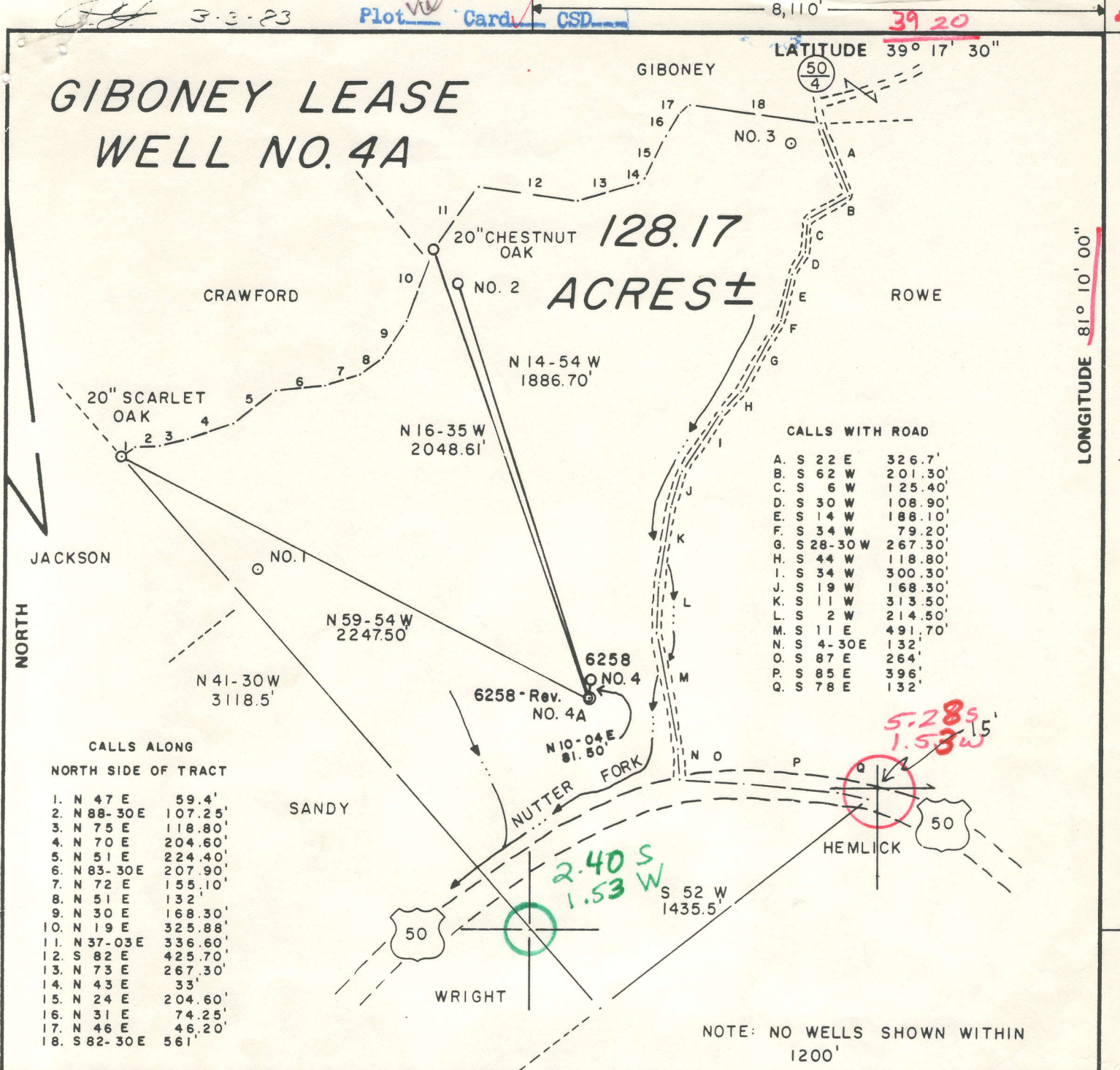
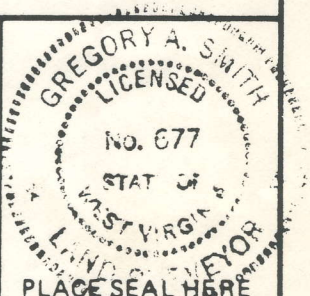


