

POCAHONTAS LAND CORPORATION
ORDER BOOK 38/385

01600

81037'30"

01550

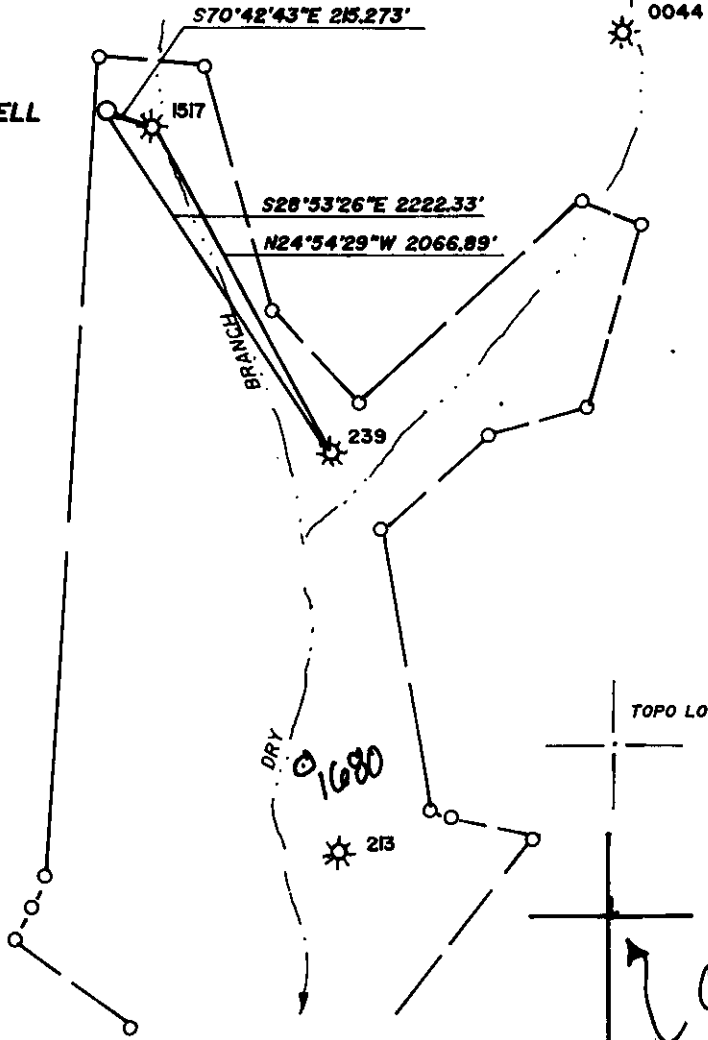
LONGITUDE 81°37'30"

12,750'

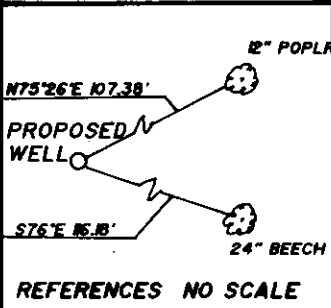
NORTH

COORDINATES
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-125666.596

1600

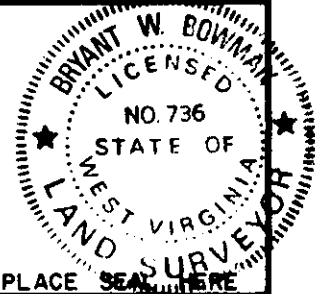


NO KNOWN WATER WELLS
WITHIN 1000'



FILE NO. _____
 DRAWING NO. _____
 SCALE $1"=1000'$
 MINIMUM DEGREE OF ACCURACY $1/3000$
 PROVEN SOURCE OF ELEVATION EXISTING WELL 1517
ELE 1547

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) [Signature]
 R. F. E. _____ L. L. S. 736



WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 #10 McJUNKIN ROAD
 NITRO, WEST VIRGINIA 25143-2506



