

7500' Longitude 37° 25' 10 9-25-80

HEADSVILLE 15

Raymond Staggs 34/23 16

Gillespie Well

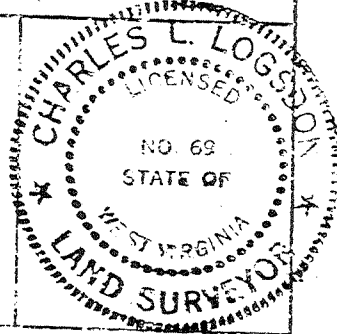
McDonald Well

C. Gillespie

Surface & Minerals
E. H. McDonald
9/95
Tax Map CR 16-4

FILE NO. _____
DRAWING NO. _____
SCALE 1" = 500'
MINIMUM DEGREE OF ACCURACY 1 in 200
PROVEN SOURCE OF ELEVATION B.M. on Bridge over Staggs Run at Headsville

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) [Signature]
R.P.E. _____ L.L.S. 69



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

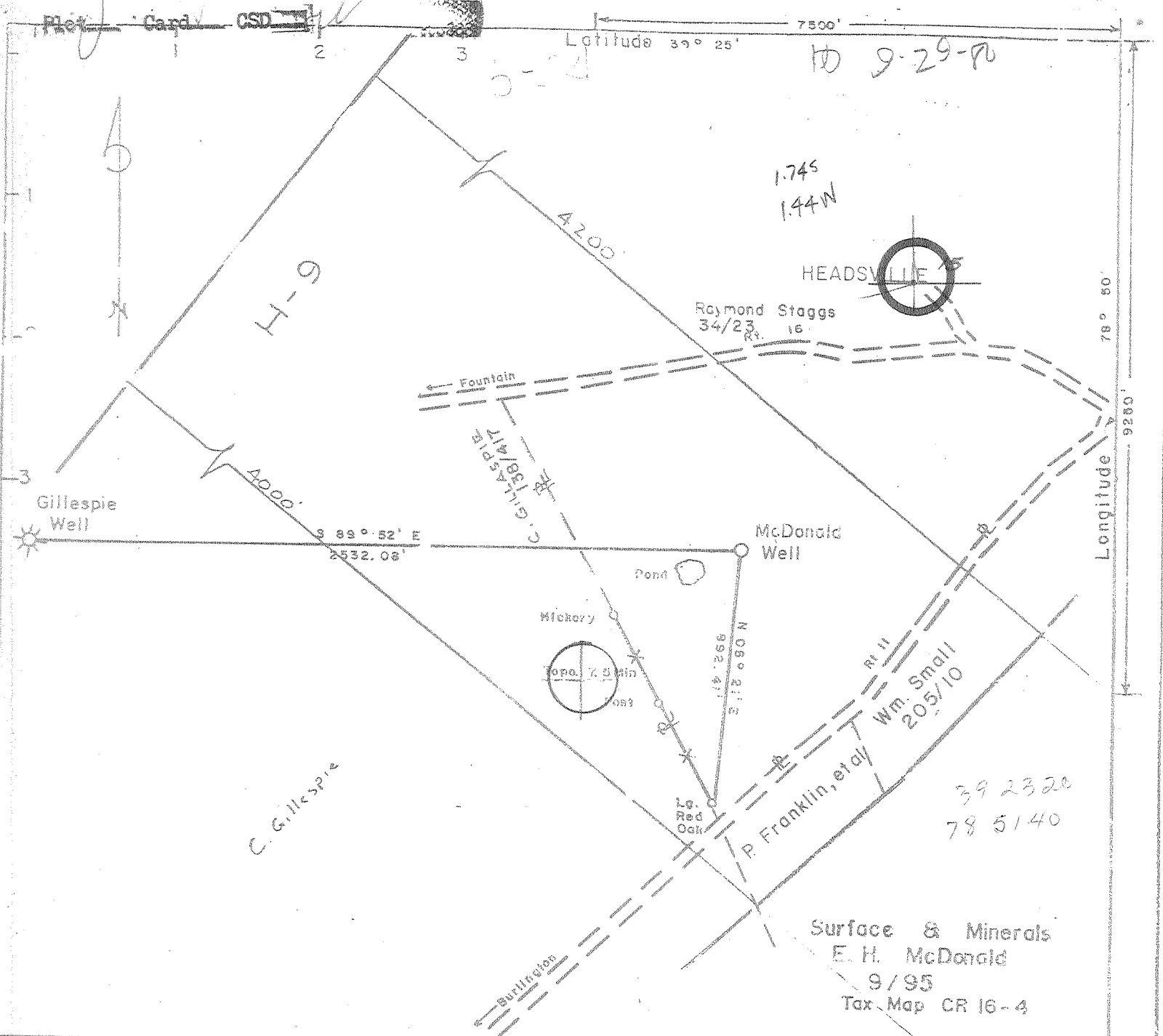
DATE July 24, 1980
OPERATOR'S WELL NO. _____
API WELL NO. 057
WV Mineral 0047 • Frac
STATE COUNTY PERMIT

