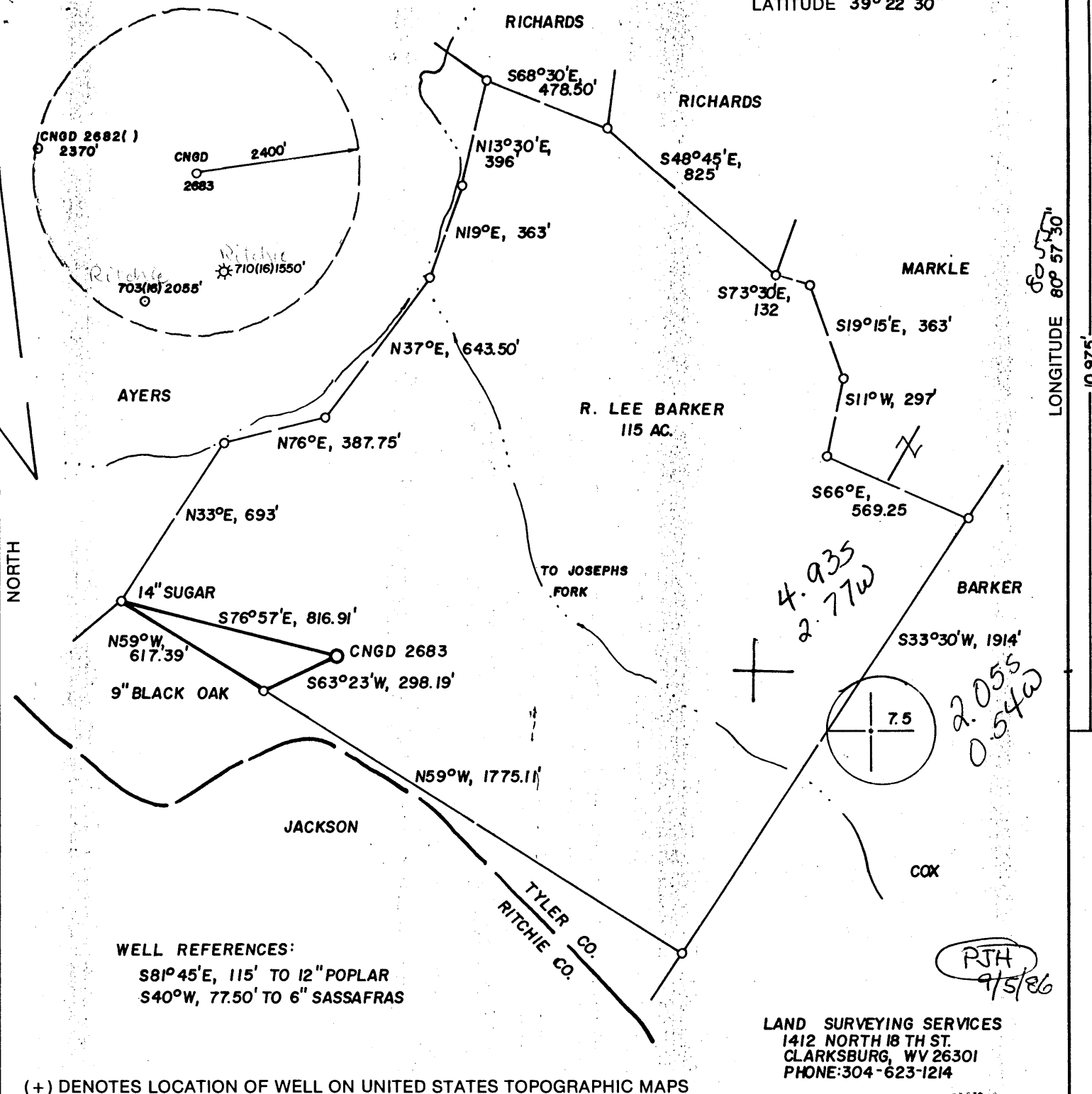


87B 9/19/89

39 25

2970

LATITUDE 39° 22' 30"



