



1) Date: February 4, 1983  
 2) Operator's Well No. Mon-Power 4  
 3) API Well No. 47 073 1594  
 State County Permit

DRILLING CONTRACTOR:

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

Union Drilling, Inc.  
P.O. Drawer 40  
Buckhannon, WV 26201

OIL AND GAS WELL PERMIT APPLICATION

- 4) WELL TYPE: A Oil  / Gas \_\_\_\_\_  
 B (If "Gas", Production \_\_\_\_\_ / Underground storage \_\_\_\_\_ / Deep \_\_\_\_\_ / Shallow \_\_\_\_\_)
- 5) LOCATION: Elevation: 976 Watershed: McElroy Run  
 District: Grant County: Pleasants Quadrangle: Willow Island 7.5
- 6) WELL OPERATOR Jenkins Energy Corp. 11) DESIGNATED AGENT Carl Davis  
 Address P.O. Box 980 Address P.O. Box 980  
Bridgeport, WV 26330 Bridgeport, WV 26330
- 7) OIL & GAS ROYALTY OWNER Monongahela Power Co. et al 12) COAL OPERATOR None  
 Address \_\_\_\_\_ Address \_\_\_\_\_  
 Acreage \_\_\_\_\_
- 8) SURFACE OWNER Monongahela Power Co. 13) COAL OWNER(S) WITH DECLARATION ON RECORD:  
 Address \_\_\_\_\_ Name None  
 Address \_\_\_\_\_  
 Name \_\_\_\_\_  
 Address \_\_\_\_\_
- 9) FIELD SALE (IF MADE) TO:  
 Address \_\_\_\_\_
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED  
 Name Robert Lowther  
 Address General Delivery  
Middlebourne, WV 26140
- 14) COAL LESSEE WITH DECLARATION ON RECORD:  
 Name None  
 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, Devonian Shale  
 17) Estimated depth of completed well, 976 5125 feet  
 18) Approximate water strata depths: Fresh, 70' feet; salt, None feet.  
 19) Approximate coal seam depths: None 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	
Conductor	11 3/4				X	90'	All	CTS	Kinds
Fresh water									
Coal									Sizes
Intermediate	8 5/8	J-55		X		950'	All	CTS	
Production	4 1/2	J-55		X		5125		550	Depths set
Tubing									
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: Patricia L. Moore  
 My Commission Expires January 13, 1993

Signed: Carlton Davis  
 Its: DESIGNATED AGENT

OFFICE USE ONLY  
DRILLING PERMIT

Permit number 47-073-1594 Date February 7 1983

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 October 7, 1983 unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond: <u>Blanket</u>	Agent: <u>ls</u>	Plat: <u>ls</u>	Casing: <u>ls</u>	Fee: <u>1313</u>
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[Signature]  
 Administrator, Office of Oil and Gas

Line Item Explanation

- 1) Date of Application
- 2) Your well name and number
- 3) To be filled out by office of oil & gas
- 4A) "Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of gravity, which are produced at the well in liquid form by ordinary production methods and which are not the result of condensation of gas after it leaves underground reservoirs: "Gas" means all natural gas and all other fluid hydrocarbons not defined as oil.
- 4B) "Shallow well" means any well drilled and completed in a formation above the top of the uppermost member of the "Onondaga Group" or a depth less than six thousand feet, whichever is shallower.  
"Deep well" means any well drilled and completed in a formation at or below the top of the uppermost member of the "Onondaga Group" or at a depth less than six thousand feet, whatever is shallower.
- 5) Where well is located
- 6) Before a permit can be issued in a corporation, company partnership, or fictitious name, the name must be registered with the Secretary of State Office
- 7) Use separate sheet if necessary
- 8) Present surface owner at time application is filed.
- 9) Optional
- 11) See Reg. 7.01 relating to code §22-4-1k
- 12) "Coal Operator" means any persons, firm, partnership, partnership association or corporation that proposes to or does operate a coal mine. See Note 24
- 13 & 14) As per §22-4-20; See Note 24
- 15) Work that will be attempted—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.
- 16) Anticipated formation for which well will be completed
- 17) Self explanatory
- 18) Depth to deepest freshwater, and shallowest salt water, taken from nearby wells corrected for differences in elevation
- 19) All coal seam depths
- 20) Proposed casing program and cementing refer to Code 22-4-5, 22-4-6, 22-4-7, 22-4-8, 22-4-8a Reg 9.01, 15.01, 15.02, 15.03, 15.04, 25.01, 25.02, 25.03, 25.04
- 21) Code 22-4-11(c) - In lieu of filing the lease or leases or other continuing contract or contracts, the applicant for a permit described herein may file the following:
  - (1) A brief description of the tract of land including the district and county wherein the tract is located;
  - (2) The identification of all parties to all leases or other continuing contractual agreements by which the right to extract, produce or market the oil or gas is claimed;
  - (3) The book and page number wherein each such lease or contract by which the right to extract, produce or market the oil or gas is recorded;
  - (4) A brief description of the royalty provisions of each such lease or contract.
- 22) Code 22-4-11(d) and 22-4-11(e).
- 23) 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.
- 24) **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 the receipt of this Application by the Department.**

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.

