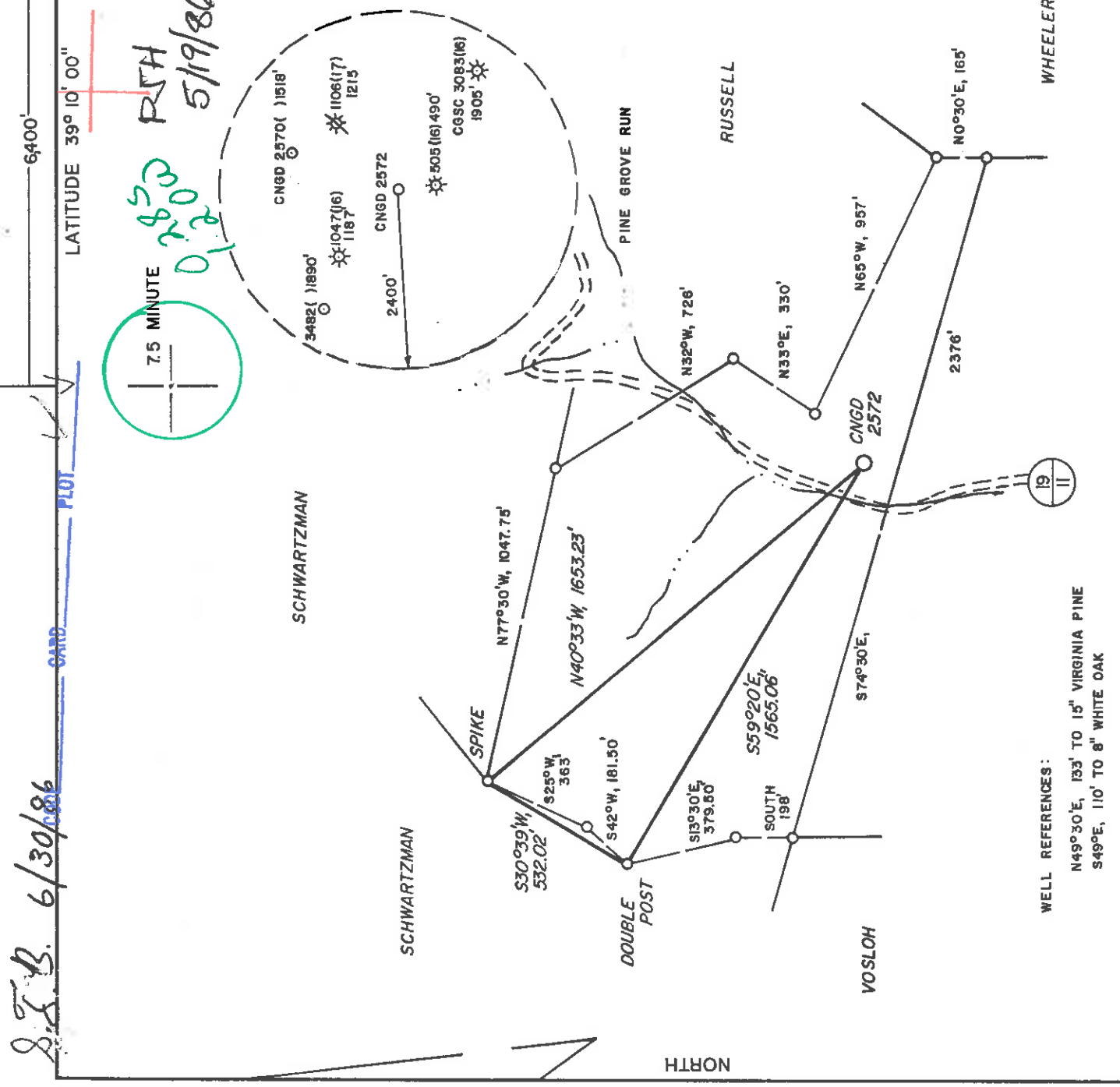


D.S.B. 6/30/86

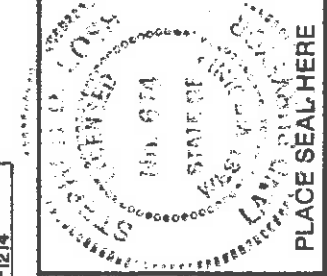
7.5 MINUTE
RTH
5/19/86

6400" LATITUDE 39° 10' 00"
1535" LONGITUDE 80° 45' 00"