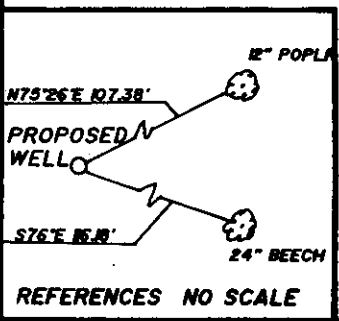
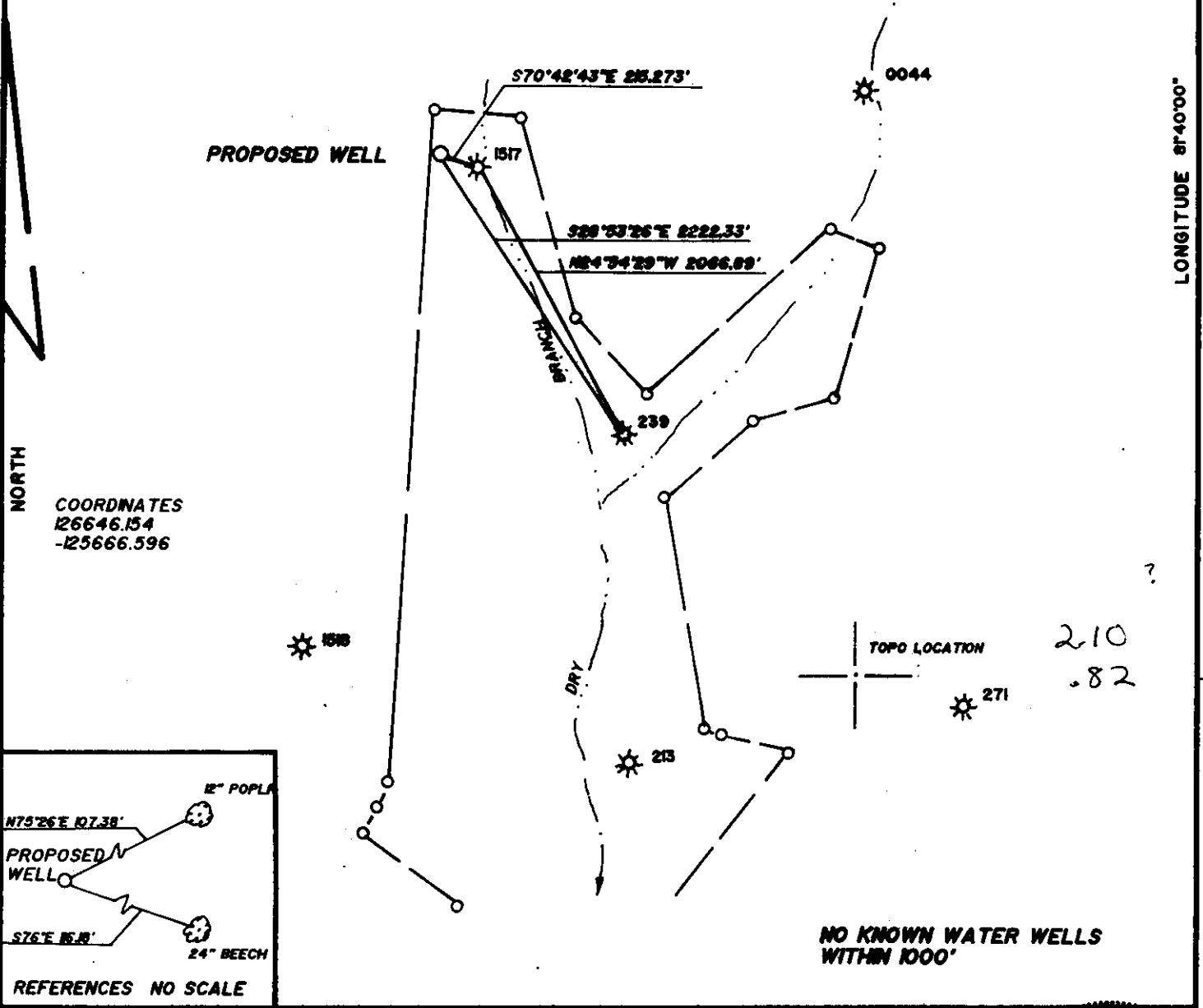
DATE AUGUST 3, 19 97
 OPERATOR'S WELL NO. 9C-68
 API WELL NO. 47-109-01668-C
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS", PRODUCTION X STORAGE ___ DEEP ___ SHALLOW ___)
 LOCATION: ELEVATION 1510 WATER SHED DRY BRANCH OF CLEAR FORK
 DISTRICT OCEANA COUNTY WYOMING
 QUADRANGLE OCEANA, WV 7.5'
 SURFACE OWNER POCAHONTAS LAND CORPORATION ACREAGE 4148 OF 34406±
 OIL & GAS ROYALTY OWNER POCAHONTAS LAND CORPORATION LEASE ACREAGE 34406±
 LEASE NO. _____
 PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR
 STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW
 FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
 PLUG AND ABANDON Cool CLEAN OUT AND REPLUG _____
 TARGET FORMATION _____ ESTIMATED DEPTH 1500'
 WELL OPERATOR PENNY VIRGINIA OIL & GAS CORP DESIGNATED AGENT DANA BLACKSHIRE
 ADDRESS 999 EXECUTIVE PARK BLVD., SUITE 300 ADDRESS PO BOX 460
KINGSPORT, TN 37660 RAVENCLIFF, WV 25913