WAIVER

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 regulations.

Date: \_\_\_\_\_, 19\_\_\_\_\_

By \_\_\_\_\_

Its \_\_\_\_\_

State of West Virginia

Department of Mines  
Oil and Gas Division

#975

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME Jenkins Energy Corp. DESIGNATED AGENT Carl Davis

Address P.O. BOX 980, BRIDGEPORT, W.V. 26330 Address P.O. BOX 980, BRIDGEPORT, W.V.

Telephone 622-3837 Telephone 622-3837

OWNER MONONGAHELA POWER CO. SOIL CONS. DISTRICT UPPER OHIO

Revegetation to be carried out by Jenkins Energy Corp. (Agent)

This plan has been reviewed by Clayton Okio SCD. All corrections and additions become a part of this plan: 8/4/82 (Date)

Samuel R. Mason  
(SCD Agent)

ACCESS ROAD LOCATION

Structure DRAINAGE DITCH (A) Structure DIVERSION DITCH (1)

Material N/A Material EARTHEN

Ref. Manual 2-12 Page Ref. Manual 2-12

Structure CROSS DRAIN (B) Structure SEDIMENT BARRIER (2)

Material AS REQUIRED PER SECTION Material LOGS & BRUSH

Ref. Manual 2-1 Page Ref. Manual 2-16

Structure (C) Structure (3)

Material

Ref. Manual Page Ref. Manual

All structures should be inspected regularly and repaired if necessary. All commercial timber is to be cut and stacked and all brush and small timber to be cut and removed from the site before dirt work begins.

REVEGETATION

Treatment Area I & II

~~Treatment Area III~~

Lime 6.5 Tons/acre or correct to pH

Lime          Tons/acre or correct to pH

Fertilizer 600 lbs/acre (10-20-20 or equivalent)

Fertilizer          lbs/acre (10-20-20 or equivalent)

HAY 2 Tons/acre

Mulch          Tons/acre

KY-31 35 lbs/acre

Seed\*          lbs/acre

LADINO CLOVER 5 lbs/acre  
         lbs/acre

         lbs/acre  
         lbs/acre

Inoculate all legumes such as vetch, trefoil and clovers with the proper bacterium. Inoculate with 3X recommended amount.

PLAN PREPARED BY SMITH LAND SURVEYING

ADDRESS 111 SOUTH STREET


GLENVILLE W.V. 26351


PHONE NO. 462-5634

AS: Please request landowners' cooperation to protect new seedling for one growing season. Attach separate sheets as necessary for comments.

ATTACH OR PHOTOCOPY SECTION OF INVOLVED TOPOGRAPHIC MAP. SADRANGLE WILLOW ISLAND 7.5'