WELL REFERENCES:
 N49°30'E, 133' TO 15" VIRGINIA PINE
 S49°E, 110' TO 8" WHITE OAK

LAND SURVEYING SERVICES
 1412 NORTH 18 TH ST.
 CLARKSBURG, WV 26301
 PHONE: 304-823-1214



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) *Stephen D. Losh*
 R.P.E. I.L.S. NO. 674
 STEPHEN D. LOSH

(+) 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 EXIST. WELL 1047 (1187)
 N.W. OF LOCATION AT ELEV. 1143

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE MAY 7, 19 86
 OPERATOR'S WELL NO. CNGD 2572
 API WELL NO. _____

WELL TYPE: OIL ___ GAS ___ LIQUID INJECTION ___ WASTE DISPOSAL ___ PERMIT
 (IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 1014' WATER SHED ___ MIDDLE ___ FORK ___
 DISTRICT COVE 2 COUNTY DODDRIDGE
 QUADRANGLE OXFORD 526 ACREAGE 60
 SURFACE OWNER C. A. LIEBER
 OIL & GAS ROYALTY OWNER J. MORRIS LEASE NO. 13415

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 ALEXANDER ESTIMATED DEPTH 5300'
 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

47-017-3508
 STATE COUNTY PERMIT

COUNTY NAME

PERMIT

JUL 28 1986

6-6 Straight Fork - Blue stone Creek (133)



RECEIVED
JUN 08 1987

State of West Virginia
Department of Mines
Oil and Gas Division

Date May 22, 1987
Operator's
Well No. 2572
Farm Morris
API No. 47 - 017 - 3508

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

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: 1014 Watershed Middle Fork
District: Cove County Doddridge Quadrangle Oxford

COMPANY CNG Development Company
ADDRESS P. O. Box 15746
Pittsburgh, PA 15244
DESIGNATED AGENT Gary A. Nicholas
ADDRESS Rt. 2 Box 698
Bridgport, WV 26330
SURFACE OWNER C. A. Lieber
ADDRESS 3634 S. 215th Street, W.
Box 3268, Goddard, KS 67052
MINERAL RIGHTS OWNER J. Morris
ADDRESS _____

OIL AND GAS INSPECTOR FOR THIS WORK _____

Mike Underwood ADDRESS Rt. 2, Box 17426
Salem, WV 26426

PERMIT ISSUED July 18, 1986

DRILLING COMMENCED April 21, 1987

DRILLING COMPLETED April 27, 1987

IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON _____

Casing Tubing	Used in Drilling in Well	Left in Well	Cement fill up Cu. ft.
Size			
20-16 Cond.			
13-10"	203	203	To Surf.
9 5/8			
8 5/8	1876	1876	To Surf.
7			
5 1/2			
4 1/2	5287	5287	560 sks
3			
2 1/2	4668	4668	---
Liners used			

GEOLOGICAL TARGET FORMATION Alexander Depth 5300 feet

Depth of completed well 5338 feet Rotary X / Cable Tools _____
Water strata depth: Fresh 340 feet; Salt 70 feet;
Coal seam depths: 1240 - 1243 Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Benson-Riley
Bradford
Salisbury
Speechley

Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ Bbl/d
Final open flow 1,061 Mcf/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 750 psig (surface measurement) after 24 hours shut in

(If applicable due to multiple completion--)

Second producing formation _____

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)

JUN 15 1987

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

Perforated Benson-Riley 4775 - 4783, 8 shots; 4684 - 4692, 8 shots; Bradford 4350 - 4360, 18 shots; Balltown 3920 - 3930, 22 shots; Speechley 3274 - 3281, 22 shots.
 Foam Frac 1st stage - Breakdown 1800, Ave HHP 2, Ave Rate 20, Ave Pres 3000, Max. Tr. Pres. 3200, Total Acid 500 gal, Total Sand 75,000, Max Conc. 5, Total Fluid 883, SL Fluid 522, Total Nit. 551,104, ISIP 1750. 2nd Stage - Breakdown 1300, Ave HHP 2, Ave Rate 20, Ave Pres. 3300, Max Tr Pr 4000, Total Acid 500 gal, Total Sand 29,816#, Max Conc. 4, Total Fluid 750, SL Fluid 185, Total Nit. 405,486, ISIP Screened out; 3rd stage - Ave HHP 2, Ave Rate 20, Ave Pr 3200, Max Tr Pres 3550, Total Acid 410, Total Sand 48,600, Max Conc. 4, Total Fluid 653, SL Fluid 377, Total Nit. 398,030, Screened out; 4th Stage - Ave HHP 2, Ave Rate 20, Ave Pres. 2400, Max Tr Pres. 3600, Total Acid 500 gal, Total Sand 71,500, Max Conc. 5, Total Fluid 767, SL Fluid 345, Total Nit. 434,932, Screened out.

