

← 39 304100' →

LATITUDE 39°27'30"

4050'

LONGITUDE 81°00'

FRANCIS THORN

STONE & WATERBEECH POINTERS

2400'

235

729

BONNER #1  
ELEV. 742'

N60°15'E  
487'

1719'

1947'

N5°E

S8°E

FENCE LINE

COUNTY ROAD

GENE CARR

DORIS SMITH

GLADYS BONNER

GAIL STULL

CONSTANCE MORRIS

WATERBEECH

GLYDIS BONNER ESTATE  
50 AC.

MIDDLE ISLAND CREEK WITH MIDDLE ISLAND CREEK

MIDDLE ISLAND CREEK

LORENA SMITH

LORENA SMITH

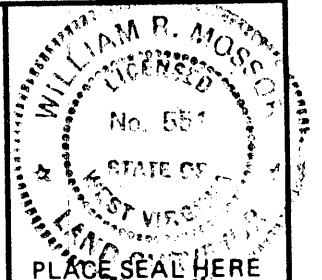
3.64 S  
0.78 W

NORTH

FILE NO. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
SCALE 1" = 500'  
MINIMUM DEGREE OF ACCURACY 1:200  
PROVEN SOURCE OF ELEVATION RD. INT. ELEV. 631'

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. Moscoso*  
R.P.E. \_\_\_\_\_ L.L.S. 551



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FORM IV-6 (8-78)



DATE 22 DECEMBER, 1981  
OPERATOR'S WELL NO. BONNER #1  
API WELL NO. 47 - 095 - 0978 - Frac.  
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 742' WATER SHED MIDDLE ISLAND CREEK  
DISTRICT UNION COUNTY TYLER  
QUADRANGLE BENS RUN 241 116 NE3  
SURFACE OWNER GLYDIS BONNER ESTATE ACREAGE 50  
OIL & GAS ROYALTY OWNER GLYDIS BONNER 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 \_\_\_\_\_  
TARGET FORMATION OHIO SHALE ESTIMATED DEPTH 5999'

APR 06 1987

WEI ADI Hi-West Petroleum Exploration  
P.O. Box 731  
Marietta, Ohio 45750  
DESIGNATED AGEN' Karen Sayre  
ADDRESS 4 1/2 Street  
Williamstown, WVa. 26187  
owwo 6-6 Shiloh-Wick (86)

STEPH

FRANCIS THORN

4050'

LONGITUDE 81°00'

NORTH

STONE & WATERBEECH POINTERS

2400'

4 1/2'

235

729

BONNER #1  
ELEV. 742'

N60°15'E  
487'

1719'

1947'

S8°E

N5°E

FENCE LINE

GENE CARR

DORIS SMITH

GLADYS BONNER

GAIL STULL

CONSTANCE MORRIS

WATERBEECH

LORENA SMITH

GLYDIS BONNER ESTATE  
50 AC.

LORENA SMITH

WITH MIDDLE ISLAND CREEK

MIDDLE ISLAND CREEK

3.645  
0.78W

FILE NO. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
SCALE **1"=500'**  
MINIMUM DEGREE OF ACCURACY **1:200**  
PROVEN SOURCE OF ELEVATION **RD. INT. ELEV. 631'**

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. Hossain*  
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 **22 DECEMBER**, 19**81**  
OPERATOR'S WELL NO. **BONNER #1**  
API WELL NO. \_\_\_\_\_  
**47 - 095 - 0978**  
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 **742'** WATER SHEET **MIDDLE ISLAND CREEK**  
DISTRICT **UNION** COUNTY **TYLER**  
QUADRANGLE **BENS RUN St. Marys 15' NE**  
SURFACE OWNER **GLYDIS BONNER ESTATE** ACREAGE **50**  
OIL & GAS ROYALTY OWNER **GLYDIS BONNER** 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 \_\_\_\_\_  
TARGET FORMATION **OHIO SHALE** ESTIMATED DEPTH **5999'**  
WELL OPERATOR **LAUDERMAN O&G** DESIGNATED AGENT **PHILLIP MORGAN**  
ADDRESS **P.O. BOX 266** ADDRESS **P.O. BOX 266**  
**PADEN CITY, W.VA. 26159** **PADEN CITY, W.VA. 26159**

FEB 01 1982



IV-35  
(Rev 8-81)

Date AUGUST 21, 1988  
Operator's Well No. 1  
Farm DEZZIL BONNIER  
API No. 47-95-0978  
FRAC