LEGEND



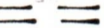









Well Site 

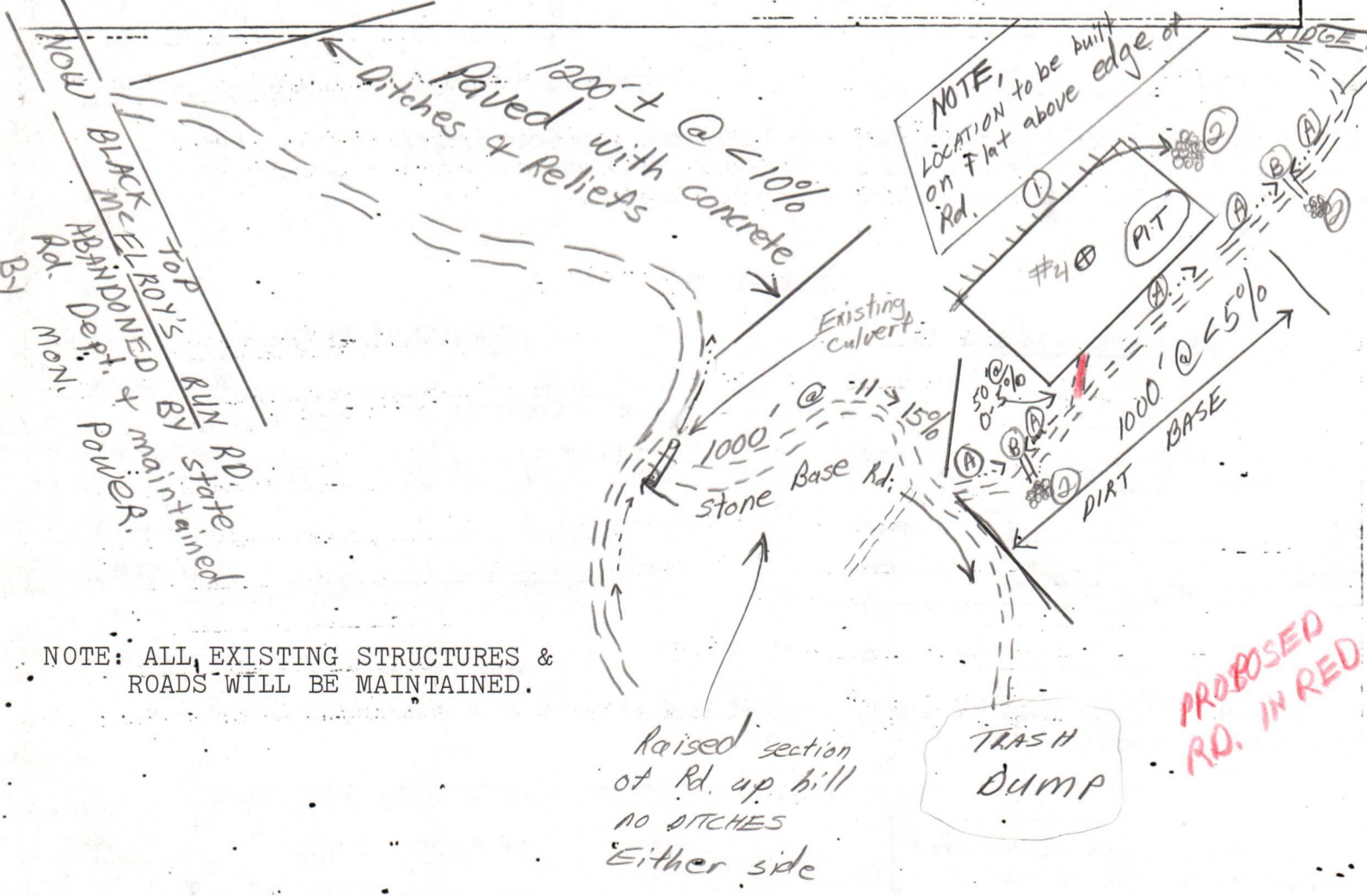
Access Road 

WELL SITE PLAN

etch to include well location, existing access road, roads to be constructed, wellsite, filling pits and necessary structures numbered or lettered to correspond with the first part of this plan. Include all natural drainage.

LEGEND

Property boundary 	Diversion 
Road 	Spring 
Existing fence 	Wet spot 
Planned fence 	Building 
Stream 	Drain pipe 
Open ditch 	Waterway 



NOTE: ALL EXISTING STRUCTURES & ROADS WILL BE MAINTAINED.

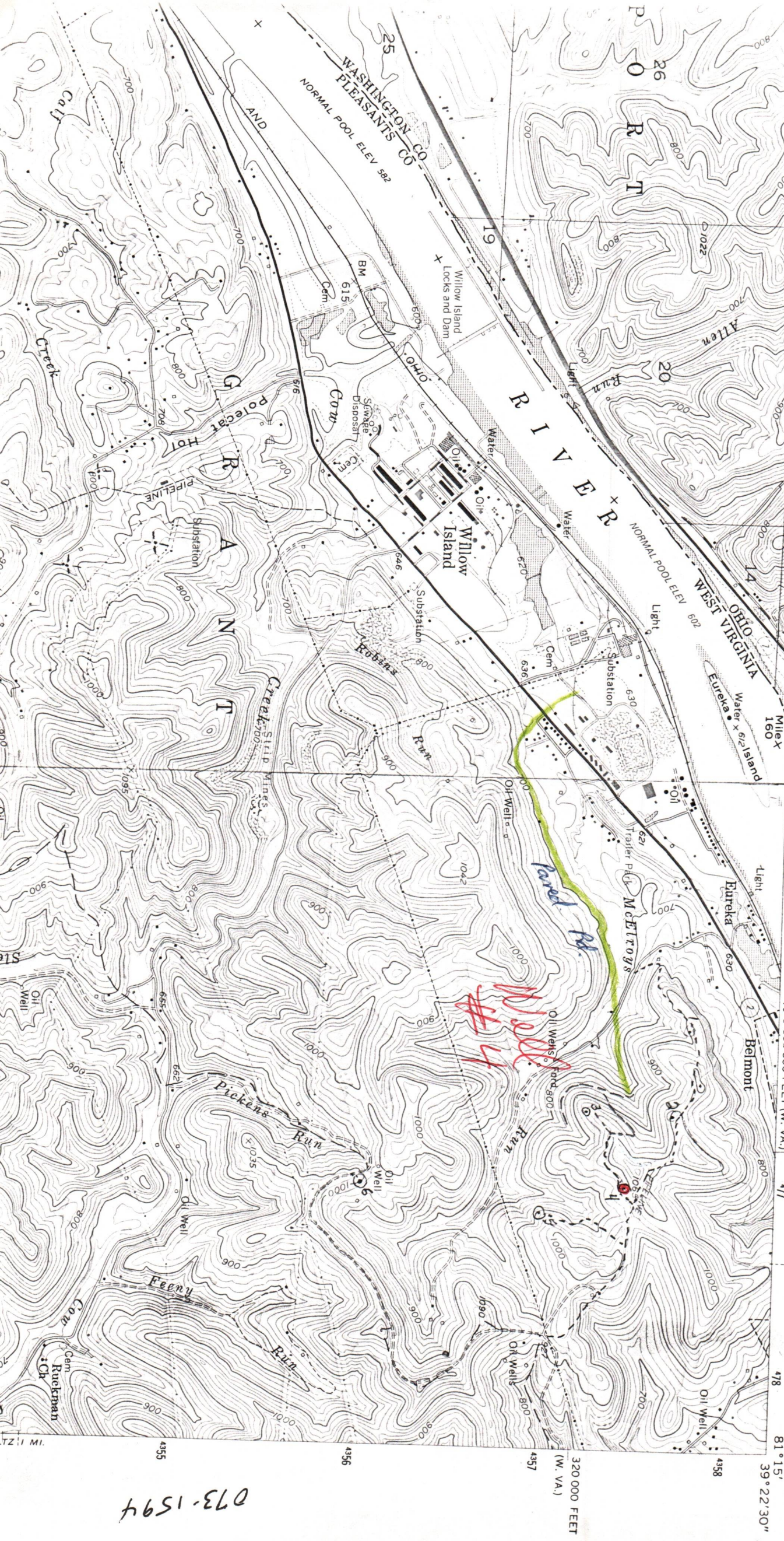
STATE OF WEST VIRGINIA  
 REPRESENTED BY THE  
 STATE OF WEST VIRGINIA GEOLOGICAL SURVEY  
 AND OTHER STATE AGENCIES