# GIBONEY LEASE WELL NO. 4A



FILE NO. 9-43  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 600'  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION JUNCT. OF ROADS ELEV. 1017'

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) Gregory A. Smith  
 R.P.E. \_\_\_\_\_ L.L.S. 677



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FORM IV-6 (8-78)

DATE MARCH 1, 19 83  
 OPERATOR'S WELL NO. 4A  
 API WELL NO. 47-085-6258-Rev  
 STATE 47 COUNTY 085 PERMIT 6258-Rev

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS,") PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 970' WATER SHED NUTTER FORK  
 DISTRICT GRANT COUNTY RITCHIE  
 QUADRANGLE SCHULTZ 7.5' St. Marys 15' SW

SURFACE OWNER H.G. GIBONEY et. ux. ACREAGE 128.17  
 OIL & GAS ROYALTY OWNER H.G. GIBONEY et. ux. LEASE ACREAGE 128.17  
 LEASE NO. \_\_\_\_\_

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 MARCELLUS ESTIMATED DEPTH 5900'  
 WELL OPERATOR APPCO OIL & GAS CORP. DESIGNATED AGENT RICHARD H. BRUMBAUGH MAR 07 1983  
 ADDRESS P. O. BOX 14348 ADDRESS 212 COURT STREET  
ORLANDO, FLORIDA 32807 SPENCER, WV 25276

DEEP WELL 3-3 (unplugged) (1983)



Pict Card - 16-83

6090'

20

# GIBONEY LEASE WELL NO. 4

LATITUDE 39° 17' 30"

CALLS ALONG  
NORTH SIDE OF TRACT

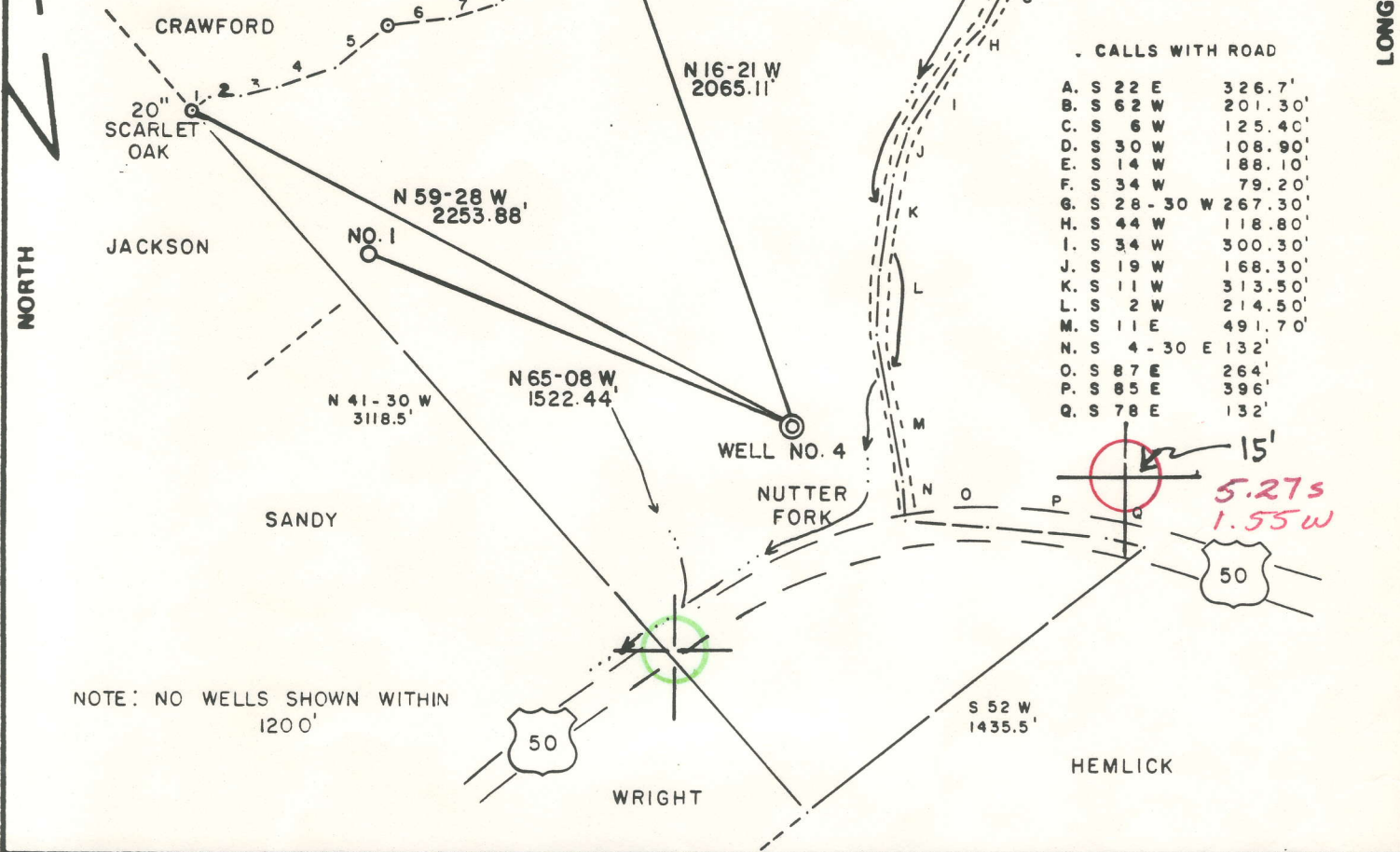
1. N 47 E	59.4'
2. N 88 - 30 E	107.25'
3. N 75 E	118.80'
4. N 70 E	204.60'
5. N 51 E	224.40'
6. N 83 - 30 E	207.90'
7. N 72 E	155.10'
8. N 51 E	132'
9. N 30 E	168.30'
10. N 19 E	325.88'
11. N 37 - 03 E	336.60'
12. S 82 E	425.70'
13. N 73 E	267.30'
14. N 43 E	33'
15. N 24 E	204.60'
16. N 31 E	74.25'
17. N 46 E	46.20'
18. S 82 - 30 E	561'

