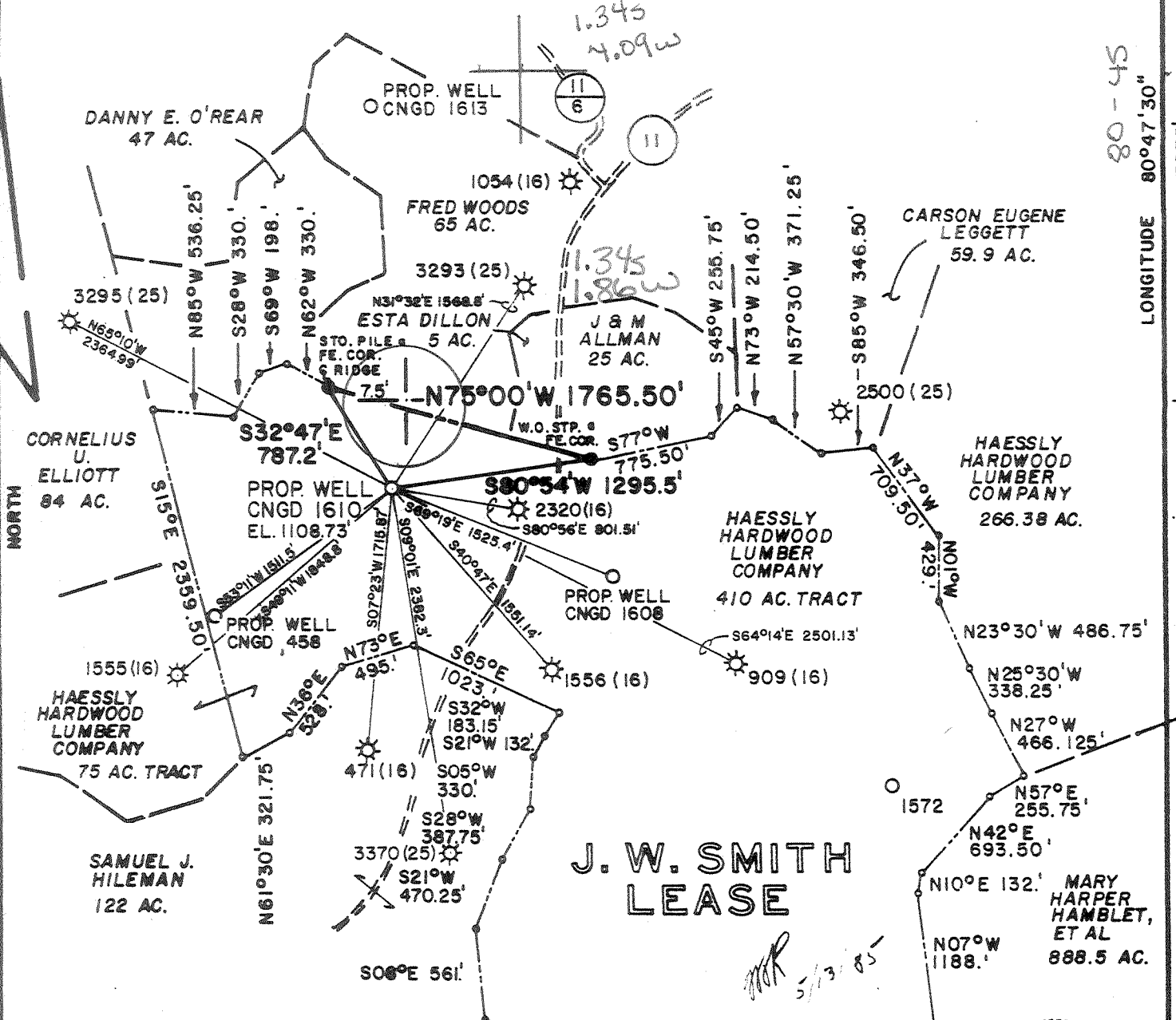


CODE _____ CARO _____ PLOT _____

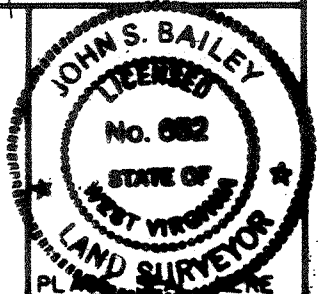
MAGNETIC REFERENCE TIES
CNGD 1610 TO 13" C.O. N37°15'E 209.8'
CNGD 1610 TO 16" W.O. S29°16'E 237.2'



80-45
LONGITUDE 80°47'30"
7075'