**RECEIVED**  
SEP 06 1988

State of West Virginia  
Department of Mines  
Oil and Gas Division

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

WELL OPERATOR'S REPORT  
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 742' Watershed MIDDLE ISLAND CREEK  
District: UNION County TYLER Quadrangle BENS RUN

COMPANY HI-WEST PETROLEUM & EXPLORATION

ADDRESS P.O. BOX 731, MARIETTA, OHIO 45750

DESIGNATED AGENT KAREN SAYER

ADDRESS 4 1/2 STREET, WILLIAMSTOWN, WV 26187

SURFACE OWNER DEZZIL BONNIER

ADDRESS 667 KUOLLWOOD DRIVE, MT. AIZY

MINERAL RIGHTS OWNER SAME NC 27030

ADDRESS SAME

OIL AND GAS INSPECTOR FOR THIS WORK ROBERT COWTHER

ADDRESS CD, MIDDLEBORNE, WV

PERMIT ISSUED 4/1/87 26149

DRILLING COMMENCED SHOT 4/8/87

DRILLING COMPLETED 4/10/87

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

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
20-16 Cond.			
13-10"			
9 5/8			
8 5/8			
7			
1 1/2			
4 1/2			
3			
2	1620'	1620'	
Liners used	RODS & TUBING PUT BACK IN HOLE		

GEOLOGICAL TARGET FORMATION     Depth     feet

Depth of completed well     feet Rotary     / Cable Tools    

Water strata depth: Fresh     feet; Salt     feet

Coal seam depths:     Is coal being mined in the area?    

OPEN FLOW DATA

Producing formation KEEVER Pay zone depth 1620' feet

Gas: Initial open flow 10 Mcf/d Oil: Initial open flow 5 Bbl/d

Final open flow 25 Mcf/d Final open flow 10 Bbl/d

Time of open flow between initial and final tests 24 hours

Static rock pressure 510 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     Bbl/d

Final open flow     Mcf/d Oil: 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

(Continue on reverse side)

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

SHOT with 40 quarts Nitro FROM  
1620' - 1635' ON 4/8/87

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
<div data-bbox="1203 960 1586 1101" data-label="Text"> <p><b>RECEIVED</b> SEP 06 1988</p> </div> <div data-bbox="1225 1133 1570 1194" data-label="Text"> <p>DIVISION OF OIL &amp; GAS DEPARTMENT OF ENERGY</p> </div>					

(Attach separate sheets as necessary)

Hi-WEST PETROLEUM EXPLORATION  
Well Operator  
By: ROBERT LEMOU  
Date: 8/21/88

SEP 09 1988

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 ~~minerals~~, encountered in the drilling of a well."

2022



IV-35  
(Rev 8-81)

**RECEIVED**  
FEB 20 1987

State of West Virginia  
Department of Mines  
Oil and Gas Division

Date July 25, 1982  
Operator's  
Well No. Glydis Bonner #1  
Farm Glydis Bonner Estate  
API No. 47 - 95 - 0978

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

WELL OPERATOR'S REPORT  
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 742' Watershed Middle Island Creek  
District: Union County Tyler Quadrangle Bens Run

COMPANY Lauderman Oil & Gas  
ADDRESS P. O. Box 266, Paden City, WV 26159  
DESIGNATED AGENT Phillip Morgan  
ADDRESS P. O. Box 266, Paden City, WV 26159  
SURFACE OWNER Glydis Bonner Estate  
ADDRESS Denzil Bonner - Executor  
1848 Pershing Way, Morrow, GA 30260  
MINERAL RIGHTS OWNER Same  
ADDRESS Same  
OIL AND GAS INSPECTOR FOR THIS WORK Phillip  
Tracy ADDRESS Rt. 23, Alma, WV 26320  
PERMIT ISSUED December 30, 1981  
DRILLING COMMENCED February 15, 1982  
DRILLING COMPLETED June 25, 1982 ✓

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8	385' - 1 3/8"	Yes	Yes
8 5/8	1,147	Yes	No
7			
5 1/2			
4 1/2			
3			
2	1620	Yes	No
Liners used			

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

GEOLOGICAL TARGET FORMATION Ohio Shale Depth 5999' feet  
Depth of completed well 1635' feet Rotary    / Cable Tools XX  
Water strata depth: Fresh 40'-60' feet; Sulfur    Salt 365' feet  
Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Keener & Big Injun Pay zone depth 1620-1635' feet  
Gas: Initial open flow 20,000 Mcf/d Oil: Initial open flow 3 Bbl/d  
Final open flow 20,000 Mcf/d Final open flow 3 Bbl/d  
*natural well* Time of open flow between initial and final tests 24 hours  
Static rock pressure 140 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    Bbl/d  
Final open flow    Mcf/d Oil: 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