128.17'  
ACRES ±

CALLS WITH ROAD

A. S 22 E	326.7'
B. S 62 W	201.30'
C. S 6 W	125.40'
D. S 30 W	108.90'
E. S 14 W	188.10'
F. S 34 W	79.20'
G. S 28 - 30 W	267.30'
H. S 44 W	118.80'
I. S 34 W	300.30'
J. S 19 W	168.30'
K. S 11 W	313.50'
L. S 2 W	214.50'
M. S 11 E	491.70'
N. S 4 - 30 E	132'
O. S 87 E	264'
P. S 85 E	396'
Q. S 78 E	132'

LONGITUDE 81° 10' 00"



NOTE: NO WELLS SHOWN WITHIN 1200'

FILE NO. 9-38  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 600'  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS  
ELEV. 1017'

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) Gregory A. Smith  
 R.P.E. \_\_\_\_\_ L.L.S. 677



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



DATE SEPT. 30, 19 82  
 OPERATOR'S WELL NO. 4  
 API WELL NO. \_\_\_\_\_  
47 085 - 6258  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS,") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 974' WATER SHED NUTTER FORK  
 DISTRICT GRANT COUNTY RITCHIE  
 QUADRANGLE SCHULTZ 7.5' St. Marys 15' SW  
 SURFACE OWNER H. G. GIBONEY et. ux. ACREAGE 128.17  
 OIL & GAS ROYALTY OWNER H. G. GIBONEY et. ux. LEASE ACREAGE 128.17  
 LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

FEB 21 1983

PLUG AND ABANDON  CLEAN OUT AND REPLUG   
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 5950'  
 WELL OPERATOR APPCO OIL & GAS CORP. DESIGNATED AGENT RICHARD H. BRUMBAUGH  
 ADDRESS P.O. BOX 14348 ADDRESS 212 COURT STREET  
ORLANDO, FLORIDA 32807 SPENCER, WV 25276





IV-35  
(Rev 8-81)

