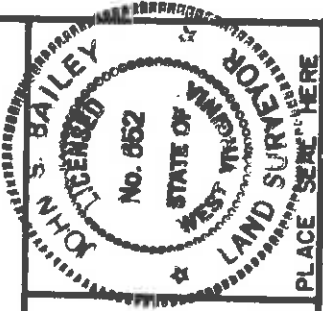


PREPARED BY MSES CONSULTANTS

FILE NO. MSES 84-309  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1/4" IN 200'  
 PROVEN SOURCE OF ELEVATION RD JCT. ON RT. 48  
3200 NE OF LOC. EL. 1051

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

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) John S. Bailey  
 R. P. E. L. S. 652



Department of Mines  
 Oil & Gas Division

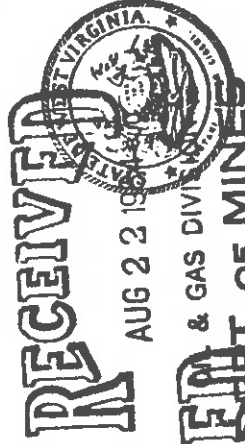
DATE FEBRUARY 22, 19 84  
 OPERATOR'S WELL NO. CNGD 799  
 API WELL NO. 47-017-3298  
 STATE WV COUNTY PUTNAM PERMIT 3298

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS", PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1194.70' WATER SHED INDIAN FORK

DISTRICT GREENBRIER COUNTY DODDRIDGE  
 QUADRANGLE BIG ISAAC 7.5' (1976) 15' NE 3  
 SURFACE OWNER JOHN K. DAVIS  
 OIL & GAS ROYALTY OWNER ABE N. HINKLE ACREAGE 52  
 LEASE NO. 13227 LEASE ACREAGE 52

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 142 ESTIMATED DEPTH 5550'  
 WELL OPERATOR CNG DEVELOPMENT COMPANY DESIGNATED AGENT GARY A. NICHOLAS  
 ADDRESS ONE PARK RIDGE CENTER BRIDGEPORT, W.V. 26330



RECEIVED

AUG 22 1984

RECEIVED & GAS DIVISION  
DEPT. OF MINES

JUN 13 1984

State of West Virginia

OIL & GAS DIVISION

Department of Mines  
Oil and Gas Division

Date 05/30/84

Operator's

Well No. CNGD 799

Farm Hinkle

API No. 47 - 017 - 3298

IV-35  
(Rev 8-81)

DEPT. OF MINES

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: 1194.70 Watershed Indian Fork  
District: Greenbrier County Doddridge Quadrangle Big Isaac 7.5' (1976)

COMPANY CNG DEVELOPMENT COMPANY  
ADDRESS P.O. BOX 15746, PITTSBURGH, PA 15275  
DESIGNATED AGENT GARY A. NICHOLAS  
ADDRESS RT. 2, BOX 698, BRIDGEPORT, WV 26330  
SURFACE OWNER JOHN K. DAVIS  
ADDRESS RT 3, BOX 92, SALEM, WV 26426  
MINERAL RIGHTS OWNER ABE N. HINKLE  
ADDRESS  
OIL AND GAS INSPECTOR FOR THIS WORK  
H.M. Rt. 2 Box 114  
Underwood ADDRESS Salem, WV 26426  
PERMIT ISSUED 03/26/84  
DRILLING COMMENCED 04/26/84  
DRILLING COMPLETED 05/03/84  
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.			
13-10"			
9 5/8			
8 5/8	1637	1637	To Surface
7			
5 1/2			
4 1/2	5526	5526	230 sks
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Alexander  
Depth of completed well 5643<sup>75</sup> feet Rotary X / Cable Tools  
Water strata depth: Fresh 1530' feet; Salt  
Coal seam depths: 190 - 193, 780 - 782 Is coal being mined in the area? No

OPEN FLOW DATA  
Producing formation Alexander Pay zone depth 5353 - 5358 feet  
Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d  
Final open flow 1008 Mcf/d Final open flow Bbl/d  
Time of open flow between initial and final tests hours  
Static rock pressure 1600 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  
SEP 24 1984  
(Continue on reverse side)

