

FILE NO. 09-0015
 DRAWING NO. 09
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1" IN 2500'
 PROVEN SOURCE OF ELEVATION EXIST WELL 12102
ELEV 1417

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) Thomas L. Kirk
 R.P.E. 3698 L.L.S. _____

PLACE SEAL HERE

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

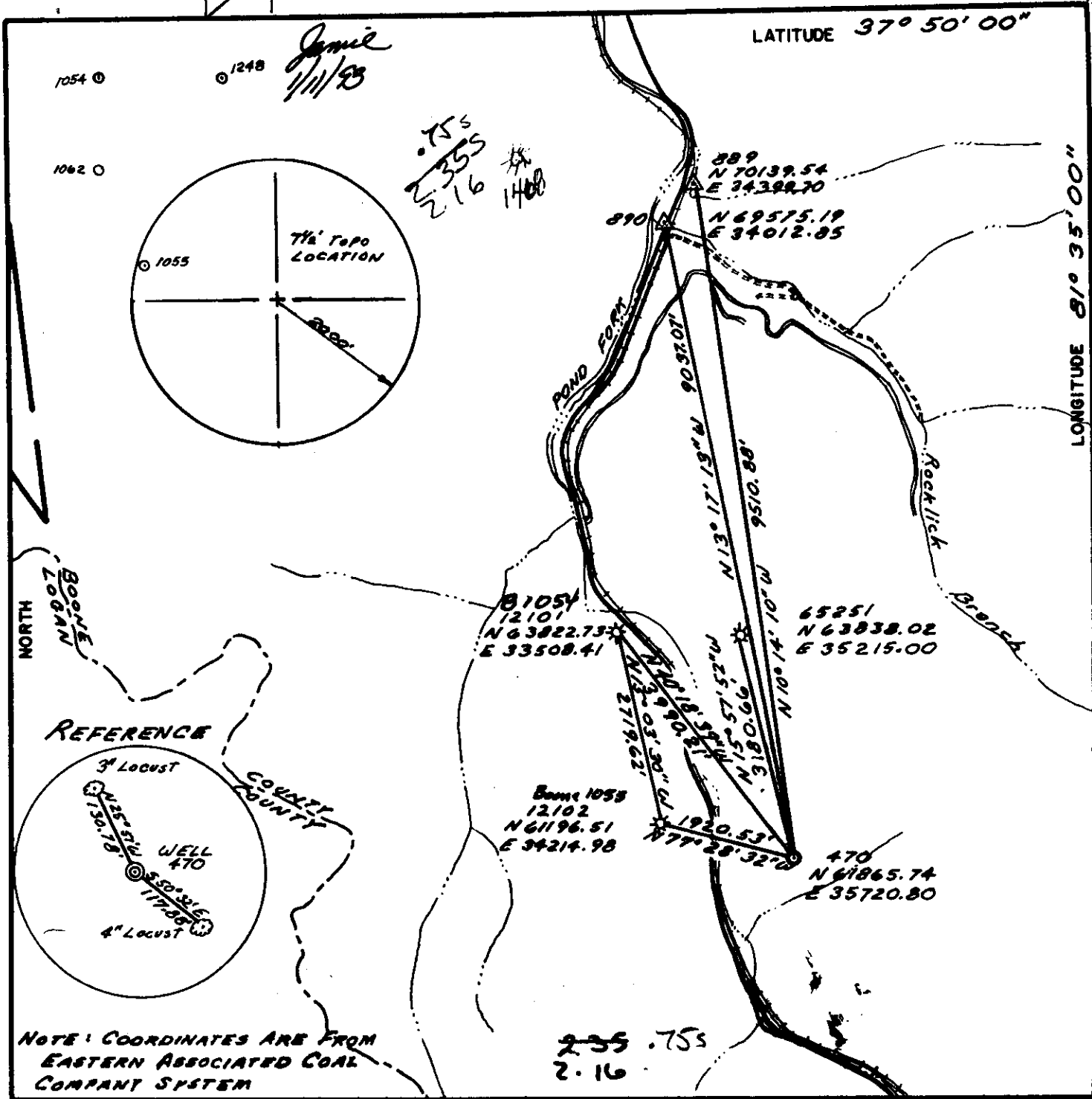


Department of Mines
 Oil & Gas Division

DATE JUNE 6, 1984
 OPERATOR'S WELL NO. CNEO 470
 API WELL NO. RELOCATION
47-005-1444-F
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS", PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X)
 LOCATION: ELEVATION 1745.3 WATER SHED POND FORK
 DISTRICT CROOK COUNTY BOONE
 QUADRANGLE PILOT KNOB
 SURFACE OWNER CHARLESTON NATIONAL BANK ACREAGE 6216.27
 OIL & GAS ROYALTY OWNER CHARLESTON NATIONAL BANK LEASE ACREAGE 23,649.70
 LEASE NO. 80210
 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 ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION CLAYTON/MEIB ESTIMATED DEPTH 3390'