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 742.36' WATERSHED Patterson Creek
DISTRICT Cabin Run COUNTY Mineral
QUADRANGLE Headsville KEYSER 15
SURFACE OWNER E. H. & H.T. McDonald ACREAGE 150
OIL & GAS ROYALTY OWNER E. H. & H.T. McDonald LEASE ACREAGE 150
LEASE NO. D.B. 211 Pg 345
PROPOSED WORK: DRILL CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

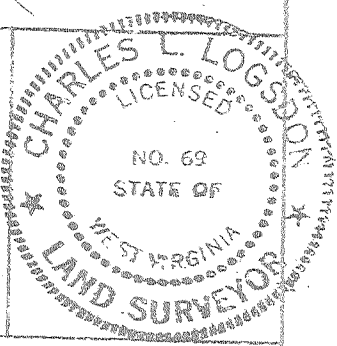
SEP 22 1981

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION Oriskany Sand ESTIMATED DEPTH 2200
WELL OPERATOR Upland Resources DESIGNATED AGENT Huntley & Huntley
ADDRESS 1700 Benedum - Trees Building ADDRESS 1700 Benedum - Trees Building
Pittsburgh Pa 15222



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION B.M. on Bridge over Staggs Run at Headsville

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) C. L. Logsdon
 R.P.E. _____ L.L.S. 69



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

DATE July 24, 19 80
 OPERATOR'S WELL NO. 1
 API WELL NO. 057
 WV - Mineral - 0047
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 742.36' WATERSHED Patterson Creek
 DISTRICT Cabin Run COUNTY Mineral
 QUADRANGLE Headsville KEYSER 15 C
 SURFACE OWNER E. H. & H.T. McDonald ACREAGE 150
 OIL & GAS ROYALTY OWNER E. H. & H.T. McDonald LEASE ACREAGE 150
 LEASE NO. D.B. 211 Pg 345

PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) Deep Well

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___ 6-0 Headsville South (302)
 TARGET FORMATION Oriskany Sand ESTIMATED DEPTH 2200
 WELL OPERATOR Upland Resources DESIGNATED AGENT Huntley & Huntley
 ADDRESS 1700 Benedum - Trees Building Pittsburgh, Pa. 15222 ADDRESS 1700 Benedum - Trees Building Pittsburgh, Pa. 15222

OCT 17 1980

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

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil / Gas X (If "Gas", Production X / Underground storage / Deep X / Shallow / LOCATION: Elevation: 742.36' Watershed: Patterson Creek District: Cabin Run County: Mineral Quadrangle: Headsville

WELL OPERATOR UPLAND RESOURCES, INC. Address 1700 Benedum-Trees Bldg. Pittsburgh, Pa. 15222

DESIGNATED AGENT HUNTLEY & HUNTLEY, INC. Address 1700 Benedum-Trees Bldg. Pittsburgh, Penna. 15222

