440	
2nd Warren			3440	3550	
Shale			3550	3770	
Tiona			3770	3836	
Shale			3836	3860	
Speechley			3860	3964	
Shale			3964	4100	
Balltown			4100	4266	
Shale			4266	4450	
1st Riley			4450	4468	
Shale			4468	4548	
2nd Riley			4548	4588	
Shale			4588	4970	
Tioga			4970	4980	
Shale			4980	5172	
Benson			5172	5180	
Shale			5180	5234	
Alexander			5234	5296	
Total Depth			5296		

(Attach separate sheets as necessary)

Kevin Grogg, Agent
Well Operator

By: _____
Date: 7-2-85

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."

FILE COPY
RECEIVED



1) Date: May 6, 1985
 2) Operator's Well No. Hansford #1
 3) API Well No. 47 - 017-3433
 State County Permit

MAY 10 1985

**OIL & GAS DIV.
DEPT. OF MINES**

**STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION
APPLICATION FOR A WELL WORK PERMIT**

- 4) WELL TYPE: A Oil / Gas
 B (If "Gas", Production _____ / Underground storage _____ / Deep _____ / Shallow _____)
- 5) LOCATION: Elevation: 1101 Watershed: Right Fork
 District: Central County: Doddridge Quadrangle: Oxford
- 6) WELL OPERATOR French Creek Development 7) DESIGNATED AGENT Lynn Gragg
 Address Route 2 Box 57D Address Route 2 Box 57D
Harrisville, WV 26362, 8325 Harrisville, WV 26362
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Steve Casay MIKE UNDERWOOD Name Haught Inc.
 Address Route 2 Box 2980 Address _____
Jane Low, WV 26378 782-1043 Smithville, WV 26178
- 10) PROPOSED WELL WORK: Drill / Drill deeper _____ / Redrill _____ / Stimulate
 Plug off old formation _____ / Perforate new formation _____
 Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Marcellus Shale
- 12) Estimated depth of completed well, 5700 feet
- 13) Approximate strata depths: Fresh, 80 feet; salt, 500 feet.
- 14) Approximate coal seam depths: N/A Is coal being mined in the area? Yes _____ / No
- 15) 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									
Coal									Sizes
Intermediate	8 5/8	RI		X		1201	1201	To Surface	By Rule 1505
Production	4 1/2	RI		X		5700	5700	By Rule	Depths set 15.01
Tubing									
Liners									Perforations:
									Top Bottom

**OFFICE USE ONLY
DRILLING PERMIT**

Permit number 47-017-3433

May 10 1985
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. 8) 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.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.
 Permit expires May 10, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
<u>68</u>	<u>MU</u>	<u>MU</u>	<u>MU</u>	<u>314</u>

Margaret J. Hesse
 Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

File