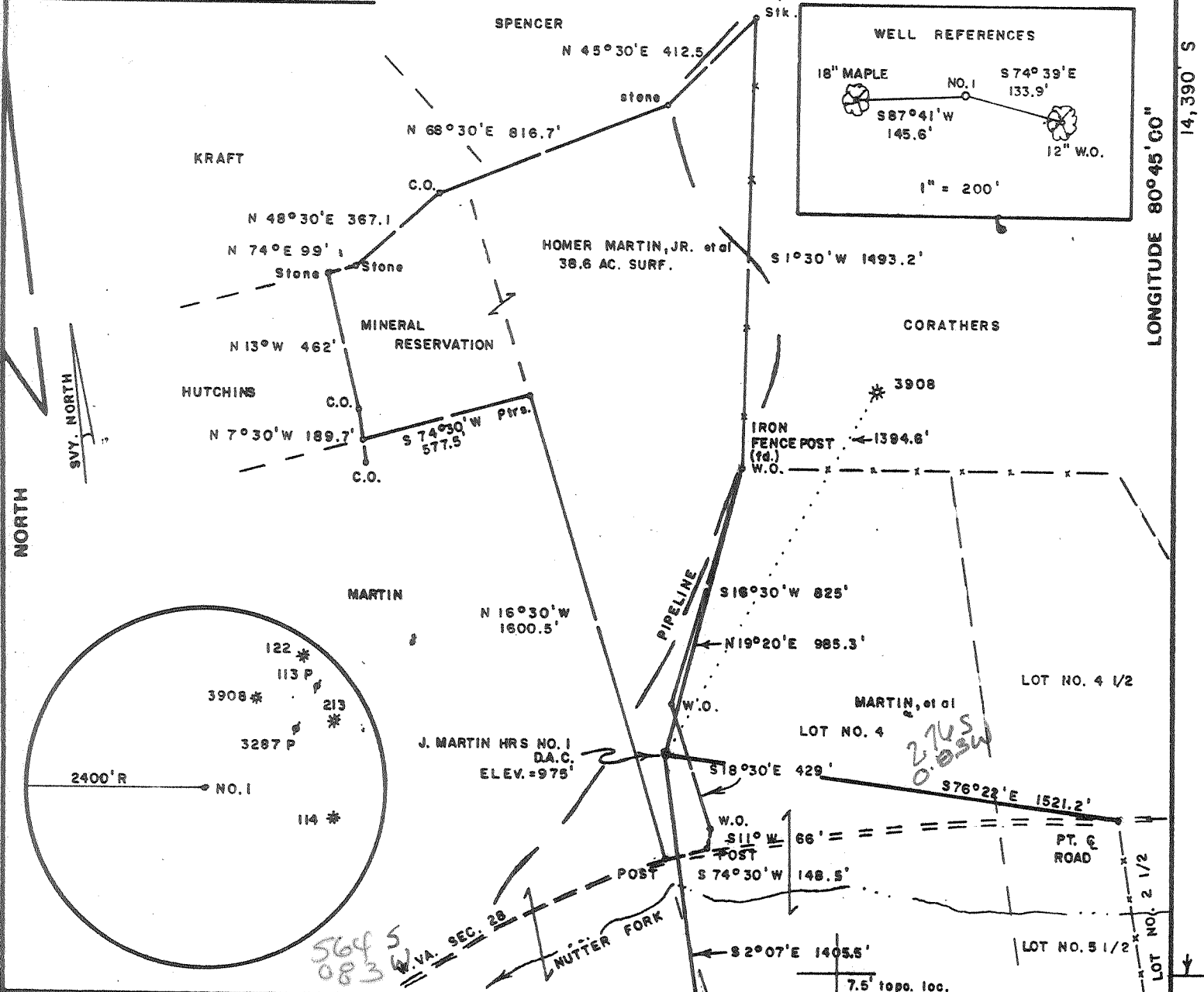


# FREEMAN HRS. LEASE

## 25 OF 38.6 AC. ±

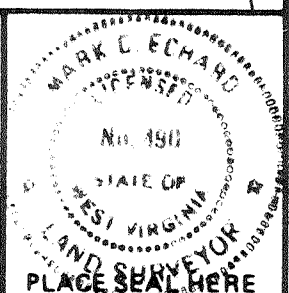
LATITUDE 39°22'30"

LONGITUDE 80°45'00"



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION JCT. OF ROADS EAST OF LEASE ELEV. = 862'

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) Mark C. Echard  
 MARK C. ECHARD  
 R.P.E. \_\_\_\_\_ L.L.S.: 490  
 24" w.o. (fd)



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



DATE DECEMBER 29, 19 92  
 OPERATOR'S WELL NO. J. FREEMAN NO. 1  
 API WELL NO. \_\_\_\_\_  
47 - 017 - 4011  
 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 975' WATER SHED NUTTER FORK  
 DISTRICT WEST UNION COUNTY DODDRIDGE  
 QUADRANGLE WEST UNION 7.5'  
 SURFACE OWNER HOMER MARTIN, JR. et al ACREAGE 38.6  
 OIL & GAS ROYALTY OWNER JOSEPH FREEMAN HRS. LEASE ACREAGE 25 of 38.6  
 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 BENSON ESTIMATED DEPTH 5200'  
 WELL OPERATOR D.A.C. DESIGNATED AGENT KENNETH MASON  
 ADDRESS P.O. BOX 99 ADDRESS P.O. BOX 99  
ALMA, W.VA. 26320 ALMA, W.VA. 26320

6-6 Wilbur (092)

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: MARTIN, HOMER ETAL.

