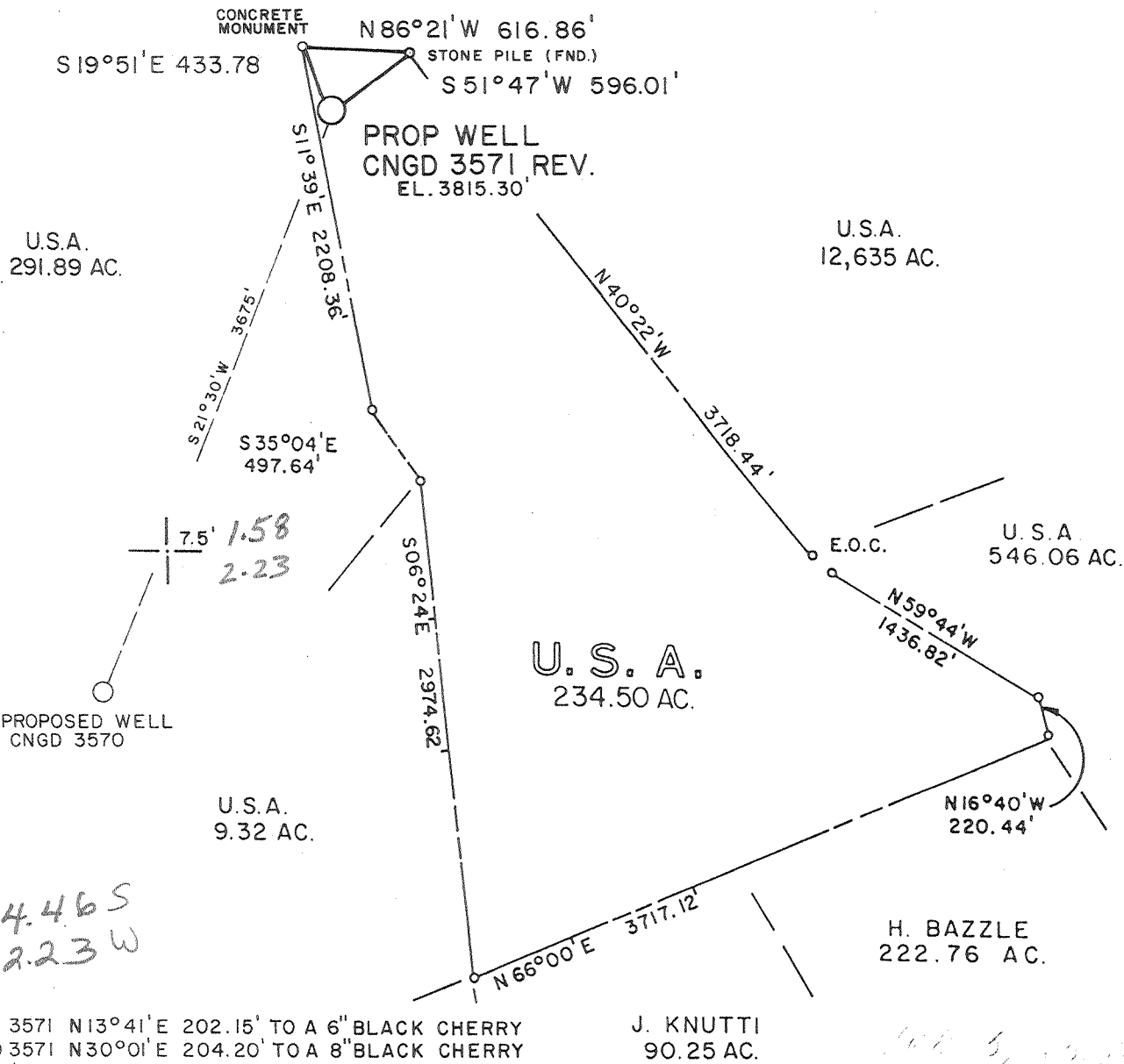


11,800'

(+) DENOTES LOCATION OF WELL ON U.S.G.S. TOPOGRAPHIC MAP

LATITUDE 38°57'30"

LONGITUDE 79°40'00"



CNGD 3571 N13°41'E 202.15' TO A 6" BLACK CHERRY
CNGD 3571 N30°01'E 204.20' TO A 8" BLACK CHERRY

MSES consultants, inc.
 FILE NO. MSES 89-888
 DRAWN BY RRC/RVS
 SCALE 1"=1000'
 MIN. DEGREE OF ACCURACY 1 IN 2500
 PROVEN SOURCE OF ELEVATION:
ROAD INTERSECTION SE OF LOC.
ELEV. 2897'