 WELL OPERATOR CNEO PRODUCTION DESIGNATED AGENT Rodney J. Biggs
 ADDRESS ONE PARK RIDGE CENTER ADDRESS CROSSWIND CORPORATE PARK
PITTSBURGH PA 15224 RT 2 BOX 698
BRIDGEPORT, WVA 26330

BOO 1444 F



NOTE: COORDINATES ARE FROM EASTERN ASSOCIATED COAL COMPANY SYSTEM

FILE NO. 03-0015
 DRAWING NO. 09
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1" IN 3500'
 PROVEN SOURCE OF ELEVATION EXIST WELL 12102 ELEV 1417

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) Thomas P. Kirk
 R.P.E. 3698 L.L.S. _____

PLACE SEAL HERE

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



Department of Mines
 Oil & Gas Division

DATE JUNE 6, 1984
 OPERATOR'S WELL NO. CNEO 470
 API WELL NO. RELOCATION
47-005-1444-7
 STATE COUNTY PERMIT

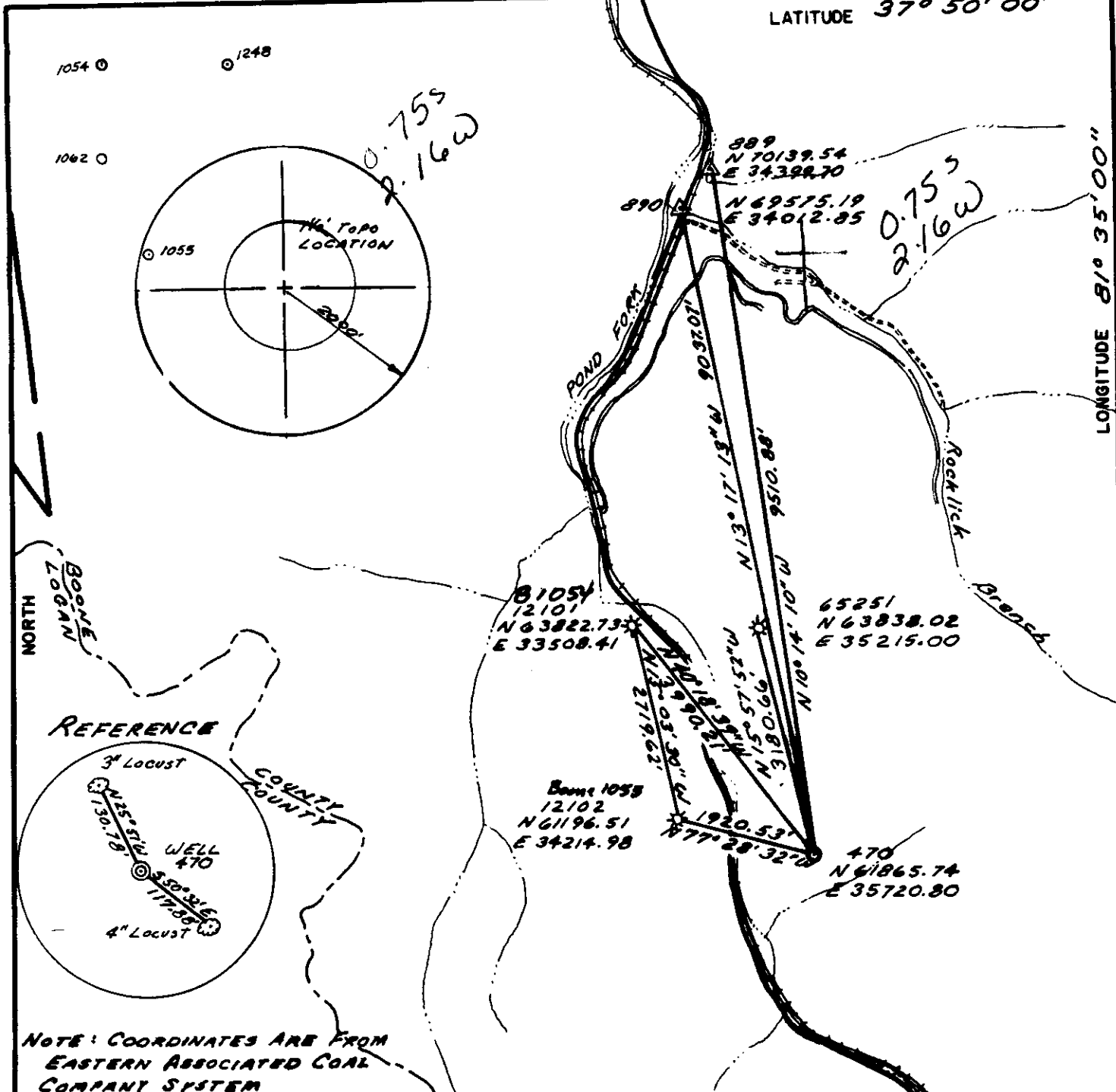
WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS", PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X)
 LOCATION: ELEVATION 1745.3 WATER SHED POND FORK
 DISTRICT CROOK 1 COUNTY BOONE
 QUADRANGLE PILOT KNOB