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

Perfro Perforated; Alexander 5353 - 5358, 10 holes (.39)  
 Halliburton Foam Fractured with 15,000# 20/40 Sand; 460,000 SCF N2  
 Perfco Perforated Benson; 5022 - 5031, 10 holes (.39)  
 Halliburton Foam Fractured with 50,000# 20/40 Sand, 740,000 SCF N2

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
K.B. - G.L.			0	10	Including indication of all fresh and salt water, coal, oil and gas
R.R., Sd & Sh			10	190	
Coal			190	193	
R.R., Sd & Sh			193	780	
Coal			780	782	
R.R., Sd & Sh			782	2030	
Lime			2030	2050	
Shale			2050	2080	
Little Lime			2080	2100	
Big Lime			2100	2180	
Injun			2180	2265	
Sd & Sh			2265	5015	
Benson			5015	5035	
Sd & Sh			5035	5345	
<u>Alexander</u>			5345	5430	
Sd & Sh			5430	<u>5643T.D.</u>	
LOG TOPS					
Big Injun			2190	2260	
Gordon Stray/Gordon			2783	2912	
Speechley			3684	3774	
Benson			5018	5033	
Alexander			5302	5414	

(Attach separate sheets as necessary)

CNG DEVELOPMENT COMPANY  
Well Operator

By: [Signature]

Date: May 30, 1984

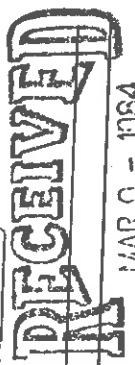
Note: Regulation 2.02(i) provides as follows:  
 "The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including water, encountered in the drilling of a well."



1) Date: March 5, 19 84  
 2) Operator's Well No. 799  
 3) API Well No. 47-017-3298  
 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   
 Elevation: 1194.70 Undergroud storage \_\_\_\_\_  
 District: Greenbrier Watershed: Indian Fork Deep  Shallow   
 County: Doddridge  
 6) WELL OPERATOR CNG Development Company Quadrangle: Big Isaac 7.5' (1976)  
 Address c/o Paul 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 Mr. H. M. Underwood  
 Address Rt. 2, Box 114 Name Sam Jack Drilling Company  
Salem, WV 26426 Address P. O. Box 48  
 10) PROPOSED WELL WORK: Drill  deeper \_\_\_\_\_/ Drill deeper \_\_\_\_\_/ Stimulate   
 Plug off old formation \_\_\_\_\_/ Perforate new formation \_\_\_\_\_  
 Other physical change in well (specify) \_\_\_\_\_



11) GEOLOGICAL TARGET FORMATION, Alexander  
 12) Estimated depth of completed well, 5630 feet  
 13) Approximate trata depths: Fresh, \_\_\_\_\_ feet; salt, \_\_\_\_\_ feet.  
 14) Approximate coal seam depths: 780-783 Is coal being mined in the area? Yes \_\_\_\_\_  
 15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS			Left in well	CEMENT FILLS OR SACKS (Cubic feet)
	Size	Grade	Weight per ft.		
Conductor					
Fresh water	<u>1 1/4 - 3/4</u>	<u>H-40</u>	<u>42</u>	<u>30</u>	<u>To surface</u> By Rule <u>15.05</u>
Coal					
Intermediate	<u>8-5/8</u>	<u>X-42</u>	<u>23</u>	<u>1600</u>	<u>To surface</u> By Rule <u>15.05</u>
Production	<u>4-1/2</u>	<u>J-55</u>	<u>10.5</u>	<u>5630</u>	<u>200-400</u> sks Depths set Rule <u>15.01</u>
Tubing	<u>1-1/2</u>	<u>CN-55</u>	<u>2.75</u>		
Liners					

Perforations: \_\_\_\_\_  
 Top \_\_\_\_\_ Bottom \_\_\_\_\_

**OFFICE USE ONLY  
 DRILLING PERMIT**

Permit number 47-017-3298 March 26, 19 84  
 Date

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 its 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 March 26, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <b>BLANKET</b>	Agent: <u>MA</u>	Plat: <u>MH</u>	Casing <u>ML</u>	Fee <u>601-613</u>
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Administrator, Office of Oil and Gas

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

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

