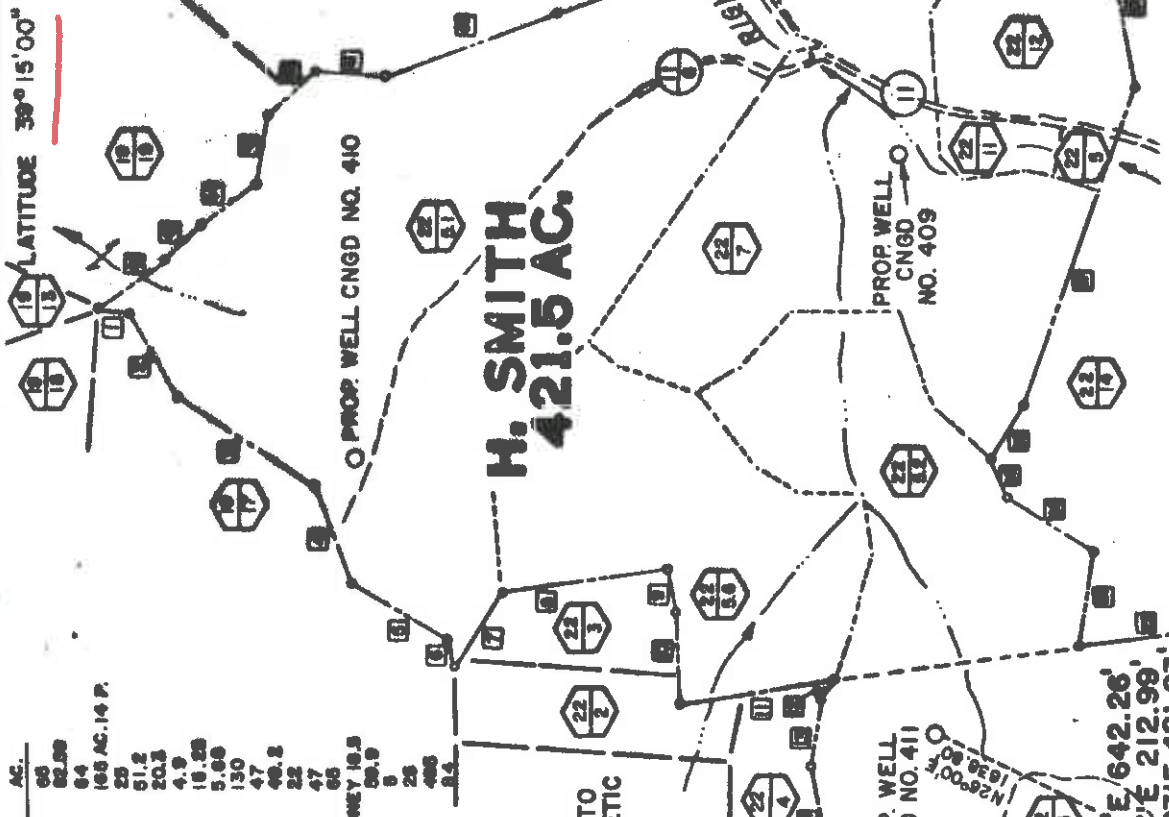


MAP PARCEL	SURFACE OWNER	AC.
15	GLENN C. CUNNINGHAM, ET UX	66
16		62.50
17	DAVID ELLIOT, JR.	84
18	ELWIN LEGGETT	168 AC. 14 P.
19	DAVID ELLIOT, JR.	23
19	SHIRLEY O. COUCH	51.2
20	LARRY DOTSON	20.3
21		4.9
22		16.28
22	W. F. & C. STAS	5.68
22	RONNIE McELROY SR., ET UX	130
22	DANNY E. O'NEAR, ET AL	47
22	W. F. & C. STAS	46.3
22	JOHN E. WAGNER III.	22
22	DANNY E. O'NEAR, ET AL	67
22	FRED WOODS, ET UX	65
22	CLETUS RAY & CHARLOTTE RICHNEY	16.3
22	CARSON E. LEGGETT	59.9
22	DILLON ESTATE	9
22	JERRY & MAMIE ALLMAN	28
22	HAESLY HARDWOOD LUMBER	406
22	CORNELIUS U. ELLIOT	24

LEGEND:  
 MAP NO.  
 PARCEL NO.