WYO 1668-C

POCAHONTAS LAND CORPORATION
ORDER BOOK 38/385

LONGITUDE 81°40'00"

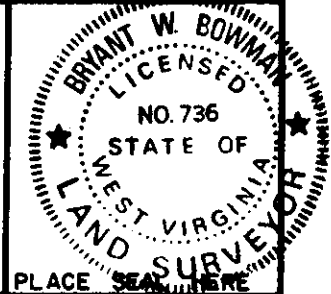


NO KNOWN WATER WELLS WITHIN 1000'

FILE NO. _____
 DRAWING NO. _____
 SCALE 1"=1000'
 MINIMUM DEGREE OF ACCURACY 1/2000
 PROVEN SOURCE OF ELEVATION EXISTING WELL 1517
 ELE 1547

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) Bryant W. Bowman
 R. P. E. _____ L. L. S. 736



WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 #10 McJUNKIN ROAD
 NITRO, WEST VIRGINIA 25143-2506



DATE AUGUST 3, 19 97
 OPERATOR'S WELL NO. 89-68
 API WELL NO. 47-109-01668-C
 STATE COUNTY PERMIT

WELL TYPE: OIL _____ GAS X LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS", PRODUCTION X STORAGE _____ DEEP _____ SHALLOW _____)

LOCATION: ELEVATION 1510 WATER SHED DRY BRANCH OF CLEAR FORK
 DISTRICT OCEANA COUNTY WYOMING
 QUADRANGLE OCEANA, WV 7.5'

SURFACE OWNER POCAHONTAS LAND CORPORATION ACREAGE 4148 OF 34406±
 OIL & GAS ROYALTY OWNER POCAHONTAS LAND CORPORATION LEASE ACREAGE 34406±
 LEASE NO. _____

PROPOSED WORK: DRILL X CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR
 STIMULATE _____ PLUG OFF OLD FORMATION _____ PERFORATE NEW
 FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON cool CLEAN OUT AND REPLUG _____ ESTIMATED DEPTH 1500'

TARGET FORMATION _____

WELL OPERATOR PENN VIRGINIA OIL & GAS CORP DESIGNATED AGENT DANA BLACKSHIRE
 ADDRESS 999 EXECUTIVE PARK BLVD, SUITE 300 ADDRESS PO BOX 460
KINGSPORT, TN 37660 RAVENCLIFF, WV 25913

WR-35

API # 47-109-01668-C

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: POCAHONTAS LAND CORP. Operator Well No.: 19C-68

LOCATION: Elevation: 1,610.00 Quadrangle: OCEANA

District: OCEANA County: WYOMING
Latitude: 11100 Feet South of 37 Deg. 45Min. 0 Sec.
Longitude 4350 Feet West of 81 Deg. 40 Min. 0 Sec.

