

11118.26 CARD FLOT

5050' LATITUDE 39°15'00" LONGITUDE 80°47'30"

REFERENCE WELL TIES
CNGD 459 TO 16" RO. S79°53'E 133.72'
CNGD 459 TO 26" BASSWOOD S37°44'E 173.79'

A. H. WALTERS
261.25 AC.
1.445
3.180

D. C. STEWART
266 AC.

C. E. LEGGETT
59.9 AC.

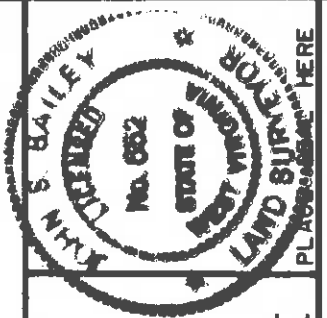
HAESSLY HARDWOOD
LUMBER SALES
485 AC.

R. L. HARPER ET AL.
885.14 AC.

PREPARED BY MSES CONSULTANTS, INC.

FILE NO. MSES 84-451
DRAWING NO. _____
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY 1 IN 200
PROVEN SOURCE OF ELEVATION B.M. EL. 944' ON RT. 11.4100'
WEST OF LOCATION

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



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



Department of Mines
Oil & Gas Division

DATE JULY 24, 19 84
OPERATOR'S WELL NO. CNGD 459
API WELL NO. 47-017-3409
STATE WV COUNTY PUTNAM PERMIT _____

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
(IF "GAS", PRODUCTION STORAGE _____ DEEP _____ SHALLOW
LOCATION: ELEVATION 1156 WATER SHED RIGHT FORK
DISTRICT WEST UNION COUNTY DODDRIDGE
QUADRANGLE S&G OXFORD 7.5' (1976) Nolbrook 151' NE3
SURFACE OWNER HAESSLY HARDWOOD LUMBER SALES, INC ACREAGE 266
OIL & GAS ROYALTY OWNER MARY K. & RICHARD A. POST ET AL. LEASE NO. 41980 LEASE ACREAGE 266

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 5320'
TARGET FORMATION ALEXANDER
WELL OPERATOR CNG DEVELOPMENT COMPANY DESIGNATED AGENT GARY A. NICHOLAS
ADDRESS 147 ONE PARK RIDGE CENTER BRIDGEPORT, PA. 15219 ADDRESS BRIDGEPORT, WV 26330
6-6 Straight Fork - Bluestone Creek (133) MAK 0 4 1985

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

Superior Wireline Perforated Alexander 5154 - 5191; 10 holes (.49)
 Halliburton Frac Alexander - Breakdown (psi) #pumps 2700, AVG. HHP 2, Avg BPM 16
 Avg psi 2850, 500 gal 15% HCL, 55,000# 20/40 Sand, 759 BBL Total Fluid, ISIP 1250,
 5 min 1150, Total Nitrogen (SCF) 565,000

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Fill			0	5	Hole Damp @ 40'
Shale, Sand & RR			5	1850	
Big Lime			1850	1890	
Sand & Shale			1890	1910	
Big Injun			1910	1960	
Sand, Shale & RR			1960	4860	
Benson			4860	4870	
Sand & Shale			4870	5343	Alexander @ TD
<u>LOG TOPS</u> ✓					
Big Lime			1850	1910	
Big Injun			1910	1996	
Weir			2150	2266	
Berea			2350	2358	
Leopold			5070	5080	
Alexander			5115	5202	

(Attach separate sheets as necessary)

CDC DEVELOPMENT COMPANY
 Well Operator
 By: [Signature]
 Date: June 12, 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 ^{encountered} in the drilling of a well."

RECEIVED

JAN 28 1985

1) Date: January 15, 19 85
 2) Operator's Well No. 459
 3) API Well No. 47 - 017 - 3409
 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 1156', Elevation: 1156', Undergrnd storage Right Fork Deep Shallow
 5) LOCATION: District: West Union County: Doddridge Quadrange: Oxford 7.5'
 6) WELL OPERATOR: CNG Development Company 10110 7) DESIGNATED AGENT Mr. Gary Nicholas
 Address: C/o Paul W. Garrett, P.O. Box 15746 Rt. 2, Box 698, Bridgeport, WV 26330
 Address: Pittsburgh, PA 15244
 8) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name: Mr. Mike Underwood
 Address: Rt. 2, Box 114
 Address: Salem, WV 26426
 9) DRILLING CONTRACTOR:
 Name: Sam Jack Drilling Company
 Address: P. O. Box 48
 Buckhannon, WV 26201
 10) PROPOSED WELL WORK: Drill deeper Drill deeper Redrill Stimulate
 Plug off old formation Perforate new formation
 Other physical change in well (specify): Alexander
 11) GEOLOGICAL TARGET FORMATION, 5320
 12) Estimated depth of completed well 1370 feet
 13) Approximate true depths of coal seams: 80, 410, 600, feet; salt, - 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		
Conductor	16						
Fresh water	11-3/4	H-40	42	X		20-30	
Coal						300-48	To surface By Rule 15.05
Intermediate	8-5/8	X-42	23	X	1500	1500	To surface By Rule 15.05
Production	4-1/2	J-55	10.5	X	5320	5320	200-400 sks. Depths set
Tubing	1-1/2	CN-55	2.75	X			By Rule 15.01 Perforations:
Liners							Top Bottom

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-017-3409

February 26, 19 85
 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 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 February 26, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: 28	Agent: MW	Plat: MW	Casing: MW	Fee: 6070
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Margaret J. Hesse
 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

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