NOTE:  
 SURVEYED TO  
 1984 MAGNETIC  
 MERIDIAN.

WEST UNION DIST.  
 CENTRAL DIST.



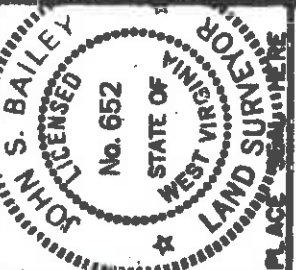
LEASE PROPERTY DESCRIPTION

1	S107° 16'	15180° W 358'	25	N64° E 202'	37	N21° W 310'
2	S80° W 500'	14378° W 537'	26	S58° E 308'	38	N21° W 98'
3	S334° W 806'	15336° W 690'	27	S71° E 1750'	39	N20° W 860'
4	S364° W 559.83	16316° E 584'	28	N76° E 740'	40	N21° W 948'
5	S332° W 571'	17319° W 341'	29	N49° E 280'	41	N49° 30' E 343'
6	S75° W 150'	18312° E 212.88	30	N49° E 285'	42	N49° W 346'
7	S57° 30' E 497'	19350° W 541'	31	N10° W 175'	43	N36° 30' W 348'
8	S08° E 860'	20327° 30' W 497'	32	N06° 30' E 204'	44	N36° 30' W 348'
9	S78° 30' W 230'	21147° 30' E 2390'	33	N27° E 288'	45	N30° W 294'
10	S86° W 400'	22110° W 915'	34	N17° W 203'	46	N34° 30' W 404'
11	S09° E 800'	23381° E 560'	35	N33° 30' W 306'		
12	N44° W 117'	24143° 50' E 208'	36	N31° W 218'		

PREPARED BY MSES CONSULTANTS.

FILE NO. MSES-84-288  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1000'-0"  
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200  
 PROVEN SOURCE OF ELEVATION N.T. OF RT. 11 & 11/8. ELEV. 922

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 A. Bailey L.S. 652



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



Department of Mines  
 Oil & Gas Division

DATE JANUARY 18 19 84  
 OPERATOR'S WELL NO. CNGD NO. 408  
 API WELL NO. 47-017-3292  
 STATE WV COUNTY PUTNAM PERMIT

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS", PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1223.30' WATER SHED RIGHT FORK  
 DISTRICT WEST UNION 8 COUNTY DODDRIDGE  
 QUADRANGLE OXFORD 7.5' 1964 (PHOTOINSPECTED 1976) ACREAGE 84 058  
 SURFACE OWNER CORNELIUS U. ELLIOT  
 OIL & GAS ROYALTY OWNER UNION NATIONAL BANK, ET AL LEASE ACREAGE 450 AC.  
 LEASE NO. 3390 (421.5 Per Abstract)

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  ESTIMATED DEPTH 5600' APR 2 1984  
 TARGET FORMATION ALEXANDER 142  
 WELL OPERATOR CNG DEVELOPMENT COMPANY DESIGNATED AGENT GARY A. NICHOLAS  
 ADDRESS ONE PARK RIDGE CENTER ADDRESS CROSSWIND CORPORATE PARK  
PITTSBURGH, PA 15224 ROUTE 2, BOX 698

ALLEN BLUEPRINT Co. 4 676 Crane Fork, Blue Stone Creek, W.Va. (13A) Charleston, WV

**RECEIVED**

JUN 12 1984



State of West Virginia  
Department of Mines  
Oil and Gas Division

OIL & GAS DIVISION

DEPT. OF MINES

Date 05/30/84  
Operator's Well No. ONGD 408  
Farm H. Smith  
API No. 47 - 017 - 3292

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: 1223.3 Watershed Right Fork

District: West Union County Doddridge Quadrangle Osford 7.5' (1964)