SURFACE OWNER CHARLESTON NATIONAL BANK ACREAGE 6216.27
 OIL & GAS ROYALTY OWNER CHARLESTON NATIONAL BANK LEASE ACREAGE 23,649.70
 LEASE NO. 80210

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 ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION 4. MAXON / MEIB ESTIMATED DEPTH 3390'
 WELL OPERATOR C.N.G. PRODUCTION DESIGNATED AGENT Rodney J. Biggs
 ADDRESS ONE PARK RIDGE CENTER 1146 PITTSBURGH PA 15224 ADDRESS CROSSWIND CORPORATE PARK RT# 2 BOX 698 BRIDGEPORT, WVA 26330

BOO 1444



NOTE: COORDINATES ARE FROM EASTERN ASSOCIATED COAL COMPANY SYSTEM

FILE NO. 03-0015
 DRAWING NO. 09
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1" IN 2500'
 PROVEN SOURCE OF ELEVATION EXIST WELL 12102
ELEV 1417

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) Thomas J. [Signature]
 R.P.E. 3698 L.L.S. _____

PLACE SEAL HERE

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



Department of Mines
 Oil & Gas Division

DATE JUNE 6, 1984
 OPERATOR'S WELL NO. CNEO 470
 API WELL NO. RELOCATION
47-005-1444
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS", PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X)
 LOCATION: ELEVATION 1745.3 WATER SHED POND FORK
 DISTRICT CROOK COUNTY BOONE
 QUADRANGLE PILOT Knob 547 Bald Knob 15' 508
 SURFACE OWNER CHARLESTON NATIONAL BANK ACRES 6216.27
 OIL & GAS ROYALTY OWNER CHARLESTON NATIONAL BANK LEASE ACRES 23,649.70
 LEASE NO. 80210

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 ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION U. MAXTON / NEIR ESTIMATED DEPTH 3300' AUG 20 1984
 WELL OPERATOR CNG DEVELOPMENT CO. DESIGNATED AGENT GARY A NICHOLAS
 ADDRESS ONE PARK RIDGE CENTER 142 ADDRESS CROSSWIND CORPORATE PARK
PITTSBURGH PA 15224 RTR 2 BOX 698
SPD-Maxxon BRIDGEPORT, WVA 26330

IV-35
(Rev 8-81)

RECEIVED

NOV - 9 1984

OIL & GAS DIV.
DEPT. OF MINES



State of West Virginia
Department of Mines
Oil and Gas Division

Date November 1, 1984
Operator's
Well No. CNGD WN 470
Farm Charleston National Bank
API No. 47 - 005 - 1444

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas X / Liquid Injection / Waste Disposal /
(If "Gas," Production X / Underground Storage / Deep / Shallow X /)

LOCATION: Elevation: 1745.3 Watershed Pond Fork
District: Crook County Boone Quadrangle Pilot Knob