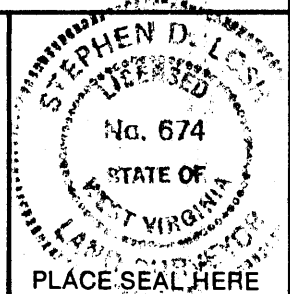
WELL REFERENCES:
 S81°45'E, 115' TO 12" POPLAR
 S40°W, 77.50' TO 6" SASSAFRAS

LAND SURVEYING SERVICES
 1412 NORTH 18 TH ST.
 CLARKSBURG, WV 26301
 PHONE: 304-623-1214

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

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 IN 200
 PROVEN SOURCE OF ELEVATION TOP OF KNOB 3600' SE. OF LOC. AT ELEV. 1275'

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 ENERGY.
 (SIGNED) [Signature]
 R.P.E. _____ L.L.S. NO. 674
STEPHEN D. LOSH



STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



DATE AUGUST 29, 19 86
 OPERATOR'S WELL NO. CNGD 2683
 API WELL NO. 47-095-1161

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION ___ STORAGE X DEEP ___ SHALLOW X
 LOCATION: ELEVATION 1040' WATER SHED JOSEPHS FORK
 DISTRICT MEADE COUNTY TYLER
 QUADRANGLE PENNSBORO 7.5' 539 133 W24 West Union
 SURFACE OWNER R. LEE BARKER ACREAGE 115.
 OIL & GAS ROYALTY OWNER R. LEE BARKER LEASE ACREAGE 115.
 LEASE NO. DV 16851

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 BENSON ESTIMATED DEPTH 5350'
 WELL OPERATOR CNG DEVELOPMENT COMPANY DESIGNATED AGENT GARY A. NICHOLAS
 ADDRESS ONE PARK RIDGE CENTER 142 ADDRESS ROUTE 2, BOX 698
PITTSBURGH, PA 15244 BRIDGEPORT, WV 26330

OCT 14 1986

6-6 unnamed (0)

FORM WW-6 H.T. HALL 48673

COUNTY NAME PERMIT



IV-35
(Rev 8-81)

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DEC 18 1986

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

State of West Virginia
Department of Mines
Oil and Gas Division

Date December 1, 1986
Operator's
Well No. CNGD WN 2683
Farm Barker
API No. 47 - 095 - 1161

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: 1040 Watershed Josephs Fork
District: Meade County Tyler Quadrangle Pennsboro

COMPANY CNG Development Company

ADDRESS P. O. Box 15746
Pittsburgh, PA 15244

DESIGNATED AGENT Gary A. Nicholas

ADDRESS Rt. 2 Box 698
Bridgetown, WV 26330

SURFACE OWNER R. Lee Barker

ADDRESS South Street
Harrisville, WV 26362

MINERAL RIGHTS OWNER R. Lee Barker

ADDRESS South Street
Harrisville, WV 26362

OIL AND GAS INSPECTOR FOR THIS WORK

Robert Lowther ADDRESS General Delivery
Middlebourne, WV

PERMIT ISSUED October 6, 1986

DRILLING COMMENCED Nov. 2, 1986

DRILLING COMPLETED Nov. 7, 1986

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.			
13-10"			
9 5/8			
8 5/8	1224	1224	To Surf.
7			
5 1/2			
4 1/2	4999	4999	140 sks
3			
2 1-1/2	4883	4883	---
Liners used			

GEOLOGICAL TARGET FORMATION Benson Depth 5350 feet

Depth of completed well 5120 feet Rotary X / Cable Tools

Water strata depth: Fresh 50 feet; Salt feet

Coal seam depths: Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Benson Pay zone depth 4895-4903 feet

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

Final open flow 231 Mcf/d Final open flow Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 760 psig (surface measurement) after 24 hours shut in

