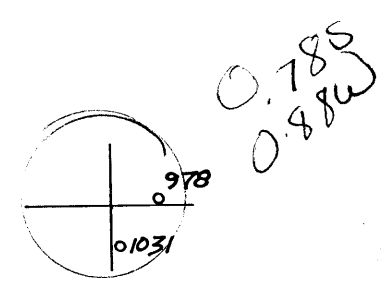
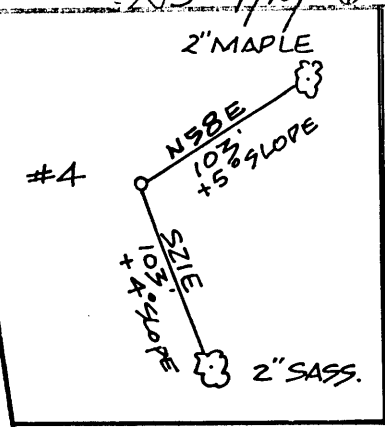
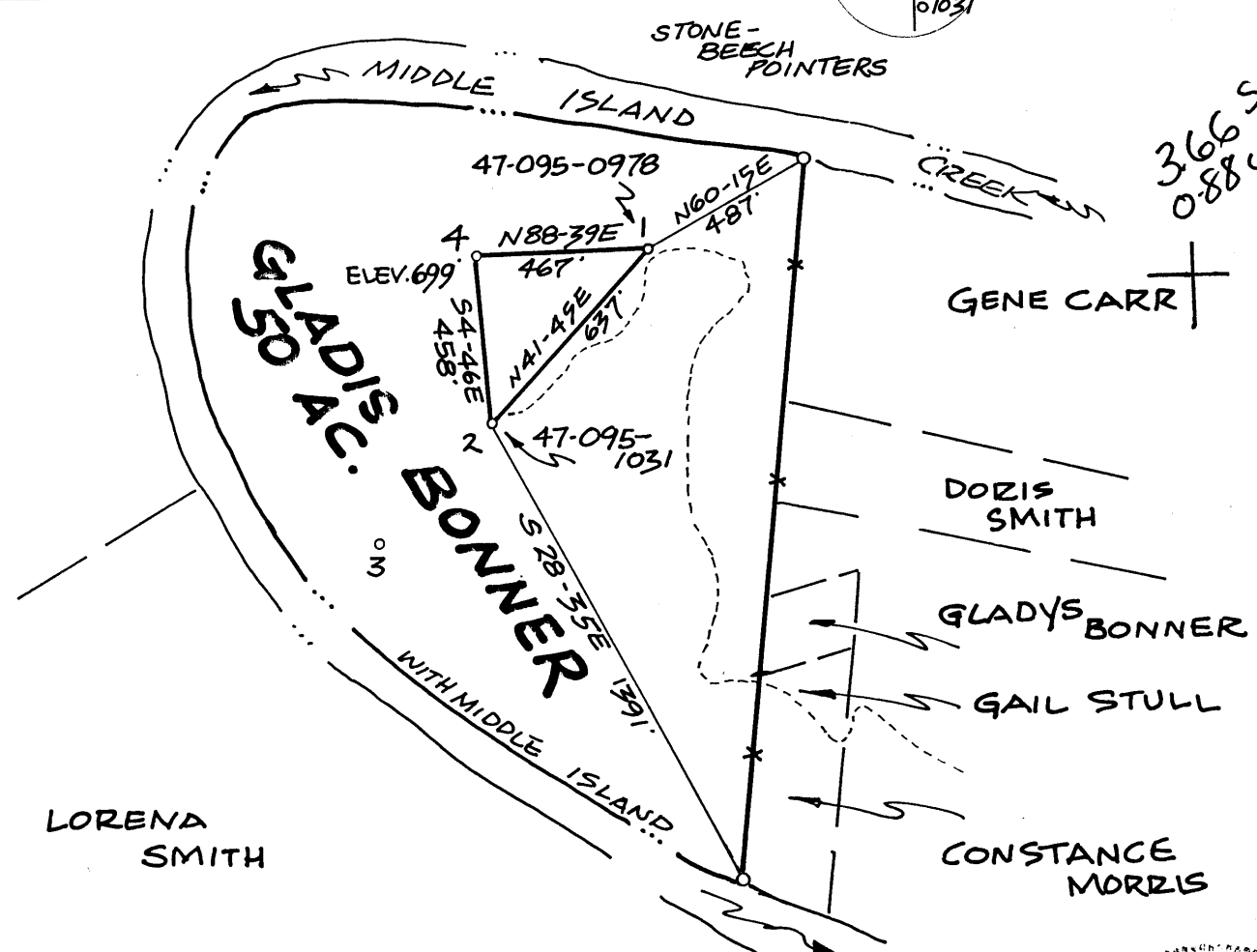


AS 9/10/86

4570' 39 30
LATITUDE 39° 27' 30"



LONGITUDE 81° 00' 4080'



FILE NO. MB1-9
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION ROAD 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 H. Moore
 R.P.E. _____ L.L.S. 551



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



DATE 9 SEPTEMBER, 19 85
 OPERATOR'S WELL NO. 4
 API WELL NO. 47-095-1152
 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 699' WATER SHED MIDDLE ISLAND CREEK
 DISTRICT UNION 6 COUNTY TYLER
 QUADRANGLE BENS RUN 241 116 NE3
 SURFACE OWNER GLADIS BONNER ESTATE ACREAGE 50
 OIL & GAS ROYALTY OWNER GLADIS BONNER ESTATE 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 MARCELLUS ESTIMATED DEPTH 5990'
 WELL OPERATOR HI-WEST PETRO. EXP. DESIGNATED AGENT KAREN SAYER
 ADDRESS 469 N. ORANGE AVE 604 ADDRESS 4 1/2 STREET
ORLANDO, FLORIDA 32801 WILLIAMSTOWN, W.VA. 26187