471 20'  
 472  
 4762 IV NE  
 (BELMONT)  
 NEW MATAMORAS 17 MI  
 NEWFORT 4.8 MI  
 17°30'45"

ST MARVS 4 MI  
 BELMONT 1 MI  
 476 1 500 000 FEET (W. VA.)

WILLOW ISLAND QUADRANGLE  
 WEST VIRGINIA—OHIO  
 7.5 MINUTE SERIES (TOPOGRAPHIC)  
 SE/4 MARIETTA 15' QUADRANGLE

4762 I NW  
 (RAVEN ROCK)



073-1594

320 000 FEET  
 (W. VA.)

Item 21

The lands to which this application applies are a part of a 1270.047 acre oil and gas lease, located in Pleasants Co. WV. The lands are a part of the Pleasants Power Station operated by Monongahela Power Company. The property is located in Grant District and lies southeast of State Route 2 on the waters of McElroy Run.

The lands to be developed are a part of that certain oil and gas lease by and between MONONGAHELA POWER COMPANY, an Ohio corporation, THE POTOMAC EDISON COMPANY, a Maryland and Virginia corporation, and WEST PENN POWER COMPANY, a Pennsylvania corporation, as lessors and GENE STALNAKER, INC. as lessee, recorded in Book 176, Page 88 in the County Clerks Office, Pleasants Co. WV. Said lease being further assigned to COLBURN ENERGY CORPORATION, a Delaware corporation which assignment of oil and gas lease is recorded in Book 178, Pages 526 to 552 in the County Clerks Office of Pleasants Co., WV.

JENKINS ENERGY CORPORATION rights to the leasehold estate are derived from a Drilling and Operating Agreement dated December 21, 1982. This agreement designates Jenkins Energy Corporation as operator of the property for and in behalf of Colburn Energy Corporation. This contract is not of record. Lessors retain 15.25% of the market value of all oil and gas produced as a royalty.

ITEM #21 EXTRACTION RIGHTS

CODE 22-4-11 (C)

Attachment to Form IV-2. (6/82)

Oil and Gas Well Permit Application



# NOWSCO

## WELL SERVICE

TREATMENT REPORT  
CEMENTING

DATE: 2-19-83

SERVICE ORDER NO.:

Customer's Name <u>Jenkins Energy Corp.</u>	Well Name <u>Mon-Power #4</u>	Permit No. <u>1594</u>
Address <u>P.O. Box 980</u> <u>Bridgeport, W.Va 26330</u>	Location: Twp. _____ County <u>Plasants</u> State <u>WVA</u>	
	Contractor <u>Stalwater #5</u>	Field <u>Beimont.</u>

TYPE OF JOB Surface  Intermediate  Production  Liner  Abandonment   
 Multistage  Plug Back  Squeeze  Pumping  Other

### WELL DATA

Hole: Size 11" INCH Total Depth 1154 FT. Mud Type \_\_\_\_\_ Viscosity \_\_\_\_\_ CP Density \_\_\_\_\_ LBS./GAL.

Casing or Liner:  
 Size 8 5/8 IN. Lin. Density 20 LBS./FT. Grade J-55 Depth 1121 FT.  
 Size \_\_\_\_\_ IN. Lin. Density \_\_\_\_\_ LBS./FT. Grade \_\_\_\_\_ Depth \_\_\_\_\_ FT.  
 Size \_\_\_\_\_ IN. Lin. Density \_\_\_\_\_ LBS./FT. Grade \_\_\_\_\_ Depth \_\_\_\_\_ FT.

Type of Plugs:  
 Top Size 8 5/8 IN.  
 \_\_\_\_\_ Wooden  Rubber  
 Btm. Size \_\_\_\_\_ IN.  
 \_\_\_\_\_ Wooden \_\_\_\_\_ Rubber

Drill Pipe or Tubing:  
 Size \_\_\_\_\_ IN. Lin. Density \_\_\_\_\_ LBS./FT. Grade \_\_\_\_\_ Depth \_\_\_\_\_ FT.  
 Size \_\_\_\_\_ IN. Lin. Density \_\_\_\_\_ LBS./FT. Grade \_\_\_\_\_ Depth \_\_\_\_\_ FT.  
 Size \_\_\_\_\_ IN. Lin. Density \_\_\_\_\_ LBS./FT. Grade \_\_\_\_\_ Depth \_\_\_\_\_ FT.