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) J. S. Bazzle
 R.P.E. _____ L.L.S. 652



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE MAY 8, 1989
 OPERATOR'S WELL NO. CNGD 3571 REV.
 API WELL NO. 47 - 083 - 1098
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 IF "GAS", PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 3815.30' WATERSHED STALNAKER RUN OF SHAVERS RUN
 DISTRICT BEVERLY COUNTY RANDOLPH
 QUADRANGLE BOWDEN, W.V. 7.5' NEAREST TOWN BOWDEN
 SURFACE OWNER U.S.A. ACREAGE 234.50
 OIL & GAS ROYALTY OWNER U.S.A. LEASE ACREAGE 234.50
 LEASE NO. DV 25606

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 TUSCARORA ESTIMATED DEPTH 10,800'
 WELL OPERATOR CNG DEVELOPMENT COMPANY DESIGNATED AGENT RODNEY J. BIGGS
 ADDRESS ONE PARK RIDGE CENTER ADDRESS CROSSWIND CORPORATE PARK
P.O. BOX 15746 ROUTE 2 BOX 698
PITTSBURGH, PA. 15244 BRIDGEPORT, W.V. 26330

OCT 6 1989

FORM IV-6

138334

DEEP WELL 3-6 Bowden (376) DPT-Tusc.

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

- 1) Well Operator: CNG Development Company 10110 (1) 260
- 2) Operator's Well Number: CNGD 3571 3) Elevation: 3815.3
- 4) Well type: (a) Oil / or Gas X/
- (b) If Gas: Production X/ Underground Storage /
Deep X/ Shallow /
- 5) Proposed Target Formation(s): Tuscarora 578
- 6) Proposed Total Depth: 10.800 feet
- 7) Approximate fresh water strata depths: 1121, 1971
- 8) Approximate salt water depths: none
- 9) Approximate coal seam depths: 665
- 10) Does land contain coal seams tributary to active mine? Yes / No X/
- 11) Proposed Well Work: Drill new well
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	20	K-55	54	40	40	Sand in
Fresh Water	9 5/8	J-55	36	2200	2200	To surface 38CSR-18-11.3
Coal						
Intermediate	7	N-80	26	7600	7600	250-350 sks
	7	P-110	26	1400	1400	38CSR-18-11.3
Production	5" liner	P-110	15	1800	1800	250-350 sks 38CSR-18-11.3
Tubing						
Liners						

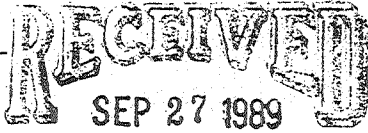
PACKERS : Kind _____
Sizes _____
Depths set _____

RECEIVED
SEP 27 1989

For Division of Oil and Gas Use Only DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

032915
24

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond _____ Agent
(Type)



- 1) Date: June 15, 1989
- 2) Operator's well number
CNGD 3571
- 3) API Well No: 47 - 083 - 1098
State - County - Permit

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY
STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
 - (a) Name U.S. Forest Service
Address 200 Sycamore Street
Elkins, WV 26241
 - (b) Name _____
Address _____
 - (c) Name _____
Address _____
- 5) (a) Coal Operator:
 - Name _____
Address _____
 - (b) Coal Owner(s) with Declaration
Name same as Surface Owner
Address _____
 - Name _____
Address _____
 - (c) Coal Lessee with Declaration
Name _____
Address _____
- 6) Inspector Phillip Tracy
Address Rt. 2, Box 37-A
Montrose, WV 26283
Telephone (304)-636-8798

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

_____ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR
X Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through _____ on the above named parties, by:

- X Personal Service (Affidavit attached)
- _____ Certified Mail (Postmarked postal receipt attached)
- _____ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator CNG Development Company
By: [Signature]
Its: Supervisor Purchasing/Production Services
Address One Park Ridge Center, P. O. Box 15746
Pittsburgh, PA 15244
Telephone (412) 787-4117

Subscribed and sworn before me this 15 day of June, 1989

Barbara L. Randall
My commission expires _____

NOTARIAL SEAL
BARBARA L. RANDALL, NOTARY PUBLIC
FINDLAY TOWNSHIP, ALLEGHENY COUNTY
MY COMMISSION EXPIRES APRIL 5, 1993

Notary Public

State of West Virginia
DEPARTMENT OF ENERGY
Division of Oil and Gas

Well Operator's Report of Well Work

Farm name: MONONGAHELA NAT'L FOREST Operator Well No.: CNGD 3571

LOCATION: Elevation: 3815.30 Quadrangle: BOWDEN

District: BEVERLY County: RANDOLPH
Latitude: 8350 Feet South of 38 Deg. 57Min. 30 Sec.
Longitude 11800 Feet West of 79 Deg. 40 Min. 0 Sec.

