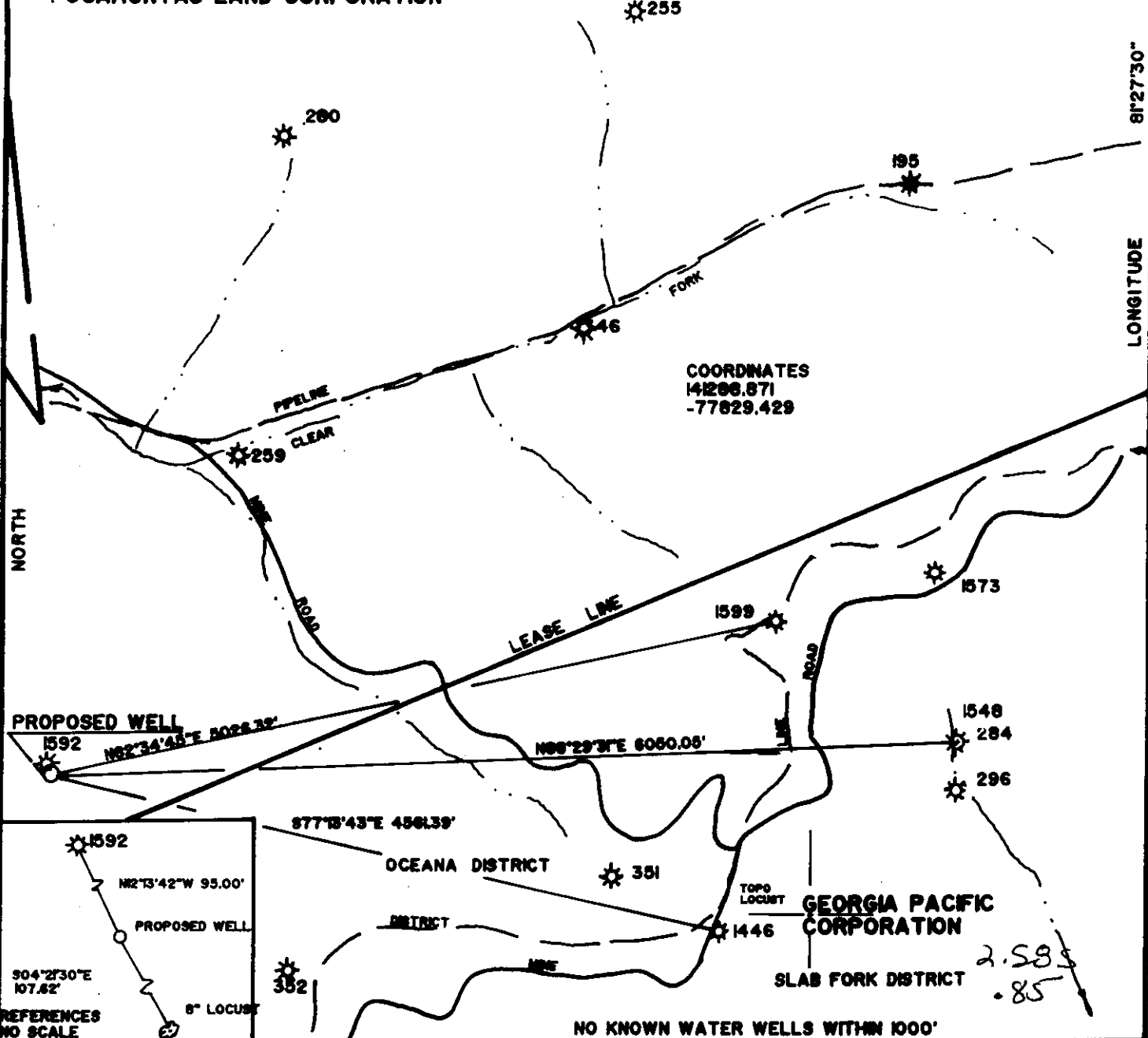


4500'

LATITUDE 37°47'30"

