

# HARTMAN LEASE 673 ACRES±

# WELL No. 12

**NOTES ON SURVEY**

1. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV SOUTH ZONE NAD '27.
2. TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 07/10/01.
3. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A PLAT DATED 03/21/91 AS PREPARED BY GREGORY A. SMITH, P.S. FOR A.P.I. NO. 47-085-8060.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF RITCHIE COUNTY IN JULY, 2001.
5. WELL LAT./LONG. ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).

**WELL No. 12  
STATE PLANE  
COORDINATES**  
(N) 741,411  
(E) 2,000,875

EVERETT MASON  
200 ACRES±  
(SURFACE)

MYRON C. & MONROE BAILEY  
42.5 ACRES±  
(SURFACE)

MYRON C. & MONROE BAILEY  
62.5 ACRES±  
(SURFACE)

RALPH TINGLER  
35.25 ACRES±  
(SURFACE)

MARTY NICHOLS & CELAINE RIDDLE  
100 ACRES±

C. MARLING & SYLVIA BAILEY  
568.69 ACRES±

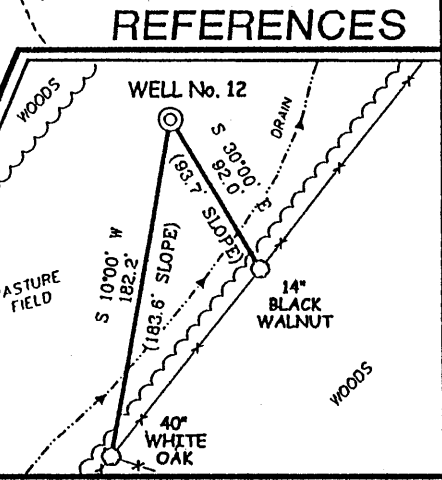
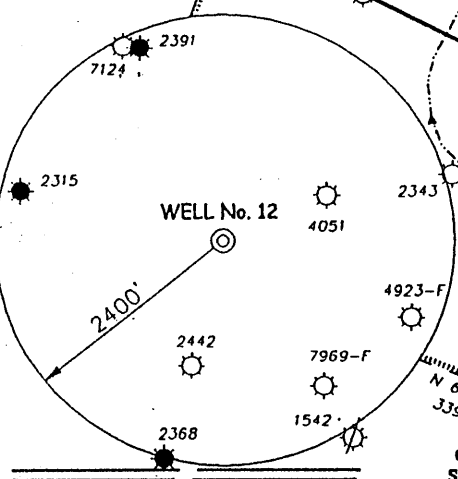
CHARLES & DEAN MASON  
36.6 ACRES±  
(SURFACE)

ROGER & DEAN MASON  
50 ACRES±  
(SURFACE)

C. MARLING & SYLVIA BAILEY  
40.25 ACRES±  
(SURFACE)

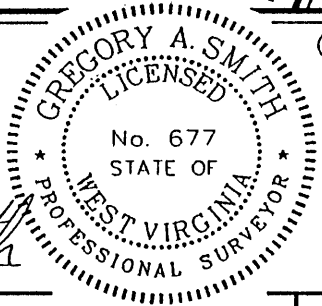
SYLVIA BAILEY  
59.75 ACRES±  
(SURFACE)

C. MARLING & SYLVIA BAILEY  
26.38 ACRES±  
(SURFACE)



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 ENVIRONMENTAL PROTECTION.

P.S. 677 *Gregory A. Smith*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
DATE JULY 30, 2001  
OPERATORS WELL NO. HARTMAN No. 12  
API WELL NO. 47-085-08834  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 1038AP12 (104-49)  
PROVEN SOURCE OF ELEVATION BENCHMARK ELEVATION 799' SCALE 1"=1000'

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

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

LOCATION :  
ELEVATION 890' WATERSHED TRIBUTARY OF GRASS RUN  
DISTRICT MURPHY COUNTY RITCHIE QUADRANGLE BURNT HOUSE 7.5'

SURFACE OWNER C. MARLING & SYLVIA BAILEY ACREAGE 568.69±  
ROYALTY OWNER J.F. HARTMAN HEIRS LEASE ACREAGE 568.69 OF 673±

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 ALEXANDER  
ESTIMATED DEPTH 5600'

WELL OPERATOR J.F. DEEM DESIGNATED AGENT FRANK DEEM  
ADDRESS 5518 2nd AVE. VIENNA, WV 26105 ADDRESS 5518 2nd AVE. VIENNA, WV 26105

AUG 31 2001

(THURSDAY FIELD 127)

COUNTY NAME RIT  
PERMIT 8834

M17

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

Well Operator's Report of Well Work

Farm name: Hartman Operator Well No.: 12

LOCATION: Elevation: 890' Quadrangle: Burnt House

District: Murphy County: Ritchie  
Latitude: 2050 Feet South of 39 Deg. 02 Min. 30 Sec.  
Longitude 10,960 Feet West of 80 Deg. 57 Min. 30 Sec.