Company: CNG DEVELOPMENT CO. A DEL
P. O. BOX 15746
PITTSBURGH, PA 15244-0000

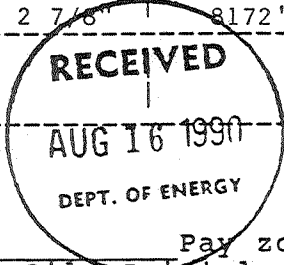
Agent: RODNEY J. BIGGS

Inspector: PHILLIP TRACY
Permit Issued: 10/05/89
Well work Commenced: 10/30/89
Well work Completed: 8/4/90
Verbal Plugging
Permission granted on: _____
Rotary Cable _____ Rig
Total Depth (feet) 11,197'
Fresh water depths (ft) 57'

Salt water depths (ft) _____

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 85 - 87

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
13 3/8"	40.70'		
9 5/8"	2181.94'	2181.94'	775 sks
7"	9526.69'	9526.69'	350 sks
2 7/8"	8172' KB	8172' KB	-----



OPEN FLOW DATA

Producing formation Oriskany Pay zone depth (ft) 8517-8526
 Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
 Final open flow 1891/85 MCF/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests _____ Hours
 Static rock Pressure 2310 psig (surface pressure) after 72 Hours

Second producing formation Chert Pay zone depth (ft) 8222-8298
 Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
 8/4/90 Final open flow 1,806 MCF/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests _____ Hours
 Static rock Pressure 2000 psig (surface pressure) after 12 Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: Rodney J. Biggs, Manager
CNG DEVELOPMENT CO. A DEL. CORP.

By: Rodney J. Biggs
Date: August 7, 1990

AUG 24 1990

PLUG BACK:

Plug #1 from 11,153' to 10,965'; used 35 sks Cl."H" Cmt.
 Plug #2 from 10,225' to 10,091'; used 25 sks Cl. "H" Ctm.
 Plug #3 from 9,500' to 9,360'; used 25 sks Cl."H" Cmt.
 Set 7" Halliburton ESV Cement retainer on D.P. at 8730' & Dropped 3 sk. sand on retainer

PERFORATED/ACIDIZE ORISKANY:

Perf. from 8517 - 8526, 27 holes; 8535 - 8546, 44 holes; Used 4" HSC.
 Brokedown Perf. at 5000#, ISIP 3600#, 15 min SI 1500#
 Acidize - Ave. Rate 23 1/2, Ave. Pres. 2910# on tubing, 3620# on Annulus,
 Max. Pres. 3760#, 708 bbl fluid used, ISIP 2610#, 15 min 2000#, pumped 4000 gal
 15% FE Acid.

PERFORATED/ACIDIZE CHERT:

Perf. from 8222 - 8298, 96 holes, .46" dia., 4" HSC
 (Set Baker Model G Retrievable Bridge Plug @ 8375' KB)
 Acidize - Breakdown 4300#, Avg. HP 3 pumps, Ave Rate 20 bbl Annulus, 3 bbl tubing,
 Ave Pres. 3400#, Max Tr Pres. 3700#, Total Acid 12,800 gal, Total Fluid 976 bbl,
 ISIP 1850, 5 min 1470, used total 180,000 SCFN₂

KB to GL	0	20
Fill	20	24
Sd & SH	24	85
Coal	85	87
Sd, Sh & RR, Lime	87	8220
Chert	8220	8306
Sd, Sh & Lime	8306	8846
Chert	8846	8854
Sd, Sh. & Lime	8854	11197

11203
 -8616

 2587 620

LOG TOPS

Tully	7862	7882
Marcellus	8097	8137
Purcell	8137	8188
Onondaga	8188	8221
Huntersville Chert	8221	8358
Needmore Shale	8358	8394
Oriskany	8394	8616
Helderberg	8616	8806
Mandata Shale	8806	8838
Keyser Ls.	8838	9072
Salina	9072	9796
Wills Creek	9796	10062
Williamsport Ss.	10062	10069
McKenzie Ls.	10166	10481
Rose Hill Sh.	10481	10857
Cacapon Ss.	10857	10902
Upper Tuscarora Ss.	11048	
TD	11203	

94/11