Type of Head:  
 Plug Loading Head  
 \_\_\_\_\_ Swage \_\_\_\_\_ Other

Perforations: From \_\_\_\_\_ FT. To \_\_\_\_\_ FT. Pump Out Lines:  Yes  No  Cement  Mud  Other \_\_\_\_\_  
 From \_\_\_\_\_ FT. To \_\_\_\_\_ FT. Float Holding:  Yes  No Returns:  Full  Partial  Nil  
 From \_\_\_\_\_ FT. To \_\_\_\_\_ FT. Type of Packer or Special Tool N/A Depth N/A FT.

Time arrived on location 2-19-83 11:30 A.M. Time left location 2-19-83 2 PM.

### CEMENT DATA

	Amount SKS.	Cement Blend	Additives	Density LBS./GAL.	Yield CU. FT./SK	Total Slurry Yield CU. FT.
Fill	<u>195</u>	<u>Poz</u>	<u>2% 6eL 2% CAOL<sub>2</sub></u>	<u>14.1</u>	<u>1.26</u>	<u>245.7</u>
Tail-In	<u>100</u>	<u>N.P.</u>	<u>3% CAOL<sub>2</sub></u>	<u>15.6</u>	<u>1.18</u>	<u>118.</u>
Fill						
Tail-In						

### CASING OR LINER DATA

### PLUG BACK DATA

Remarks	Time		Rate bbls./min.	Pressure, Psi		Volume pumped bbls.	Plug #	Top Ft.	Btm. Ft.	Cement Cu. Ft.	Displacement bbls.	Time Plug Down
	Start	Finish		Max.	Min.							
<u>on location Rigging Up</u>	<u>11:30</u>											
<u>Pump H<sub>2</sub>O ahead</u>	<u>12:24</u>	<u>12:33</u>	<u>5</u>	<u>100</u>	<u>100</u>	<u>45</u>						
<u>MIX 6% 6eL</u>	<u>12:33</u>	<u>12:38</u>	<u>5</u>	<u>100</u>	<u>100</u>	<u>25</u>						
<u>H<sub>2</sub>O SPACER</u>	<u>12:38</u>	<u>12:39</u>	<u>5</u>	<u>150</u>	<u>150</u>	<u>5</u>						
<u>MIX CEMENT</u>	<u>12:39</u>	<u>12:55</u>		<u>200</u>	<u>150</u>	<u>71</u>						
<u>Release Plug</u>	<u>12:55</u>	<u>12:57</u>		—	—	—						
<u>Displace Plug</u>	<u>12:57</u>	<u>1:14</u>		<u>500</u>	<u>100</u>	<u>71</u>						
<u>Bump Plug</u>	<u>1:14</u>	<u>1:17</u>		<u>500</u>	<u>100</u>	—						
<u>Shut in Head</u>	<u>1:17</u>											
<u>Rig Down</u>	<u>1:18</u>											

RECEIVED  
 FEB 25 1983  
 OIL AND GAS DIVISION  
 WV DEPARTMENT OF MINES

*C. Rouse*



CUSTOMER'S NAME Jenkins Energy Corp.  
 MAILING ADDRESS P.O. Box 980  
Bridgeport, W.Va. 26330

TYPE OF JOB/TREATMENT Surface 5 7/8  
 NAME OF WELL Mon Power # 4 PERMIT NO. 1594  
 LOCATION: TWP. \_\_\_\_\_ COUNTY Pleasants STATE W.Va FIELD \_\_\_\_\_

SERVICE INSTRUCTIONS: Cement 8 3/4 casing as instructed  
by customer representative on location

DATE 1983 YEAR MONTH DAY 2 19

CUSTOMER'S ORDER NO. \_\_\_\_\_  
 CONTRACTOR Stalwart # 5

I HAVE READ, UNDERSTOOD AND AGREED TO THE TERMS AND CONDITIONS OF THE REVERSE SIDE HEREOF AND REPRESENT THAT I HAVE FULL AUTHORITY TO ACCEPT SAME AND SIGN THIS ORDER.

RECEIPT OF MATERIALS & SERVICES ON THIS ORDER ARE HEREBY ACKNOWLEDGED.