Company: J. Frank Deem

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 5518 2nd Avenue Vienna, WV 26105	3-5/8	927	927	200 Sx
Agent: J. Frank Deem	4-1/2		4961	720 Sx
Inspector: Larry Parrish				
Date Permit Issued:				
Date Well Work Commenced: 12-20-01				
Date Well Work Completed: 12-29-01				
Verbal Plugging:				
Date Permission granted on:				
Rotary xxx Cable Rig				
Total Depth (feet): 5330'				
Fresh Water Depth (ft.): 50'				
Salt Water Depth (ft.): NR				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.):				

OPEN FLOW DATA Alexander 4779-4848  
Benson 4564-4569  
3rd Riley 4390-4414

Producing formation Riley Pay zone depth (ft) 4215-4284

Gas: Initial open flow 6 MCF/d Oil: Initial open flow 0 Bbl/d

Final open flow 1,127 MCF/d Final open flow Show Bbl/d

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

Static rock Pressure 1,460 psig (surface pressure) after 96 Hours

All Formations are Co-Mingled.

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

RECEIVED  
Office of Oil & Gas  
Office of Chief  
MAY 22 2003  
WV Department of  
Environmental Protection

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.

Signed: J. Frank Deem  
By: J. Frank Deem  
Date: 5/20/03

JUN 13 2003

R17  
8834

TREATMENT

Stage #1: Alexander (4720-4832) 13 Holes; 60,000# 20/40 Sand, 565,000 SCF N<sub>2</sub> & 809 Bbls. 60 Quality Foam

Stage #2: Benson & 3rd Riley (4391-4567) 13 Holes; 40,000# 20/40 Sand; 432,000 SCF N<sub>2</sub> & 615 Bbls. 60 Quality Foam

Stage #3: Riley (4216-4282) 13 Holes; 5,000# 80/100 & 35,000# 20/40 Sands, 448,000 SCF N<sub>2</sub> & 593 Bbls. 60 Quality Foam

FORMATIONS:

Red Clay	0 - 20	
Sd & Sh	20 - 50	Water @ 50'
Sd	50 - 65	
Sd & Sh	65 - 85	
Sd	85 - 146	
RR & Sh	146 - 185	
Sd	185 - 331	
Sd & Sh	331 - 480	
RR & Sh	480 - 759	
Sd	759 - 848	
Sd & Sh	848 - 1119	
Sd	1119 - 1189	
Shell	1189 - 1195	
Sd & Sh	1195 - 1704	
L Lime	1704 - 1721	
Shell	1721 - 1742	
B Lime	1742 - ----	
Injun	---- - 1882	
Sd & Sh	1882 - 3155	<u>Gas Tests:</u> 1903 - 11 Mcf
Sd	3155 - 3175	2403 - 11 Mcf
Sd & Sh	3175 - 4245	3928 - 6 Mcf
Brn Sd	4245 - 4255	
Sd & Sh	4255 - 4485	
Benson	4485 - 4505	
Sd & Sh	4505 - 4585	
Brn Sd	4585 - 4595	
Sd & Sh	4595 - 4725	
Alex	4725 - 4735	
Sd & Sh	4735 - 5330	
TD	5330	



west virginia department of environmental protection

Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
www.dep.wv.gov

December 21, 2012

**WELL WORK PERMIT**

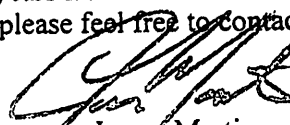
**Fracture**

This permit, API Well Number: 47-8508834, issued to DEEM, J. F. OIL & GAS, LLC, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Please be advised that form WR-35, well operators report of well work, is to be submitted to this office within 90 days of completion of drilling, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.



James Martin  
Chief

Operator's Well No: HARTMAN 12  
Farm Name: BAILEY, SYLVIA  
**API Well Number: 47-8508834**  
Permit Type: Fracture  
Date Issued: 12/21/2012

**Promoting a healthy environment.**

12/28/2012