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 CORNELIUS U. ELLIOTT

ADDRESS 225 FOLEY ST., BRIDGEPORT, WV 26330

MINERAL RIGHTS OWNER UNION NATIONAL BANK et al

ADDRESS P.O. BOX 442, CLARKSBURG, WV 26301

OIL AND GAS INSPECTOR FOR THIS WORK

H.M. Underwood ADDRESS Rt. 2, Box 114 Salem, WV 26426

PERMIT ISSUED 03/26/84

DRILLING COMMENCED 04/10/84

DRILLING COMPLETED 04/16/84

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

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	2040	2040	To Surf
7			
5 1/2			
4 1/2	5499	5499	425 sks
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Alexander Depth 5600 feet

Depth of completed well 5583 feet Rotary X / Cable Tools \_\_\_\_\_

Water strata depth: Fresh 310' feet; Salt \_\_\_\_\_ feet

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

OPEN FLOW DATA

Producing formation Alexander

Pay zone depth 5318 - 5364 feet

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

Final open flow 1143 Mcf/d \_\_\_\_\_ Bbl/d

Time of open flow between initial and final tests \_\_\_\_\_ hours

Static rock pressure 430 psig (surface measurement) after \_\_\_\_\_ 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

JUN 18 1984

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

McCullough Perforated; <sup>Max.</sup> 5318' - 5364'; 10 holes

Halliburton Foam Fractured with 70,000# Sand, 500 gal MOD 202 gal acid, 742,000 SCF N2

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
Fill & Shale			0	3	Including indication of all fractures and salt water, coal, oil and gas
Sd, RR & Sh			3	2055	
Big Lime			2055	2120	
Big Injun			2120	2160	
Sd & Sh			2160	2361	
Weir			2361	2485	
Sd & Sh			2485	3375	
Warren			3375	3395	
Shale			3395	3715	
Upper Speechly			3715	3755	
Shale			3755	3800	
Speechly			3800	3950	
Sd & Sh			3950	4510	
Bradford			4510	4535	
Sd & Sh			4535	5304	
<u>Alexander</u>			5304	5367	
Sd & Sh			5367	5583 T.D.	

See Attached Sheet for Electric Log Tops

(Attach separate sheets as necessary)

CNG DEVELOPMENT COMPANY  
Well Operator

By: 

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 well, encountered in the drilling of a well."

017 3292, pg 2

CNGD Well No. 408  
Harry Smith  
Doddridge County, WV

ELECTRIC LOG TOPS

<u>Formation</u>	<u>Top</u>	<u>Bottom</u>
Big Injun	2136	2208
Weir	2369	2493
Gantz	2566	2570
Gordon Stray/Gordon	2773	2928
4th	2937	2975
Warren	3430	3490
Upper Speechley	3555	3619
Speechley	3833	3967
Balltown	4153	4450
Bradford	4509	4660
Riley	4883	5005
Benson	5043	5053

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JUN 1 2 1984

OIL & GAS DIVISION  
DEPT. OF MINES

JUN 18 1984





1) Date: February 7, 19 84  
 2) Operator's Well No.: 408  
 3) API Well No. 47 - 017 - 3292  
 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: 1223.3 Watershed: Right Fork (Photoinsppected 1976)  
 District: West Union County: Doddridge Quadrangle: Oxford 7.5' 1964

6) WELL OPERATOR CNG Development Company 7) DESIGNATED AGENT Mr. Gary Nicholas  
 Address One Park Ridge Center, 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  
Salem, WV 26426

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, Alexander

12) Estimated depth of completed well, 5475 feet

13) Approximate traata depths: Fresh, \_\_\_\_\_ feet; salt, 1642 feet.

14) Approximate coal seam depths: 780 Is coal being mined in the area? Yes  No  COAL DIVISION

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT BELL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used		
Conductor							
Fresh water	11-3/4	H-40	42	X			By Rule 15.05
Coal							Sizes
Intermediate	8-5/8	X-42	23	X			By Rule 15.05
Production	4-1/2	J-55	10.5	X			Depths set
Tubing	1-1/2	CN-55	2.75	X			200-400
Liners							OR AS REQ. BY RULE 15.01
							Perforations:
							Top
							Bottom

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-017-3292 Date March 26, 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 March 26, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>BLANKET</u>	Agent: <u>MAU</u>	Plat: <u>MA</u>	Casing Fee: <u>000-</u>
			<u>235-</u>

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

Administrator, Office of Oil and Gas

File

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