Date April 18, 1983  
Operator's  
Well No. 4A  
Farm H.G. Giboney  
API No. 47 - 085 - 6258

State of West Virginia  
Department of Mines  
Oil and Gas Division

OCT 16 1983

WELL OPERATOR'S REPORT  
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

RECEIVED

OCT - 3 1983

WELL TYPE: Oil X / Gas X / Liquid Injection \_\_\_ / Waste Disposal \_\_\_ /  
(If "Gas," Production \_\_\_ / Underground Storage \_\_\_ / Deep \_\_\_ / SHALLOW GAS DIVISION  
DEPT. OF MINE

LOCATION: Elevation: 980 K.B. Watershed Nutters Fork  
District: Grant County Ritchie Quadrangle Schults 7.5 min

COMPANY Appco Oil and Gas Corporation

ADDRESS 100 s. Orange Ave. S-909. Orlando. Fla

DESIGNATED AGENT Richard Brumbaugh

ADDRESS 212 Court St. Spencer. WV 25337

SURFACE OWNER H.G. Giboney et. ux.

ADDRESS Route #1, Cairo, WV 26337

MINERAL RIGHTS OWNER H.G. Giboney et. ux.

ADDRESS Route #1, Cairo, WV 26337

OIL AND GAS INSPECTOR FOR THIS WORK \_\_\_\_\_

Sameul Hersman ADDRESS P.O. Box 66, Smithville, WV

PERMIT ISSUED 3/1/83 26178

DRILLING COMMENCED 2/21/83 revised permit

DRILLING COMPLETED 3/07/83 (3/02/83)

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

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"	201'	201'	to surface
9 5/8			250 ft <sup>3</sup>
8 5/8	2010'	2010'	350' fill
7			
5 1/2			600 ft <sup>3</sup>
4 1/2	5773'	5773'	2,634' fill
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Marcellus Shale Depth 5800' feet

Depth of completed well 5780 feet Rotary X / Cable Tools \_\_\_\_\_

Water strata depth: Fresh n/a feet; Salt 1177+ feet

Coal seam depths: n/a Is coal being mined in the area? no

OPEN FLOW DATA

Producing formation Olentangy and Marcellus shale Pay zone depth 5326-5750 feet

Gas: Initial open flow 300 Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d

Final open flow 100 Mcf/d Final open flow \_\_\_\_\_ Bbl/d

Time of open flow between initial and final tests 48 hours

Static rock pressure 1400 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

(Continue on reverse side)



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

Perforations: Stage 1 (Marcellus Shale) *down into Onondaga???*  
 5682 to 5750 19 .39 holes  
 Stage 2 (Olentangy Shale)  
 5326 to 5555 20 .39 holes

Stimulation: Nitrogen Completion *Rhine Street*  
 800 mscf Nitrogen per stage  
 250 gallons of 15% HCL used in breakdown process  
 ISIP 1st stage 3200 psi  
 ISIP 2nd stage 2900 psi

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Permian & Pennsylvanian systems			surface	1743	
First Cow Run sandstone			1030	1053	No shows
Second Cow Run Sandstone			1177	1200	No shows
Salt Sands			1325	1665	interbedded sandstone and shale
Maxton sandstone			1709	1731	wet, slight show of gas
Greenbriar limestone			1733	1795	Sandy in bottom part
Big Injun sandstone			1819	1910	Slight show of gas
8 5/8" casing point				2010	
siltstone & shale			2010	2281	
Sunbury (coffee) Shale			2281	2293	Berea sandstone absent
siltstone & shale			2293	4563	Gantz 2407-2417 Gordon 2687-2689 Tiona 3541-3559 Speechley- Balltown 3580-4010 Bradford 4116-4128
Huron Member (Ohio Shale)			4563	4604	Organic shale, slight show of gas
siltstone & shale			4604	4807	
PIPE CREEK Benson Equivalent (organic marker)			4807	4812	Organic shale
siltstone & shale <i>N/A</i>			4812	5307	
Olentangy Shale <i>Rhine Street</i>			5307	5557	Organic shales
siltstone & shale <i>CASH</i>			5557	5681	
Marcellus Shale			5681	5703	Organic shale, slight show of gas
Onondage Limestone (Corniferous)			5703 <i>5760 on gamma ray</i>	5728	T.D. Logger 5728' T.D. Driller <u>5780'</u>

(Attach separate sheets as necessary)

*5703  
980  
4723*  
2300  
1500  
4100

Appco Oil & Gas Corporation  
Well Operator

By: Benjamin Amelto, Geologist  
 Date: April 18, 1983

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."





