

# FORD LEASE 124.5 ACRES ± WELL # 1

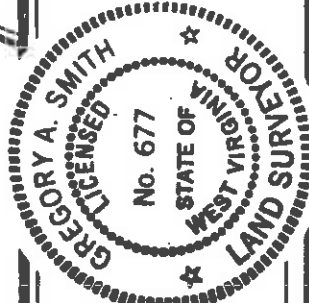
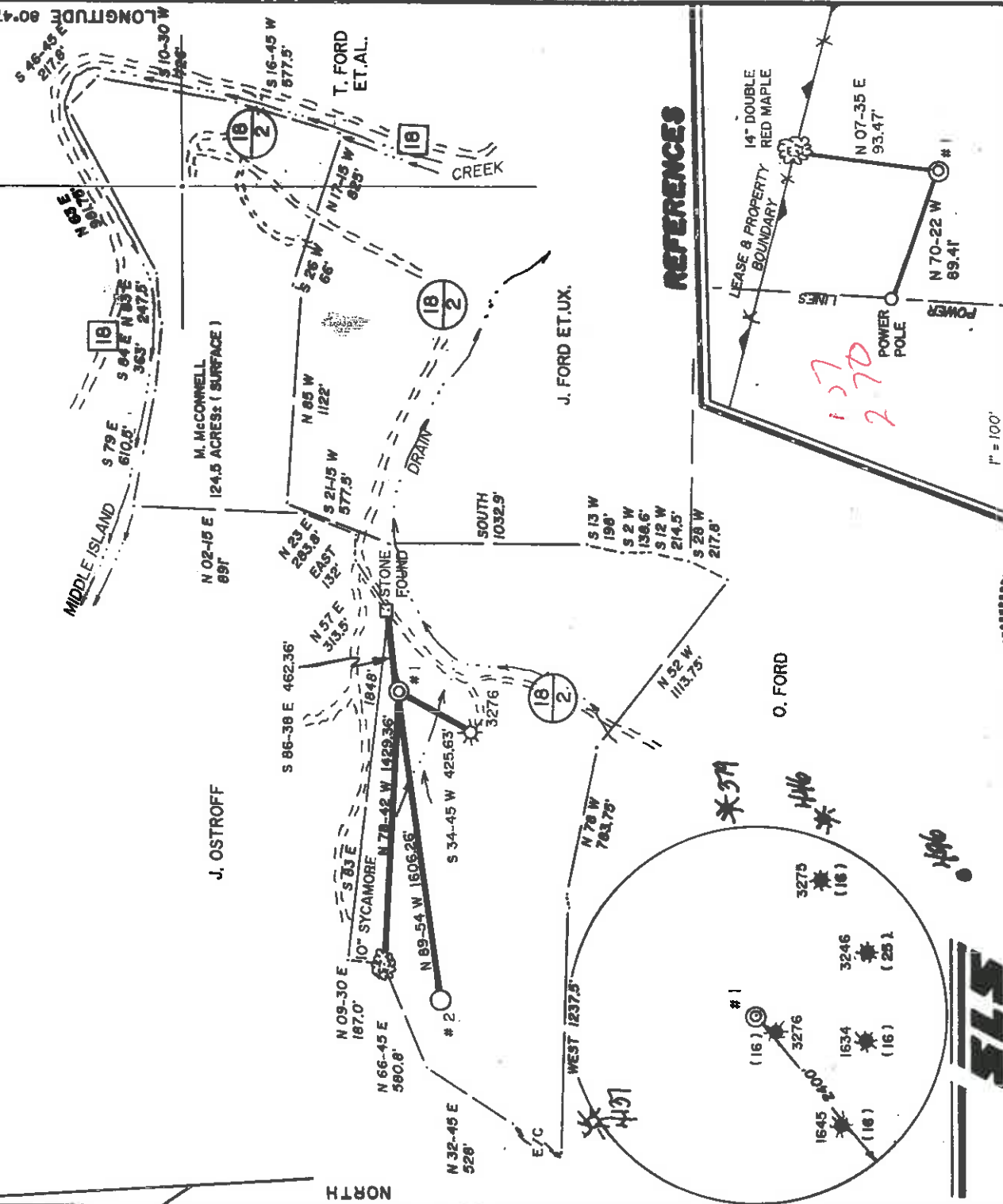
*Opinion*  
*3/6/95*

*1.0750*  
*0.450*

LONGITUDE 80°47'30"

LATITUDE 39°20'00"

