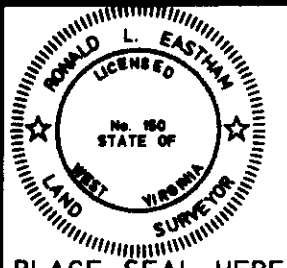


(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1: 25,994
 PROVEN SOURCE OF ELEVATION U.S.G.S. BM 'IT 8K8'
 Elev. = 2401.191

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 THE LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.

(SIGNED) *Ronald L. Eastman*
 R.P.E. _____ L.L.S. 100



STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION

DATE September 5, 19 97
 OPERATOR'S WELL NO. 37
 API WELL NO. 47-039-05176

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

LOCATION: ELEVATION 5795.9 WATER SHED Gibson Branch of Fiftymile Fork of Cabin Creek of the Kanawha River
 DISTRICT Cabin Creek COUNTY Kanawha
 QUADRANGLE Dorothy

SURFACE OWNER Carbon Fuel Company ACREAGE 8300
 OIL & GAS ROYALTY OWNER Carbon Fuel Company LEASE ACREAGE 8700
 LEASE NO. 9965

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 6500'
 WELL OPERATOR Eastern States Oil & Gas, Inc. DESIGNATED AGENT Robert Alley
 ADDRESS P.O. Box 2347 ADDRESS P.O. Box 2347
Charleston, WV 25328 Charleston, WV 25328

OCT 31 1997

6-6 262

FORM W.W.-6

COUNTY NAME

PERMIT

WR-35

24-Oct-97

API # 47- 39-05176

REC'D
DIVISION OF OIL & GAS

APR 07 1998

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

Well Operator's Report of Well Work

Farm name: CARBON FUEL COMPANY Operator Well No.: CARBON FUEL #37

LOCATION: Elevation: 1,573.53 Quadrangle: DOROTHY

District: CABIN CREEK County: KANAWHA
Latitude: 6810 Feet South of 38 Deg. 0 Min. 0 Sec.
Longitude 3910 Feet West of 81 Deg. 25 Min. 0 Sec.

Company: EASTERN STATES OIL & GAS,
2900 EISENHOWER AVE STE 300
ALEXANDRIA, VA 22314-0000

Agent: ROBERT G. ALLEY

Inspector: CARLOS HIVELY
Permit Issued: 10/27/97
Well work Commenced: 1/13/98
Well work Completed: 1/25/98
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5430'
Fresh water depths (ft) 90', 170'

Salt water depths (ft) 1185'

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 65', 129'

| Casing & Tubing Size | Used in Drilling | Left in Well | Cement Fill Up Cu. Ft. |
|----------------------|------------------|--------------|------------------------|
| 13 3/8" | 150' | 150' | 110 sks |
| 9 5/8" | 756' | 756' | 275 sks |
| 7" | 1730' | 1730' | 165 sks |
| 4 1/2" | 5404' | 5404' | 165 sks |

OPEN FLOW DATA

Commingle Dev. Shale,
Gordon/Weir, L. Weir,
Middle Weir, Big Lime

Producing formation Middle Weir, Big Lime Pay zone depth (ft) _____
Gas: Initial open flow 1650 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 1650 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 2 Hours
Static rock Pressure 595 psig (surface pressure) after 116.5 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.

David L. Matz, VP Drilling & Completion
For: EASTERN STATES OIL & GAS, INC.

By: David L. Matz
Date: 3/26/98

MAY 1998

KAN 5176

TECHNICAL
DIVISION OF OIL AND

MAY 07 1998

Driller's Record

WV Division of
Oil and Gas

Well: Carbon Fuel #37

API # - 47-039-05176

| FORMATION | TOP | BOTTOM | REMARKS |
|--------------|------|--------|---|
| sub | 0 | 10 | |
| sand | 10 | 65 | |
| coal | 65 | 70 | |
| sand | 70 | 129 | 1" water @ 90' |
| coal | 129 | 133 | |
| sand | 133 | 602 | Damp @ 170' |
| sand & shale | 602 | 720 | |
| sand | 720 | 790 | ¼" water @ 1185' |
| sand & shale | 790 | 870 | |
| sand | 870 | 987 | |
| sand & shale | 987 | 1054 | Gas Checks @: |
| salt sand | 1054 | 1634 | 1899', 2210', 2396', 2521', 2618' & 2711' all no show |
| sand & shale | 1634 | 1738 | 2803', 2926', 3206' & 3419' all odor |
| Ravenc Cliff | 1738 | 1788 | 3698', 4006', 4315', 4597', 4903' & 5430' all no show |
| Avis | 1788 | 1860 | |
| U. Maxton | 1860 | 1949 | |
| sand & shale | 1949 | 2235 | |
| L. Maxton | 2235 | 2304 | |
| sand & shale | 2304 | 2320 | |
| L. Lime | 2320 | 2405 | |
| sand & shale | 2405 | 2418 | |
| B. Lime | 2418 | 2735 | |
| Big Injun | 2735 | 2772 | |
| M. Weir | 2772 | 2865 | |
| sand & shale | 2865 | 2911 | |
| L. Weir | 2911 | 2989 | |
| shale | 2989 | 3233 | |
| Berea | 3233 | 3270 | |
| sand & shale | 3270 | 3446 | |
| Gordon | 3446 | 3463 | |
| sandy shale | 3463 | 4366 | |
| Huron | 4366 | 5185 | |
| Java | 5185 | 5400 | |
| shale | 5400 | 5430 | |
| Total Depth | | 5430 | |
| | | | |
| | | | |
| | | | |
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| | | | |