(Continue on reverse side)

MAR 03 1987

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

✓ Natural

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Sand Stone & Top Soil			0	50	
Blue Rock			50	90	Fresh Water
White Lime - Hard			90	125	
Sand			125	148	
Slate			148	155	
Lime - Hard			155	170	
Red Rock			170	195	
Black Lime - Hard			195	210	
Red Rock			210	226	
Lime Hard			226	258	
Red Rock			258	290	
Slate			290	325	
Slate			325	346	
Lime			346	382	Sulfur Water
Lime			382	385	Ran Surface Casing
Lime			385	400	
Slate			400	409	
Sand			409	430	
Slate			430	445	
Lime			445	455	
Shale			455	475	
Slate			475	483	
Sand			483	490	
Slate			490	496	
Lime - Hard			496	557	
Red Rock & Slate			557	590	
Lime			590	615	
Blue Rock			615	627	
Lime			627	643	
Red Rock - Slate			643	650	
Lime - Sandy Red Rock			650	663	
Slate & Shale			663	710	
Red Rock			710	745	
Slate			745	764	
Shale			764	795	
Sandy Shale			795	800	
Slate - Soft			800	826	
Lime - Hard			826	839	
Black Slate			839	845	

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FEB 20 1987

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

(Attach separate sheets as necessary)

Well Operator \_\_\_\_\_  
By: \_\_\_\_\_  
Date: \_\_\_\_\_

over →

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."

MAR 02 1987

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

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
(2)					
Slate			845	855	
White Sand - Cow Run			855	874	
Slate			874	915	
White Sand - 2nd Cow Run			915	933	Smell of Oil
Slate			933	940	
Sand			940	945	
Sandy Shale			945	953	
White Sand			953	970	
Black Shale			970	996	
Sand			996	1005	
Sand & Lime			1005	1020	
Black Shale			1020	1124	
Sand			1124	1129	
Lime			1129	1133	
Shale			1133	1144	
First Salt Sand			1144	1200	
Blue Sand			1200	1223	
Black Shale			1223	1248	
White Sand - Soft 2nd Salt			1248	1305	
Shale			1305	1337	
Sand - White 3rd Salt			1337	1357	
Shale & Lime			1357	1363	
White Sand			1363	1377	
Gray Sand - Hard			1377	1397	
Sandy Shale			1397	1410	
Black Shale			1410	1457	
Sandy Lime			1457	1471	Smell of Oil
White Sand - Maxon			1471	1498	Show of Gas
Sandy Shale			1498	1518	
Black Shale			1518	1527	
Black Lime - Hard			1527	1535	
Big Lime - Hard			1535	1620	
Keener Sand			1620	1635	Show of oil

**RECEIVED**  
FEB 20 1987

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

Ran 8 5/8" Casing to 1,147'

(Attach separate sheets as necessary)

Lauderman Oil & Gas  
Well Operator

By: 

Date: July 25, 1982

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."

(Obverse)

(Revised 3-81)



Farm GLYDIS BONNER ESTATE  
API # 47-095- 028 978  
Date 12/23/81

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

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil  Gas   
(If "Gas", Production  Underground storage  Deep  Shallow

LOCATION: Elevation: 742 Watershed: MIDDLE ISLAND CREEK  
District: UNION County: TYLER Quadrangle: BENS RUN

WELL OPERATOR LAUDERMAN OIL & GAS DRILLING DESIGNATED AGENT PHILLIP MORGAN  
Address P.O. BOX 266 Address JAME  
PADEN CITY, W.VA. 26129

OIL AND GAS ROYALTY OWNER GLYDIS BONNER COAL OPERATOR N/A  
Address 1848 PERSHING WAY, Address \_\_\_\_\_  
MORROW, GA. 30260  
Acreage 50

SURFACE OWNER GLYDIS BONNER ESTATE COAL OWNER(S) WITH DECLARATION ON RECORD:  
Address JAME NAME N/A  
Acreage 50 Address \_\_\_\_\_

FIELD SALE (IF MADE) TO:  
NAME N/A COAL LESSEE WITH DECLARATION ON RECORD:  
Address \_\_\_\_\_ NAME N/A  
Address \_\_\_\_\_

OIL AND GAS INSPECTOR TO BE NOTIFIED:  
NAME PHILLIP TRACY  
Address RT. 23  
ALMA, W.VA. 26320  
Telephone 304-758-4573

**RECEIVED**

JAN 15 1982

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  other contract  dated JAN 26, 1981, to the undersigned well operator from DENZIL BONNER.