5.630



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 ENERGY

L.L.S. *Gregory A. Smith*  
677

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

DATE DECEMBER 30, 19 94  
OPERATORS WELL NO. FORD # 1  
API NO. MM  
WELL NO. 47-017-4184 STATE WV COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 3348 (53-33)  
PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEVATION 1076' SCALE 1" = 800'

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY  
OIL AND GAS DIVISION



WELL TYPE: OIL  GAS  LIQUID WASTE  DISPOSAL  "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 952' WATERSHED MIDDLE ISLAND CREEK IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

DISTRICT WEST UNION COUNTY DODDRIDGE

SURFACE OWNER MARTHA ANN MCCONNELL QUADRANGLE WEST UNION 7.5 *ST*  
ROYALTY OWNER JACK FORD ET AL. ACREAGE 124.5 LEASE ACREAGE 124.5

PROPOSED WORK: LEASE NO. \_\_\_\_\_  
DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD  
FORMATION  PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG  OTHER  
PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION ALEXANDRA  
ESTIMATED DEPTH 5400'

WELL OPERATOR MURVIN OIL CORP. DESIGNATED AGENT P. NATHAN BOWLES, JR.  
ADDRESS P.O. BOX 297 OLNEY, IL 62450 ADDRESS P.O. BOX 1396 CHARLESTON, WV 25325