K.A. 5176

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

039 5176
 325

- 1) Well Operator: EASTERN STATES OIL & GAS, INC. ⁵⁶²⁸ 15140 (2)
- 2) Operator's Well Number: Carbon Fuel #37 3) Elevation: 1573'
- Well type: (a) Oil / or Gas /
 (b) If Gas: Production / Underground Storage /
 Deep / Shallow /
- Proposed Target Formation(s): Middle Weir, Lower Weir, Lower Huron
 Proposed Total Depth: 5600' feet
- Approximate fresh water strata depths: 138'
- Approximate salt water depths: 1150'
- Approximate coal seam depths: 123', 156', 307', 668', 699'
- Does land contain coal seams tributary to active mine? Yes / No /
- Proposed Well Work: Drill and Complete *New Well*

Issued 10/27/97
 Expires 10/27/99

RECEIVED
 WV Division of
 Environmental Protection
 OCT 29 1997

Permitting
 Office of Oil & Gas

CASING AND TUBING PROGRAM

| TYPE | SPECIFICATIONS | | FOOTAGE INTERVALS | | CEMENT | |
|--------------|----------------|-------|-------------------|--|-----------------|----------------------|
| | Size | Grade | Weight per ft. | For drilling | Left in well | Fill-up (cu. ft.) |
| Conductor | 13 3/8" | L.S. | 37 | 26' | 26' | N/A |
| Fresh Water | 9 5/8" | L.S. | 26 | 350' | 350' | C.T.S. |
| Coal | | | | | | <i>305/18/1.3</i> |
| Intermediate | 7" | L.S. | 17 | 1700' | 1700' | C.T.S. |
| Production | 4 1/2" | J-55 | 10.5 | 5600' | 5600' | 380 |
| Tubing | 2 3/8" | J-55 | 4.6 | May not be run; if run, will be set 100' less than TD | | |
| Liners | | | | | | <i>305/18/1.1</i> |

PACKERS : Kind _____
 Sizes _____
 Depths set _____

For Office of Oil and Gas Use Only

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

24430

1) Date: 10-10-97
2) Operator's well number
Carbon Fuel #37
3) APT Well No: 47 - 039 - 5176
State County Permit

Permitting
Office of Oil & Gas

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 Carbon Fuel Company Name N/A
 Address One Carbon Center, Suite 200 Address _____
Chesapeake, WV 25315
- (b) Name _____ (b) Coal Owner(s) with Declaration
 Address _____ Name SEE 4(a)
 Address _____
- (c) Name _____ Name _____
 Address _____ Address _____
- 6) Inspector Mr. Carlos Hively (c) Coal Lessee with Declaration
 Address 223 Pinch Ridge Road Name N/A
Elkview, WV 25071 Address _____
 Telephone (304)- 543-0868

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)
 _____ 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.

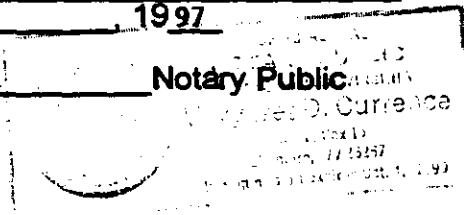
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true,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

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

Well Operator EASTERN STATES OIL & GAS, INC.
 By: [Signature]
 Its: VP - Drilling and Completion
 Address P.O. Box 2347
Charleston, WV 25328
 Telephone (304) 343-9566

Subscribed and sworn before me this 8th day of October, 1997

My commission expires [Signature] 10-4-99



Well: Carbon Fuel #37

API #: 47-039-05176

| Perforation Record | | Stimulation Record | | | | | |
|--------------------|-----------------------------|--------------------|---|--------------------|-------------------------------|--|------|
| Date | Interval Perforated From To | Interval Treated | Type | Stimulation Record | | Average Treating Pressure (PSI) | |
| | | | Foam (F) N ₂ Assist (N) Water Frac (W) Acid (A) | Fluid Type | Propping Agent Type Amount | Average Injection Rate(B=BP MS=SCFP M) | |
| | | | | B=BBL S=SCF | SKS | | |
| 2/11/98 | 3656 5177 | Devonian Shale | N | N 758,000 S | n/a | 52,800 S | 2042 |
| 2/11/98 | 3229 3457 | Gordon/Weir | N | N 514,000 S | n/a | 54,900 S | 2139 |
| 2/11/98 | 2922 2932 | Lower Weir | F | F 116 B | sand | 20 B | 1444 |
| 2/17/98 | 2819 2829 | Middle Weir | F | F 125 B | sand | 6.78 B | 1374 |
| 2/17/98 | 2651 2674 | Big Lime | A | A 48 B | n/a | 3.48 B | 1243 |

47-039-05176
Carbon Fuel #37