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

Recorded on Nov 9, 1981, in the office of the Clerk of County Commission of TYLER County, West Virginia, in 229 Book at page 287. A permit is requested as follows:

PROPOSED WORK: Drill  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 Dept. 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**

LAUDERMAN OIL & GAS DRILLING CO.  
Well Operator

By: \_\_\_\_\_  
Its: \_\_\_\_\_



PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) \_\_\_\_\_

Address \_\_\_\_\_

GEOLOGICAL TARGET FORMATION MIDDLE DEVONIAN (OHIO SHALE)  
Estimated depth of completed well 5999 feet. Rotary  Cable tools   
Approximate water strata depths: Fresh, 90 feet; salt, 1600 feet.  
Approximate coal seam depths: N/A  
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 Drill- ling		
Conductor								Kinds
Fresh water	<u>11 3/4</u>	<u>ERW</u>	<u>37</u>	<input checked="" type="checkbox"/>		<u>200 FOR OFFSHORE TOOLS</u>		
Coal	<u>8 9/8</u>		<u>32</u>	<input checked="" type="checkbox"/>		<u>840' FOR AIR. For Surfaces</u>		Sizes
Intermed.								
Production Tubing	<u>4 1/2"</u>	<u>CW</u>	<u>10.5</u>	<input checked="" type="checkbox"/>		<u>CEMENTED TO T.D. OF WELL</u>		Depths set
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-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 9-18-82.

[Signature]  
Deputy Director - Oil & Gas Division

[Signature]

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: JAN 13, 1981.

[Signature]

By: Agent

Its: \_\_\_\_\_

RECEIVED  
MAR 30 1987



1) Date: March 23, 1987  
 2) Operator's Well No. #1 W  
 3) API Well No. 47 95 0978 -FRAC  
 State County Permit

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

- 4) WELL TYPE: A Oil XX / Gas XX /  
 B (If "Gas", Production \_\_\_\_\_ / Underground storage \_\_\_\_\_ / Deep \_\_\_\_\_ / Shallow XX /)
- 5) LOCATION: Elevation: 742' Watershed: Middle Island Creek  
 District: Union 604 C County: Tyler 095 Quadrangle: Bens Run 241
- 6) WELL OPERATOR Hi-West Petroleum Exploration & CODE: 219-78 7) DESIGNATED AGENT Karen Sayer  
 Address P. O. Box 731 Address 4 1/2 Street  
Marietta, Ohio 45750 Williamstown, WV 26187
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Robert Lowther 9) DRILLING CONTRACTOR:  
 Address General Delivery Name Gerald W. Lauderman  
Middlebourne, WV 26149 Address 101 E. Madison St.  
Paden City, WV 26159
- 10) PROPOSED WELL WORK: Drill \_\_\_\_\_ / Drill deeper \_\_\_\_\_ / Redrill \_\_\_\_\_ / Stimulate XX /  
 Plug off old formation \_\_\_\_\_ / Perforate new formation \_\_\_\_\_  
 Other physical change in well (specify) \_\_\_\_\_
- 11) GEOLOGICAL TARGET FORMATION, TD 1635' ?  
 12) Estimated depth of completed well, \_\_\_\_\_ feet  
 13) Approximate strata depths: Fresh, \_\_\_\_\_ feet; salt, \_\_\_\_\_ feet.  
 14) Approximate coal seam depths: \_\_\_\_\_ 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									
Production									Depths set
Tubing	SEE ENCLOSED COMPLETION REPORT								
Lin...									Perforations:
									Top Bottom

Rework: Shooting with 40 quarts of Nitro from 1620' to 1635'

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-095-0978-FRAC W Date April 1 19 87

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 April 1, 1989 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>Single</u>	Agent: <u>[Signature]</u>	Plat: <u>[Signature]</u>	Casing: <u>[Signature]</u>	Fee: <u>538</u> <u>190</u>	WPCP: <u>[Signature]</u>	S&P: <u>[Signature]</u>	Other: <u>[Signature]</u>
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NOTE: Keep one copy of this permit posted at the drilling location.

[Signature]  
 Director, Division of Oil and Gas File

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