SEP 22 1986



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(Rev. 8-81)
NOV 17 1986

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

State of West Virginia
Department of Mines
Oil and Gas Division

Date October 30, 1986
Operator's Well No. Bonner #4
Farm Denzil Bonner Lease
API No. 47 - 095 - 1152

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: 699' Watershed Middle Island Creek
District: Union County Tyler Quadrangle Bens Run

COMPANY Hi-West Petro-Exploration
ADDRESS P.O. Box 1062, Marietta, Ohio 45750
DESIGNATED AGENT Karen Sayer
ADDRESS 4½ Street, Williamstown, WV 26187
SURFACE OWNER Denzil Bonner
ADDRESS 667 Knollwood Drive, Mt. Airy, NC 27030
MINERAL RIGHTS OWNER Same
ADDRESS Same

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8			
8 5/8	409'	Yes	Cemented to Surface
7	1449'	Yes	No
5 1/2			
4 1/2			
3			
2			
Liners used			

OIL AND GAS INSPECTOR FOR THIS WORK
Robert Lowther ADDRESS General Delivery Middlebourne, WV 26149
PERMIT ISSUED September 17, 1986
DRILLING COMMENCED September 18, 1986
DRILLING COMPLETED September 20, 1986
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

GEOLOGICAL TARGET FORMATION Keener & Big Injun Depth 1600' feet
Depth of completed well 1620' feet Rotary XX / Cable Tools
Water strata depth: Fresh 90'-110' feet; Salt 323'-345' feet ^{Sulfur}
Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Keener Pay zone depth 1564' - 1580' feet
Gas: Initial open flow 40,000 Mcf/d Oil: Initial open flow 2 Bbl/d
Final open flow 125,000 Mcf/d Final open flow 15 Bbl/d
Time of open flow between initial and final tests 24 hours
Static rock pressure 550 psig (surface measurement) after 12 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

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

Shot with 45 Quarts of Nitro over 15' Interval

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Clay & Shale			0	90	
Sand			90	125	Fresh Water
Shale			125	220	
Lime			220	230	
Sand			230	240	
Shale			240	320	
Sand			320	350	Sulfur Water
Shale			350	500	
Slate			500	650	
Sand			650	670	
Shale			670	690	
Sand			690	720	
Shale & Lime			720	790	
Sand			790	820	
Shale			820	887	
Sand			887	910	
Shale & Lime			910	1020	
Sand			1020	1063	
Shale			1063	1111	
Slate & Shale			1111	1136	
Sand			1136	1202	
Slate & Shale			1202	1321	
Sand			1321	1366	
Shale			1366	1420	
Sand			1420	1470	7" Casing to 1449'
Lime			1470	1544	
Sand			1544	1580	<u>Keener</u> - Oil & Gas
Shale			1580	1602	
Sand			1602	1622 TD	

(Attach separate sheets as necessary)

HE-WEST PETROLEUM É EXPLORATION
Well Operator

By: Robert G. [Signature]
Date: OCTOBER 30, 1986

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."

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DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY
STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, OIL AND GAS DIVISION

1) Date: September 11, 19 86
2) Operator's Well No. Bonner #4
3) API Well No. 47 095-1152
State County Permit

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: 699' Watershed: Middle Island Creek
District: Union 604 6 County: Tyler Quadrangle: Bens Run 141
- 6) WELL OPERATOR Robert J. Lemon DBACODE: 21978 7) DESIGNATED AGENT Karen Sayer
Address Hi-West Petro-Exploration Address 4 1/2 Street
P. O. Box 1062, Marietta, Ohio 45750 Williamstown, W.V. 26187
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Robert A. Lowther
Address General Delivery
Middlebourne, WV 26149
- 9) DRILLING CONTRACTOR: Name R. Wolfe Oil & Gas
Address 11 Pleasantview Drive
Athens, Ohio 45701
- 10) PROPOSED WELL WORK: Drill XX / Drill deeper _____ / Redrill _____ / Stimulate XX /
Plug off old formation _____ / Perforate new formation _____ /
Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Ohio Shale 441
- 12) Estimated depth of completed well, 5990' feet
13) Approximate trata depths: Fresh, 800' feet; salt, 600' feet.
14) Approximate coal seam depths: _____ Is coal being mined in the area? Yes _____ / No XX /

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	Size	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS	
		Grade	Weight per ft.	New	Used	For drilling		Left in well	Kinds
Conductor	10 3/4"					350'		CTS	Kinds Neat
Fresh water									
Coal									Sizes
Intermediate	7"					1500'		CTS	
Production						5990'	5990'	450 Sacks	Depths set or as req.
Tubing									by rule 15.01
Lin.									Perforations:
									Top Bottom

**OFFICE USE ONLY
DRILLING PERMIT**

Permit number 47-095-1152

September 16 19 86
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 September 16, 1988 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <input checked="" type="checkbox"/>	Agent: <u>AS</u>	Plat: <u>AS</u>	Casing: <u>AS</u>	Fee: <u>250.6</u> <u>280.2</u>	WPCP: <u>AS</u>	S&E: <u>AS</u>	Other: _____
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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.

7057