Company: PENN VIRGINIA OIL AND GAS
999 EXEC. PARK BLVD., STE. 300
KINGSPORT, TN 37660-0000

Agent: ~~DANA BLACKSHIRE~~
Harry Jewell

Inspector: OFIE HELMICK
Permit Issued: 09/10/97
Well work Commenced: 10/20/97
Well work Completed: 01/23/98
Verbal Plugging
Permission granted on:
Rotary X Cable _____ Rig
Total Depth (feet) 1517'
Fresh water depths (ft) 2" stream at
160'. Damp at 558'.
Salt water depths (ft) _____

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
13 3/8"	35'	35'	0
9 5/8"	222'	222'	94
4 1/2"	1508'	1508'	491

Is coal being mined in area (Y/N)? N
Coal Depths (ft): _____

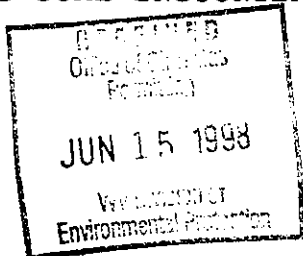
OPEN FLOW DATA

Poca 5, E Poca 6,
Poca 6, L Fire Creek,

Producing formation Fire Creek, Beckley Coals Pay zone depth (ft) _____
Gas: Initial open flow 0 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow show MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 450 psig (surface pressure) after N/A Hours

Second producing formation _____ Pay zone depth (ft) _____
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 pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.



For: PENN VIRGINIA OIL AND GAS CORPORATION

By: William M. Payne
Date: 6/17/98

WYO 1668 C

FORM WR-35R
(REVERSE)

PERMIT #: 47-109-01668-C
WELL#: 19C-68

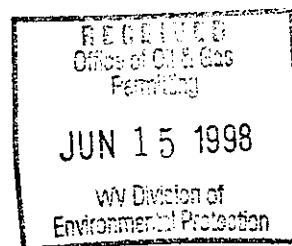
DETAILS OF PERFORATIONS, FRACTURING, OR PHYSICAL CHANGE, ETC

- Stage 1 Perforated the Poca 6 coal from 1418' - 1421' with 4 holes, the Lower Poca 6 coal from 1437' - 1439' with 3 holes and the Poca 5 coal from 1456' - 1459' with 4 holes. Breakdown with 750 gallons of 7.5% HCL acid and water. Treated with 119 barrels of water and 1500 lbs of 12/20 sand and 76,000 SCF of N2.
ATR: 33 BPM ATP: 3600 psi ISIP: 1600 psi
- Stage 2 Perforated the Beckley coal from 1318' - 1320' with 3 holes and from 1324' - 1328' with 5 holes, the Fire Creek coal from 1354' - 1356' with 3 holes, and the Lower Fire Creek coal from 1385' - 1388' with 4 holes. Breakdown with 750 gallons of 7.5% HCL acid and water. Treated with 157 barrels of water, 1400 lbs 12/20 sand and 310,000 SCF of N2.
ATR: 18 BPM ATP: 3760 psi ISIP: 3100 psi

Singe stage re-frac: added the following perforations to those listed in Stages 1 & 2 above:
Poca 5 (1457', 1458'), Lower Poca 6 (1438'), Poca 6 (1419', 1420'), Lower Fire Creek (1386', 1387'), Fire Creek (1355'), Lower Beckley (1319', 1325', 1326', 1327'). Total additional holes: 12. Breakdown with 1000 gallons 7.5% HCL acid and water. Treated with 401 barrels water, 7400 lbs 12/20 sand and 751,000 SCF N2.
ATR: 29 BPM ATP: 3850 psi ISIP: 2650 psi

<u>FORMATIONS</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>REMARKS</u>
Sand & Shale	0	130	
Coal	130	135	
Sand & Shale	135	148	
Coal	148	153	
Sand & Shale	153	252	
Coal	252	254	
Sand & Shale	254	326	
Coal	326	329	
Sand & Shale	329	470	
Coal	470	472	
Sand & Shale	472	550	
Sand	550	737	
Sand & Shale	737	1050	
Sand	1050	1200	
Sand & Shale	1200	1317	
Beckley Coal	1317	1323	
Sand & Shale	1323	1354	
Fire Creek Coal	1354	1356	
Sand & Shale	1356	1386	
Lower Fire Creek Coal	1386	1387	
Sand & Shale	1387	1419	
Poca 6 Coal	1419	1421	
Sand & Shale	1421	1437	
Lower Poca 6 Coal	1437	1438	
Sand & Shale	1438	1456	
Poca 5 Coal	1456	1458	
Sand & Shale	1458	1517	