1) Date: FEB. 7, 19 83  
 2) Operator's Well No. GIBONEY #4  
 3) API Well No. 47 085 6238  
 State County Permit

DRILLING CONTRACTOR:

OVER-JOHN, INC.

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES, OIL AND GAS DIVISION

OIL AND GAS WELL PERMIT APPLICATION

- 4) WELL TYPE: A Oil \_\_\_\_\_ / Gas X /  
 B (If "Gas", Production \_\_\_\_\_ / Underground storage \_\_\_\_\_ / Deep \_\_\_\_\_ / Shallow X /)
- 5) LOCATION: Elevation: 974' Watershed: NUTTER FORK  
 District: GRANT County: RITCHIE Quadrangle: SCHULTZ 7.5'
- 6) WELL OPERATOR APPCO OIL & GAS CORP. 11) DESIGNATED AGENT RICHARD BRAIMBAUGH  
 Address 100 S. ORANGE AVE. SUITE 909 Address 212 COURT ST.  
ORLANDO, FLA. SPENCER, W.VA.
- 7) OIL & GAS ROYALTY OWNER H.G. GIBONEY et. ux. 12) COAL OPERATOR NONE  
 Address ROUTE # 1 Address \_\_\_\_\_  
CAIRO, W.VA. 26337
- 8) SURFACE OWNER H. B. GIBONEY et. ux. 13) COAL OWNER(S) WITH DECLARATION ON RECORD:  
 Address ROUTE # 1 Name \_\_\_\_\_  
CAIRO, W.VA. 26337 Address \_\_\_\_\_
- 9) FIELD SALE (IF MADE) TO:  
 Address N/A Name \_\_\_\_\_  
 Address \_\_\_\_\_
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED  
 Name SAM HERSMAN 14) COAL LESSEE WITH DECLARATION ON RECORD:  
 Address P.O. BOX 66 Name \_\_\_\_\_  
SMITHVILLE, W. VA. 26178 Address \_\_\_\_\_
- 15) PROPOSED WORK: Drill X / Drill deeper \_\_\_\_\_ / Redrill \_\_\_\_\_ / Fracture or stimulate \_\_\_\_\_ /  
 Plug off old formation \_\_\_\_\_ / Perforate new formation \_\_\_\_\_ /  
 Other physical change in well (specify) \_\_\_\_\_
- 16) GEOLOGICAL TARGET FORMATION, MARCELLUS  
 17) Estimated depth of completed well, 5950' feet  
 18) Approximate water strata depths: Fresh, 100' feet; salt, (0) feet.  
 19) Approximate coal seam depths: N/A Is coal being mined in the area? Yes \_\_\_\_\_ / No \_\_\_\_\_

20) 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	<u>11-3/4</u>	<u>H-40</u>	<u>42#</u>	<u>X</u>		<u>300'</u>	<u>300'</u>	<u>BACK TO SURFACE</u>	Kinds
Fresh water	<u>8-5/8</u>	<u>ERW</u>	<u>112#</u>	<u>X</u>		<u>1975'</u>	<u>1975'</u>	<u>BACK TO SURFACE</u>	Sizes
Coal									
Intermediate									
Production	<u>4-1/2</u>	<u>ERW</u>	<u>10.50</u>	<u>X</u>		<u>5798'</u>	<u>5798'</u>	<u>NO CEMENT</u>	Depths set
Tubing									
Liners									Perforations:
									Top Bottom

21) EXTRACTION RIGHTS

- Check and provide one of the following:  
 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.  
 The requirement of Code 22-4-1-(c) (1) through (4). (See reverse side for specifics.)

22) ROYALTY PROVISIONS

Is the right to extract, produce or market the oil or gas based upon a lease or other continuing contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes  No

If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.