COMPANY CNG Development Company

ADDRESS P.O. Box 15746, Pittsburgh, PA 15244

DESIGNATED AGENT Gary A. Nicholas

ADDRESS Rt. 2 Box 698, Bridgeport, WV 26330

SURFACE OWNER Charleston Nat'l Bank

ADDRESS P.O. Box 1113, Charleston, WV 25325

MINERAL RIGHTS OWNER Char. Nat'l Bank

ADDRESS P.O. Box 1113, Charleston, WV 25325

OIL AND GAS INSPECTOR FOR THIS WORK

Arthur St. Clair ADDRESS P. O. Box 157
Benton, WV 24818

PERMIT ISSUED 8/14/84

DRILLING COMMENCED 10/08/84

DRILLING COMPLETED 10/16/84

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.	331	331	To Surf.
13-10"			
9 5/8			
8 5/8	1756	1756	To Surf.
7			
5 1/2			
4 1/2	3600	3600	295 sks.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Upper Maxton/Weir Depth 3300 feet

Depth of completed well 3845 feet Rotary X / Cable Tools

Water strata depth: Fresh feet; Salt feet

Coal seam depths: 195 - 439 Is coal being mined in the area? No
710 - 712
Weir

OPEN FLOW DATA
Producing formation Upper Maxton Pay zone depth 3478 - 3488
2315 - 2317
2323 - 2327
2336 - 2338
2422 - 2428 feet

Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d

Final open flow 949 Mcf/d Final open flow Bbl/d

Time of open flow between initial and final tests hours

Static rock pressure 540 psig (surface measurement) after 24 hours shut in
(If applicable due to multiple completion--)

DEC 31 1984

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

(Continue on reverse side)



1) Date: July 23, 1984
 2) Operator's Well No. 470
 3) API Well No. 47 - 005 - 1 444
 State County Permit

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES, OIL AND GAS DIVISION
 APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil Gas
 B (If "Gas", Production Underground storage Deep Shallow)
 5) LOCATION: Elevation: 1745.3' Watershed: Pond Fork (KC10W)
 District: Crook County: Boone Quadrangle: Pilot Knob
 6) WELL OPERATOR CNG Development Company
 Address: C/O Paul W. Garrett, P.O. Box 15746
Pittsburgh, PA 15244
 7) DESIGNATED AGENT Mr. Gary Nicholas
 Address: Crosswind Corporate Park
Rt. 2, Box 698, Bridgeport, WV 26330
 8) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name Mr. Arthur St. Clair
 Address P. O. Box 157
Brenton, WV 24818
 9) DRILLING CONTRACTOR:
 Name Sam Jack Drilling Company
 Address P. O. Box 48
Buckhannon, WV 26039
 10) PROPOSED WELL WORK: Drill / Drill deeper / Redrill / Stimulate
 Plug off old formation / Perforate new formation
 Other physical change in well (specify) _____
 11) GEOLOGICAL TARGET FORMATION, Berea
 12) Estimated depth of completed well, 3825 feet
 13) Approximate strata depths: Fresh, 563, 643 feet; salt, _____ feet.
 14) Approximate coal seam depths: 420-422, 687-690 Is coal being mined in the area? Yes _____
 15) CASING AND TUBING PROGRAM 746-748

RECEIVED
 JUL 25 1984

OIL & GAS DIVISION
 DEPT. OF MINES

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILLUP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor									Kinds
Fresh water	11-3/4	H-40	42	X		40	40	To surface	By Rule 15.05
Coal						778	778	to surface	Sizes by rule 15.05
Intermediate	8-5/8	X-42	23	X		2075	2075	To surface	By Rule 15.05
Production	4-1/2	J-55	10.5	X		3825	3825	200-400 sks	Depths set
Tubing	1-1/2	CN-55	2.75	X					By Rule 15.01
Liners									Perforations:
									Top Bottom

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-005-1444 Date August 14, 19 84

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 August 14, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>28</u>	Agent: <u>ls</u>	Plat: <u>MH</u>	Casing: <u>MH</u>	Fee: <u>003-417</u>
BLANKET				

Margaret J. Hesse
 Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.

File

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

16507.