Gas checks - No shows reported



DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

- 24209
- 1) Well Operator: PENN VIRGINIA OIL & GAS CORPORATION 37355(0) 518
- 2) Operator's Well Number: 19C-68 3) Elevation: 1610
- 4) Well type: (a) Oil / or Gas X /
 (b) If Gas: Production X / Underground Storage /
 Deep / Shallow /
- Issued 09/10/1997*
Expires 09/10/1999
- Proposed Target Formation(s): Beckley, Fire Creek, Poca 6, Poca 5 Coals
- Proposed Total Depth: 1500 feet
- Approximate fresh water strata depths: 150'
- Approximate salt water depths: N/A
- 9) Approximate coal seam depths: 100, 180, 220, 280, 430, to be tested: 1280, 1320
Comps of Oil & Gas
1380, 1410
- 10) Does land contain coal seams tributary to active mine? Yes / No X /
- 11) Proposed Well Work: Drill & complete CBM well in coals listed above
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS		Weight per ft.	For drilling	FOOTAGE INTERVALS Left in well	CEMENT Fill-up (cu. ft.)
	Size	Grade				
Conductor						<u>38CSR-18-11.3</u>
Fresh Water	<u>9 5/8</u>	<u>L.S.</u>	<u>26</u>	<u>200</u>	<u>200</u>	<u>65</u>
Coal						<u>38CSR-18-11.2.2</u>
Intermediate						
Production	<u>4 1/2</u>	<u>M-65</u>	<u>9.5</u>	<u>1500</u>	<u>1500</u>	<u>155</u>
Tubing						<u>38CSR-18-11.1</u>
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

For Office of Oil and Gas Use Only

10/10/24
27

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond _____ Agent
 (Type)

1) Date: August 03, 1997
2) Operator's well number
19C-68
3) API Well No: 47 - 109 - 1668-C
State County Permit

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served: 5) (a) Coal Operator:
- (a) Name Pocahontas Land Corp Name Eastern Associated Coal Corp
 Address PO Box 1517 Address 800 Laidley Tower
Bluefield, WV 24701 Charleston, WV 25324
- (b) Name _____ (b) Coal Owner(s) with Declaration
 Address _____ Name Pocahontas Land Corporation
 Address PO Box 1517
Bluefield, WV 24701
- (c) Name _____ Name _____
 Address _____ Address _____
- 6) Inspector Mr. Ofie Helmick (c) Coal Lessee with Declaration
 Address Post Office Box 398 Name Pioneer Coal Corporation
Brenton, WV 24818-0398 Address 1524 Kanawha Blvd., East
 Telephone (304)- 543-0764 Charleston, WV 25311

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

_____ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR

X Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through _____ on the above named parties, by:

- _____ Personal Service (Affidavit attached)
- X Certified Mail (Postmarked postal receipt attached)
- X Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator PENN VIRGINIA OIL & GAS CORPORATION
 By: C.M. Randolph
 Its: Vice President
 Address 999 Executive Park Blvd., Suite 300
Kingsport, TN 37660
 Telephone 1-423-392-0500