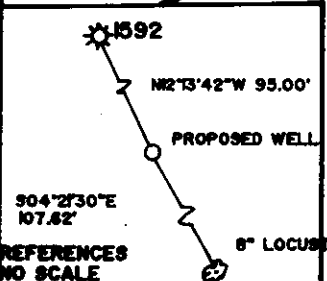
Amily 9/10/97

POCAHONTAS LAND CORPORATION



COORDINATES
141286.871
-77829.429

PROPOSED WELL
1592 N82°34'45\"/>



REFERENCES
NO SCALE

877°13'43\"/>

OCEANA DISTRICT

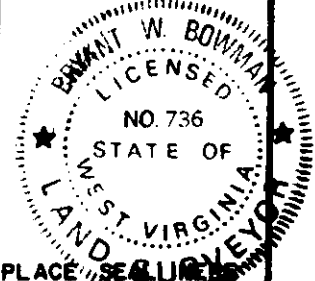
GEORGIA PACIFIC CORPORATION

SLAB FORK DISTRICT

NO KNOWN WATER WELLS WITHIN 1000'

FILE NO. _____
DRAWING NO. _____
SCALE **1\"/>**

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) *Edward S. 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 MAY 17, 1997
OPERATOR'S WELL NO. 13C-153
API WELL NO. _____
47 - 109 CH/666-C
STATE COUNTY PERMIT

WELL TYPE: OIL _____ GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
(IF "GAS", PRODUCTION STORAGE _____ DEEP _____ SHALLOW _____
LOCATION: ELEVATION 2740 WATER SHED CLEAR FORK
DISTRICT OCEANA COUNTY WYOMING
QUADRANGLE ARNETT, WV 7.8'
SURFACE OWNER POCAHONTAS LAND CORPORATION ACREAGE 34586.2
OIL & GAS ROYALTY OWNER POCAHONTAS LAND CORPORATION LEASE ACREAGE 34586.2
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) _____
Surrell, Littlehaleigh, H. Baker, Dinkley, Poca 4 & 3
PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
TARGET FORMATION _____ ESTIMATED DEPTH 2100' Coals.
WELL OPERATOR PENN VIRGINIA OIL & GAS CORP DESIGNATED AGENT DANA BLACKSHIRE
ADDRESS 999 EXECUTIVE PARK BLVD, SUITE 300 ADDRESS PO 480
KINGSPORT, TN 37660 RAVENCLIFF, WV 25993

SEP 12 1997

CHARLESTON BLUEPRINT 087163

WR-35

09-Sep-97
API # 47-109-01666 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.: 13C-153

LOCATION: Elevation: 2,740.00 Quadrangle: ARNETT

District: OCEANA County: WYOMING
Latitude: 13600 Feet South of 37 Deg. 47Min. 30 Sec.
Longitude 4500 Feet West of 81 Deg. 27 Min. 30 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: 10/24/97
Well work Completed: 01/14/98
Verbal Plugging
Permission granted on: _____
Rotary Cable _____ Rig
Total Depth (feet) 2111'
Fresh water depths (ft) _____

Salt water depths (ft) _____

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

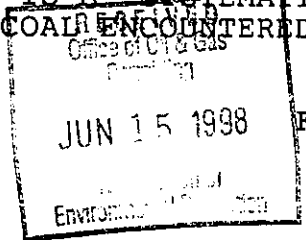
Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
9 5/8"	61'	61'	0
7"	799'	799'	169
4 1/2"	2084'	2084'	300

OPEN FLOW DATA

Beckley, U Beckley,
Producing formation L Raleigh, Sewell 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 N/A 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 COALS ENCOUNTERED BY THE WELLBORE.



For: PENN VIRGINIA OIL AND GAS CORPORATION

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

JUN 20 1998

WYO 10666 C

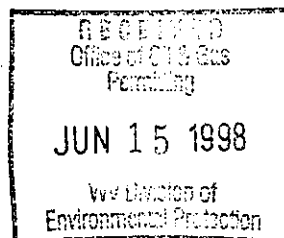
FORM WR-35R
(REVERSE)

PERMIT #: 47-109-01666-C
WELL #: 13C-153

DETAILS OF PERFORATIONS, FRACTURING, OR PHYSICAL CHANGE, ETC

- Stage 1 Perforated the Lower Poca 4 coal from 1952' - 1959' with 8 holes, the Poca 4 coal from 1921' -1923' with 3 holes and the Beckly coal from 1652' - 1658' with 7 holes. Breakdown with 1000 gallons of 7.5% HCL acid and water. Treated with 107 barrels water and 135,000 SCF of N2. Aborted frac at end of 75Q foam pad due to communication with this LC 153. Set CIBP above the Poca 4 and Lower Poca 4 perforations.
- Stage 1 (re-designed) Perforated the Upper Beckly coal from 1588' - 1590' with 3 holes, the Little Raleigh coal from 1459' - 1463' with 5 holes and the Sewell coal from 1399' - 1404' with 6 holes. (Beckley perforations from 1652' - 1658' with 7 holes included in treatment.) Breakdown with 1000 gallons of 7.5% HCL acid and water. Treated with 338 barrels of water, 26,700 lbs 12/20 sand and 532,000 SCF of N2.
ATR: 40 BPM ATP: 2295 psi ISIP: 1465 psi