CUSTOMER BY: S.M. Deed  
 AUTHORIZED AGENT  
C. Rouse  
 NOWSCO REPRESENTATIVE

PRICE LIST REFERENCE	MATERIAL & EQUIPMENT USED	QUANTITY	UNIT PRICE	AMOUNT	CUSTOMER COMMENTS		
719-645	Normal Cement	100	SACK				
	Thixotropic		SACK				
708-629	NOWSCO POZMIX (50-50)	195	SACK				
	Nowpoz		LBS.				
	Bentonite		LBS.				
717-684	Calcium Chloride 10.3 sacks	316	LBS.				
	T-10		LBS.				
	D-19, D-20		LBS.				
	R-5, R-55		LBS.				
	SAPP		LBS.				
	Cellophane		LBS.		UNIT NO.	EMP. NO.	OPERATOR
	Gilsonite		LBS.		1023		C. Rouse
	NaCl		LBS.		4001		J. Herbert
715-658	Rubber Plugs/Wooden Plugs 8 3/8	1 ea			4501		B. Morgan
717-689	Bentonite not blended	500	lbs				
701-602	Cement Service to	1121	FT.				
701-603	Additional Footage Ft. Basic						
	Multi Stage Cementing						
	Standby Cement Unit						
	Extra Trucks Used to FT.						
	Waiting Time		hrs.				
	Pump Time		hrs.				
717-773	Blending Charge	305.3	SACK				
717-774	Hauling 1.5 Ton Bulk Materials 10 Miles	123	T.M.				
	Cement Cartage on sacked cement						
705-622	Distance on Cement Unit	10					

**RECEIVED**  
 FEB 25 1983  
 OIL AND GAS DIVISION  
 WV DEPARTMENT OF MINES

STN. MGR. APPROVAL

TOTAL AMT.



IV-35  
(Rev 8-81)

RECEIVED  
MAY 23 1984



OIL & GAS DIVISION  
DEPT. OF MINES  
State of West Virginia  
Department of Mines  
Oil and Gas Division

Date March 28, 1983  
Operator's Well No. Four (4)  
Farm Monongahela Power  
API No. 47 - 073 - 1594

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 X / Underground Storage      / Deep      / Shallow X /)

LOCATION: Elevation: 976 Watershed McElroy Run of Ohio River  
District: Grant County Pleasants Quadrangle Willow Island 7.5

COMPANY Jenkins Energy Corp.  
ADDRESS P.O. Box 980, Bridgeport, W.va.  
DESIGNATED AGENT Carlton Davis  
ADDRESS P.O. Box 980, Bridgeport W.va.  
SURFACE OWNER Monongahela Power Co.  
ADDRESS St. Marys, W.va.  
MINERAL RIGHTS OWNER Monongahela Power Co.  
ADDRESS St. Marys, W.va.  
OIL AND GAS INSPECTOR FOR THIS WORK Robert Lowther  
ADDRESS Middlebourne, W.va.  
PERMIT ISSUED February 11, 1983  
DRILLING COMMENCED February 15, 1983  
DRILLING COMPLETED February 24, 1983  
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.
Size 20-16 Cond.			
11 <sup>3</sup> / <sub>4</sub>	90	90	to surface
9 5/8			
8 5/8	1111	1111	to surface
7			
5 1/2			
4 1/2		4761	500 sacks
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Hamilton Shale Depth 4910 feet  
Depth of completed well 4730 feet Rotary X / Cable Tools       
Water strata depth: Fresh 60 feet; Salt 1050 feet  
Coal seam depths:      Is coal being mined in the area?     

OPEN FLOW DATA

Producing formation Hamilton Shale Pay zone depth 4761 feet  
Gas: Initial open flow show Mcf/d Oil: Initial open flow      Bbl/d  
Final open flow 200 Mcf/d Final open flow 0 Bbl/d  
Time of open flow between initial and final tests 4 hours  
Static rock pressure 750 psig (surface measurement) after 72 hours shut in  
(If applicable due to multiple completion--)  
Second producing formation Brallier Shale Pay zone depth 3816 feet  
Gas: Initial open flow show Mcf/d Oil: Initial open flow show Bbl/d  
Final open flow 450 Mcf/d Oil: Final open flow show Bbl/d  
Time of open flow between initial and final tests 4 hours  
Static rock pressure      psig (surface measurement) after 72 hours shut in

(Continue on reverse side)

Pleasants 1594

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

RECEIVED

- 3 stages with 40 holes per stage each stage consisted of 750,000 scf N<sub>2</sub>
- First Stage - Perf 4390-4604, 40 holes, stimulated with 750,000 scf N<sub>2</sub>.
  - Second Stage - Perf 3860-4088, 40 holes, stimulated with 750,000 scf N<sub>2</sub>.
  - Third Stage - Perf 3263-3766, 40 holes, stimulated with 750,000 scf N<sub>2</sub>.
  - Fourth Stage - Perf 2123-3224, 38 holes, stimulated with 200,000 scf N<sub>2</sub>.
  - Fifth Stage - Perf 1918-1924, 10 holes, stimulated with 400,000 scf N<sub>2</sub>.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Top Soil, surface clay, sand, shale and lime streaks			0	1200	
Big Lime			1128	1200	Water, Oil, & Gas
Big Injun Sand			1218	1328	Oil & Gas
Berea Sand			1716	1724	Oil & Gas
Gantz Sand			1832	1844	
Gordon Sand			2108	2146	Oil & Gas
Brallier Shale			2608	3840	Oil & Gas
Huron Shale			3840	4480	Gas
Hamilton Shale			4480	4761	Gas

(Attach separate sheets as necessary)

Jenkins Energy Corp.