23) Required Copies (See reverse side.)

24) Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

Notary: \_\_\_\_\_  
 My Commission Expires \_\_\_\_\_

Signed: \_\_\_\_\_  
 Its: \_\_\_\_\_

OFFICE USE ONLY  
DRILLING PERMIT

Permit number \_\_\_\_\_

19

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. 10) 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.)

Permit expires October 16, 1983 unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee

Administrator, Office of Oil and Gas

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





1) Date: MARCH 1st, 1983  
 2) Operator's Well No. GIBONEY # 4A  
 3) API Well No. 47 085 6258-Rev.  
 State            County            Permit           

DRILLING CONTRACTOR:

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES, OIL AND GAS DIVISION

OIL AND GAS WELL PERMIT APPLICATION

- 4) WELL TYPE: A Oil            / Gas X  
 B (If "Gas", Production X / Underground storage            / Deep            / Shallow X)
- 5) LOCATION: Elevation: 970' Watershed: NOTTER FORK  
 District: GRANT County: RITCHIE Quadrangle: SCHULTZ 7.5'
- 6) WELL OPERATOR APPCO OIL & GAS CORP. 11) DESIGNATED AGENT RICHARD H. BRUMBAUGH  
 Address 100 S. ORANGE ST. SUITE 909 Address 212 COURT ST.  
ORLANDO, FL. 32807 SPENCER, W.V. 25276
- 7) OIL & GAS ROYALTY OWNER H.G. GIBONEY et ux. 12) COAL OPERATOR             
 Address Rt. 1 CARIO, W.V. 26337 Address
- 8) SURFACE OWNER H.G. GIBONEY et ux. 13) COAL OWNER(S) WITH DECLARATION ON RECORD:  
 Address Rt. 1 CARIO, W.V. 26337 Name             
 Acreage            Address             
 Name             
 Address
- 9) FIELD SALE (IF MADE) TO:  
 Address
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED 14) COAL LESSEE WITH DECLARATION ON RECORD:  
 Name SAMUEL HERSHMAN Name             
 Address P.O. BOX 66 Address             
SMITHVILLE, W.V. 26178
- 15) PROPOSED WORK: Drill X / Drill deeper            / Redrill            / Fracture or stimulate             
 Plug off old formation            / Perforate new formation             
 Other physical change in well (specify)
- 16) GEOLOGICAL TARGET FORMATION, MARCELLUS
- 17) Estimated depth of completed well, 5900' feet
- 18) Approximate water strata depths: Fresh, 100' feet; salt,            feet.
- 19) Approximate coal seam depths: N/A Is coal being mined in the area? Yes            / No X

20) 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	<u>11 3/4</u>	<u>H40</u>	<u>42</u>	<u>X</u>			<u>300'</u>	<u>FILL TO SURFACE</u>		Kinds
Fresh water	<u>8 5/8</u>	<u>ERW</u>	<u>24</u>	<u>X</u>		<u>1975</u>	<u>1975</u>	<u>FILL AS REQUIRED</u>		
Coal										Sizes
Intermediate										
Production	<u>4 1/2</u>	<u>ERW</u>	<u>10 1/2</u>	<u>X</u>		<u>5900'</u>	<u>5900'</u>	<u>FILL AS REQUIRED</u>		Depths set
Tubing										
Liners										Perforations:
										Top Bottom

- 21) EXTRACTION RIGHTS  
 Check and provide one of the following:  
 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.  
 The requirement of Code 22-4-1-(c) (1) through (4). (See reverse side for specifics.)
- 22) ROYALTY PROVISIONS  
 Is the right to extract, produce or market the oil or gas based upon a lease or other continuing contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes  No
- If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.
- 23) Required Copies (See reverse side.)
- 24) Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

Notary: Samuel D. Smith Signed:             
 My Commission Expires 12-7-92 Its:           

OFFICE USE ONLY  
DRILLING PERMIT

Permit number 47-085-6258-REV. Date March 4 1983

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. 10) 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.)

Permit expires November 4, 1983 unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
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Administrator, Office of Oil and Gas