005-1444 Frac. Issued 12/10/92 Expires 12/10/94

RECEIVED
DIVISION OF
Environmental Protection
NOV 29 1992
OFFICE OF PERMITS
STATE OF WEST VIRGINIA

FORM WW-2B

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

- 1) Well Operator: CNG Producing Co. ¹⁴² 10/10 (1) 506
- 2) Operator's Well Number: CNGP 470W 3) Elevation: 1745.3'
- 4) Well type: (a) Oil / or Gas /
(b) If Gas: Production / Underground Storage /
Deep / Shallow /
- 5) Proposed Target Formation(s): Big Lime ³⁴⁵
- 6) Proposed Total Depth: 3190 feet
- 7) Approximate fresh water strata depths: 563,643
- 8) Approximate salt water depths: _____
- 9) Approximate coal seam depths: 420-422, 687-690
- 10) Does land contain coal seams tributary to active mine? Yes / No /
- 11) Proposed Well Work: ^{plug} Set plug below Big Lime. Perf & acidize Big Lime. Clean up frac. Retrieve plug. Comingle with existing production.
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor						
Fresh Water	11-3/4	H-40	42	40	40	To Surface
Coal						<i>Existing Records</i>
Intermediate	8-5/8	X-42	23	778	778	To Surface
Production	4-1/2	J-55	10.5	3825	3825	CSR 12-11-1
Tubing	1-1/2	CN-55	2.75			<i>Existing 295 RB</i>
Liners						<i>B/E 11-22-92</i>

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

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

1) Date: November 16, 1992
2) Operator's well number
CNGP 470W
3) API Well No: 47 - 005 - 01444W
State - County - Permit

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION-OFFICE OF OIL & GAS
NOTICE AND APPLICATION FOR A WELL WORK PERMIT

<p>4) Surface Owner(s) to be served:</p> <p>(a) Name <u>Sr. Trust Officer-Trustee</u> Address <u>The Charleston Natl. Bank</u> <u>P.O.Box 1113, Charleston, WV 25325</u></p> <p>(b) Name _____ Address _____</p> <p>(c) Name _____ Address _____</p>	<p>5) (a) Coal Operator: <u>Dick Skidmore</u> Name <u>Eastern Associated Coal Corp.</u> Address <u>800 Laidley tower, P.O. Box 123</u> <u>Charleston, WV 25324</u></p> <p>(b) Coal Owner(s) with Declaration Name <u>Same as Surface</u> Address _____</p> <p>(c) Coal Lessee with Declaration Name _____ Address _____</p>
<p>6) Inspector <u>Richard S. Campbell</u> Address <u>P.O.Box 163</u> <u>Hamlin, WV 25523</u> Telephone (304)- _____</p>	

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 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B 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)

INSTRUCTIONS TO SURFACE OWNERS NAMED ABOVE
(Continued on Reverse)

The well operator named below is applying for a permit from the State to do oil or gas well work. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22B of the West Virginia Code. Well work permits are valid for 24 months.

Well Operator CNG Producing Company
By: Rodney J. Biggs *RJ Biggs*
Its: District Manager, Production - Designated Agent
Address Rt. 2, Box 698, Crosswind Corp. Park
Bridgeport, WV 26330
Telephone (304) 623-8840

Subscribed and sworn before me this 16 day of November, 1992

Nancy D. Colton Nancy D. Colton Notary Public
My commission expires 9/26/93

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

Young Wireline Perf. Weir 3478 - 3488; 8 holes (.41)
 Upper Maxton 2315 - 2317; 2 holes (.39), 2325 - 2327; 2 holes (.39),
 2336 - 2338; 2 holes (.39), 2422 - 2426; 4 holes (.39)
 Halliburton 75 Q Foam Frac - Break 1600 (Took psi to 3500 psi but Maxton would not break)
 HHP 1000, BPM 12 (Foam), Avg. PSI 1580, 500 gal MOD 202 Acid,
 50,000# 20/40 Sand, 570 BBL Foam, ISIP 1550 w/N₂ Gas, 5 min 1500 w/N₂C
 SCF N₂ 362,000, BHTP 2,000

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Sand			0	105	Coal 105 - 110
Coal			105	110	426 - 431 710 - 712
Sand			110	426	
Coal			426	431	
Sand & Shale			431	710	
Coal			710	712	
Sd, Sh & RR			712	2470	
Maxton Sand			2470	2545	
Sd, Sh & RR			2545	2693	
Lower Maxton			2693	2715	
Sand & Shale			2715	2784	
Little Lime			2784	2874	
Pencil Cave			2874	2880	
Big Lime			2880	3273	
Sand & Shale			3273	3845	

Weir
 TD.

(Attach separate sheets as necessary)

CNG Development Company
 Well Operator

By:

Date: November 1, 1984

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."