OIL & GAS ROYALTY OWNER E. H. & H. T. McDonald Address Route 1, Box 1 Burlington, W. Va. 26710

COAL OPERATOR Not Applicable Address

SURFACE OWNER E. H. & H. T. McDonald Address Same as above Acreage 150

COAL OWNER(S) WITH DECLARATION ON RECORD: Name Address RECEIVED SEP 11 1980

FIELD SALE (IF MADE) TO: Name Address

OIL & GAS DIVISION DEPT. OF MINES

OIL & GAS INSPECTOR TO BE NOTIFIED Name Robert S. Stewart Address P. O. Box 345 Jane Lew, W. Va. 26378

COAL LESSEE WITH DECLARATION ON RECORD: Name Address

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease X / other contract / dated July 19, 1978, to the undersigned well operator from E. H. & H. T. McDonald

[If deed, lease, or other contract has been recorded:] Recorded on July 19, 1978, in the office of the Clerk of the County Commission of Mineral County, West Virginia, in Deed Book 211 at page 345. A permit is requested as follows:

PROPOSED WORK: Drill X / Drill deeper / Redrill / Fracture or stimulate / Plug off old formation / Perforate new formation / Other physical change in well (specify)

--planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code § 22-2-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.

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.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO: WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION 1615 WASHINGTON STREET EAST CHARLESTON, WV 25311 TELEPHONE: (80-) 3-3-3392

HUNTLEY & HUNTLEY, INC. Agent for: Upland Resources, Inc. Well Operator

By Tracy Bartholomew, II Vice President - Operations

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY.
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-2 UPON COMPLETION

DRAINING CONTRACTOR (IF KNOWN) Talkington-Brady, Inc.
Address P. O. Box 371
Buckhannon, W. Va. 27201

GEOLOGICAL TARGET FORMATION, Oriskany Sandstone

Estimated depth of completed well, 2200 feet Rotary / Jable tools X
Approximate water strata depths: Fresh, 100 feet; salt, None feet.
Approximate coal seam depths: N. A. Is coal being mined in the area? Yes / No X
expected

LOGGING AND TUBING PROGRAM

LOGGING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic Feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling		
Production								Kinds
Fresh water	8-5/8	A	24.7	X		400'	400'	Cemented to Surface
Oil								Sizes
Intermediate								
Production	4-1/2	A	10.0	X		2200'	2200'	Cemented to Surface
Water								Depths set
Oil								Perforations:
								Top Bottom

Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-3, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-1a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is or be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 5-30-81.

[Signature]
Deputy Director - Oil & Gas Division

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a Declaration under Code § 22-4-22, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

The undersigned coal operator owner / lessee / of the coal under this well has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

By
Its

BLANKET BOND

[Handwritten signature]



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

DATE August 26, 1981

Surface Owner E.H. & H.T. McDonald

Company Upland Resources, c/o Westvaco

Address Rt. 1, Burlington, WV

Address 299 Park Ave., NY, NY 10017

Mineral Owner Same as Above

Farm E.H. & H.T. McDonald Acres 150

Address

Location (waters) Patterson Creek

Coal Owner N/A

Well No. 1 Elevation 742'

Address

District Cabin Run County Mineral

Coal Operator N/A

Quadrangle Headsville 7 1/2

Address

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for fracturing. This permit shall expire if operations have not commenced by 5-10-82

INSPECTOR TO BE NOTIFIED Robert Stewart

ADDRESS P.O. Box 345, Jane Lew, WV

PHONE 884-7782

J. E. Huggins
Deputy Director - Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated On File 19 by made to and recorded on the day of 19 , in County, Book Page
 NEW WELL DRILL DEEPER REDRILL XXX FRACTURE OR STIMULATE
 OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. *

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address day before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

Very truly yours, *[Signature]*
Upland Resources
Geological Consultants, Agnet
(Sign Name)
Well Operator

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:

OFFICE OF OIL AND GAS
1615 Washington Street, East
Charleston, West Virginia
Area Code 304 -348-3092 348-3096

Address of Well Operator

Street

City or Town

State

RECEIVED

AUG 28 1981

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

*SECTION 3 If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

47-057-0047 - Frac PERMIT NUMBER

Blanket Bond Number on File

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by *[Signature]*

THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO _____ DRILL _____ DEEPEN XXX FRACTURE-STIMULATE
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME _____ NAME _____
 ADDRESS _____ ADDRESS _____
 TELEPHONE _____ TELEPHONE _____
 ESTIMATED DEPTH OF COMPLETED WELL: _____ ROTARY _____ CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: _____
 TYPE OF WELL: OIL _____ GAS XXX COMB. _____ STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LET IN WELL	CEMENT HIT UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8	400'	400'	Cement to Surface
7			
5 1/2			
4 1/2		2470'	<u>247 Sks</u>
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 50' FEET _____ SALT WATER _____ FEET _____
 APPROXIMATE COAL DEPTHS No Coal
 IS COAL BEING MINED IN THE AREA? _____ BY WHOM? _____

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for _____ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the _____ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

 For Coal Company

 Official Title



RECEIVED State of West Virginia

OCT 13 1981

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

Department of Mines
Oil and Gas Division

Date October 9, 1981

Operator's

Well No. 1

Farm McDonald

API No. 47 - 057 - 0047

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil ___ / Gas X / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas," Production X / Underground Storage ___ / Deep ___ / Shallow X /)

LOCATION: Elevation: 742 Watershed Patterson Creek
District: Cabin Run County Mineral Quadrangle Headsville

COMPANY Upland Resources %Westvaco

ADDRESS 299 Park Ave., N.Y., N.Y. 10017

DESIGNATED AGENT T. Brady

ADDRESS P.O. 1016, Keyser, W.Va. 26726

SURFACE OWNER E.H. & H.T. McDonald

ADDRESS Rt. 1, Burlington, W.Va. 26710

MINERAL RIGHTS OWNER Same as above

ADDRESS _____

OIL AND GAS INSPECTOR FOR THIS WORK _____

R. Stewart ADDRESS Jane Lew, W.Va.

PERMIT ISSUED _____

DRILLING COMMENCED 11/6/80

DRILLING COMPLETED 1/9/81

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

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8			
8 5/8	400'	400'	surface
7			
5 1/2			
4 1/2		2470	1660'
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Oriskany Sandstone Depth 2306 feet

Depth of completed well 2450 feet Rotary ___ / Cable Tools XXX

Water strata depth: Fresh 50'-170' feet; Salt ___ feet

Coal seam depths: No Coal Is coal being mined in the area? ___

OPEN FLOW DATA

Producing formation Marcellus & Needmore Shale Pay zone depth 852-2244 feet

Gas: Initial open flow 0 Mcf/d Oil: Initial open flow 0 Bbl/d

Final open flow 15 Mcf/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests -- hours

Static rock pressure -- psig (surface measurement) after -- 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.

Bridge Plug at 2298'
 Perforated at 2071-2244; 18 shots; 1st stage
 1852-1990; 20 shots; 2nd stage
 Fractured the first stage with a 5% acid foam frac of 180 bbls. of top hole fluid and 300 sacks of 20/40 sand.
 Fractured the 2nd stage with a 5% acid foam frac of 180 bbls. of top hole fluid and 300 sacks of 20/40 sand.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Sandstone & Shale			0	1600	
Marcellus Shale			1600	1890	
Purcell Member of the Marcellus Shale			1890	2005	
Lower Marcellus Shale			2005	2104	
Tioga Bentonite			2104	2116	
Needmore Shale			2116	2306	
Oriskany Sandstone			2306	2450	
T.D.			2450		

(Attach separate sheets as necessary)

Upland Resources
 Well Operator
 Agency Energy Omega
 By: *Mary White*
 Date: October 9, 1981

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~~ encountered in the drilling of a well."