Subscribed and sworn before me this 21ST day of August, 1997

Kita Wilson Notary Public
 My commission expires 2-13-99

POCAHONTAS LAND CORPORATION
ORDER BOOK 38/385

01600

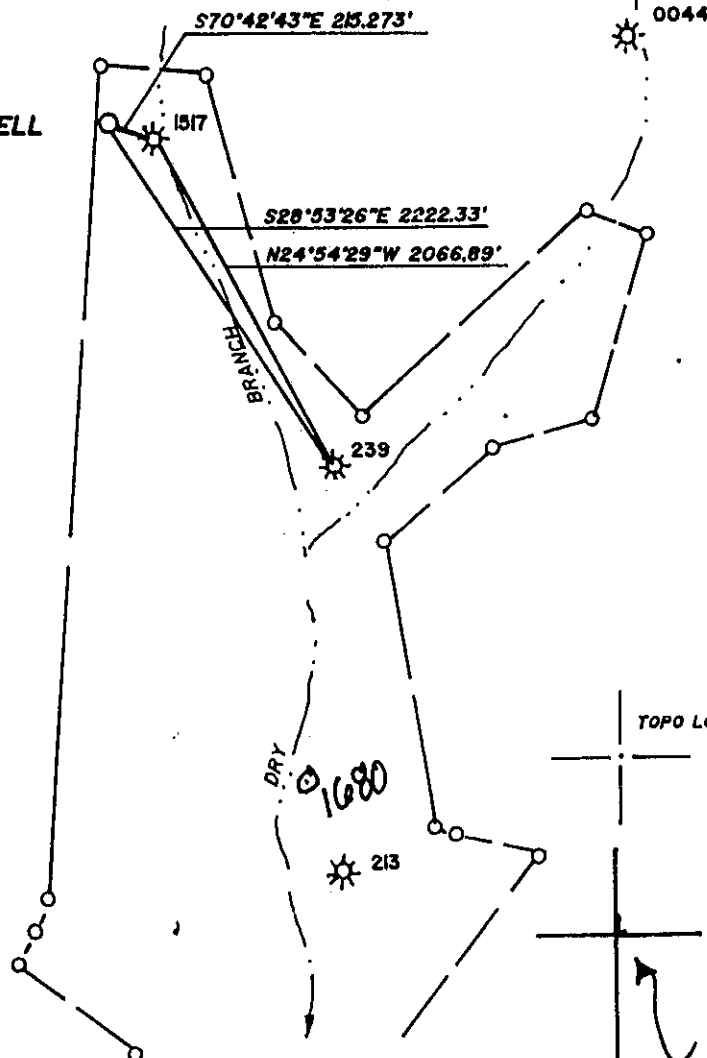
810 37' 30"

01550

NORTH

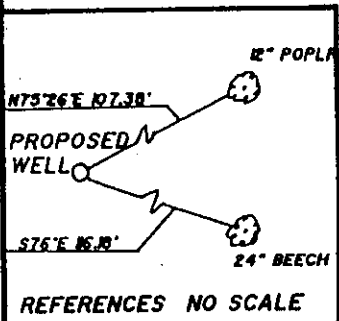
COORDINATES
126646.154
-125666.596

PROPOSED WELL



LONGITUDE 81°42'00"

12,750



TOPO LOCATION

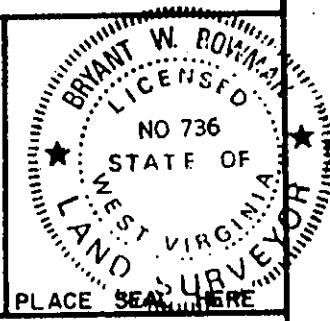
NO KNOWN WATER WELLS
WITHIN 1000'

*Corrected spot
12/24/98*

FILE NO. _____
 DRAWING NO. _____
 SCALE **1"=1000'**
 MINIMUM DEGREE OF ACCURACY **1/3000**
 PROVEN SOURCE OF ELEVATION **EXISTING WELL 1517**
ELE 1547

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) *[Signature]*

R. P. E. _____ L. L. S. **736**



WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 #10 McJUNKIN ROAD
 NITRO, WEST VIRGINIA 25143-2506



DATE **AUGUST 3,** 19 **97**
 OPERATOR'S WELL NO. **OC-68**
 API WELL NO. **47-109-01668-C-P**
 STATE COUNTY PERMIT

WELL TYPE: OIL _____ GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS", PRODUCTION STORAGE _____ DEEP _____ SHALLOW _____
 LOCATION: ELEVATION **1510** WATER SHED **DRY BRANCH OF CLEAR FORK**
 DISTRICT **OCEANA** COUNTY **WYOMING**
 QUADRANGLE **OCEANA, WV 7.5'**
 SURFACE OWNER **POCAHONTAS LAND CORPORATION** ACREAGE **4148 OF 34406±**
 OIL & GAS ROYALTY OWNER **POCAHONTAS LAND CORPORATION** LEASE ACREAGE **34406±**
 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 *COOL* CLEAN OUT AND REPLUG _____ ESTIMATED DEPTH **1500'**
 TARGET FORMATION _____
 WELL OPERATOR **PENNY VIRGINIA OIL & GAS CORP** DESIGNATED AGENT **DANA BLACKSHRE**
 ADDRESS **999 EXECUTIVE PARK BLVD., SUITE 300** ADDRESS **PO BOX 460**
KINGSPORT, TN 37660 **RAVENCLIFF, WV 25913**

WYO 1668-C-P