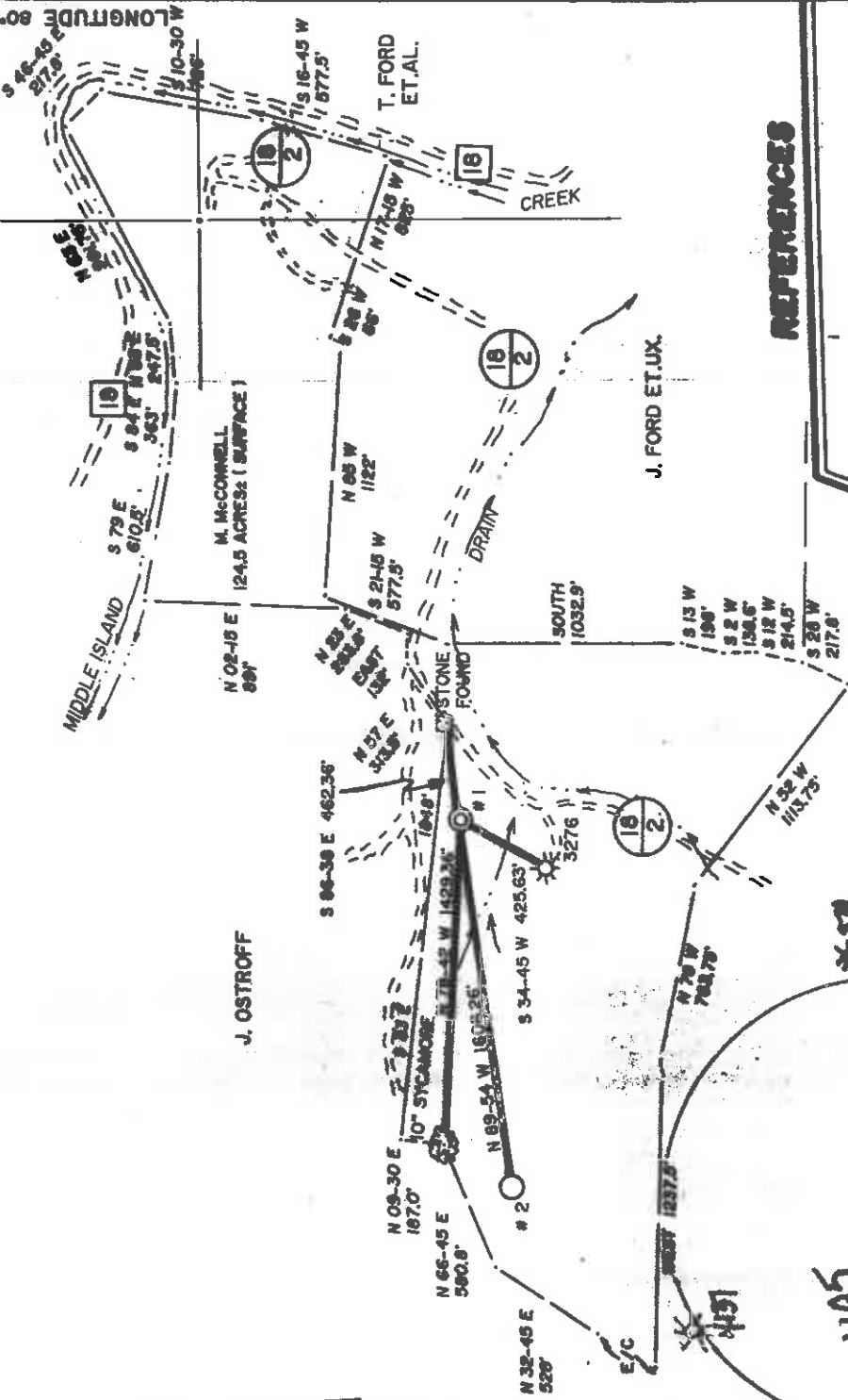
# FORD LEASE 124.5 ACRES+ WELL # 1

*April 4/1996*  
*2/16/95*

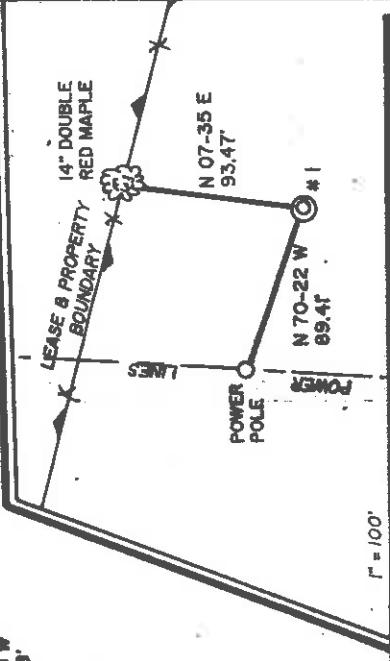
LATITUDE 39°20'00"

5.630'

LONGITUDE 80°47'30"

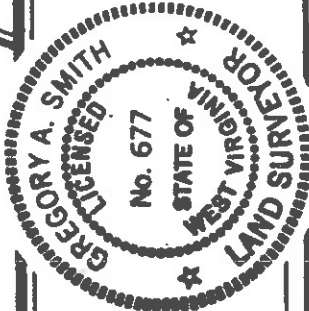


### REFERENCES



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 ENERGY

L.L.S. *Gregory A. Smith*  
677



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

DATE DECEMBER 30, 19 94

OPERATORS WELL NO. FORD # 1

API WELL NO. 47 - 017 - 041847

STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY  
OIL AND GAS DIVISION



FILE NO. 334B (.53-33)

SCALE 1" = 800'

PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEVATION 1076'

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 952' WATERSHED MIDDLE ISLAND CREEK

DISTRICT WEST UNION COUNTY DODDRIDGE

SURFACE OWNER MARTHA ANN MCCONNELL  
ROYALTY OWNER JACK FORD ET AL.

PROPOSED WORK:

DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG  OTHER

PHYSICAL CHANGE IN WELL (SPECIFY)

*Set temporary plug thru ball valve casing* TARGET FORMATION ALEXANDRA, *Quartz* ESTIMATED DEPTH 5400'

WELL OPERATOR MURVIN OIL CORP.

ADDRESS P.O. BOX 297 OLNEY, IL 62450

DESIGNATED AGENT P. NATHAN BOWLES, JR.

ADDRESS P.O. BOX 1396 CHARLESTON, WV 25325

COUNTY NAME

PERMIT

Dodd

4184



AUG 23 1995

06-Mar-95  
API # 47- 17-04184

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

Permitting  
Office of Oil & Gas

Well Operator's Report of Well Work

Farm name: MCCONNELL, MARTHA A. FORD Operator Well No.: M. FORD #1

LOCATION: Elevation: 952.00 Quadrangle: WEST UNION

District: WEST UNION County: DODDRIDGE  
Latitude: 5630 Feet South of 39 Deg. 20 Min. 0 Sec.  
Longitude 2460 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: MURVIN OIL COMPANY

1712 S. WHITTLE AVE/P.O. BX297  
OLNEY, IL 62450-0297

Agent: P. NATHAN BOWLES, JR.