FILE NO. MSES 85-602
 DRAWN BY SARC, TAL
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200
 PROVEN SOURCE OF ELEVATION BM ON CO. RT. II; ELEV. 944'

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. L. S. 652



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



DATE JANUARY 10 19 85
 OPERATOR'S WELL NO. CNGD 1610
 API WELL NO. REVISED
47-017-3439
 STATE COUNTY PERMIT

Department of Mines
 Oil & Gas Division

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS", PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X)
 LOCATION: ELEVATION 1108.73' WATER SHED RIGHT FORK
 DISTRICT WEST UNION 8 COUNTY DODDRIDGE
 QUADRANGLE OXFORD, WV 7.5' S26 Holbrook 058 NE1
 SURFACE OWNER HAESSLY HARDWOOD LUMBER SALES ACREAGE 485
 OIL & GAS ROYALTY OWNER HAESSLY HARDWOOD LUMBER SALES LEASE ACREAGE 485
 LEASE NO. 41979
 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 ALEXANDER ESTIMATED DEPTH 5375' JUN 24 1985
 WELL OPERATOR CNG DEVELOPMENT COMPANY DESIGNATED AGENT GARY A. NICHOLAS
 ADDRESS ONE PARK RIDGE CENTER ADDRESS RT. 2, BOX 698
PITTSBURGH, PA 15244 142 BRIDGEPORT, WV 26330

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

Allegheny Nuclear Perf. Alexander 5165 - 5169; 4 holes; .39
5134 - 5141; 6 holes; .39

Halliburton Foam Frac Alexander - Gel System (#/1000 gal) 20, Breakdown (psi) 2700, Ave. HHP 415, Ave. Rate (BPM) 16, Ave. Pres. (psi) 2800, Max. Tr. Pres. (psi) 2860, 500 gal FE Acid, 60,000# 20/40 Sand, Max. Conc. (#/gal) 3, 267 BBL Total Fluid, 185 BBL S L Fluid, ISIP (psi) 1200, 5 min SIP (psi) 1150, Total Nitrogen (SCF) 680,000

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
RR, Shale & Sand			0	300	1/4" stream water @ 140' 1/2" stream water @ 505'
Coal			300	304	
Sand, Shale & RR			304	1445	Coal 300 - 304 1445 - 1450 1770 - 1776
Coal			1445	1450	
Sand, Shale & RR			1450	1770	
Coal			1770	1776	
Sand & Shale			1776	1825	
Lime			1825	1875	
Sand & Shale			1875	5115	
Alexander			5115	5175	
Sand & Shale			5175	5375	
<u>LOG TOPS</u>					
Big Lime			1840	1852	
Big Injun			1880	2018	
Weir			2125	2305	
Berea			2380	2382	
Warren			3240	3300	
Speechley			3516	3570	
Balltown			3790	3832	
Bradford			4306	4370	
Alexander			5116	5171	

(Attach separate sheets as necessary)

CNG DEVELOPMENT COMPANY

Well Operator

By: *Gary A. Nulbar*

Date: July 22, 1985

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."

FILE COPY
RECEIVED

MAY 28 1985



1) Date: May 17, 19 85
2) Operator's Well No. 1610
3) API Well No. 47 - 017-3439
State County Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION
OIL & 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: 1109 Watershed: Right Fork
District: West Union County: Doddridge Quadrangle: Oxford (W)
- 6) WELL OPERATOR CNG Development Company
Address c/o Paul W. Garrett, P.O. Box 15746
Pittsburgh, PA 15244 10110
- 7) DESIGNATED AGENT Gary Nicholas
Address Crosswind Corporate Park
Rt. 2, Box 698, Bridgeport, WV 26330
- 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 / 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, 5375 feet
13) Approximate strata depths: Fresh, 297 feet; salt, 1825, 1916 feet.
14) Approximate coal seam depths: _____ Is coal being mined in the area? Yes _____ / No /

15) CASING AND TUBING PROGRAM

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	1-3/4	H-40	42	x		350	350	To Surface	By Rule 15.05
Coal									Sizes
Intermediate	8-5/8	X-42	23	x		2000	2000	To Surface	By Rule 15.05
Production	4-1/2	J-55	10.5	x		5375	5375	200-400	Depths set
Tubing	1-1/2	J-55	2.75	x					By Rule 15.01
Liners		CN-55							Perforations:
									Top Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-017-3439 Date June 13 19 85

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 June 13, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	<input checked="" type="checkbox"/> Agent:	Plat:	Casing	Fee
28	ALB	MJ	MH	8186

Margaret J. Hasse
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