<u>FORMATIONS</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>REMARKS</u>
Sand & Shale	0	310	
Coal	310	315	
Sand & Shale	315	330	
Coal	330	335	
Sand & Shale	335	684	
Coal	684	686	
Sand & Shale	686	1220	
Sand	1220	1335	
Sand & Shale	1335	1399	
Sewell Coal	1399	1403	
Sand & Shale	1403	1459	
Little Raleigh Coal	1459	1462	
Sand	1462	1572	
Shale	1572	1588	
Upper Beckley Coal	1588	1589	
Sand	1589	1652	
Beckley Coal	1652	1657	
Shale	1657	1810	
Sand	1810	1921	
Poca 4 Coal	1921	1922	
Sand & Shale	1922	1954	
Lower Poca 4 Coal	1954	1958	
Sand & Shale	1958	2117	



Gas check - No shows reported

STATE OF WEST VIRGINIA 109-1666 Page 1 of 1

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

- 24207
- 1) Well Operator: PENN VIRGINIA OIL & GAS CORPORATION 37355 (C) 218
- 2) Operator's Well Number: 13C-153 3) Elevation: 2740
- 4) Well type: (a) Oil / or Gas X / *Issued 09/10/1997*
 (b) If Gas: Production X / Underground Storage / *Expires 09/10/1999*
 Deep / Shallow /
- Proposed Target Formation(s): Sewell, Little Raleigh, U. Beckley, Beckley Poca 4 & Coals
- Proposed Total Depth: 2100 feet
- Approximate fresh water strata depths: 750
- Approximate salt water depths: N/A
- 9) Approximate coal seam depths: 300, 400, 1230, to be treated: 1350, 1460, 1560, 1850, 1920, 1950
- 10) Does land contain coal seams tributary to active mine? Yes / No X /
- 11) Proposed Well Work: Drill and Complete a Coalbed Methane Well with coals listed above
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS			CEMENT Fill-up (cu. ft.)
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor						<u>38CSR/91.3</u>
Fresh Water	<u>7</u>	<u>L.S.</u>	<u>17</u>	<u>800</u>	<u>800</u>	<u>135</u>
Coal						<u>38CSR/1611.2</u>
Intermediate						
Production	<u>4 1/2</u>	<u>M-65</u>	<u>9.5</u>	<u>2100</u>	<u>2100</u>	<u>220</u>
Tubing						<u>38CSR/1911.1</u>
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

For Office of Oil and Gas Use Only

1070 24
27

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond 6 Agent
 (Type)

Permitting
Office of Oil & Gas

1) Date: May 16, 1997
2) Operator's well number
130-153
3) API Well No: 47 - 100 - 1666 - C
State 100 County 1666 Permit C

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 Ranger Fuel Corporation
Address PO Box 1517 Address PO Box 4000
Bluefield, WV 24701 Lebanon, VA 24266
(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 _____
Brenton, WV 24818-0398 Address _____
Telephone (304)- 543-0764

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 Nelson Notary Public
My commission expires 2-13-99



West Virginia Department of Environmental Protection
Office of Oil and Gas
WELL LOCATION FORM: GPS

API: 47-109-01666-P WELL NO.: 13C-153

FARM NAME: Pocahontas Land Corporation

RESPONSIBLE PARTY NAME: Mr. Richard Waddell

COUNTY: Wyoming DISTRICT: Oceana

QUADRANGLE: Arnett

SURFACE OWNER: Pocahontas Land Corporation

ROYALTY OWNER: Penn Virginia Oil & Gas Corporation

UTM GPS NORTHING: 4178701.28

UTM GPS EASTING: 458256.38 GPS ELEVATION: 834.68

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

- Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
- Accuracy to Datum – 3.05 meters
- Data Collection Method:

Survey grade GPS _____: Post Processed Differential _____
Real-Time Differential _____

Mapping Grade GPS X: Post Processed Differential X
Real-Time Differential _____

WYO 1666 P

I the undersigned, hereby certify this data 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 Office of Oil and Gas.

Richard Waddell
Signature

Ops. Mgr.
Title

4-29-04
Date