Inspector: MIKE UNDERWOOD

Permit Issued: 03/06/95

Well work Commenced: 07/26/95

Well work Completed: 08/22/95

Verbal Plugging

Permission granted on: Rig

Rotary Cable 5343

Total Depth (feet) 5343

Fresh water depths (ft) 50

Salt water depths (ft) none

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

Coal Depths (ft): None

OPEN FLOW DATA

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4	37.5	37.5	
8 5/8	968	968	319
4 1/2	5280	5280	387

Producing formation Benson and Alexander  
 Gas: Initial open flow 455 MCF/d Oil: Initial open flow - Bbl/d  
 Final open flow 445 MCF/d Final open flow - Bbl/d  
 Time of open flow between initial and final tests 24 Hours  
 Static rock pressure 1200 psig (surface pressure) after 48 Hours

Second producing formation Riley and 3rd Riley  
 Gas: Initial open flow 455 MCF/d Oil: Initial open flow - Bbl/d  
 Final open flow 445 MCF/d Final open flow - Bbl/d  
 Time of open flow between initial and final tests 24 Hours  
 Static rock pressure 1200 psig (surface pressure) after 48 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.

RECEIVED  
WV Division of  
Environmental Protection

For: MURVIN OIL COMPANY

AUG 25 1995

Permitting  
Office of Oil & Gas

By: *Cary A. Hill* Executive Vice-President

Date: August 23, 1995

SEP 1 1995

08/11/95: Ran bond log, perforated Alexander 5156' to 5221' with 20 holes.

08/14/95: Foam fractured Alexander perfs with 500 gals. 15% HCL, 400 bbls. fluid, 60,000 lbs 20/40, and 569 MSCF nitrogen.

Perforated Riley and Benson formations 4828' to 4892' with 10 holes. Foam fractured perfs with 500 gals 15% HCL, 146 bbls. fluid, 30,000 lbs. 20/40, and 561 MSCF nitrogen.

Perforated Riley formation 4446' to 4488' with 12 holes. Foam fractured perfs with 750 gals. 15% HCL, 308 bbls. fluid, 10,000 lbs. 80/100, 30,000 lbs. 20/40, and 455 MSCF nitrogen.

WELL LOG

FORMATION	TOP	BOTTOM
Sand/Shale	0	45
Shale/Sand	45	189
Sand	189	199
Sandy Shale	199	220
Red Rock	220	239
Sandy Shale	239	443
Shale	443	500
Sand/Shale	500	605
Sand	605	719
Red Rock	719	835
Sandy Shale	835	1105
Shale	1105	1160
Sandy Shale	1160	1660
Sand	1660	1680
Sandy Shale	1680	1827
Big Lime	1827	1960
Injun	1960	2030
Shale	2030	2187
Weir	2187	2292
Shale	2292	2388
Berea	2388	2398
Shale	2398	2584
Gordon	2584	2634
Shale	2634	3258
Warren	3258	3317
Shale	3317	3578
Speechly	3578	3638
Shale	3638	3840
Balltown	3840	4274
Shale	4274	4425
Riley	4425	4492
Shale	4492	4808
3rd Riley	4808	4834
Shale	4834	4886
Benson	4886	4895
Shale	4895	5132
Alexander	5132	5224
Shale	5224	5343
Total Depth	5343	

**RECEIVED**  
WV Division of  
Environmental Protection  
AUG 25 1995  
Permitting  
Office of Oil & Gas

RECEIVED  
Division of  
Environmental Protection

017-4184

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
WELL WORK PERMIT APPLICATION

FEB 17 1995

Issued 03/06/95

671

34050 (8)

595 Murvin Oil Company

Well Operator: Murvin Oil Company

Expired 03/06/97

3) Elevation: 952

8

Well Number: M Ford #1

4) Well type: (a) Oil \_\_\_ / or Gas X /

(b) If Gas: Production X / Underground Storage \_\_\_ /  
Deep \_\_\_ / Shallow X /

Proposed Target Formation(s): Riley - Benson - Alexander 439

Proposed Total Depth: 5300 feet

Approximate fresh water strata depths: 48, 90

Approximate salt water depths: --

Approximate coal seam depths: --

10) Does land contain coal seams tributary to active mine? Yes \_\_\_ / No X /

11) Proposed Well Work: Drill and Complete New Well

12)

CASING AND TUBING PROGRAM

TYPE	SIZE	GRADE	WEIGHT PER FT.	FOR DRILLING	LEFT IN WELL	FILL-UP (Cu. ft.)
Conductor	11 3/4	L.S.	42	40	40	O.K. MUC
Fresh Water	8 5/8	L.S.	20	950	950	(CIS)
Coal						38CS98A3
Intermediate						38CS98A.22
Production	4 1/2	J/K	10.5	5300	5300	370
Tubing						38CS98A.17
Liners						