(If applicable due to multiple completion--)

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)
DEC 30 1986

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

Perforated Benson 4895 - 4903, 24 holes, .39 HSC

Breakdown 1600, Ave HHP 1900, Ave Rate 20, Ave Pres. 2750, Max Tr Pres. 2920,
Total Sand 6,000# 80/100, 83,000# 20/40, Max. Conc. 7#/gal, Total Acid 500 gal,
Total Fluid 332 bbl (clear), SL Fluid 190 bbl (clear), ISIP 1100, 5 min 1000,
Total Nit. 468,946 CF

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
KB - GL			0	10	1/2" stream @ 50'
Soil, Sand, Shale & RR			10	1855	Damp @ 1300'
B. Lime & Injun			1855	2000	Damp @ 1360'
SAnd, Shale & RR			2000	3970	Damp @ 1510'
Balltown			3970	4010	✓ Oil Odor @ 1520'
Sand & Shale			4010	<u>5120</u>	Soap Hole @ 1545'
 <u>LOG TOPS</u> ✓					
Big Lime			1884	1987	
Big Injun			1987	2086	
Weir			2346	2396	
Berea			2506	2510	
4th Sand			2886	2900	
Warren			3444	3480	
Bradford			4514	4592	
Riley?			4896	4904	

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DEC 18 1985

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

(Attach separate sheets as necessary)

CNG DEVELOPMENT COMPANY

Well Operator

By:

[Handwritten Signature]

Date: December 1, 1986

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
encountered in the drilling of a well."

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SEP 17 1986



1) Date: Sept. 10, 1986
2) Operator's Well No. 2683
3) API Well No. 47-095-1161
State County Permit

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

- 4) WELL TYPE: A Oil / Gas /
B (If "Gas", Production / Underground storage / Deep / Shallow)
- 5) LOCATION: Elevation: 1040 Watershed: Josephs Fork
District: Meade 4 192 County: Tyler Quadrangle: Pennsboro 539
- 6) WELL OPERATOR/NG Development Co. CODE: 1010 7) DESIGNATED AGENT Gary Nicholas
Address c/o Paul W. Garrett, P.O. Box 15746 Address Crosswind Corporate Park
Pittsburgh, PA 15244 Rt. 2, Box 698, Bridgeport, WV 26330
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Robert Lowther 9) DRILLING CONTRACTOR:
Address General Delivery Name Sam Jack Drilling Co.
Middlebourne, WV 26149 Address P.O. Box 48
Buckhannon, WV 26201
- 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, Benson 435
- 12) Estimated depth of completed well, 5350 feet
- 13) Approximate strata depths: Fresh, _____ feet; salt, _____ feet.
- 14) Approximate coal seam depths: _____ Is coal being mined in the area? Yes / No /
- 15) CASING AND TUBING PROGRAM Op. Ch.

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									Kinds
Fresh water	11-3/4	H-40	42	X		40	40	To surface	By rule 15.05
Coal									Sizes
Intermediate	8-5/8	X-42	23	X		1525/220	1525/220	To surface	By rule 15.05
Production	4-1/2	J-55	10.5	X		5350	5350	200 - 400	Depths set
Tubing	1-1/2	CN-55	2.75	X					By rule 15.01
Lin...									Perforations:
									Top Bottom

**OFFICE USE ONLY
DRILLING PERMIT**

Permit number 47-095-1161 Date October 6 19 86

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 October 6, 1988 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <input checked="" type="checkbox"/>	Agent: <u>AS</u>	Plat: <input checked="" type="checkbox"/>	Casing: <u>AS</u>	Fee: <u>15370</u> <u>195</u>	WRCP: <input checked="" type="checkbox"/>	S&E: <input checked="" type="checkbox"/>	Other: <input type="checkbox"/>
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NOTE: Keep one copy of this permit posted at the drilling location.

[Signature]
Director, Division of Oil and Gas

File

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