Well Operator

By:

Date:

*John Mitchell*  
11-10-83

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."

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

RECEIVED

FEB 25 1983

OIL AND GAS DIVISION  
WEST VIRGINIA DEPARTMENT OF MINES  
(KIND)

INSPECTOR'S WELL REPORT

Permit No. 073-1594

Company Jenkins Energy  
Address Bridgeport w/Bar  
Farm Monongahela power  
Well No. 4  
District Grant County Pleasant  
Drilling commenced 2-17-83  
Drilling completed \_\_\_\_\_ Total depth 3495  
Date shot \_\_\_\_\_ Depth of shot \_\_\_\_\_  
Initial open flow \_\_\_\_\_ /10ths Water in \_\_\_\_\_ Inch  
Open flow after tubing \_\_\_\_\_ /10ths Merc. in \_\_\_\_\_ Inch  
Volume \_\_\_\_\_ Cu. Ft.  
Rock pressure \_\_\_\_\_ lbs. \_\_\_\_\_ hrs.  
Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
Fresh water 340 feet \_\_\_\_\_ feet  
Salt water \_\_\_\_\_ feet \_\_\_\_\_ feet

CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Size			
16			Kind of Packer _____
13			
10			Size of _____
8 1/4			
6 3/8			Depth set _____
5 3/16			
3			Perf. top _____
2			Perf. bottom _____
Liners Used			Perf. top _____
			Perf. bottom _____

CASING CEMENTED 8 5/8 SIZE 1 1/2 No. FT. 2-19-83 Date  
NAME OF SERVICE COMPANY Nowco  
COAL WAS ENCOUNTERED AT \_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES

Drillers' Names \_\_\_\_\_

Remarks: Gas 1200-1210  
Gas 2130-2140  
Gas 2980  
oil 3003

2-22-83  
DATE

R.A. Lowther  
DISTRICT WELL INSPECTOR

Form 26  
2/16/82

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

INSPECTOR'S PLUGGING REPORT

Permit No. \_\_\_\_\_

Well No. \_\_\_\_\_

COMPANY \_\_\_\_\_ ADDRESS \_\_\_\_\_

FARM \_\_\_\_\_ DISTRICT \_\_\_\_\_ COUNTY \_\_\_\_\_

Filling Material Used \_\_\_\_\_

Liner	Location		Amount	Packer	Location		
PLUGS USED AND DEPTH PLACED			BRIDGES		CASING AND TUBING		
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION		RECOVERED	SIZE	LOST

Drillers' Names \_\_\_\_\_

Remarks:

\_\_\_\_\_ I hereby certify I visited the above well on this date.  
DATE

\_\_\_\_\_ DISTRICT WELL INSPECTOR



**RECEIVED**

JUN 27 1984

**State of West Virginia  
Department of Mines  
Oil and Gas Division  
Charleston 25305**

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

**FINAL INSPECTION REPORT  
INSPECTORS COMPLIANCE REPORT  
June 6, 1984**

COMPANY Jenkins Energy Corporation  
P. O. Box 980  
Bridgeport, West Virginia 26330

PERMIT NO 073-1594 (2-83)  
FARM & WELL NO Monongahela Power #4  
DIST. & COUNTY Grant/Pleasants

RULE	DESCRIPTION	IN COMPLIANCE	
		YES	NO
23.06	Notification Prior to Starting Work	<input checked="" type="checkbox"/>	<input type="checkbox"/>
25.04	Prepared before Drilling to Prevent Waste	<input checked="" type="checkbox"/>	<input type="checkbox"/>
25.03	High-Pressure Drilling	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16.01	Required Permits at Wellsite	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15.03	Adequate Fresh Water Casing	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15.02	Adequate Coal Casing	<input type="checkbox"/>	<input type="checkbox"/>
15.01	Adequate Production Casing	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15.04	Adequate Cement Strenght	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15.05	Cement Type	<input checked="" type="checkbox"/>	<input type="checkbox"/>
23.02	Maintained Access Roads	<input checked="" type="checkbox"/>	<input type="checkbox"/>
25.01	Necessary Equipment to Prevent Waste	<input checked="" type="checkbox"/>	<input type="checkbox"/>
23.04	Reclaimed Drilling Pits	<input checked="" type="checkbox"/>	<input type="checkbox"/>
23.05	No Surface or Underground Pollution	<input checked="" type="checkbox"/>	<input type="checkbox"/>
23.07	Requirements for Production & Gathering Pipelines	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16.01	Well Records on Site	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16.02	Well Records Filed	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7.05	Identification Markings	<input checked="" type="checkbox"/>	<input type="checkbox"/>

I HAVE INSPECTED THE ABOVE CAPTIONED WELL AND RECOMMEND THAT IT BE RELEASED:

SIGNED R.A. Lowther

DATE June 26, 1984

Your well record was received and reclamation requirements approved. In accordance with Chapter 22, Article 4, Section 2, the above well will remain under bond coverage for the life of the well.