PACKERS : Kind \_\_\_\_\_  
Sizes \_\_\_\_\_  
Depths set \_\_\_\_\_

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

**RECEIVED**  
WV Division of  
Environmental Protection  
FEB 17 1995

1) Date: February 1, 1995  
2) Operator's well number M.X. Ford #1  
3) API Well No: 47 - 017 - 4184  
State - County - Permit

Permitting  
Office of Oil & Gas  
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 Martha Ann Ford McConnell  
Address Mid Star Rt. Box 16  
West Union, WV 26456

(b) Name \_\_\_\_\_  
Address \_\_\_\_\_

(c) Name \_\_\_\_\_  
Address \_\_\_\_\_

5) (a) Coal Operator:  
Name None  
Address \_\_\_\_\_

(b) Coal Owner(s) with Declaration  
Name Ida Ford Heirs  
Address c/o Jack Ford  
P.O. Box 6, West Union, WV 26456

Name \_\_\_\_\_  
Address \_\_\_\_\_

(c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_

6) Inspector Mr. Mike Underwood  
Address Route 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

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 9 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.

By: Gary H. Perry  
Executive Vice-President  
Address \_\_\_\_\_  
P.O. Box 297  
Olney, IL 62450  
Telephone (618) 393-2124

Subscribed and sworn before me this 12<sup>th</sup> day of January, 1995  
My commission expires 10/28/97 Notary Public

TERESA PERRY, Notary Public  
State of Ohio  
My Commission Expires Oct. 28, 1997

FORM WW-2B 017-4184 frac  
 STATE OF WEST VIRGINIA  
 ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
 DIVISION 1998 WELL WORK PERMIT APPLICATION

Permitting  
 Office of Oil & Gas: 545 Murvin Oil Company 34050 8 671  
 Operator's Well Number: M. Ford #1 3) Elevation: 952

Well type: (a) Oil / or Gas X / Issued 04/25/96  
 (b) If Gas: Production X / Underground Storage / Expired 04/25/98  
 Deep / Shallow X /

Proposed Target Formation(s): Balltown 433

- 6) Proposed Total Depth: 4274 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: Recomplete in Shallow Formation by setting temporary plug and then removing plug after recompletion in order to commingle production.

**CASING AND TUBING PROGRAM**

TYPE	SIZE	GRADE	WEIGHT PER FT.	FOOTAGE	INTERVALS	CEMENT
Conductor	11 3/4	L.S.	42	37.5	Left in well 37.5	319 30CS/18.1.3
Fresh Water	8 5/8	L.S.	20	968	968	387 30CS/18.1.1
Coal						
Intermediate						
Production	4 1/2	J/K	10.5	5280	5280	
Tubing						
Liners						

PACKERS : Kind \_\_\_\_\_  
 Sizes \_\_\_\_\_  
 Depths set \_\_\_\_\_

For Office of Oil and Gas Use Only  
 Fee(s) paid: PAID Well Work Permit PAID Reclamation Fund PAID WPCP  
 Plat PAID WW-9 PAID WW-2B PAID Bond PAID Agent PAID  
 (Type) \_\_\_\_\_

25



**RECEIVED**  
WV Division of  
Environmental Protection  
APR 03 1996

1) Date: February 5, 1996  
2) Operator's well number  
M. Ford #1  
3) API Well No: 47 - 017 - 4184  
State County Permit

Office of **Permitting**  
**STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT**  
**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 Martha Ann Ford McConnell  
Address Mid Star Rt., Box 16  
West Union, WV 26456
- (b) Name \_\_\_\_\_  
Address \_\_\_\_\_
- (c) Name \_\_\_\_\_  
Address \_\_\_\_\_
- (a) Coal Operator:  
Name None  
Address \_\_\_\_\_
- (b) Coal Owner(s) with Declaration  
Name Ida Ford Heirs  
Address c/o Jack Ford  
P.O. Box 6, West Union, WV 26456  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- (c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- 6) Inspector Mr. Mike Underwood  
Address Rt. 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 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 8 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 22-6 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.

By: Murvin Oil Company  
Well Operator  
Its: Executive Vice President  
Address P.O. Box 297  
Olney, Illinois 62450  
Telephone 618-393-2124

Subscribed and sworn before me this 5th day of February, 1996  
Barbara A. Ziel Notary Public  
My commission expires November 9, 1996