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	Hole Wet 70' - 1/4"
Sand, Shale & RR			10	1240	340'
Coal			1240	1243	500' - 1/2"
Sand & Shale			1243	1770	
Big Lime & Injun			1770	1930	
Sand & Shale			1930	4760	
Benson			4760	4780	
Shale			4780	5010	
Alex.			5010	5120	
Sand & Shale			5120	5338	
LOG TOPS					
Big Injun			1888	1957	
Weir			2088	2198	
Berea			2290	2298	
4th			2516	2520	
Warren			3134	3178	
U. Speechley			3262	3276	
Balltown			3902	3918	
Bradford			4318	4362	
Riley			4648	4678	
Benson			4752	4799	
Alexander			5002	5100	

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

RECEIVED
JUN 08 1987

(Attach separate sheets as necessary)

CNG DEVELOPMENT COMPANY
Well Operator

By: _____

Date: May 22, 1987

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 ^{logs} encountered in the drilling of a well."

FORM WM-2 (Obverse) 7/85
RECEIVED
 JUN 25 1988

1) Date: May 23, 1986
 2) Operator's Well No. 2572
 3) API Well No. 47-017-3508 State County Permit



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

4) WELL TYPE: A Oil / Gas / Production / Undergrnd storage / Deep / Shallow
 B (if "Gas", Production / Undergrnd storage / Deep / Shallow
 5) LOCATION: Elevation: 1014 Watershed: Middle Fork
 District: Cove County: Doddridge Quadrangle: Oxford 7-25
 6) WELL OPERATOR: CNG Development Co. CODE: 10110 7) DESIGNATED AGENT Gary Nicholas
 Address c/o Paul W. Garrett, P.O. Box 15746 Address Crosswind Corporate Park
Pittsburgh, PA 15244
 8) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name Mike Underwood
 Address Route 2, Box 114
Salem, WV 26426

9) DRILLING CONTRACTOR:
 Name Sam Jack Drilling Co.
 Address P.O. Box 48
Buckhannon, WV 26201

10) PROPOSED WELL WORK: Drill / deeper / Redrill / Stimulate
 Plug off old formation / Perforate new formation
 Other physical change in well (specify) Alexander

11) GEOLOGICAL TARGET FORMATION, 5300 feet
 12) Estimated depth of completed well, 5300 feet
 13) Approximate tra depths: Fresh, 1161 feet; salt, 1714 feet.
 14) Approximate coal seam depths: 1161 Is coal being mined in the area? Yes No

15) CASING AND TUBING PROGRAM 1134 added by inspectors request

CASING OR TUBING TYPE	SPECIFICATIONS		For drilling	Left in well	CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade				
Conductor	11-3/4	H-40	42	X	To surface	By Rule 15.05
Fresh water						
Coil						
Intermediate	8-5/8	X-42	23	X	To surface	By rule 15.05
Production	4-1/2	J-55	10.5	X	400	Depths set
Tubing	1-1/2	CN-55	2.75	X	<u>530 SKS OR</u>	By rule 15.01
Link						Perforations:
						Top
						Bottom

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-017-3508 Date July 18, 1986

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 July 18, 1988 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>✓</u>	Agent: <u>AD</u>	Plat: <u>AS</u>	Casing Fee: <u>AS</u>	WPCP Fee: <u>AS</u>	SOE Fee: <u>AS</u>	Other: <u>AS</u>
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NOTE: Keep one copy of this permit posted at the drilling location.
Director, Division of Oil and Gas
 See the reverse side of the APPLICANT'S COPY for instructions to the well operator. File