T.H. r. B.B.  
Administrator-Oil & Gas Division

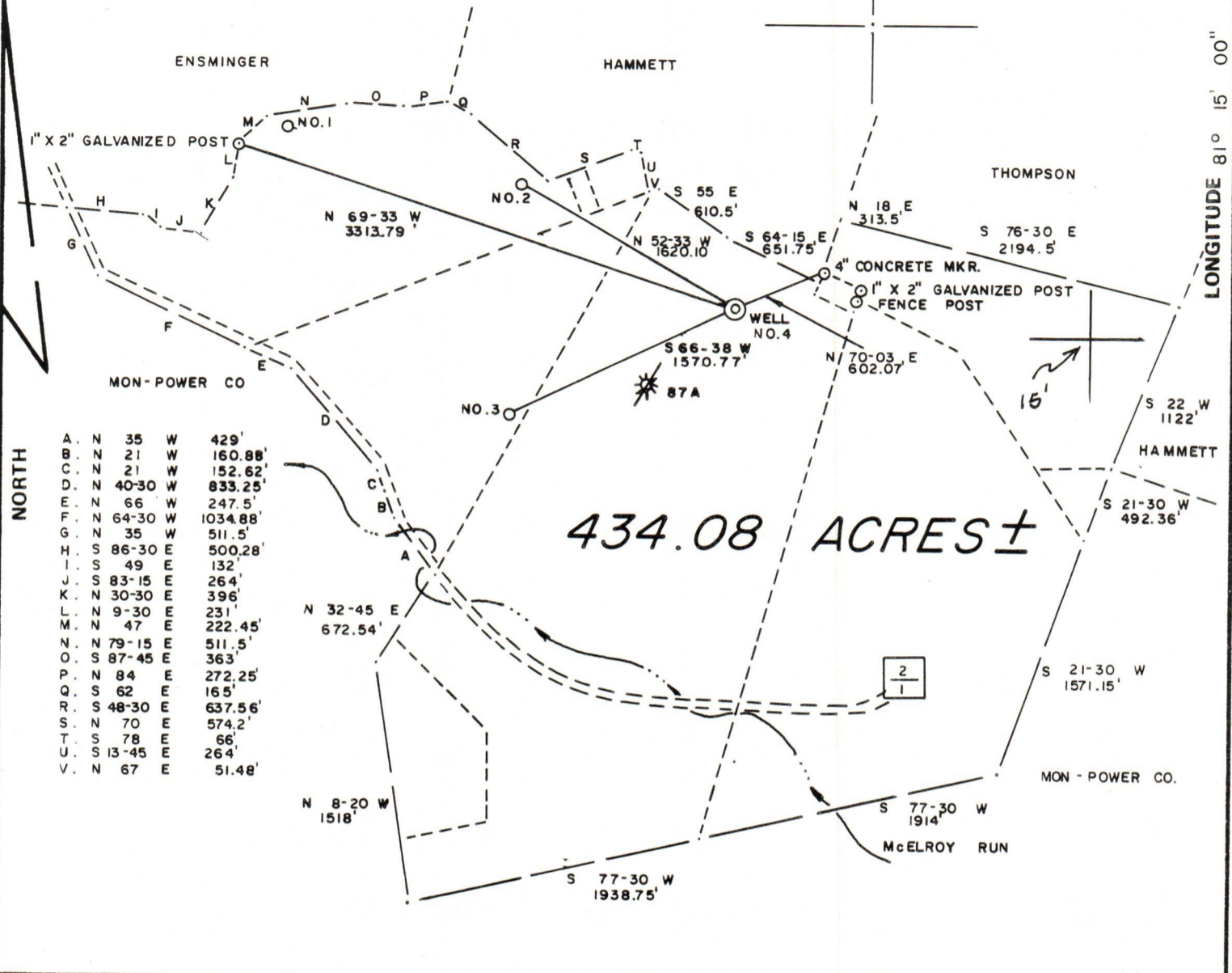
July 23, 1984

2-7-83

4600'

LATITUDE 39° 22' 30"  
39° 25' 00"

# MON-POWER LEASE WELL NO. 4



FILE NO. 8-1  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1 / 200  
 PROVEN SOURCE OF ELEVATION T.B.M. MON.-POWER CO. ELEV. 826.61'

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) Gregory A. Smith  
 R.P.E. \_\_\_\_\_ L.L.S. 677

PLACE SEAL HERE

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

DATE JULY 21, 1982  
 OPERATOR'S WELL NO. 4  
 API WELL NO. 47-073-1594  
 STATE 47 COUNTY 073 PERMIT 1594

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 976. WATER SHED McELROY RUN  
 DISTRICT GRANT COUNTY PLEASANTS  
 QUADRANGLE WILLOW ISLAND 7.5'

SURFACE OWNER MONONGAHELA POWER COMPANY ACREAGE 434.08  
 OIL & GAS ROYALTY OWNER MONONGAHELA POWER COMPANY LEASE ACREAGE 1158.22  
 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 DEVONIAN SHALE ESTIMATED DEPTH 5125'  
 WELL OPERATOR JENKINS ENERGY CORP DESIGNATED AGENT CARL DAVIS  
 ADDRESS P.O. BOX 980 BRIDGEPORT, W.V. 26330