Operator Well No.: FREEMAN #1

LOCATION: Elevation: 975.00

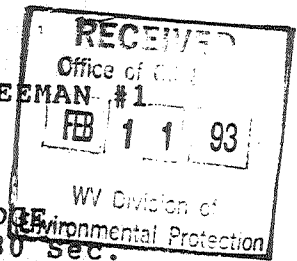
Quadrangle: WEST UNION

District: WEST UNION

County: DODDRIDGE

Latitude: 14390 Feet South of 39 Deg. 22Min. 30 Sec.

Longitude: 4400 Feet West of 80 Deg. 45 Min. 0 Sec.



Company: DRILLING APPALACHIAN CORP

P. O. BOX 99  
ALMA, WV 26320-0099

Agent: KENNETH R. MASON

Inspector: MIKE UNDERWOOD

Permit Issued: 12/31/92

Well work Commenced: 12/31/92

Well work Completed: 1/11/93

Verbal Plugging

Permission granted on: N/A

Rotary X Cable Rig

Total Depth (feet) 5110'

Fresh water depths (ft) 180'

1740'

Salt water depths (ft) 1740'

Is coal being mined in area (Y/N)? N

Coal Depths (ft): N/A

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
8-5/8	1058'	1058'	CTS 235sks
4-1/2		5065'	300sks

OPEN FLOW DATA

Producing formation Benson Sand Pay zone depth (ft) 4970-74

Gas: Initial open flow 60 MCF/d Oil: Initial open flow 0 Bbl/d

Final open flow 581 MCF/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 36 Hours

Static rock Pressure 1525 psig (surface pressure) after 48 Hours

Second producing formation \_\_\_\_\_ Pay zone depth (ft) \_\_\_\_\_

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

Final open flow \_\_\_\_\_ MCF/d Final open flow \_\_\_\_\_ Bbl/d

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

Static rock Pressure \_\_\_\_\_ psig (surface pressure) after \_\_\_\_\_ 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: DRILLING APPALACHIAN CORP.

Reviewed TMG

Recorded \_\_\_\_\_

By: Kenneth R. Mason

Date: 1-22-93

FEB 23 1994

Perforated at a depth of 4970'4974', 16 shots  
 Fractured with 10,000# 80/100, 40,000# 20/40 sand, 20# gel water,  
 87,000 CF nitrogen gas. Formation break, 1882 psi, avg treatment  
 psi, 2875 psi, avg fluid rate 26.18 bbls/minute, ISIP 2151 psi.

Permian Sands/Shales	Surface	500
Pennsylvanian Sands/Shales	500	1930
Big Lime shale	1930	2000
Keener shale	2009	2032
Big Injun shale	<del>3035</del> 2035	2105
Weir Sand shale	2254	2340
Gantz Sand Shale/Siltstone	2441	2467
Gordon Sand shale/siltstone	2671	2705
Warren shale/siltstone	2706	3345
Riley shale/siltstone	3346	3370
Benson Sand shale/siltstone	3371	4515
TD	4516	4546
	4547	4969
	4970	4974 show gas
	4975	5110
		5110

OFT=435  
 DF=424

16598

017-4011

ORIGINAL

ED  
of  
Environmental Protection  
FORM WW-2B  
DEC 30 92  
Permit  
Office of Oil & Gas

Issued 12/31/92  
Expires 12/31/94  
Page of

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

- 1) Well Operator: DRILLING APPALACHIAN CORPORATION 14425 (8) 670
- 2) Operator's Well Number: Freeman #1 3) Elevation: 975'
- 4) Well type: (a) Oil X/ or Gas X/  
(b) If Gas: Production X/ Underground Storage   /  
Deep   / Shallow X/
- 5) Proposed Target Formation(s): Benson 435
- 6) Proposed Total Depth: 5250± feet
- 7) Approximate fresh water strata depths:
- 8) Approximate salt water depths:
- 9) Approximate coal seam depths:
- 10) Does land contain coal seams tributary to active mine? Yes   / No X/
- 11) Proposed Well Work: Drill, perforate, stimulate new formation
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor	11-3/4"		34#	30'	0'	OK ml ↑
Fresh Water						
Coal						
Intermediate	8-5/8"		20#	1090'	1090'	CTS-38CSR18-11.3 CTS-38CSR18-11.2
Production	4-1/2"	J-55	10½#	5095'	5095'	CTS-38CSR18-11.1
Tubing						
Liners						

PACKERS : Kind     
Sizes     
Depths set   

For Division of Oil and Gas Use Only

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

16598

009048  
44

DEC 30 92  
Permitting  
Office of Oil & Gas

- 1) Date: Dec. 23, 1992
- 2) Operator's well number  
Freeman #1
- 3) API Well No: 47 - 017 - 4011  
State - County - Permit

ORIGINAL

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
  - (a) Name Homer Martin, et al  
Address Route 2, Box 328A  
West Union, WV 26456
  - (b) Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (c) Name \_\_\_\_\_  
Address \_\_\_\_\_
- 5) (a) Coal Operator:
  - Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (b) Coal Owner(s) with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_
  - Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- 6) Inspector Mike Underwood  
Address Rte 2, Box 135  
Salem WV 26426  
Telephone (304) - 782-1043

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:  
   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 DRILLING APPALACHIAN CORPORATION  
By: *Raymond R. Thomas*  
Its: President  
Address P. O. Box 99, Alma, WV 26320

Telephone 304/758-4638

Subscribed and sworn before me this 29 day of December, 1992



OFFICIAL SEAL  
Notary Public, State of West Virginia  
Betty Fletcher  
P.O. Box 11  
Alma, WV 26320  
My commission expires February 13, 2001  
*Betty Fletcher* Notary Public  
February 13, 2001