

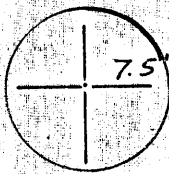
39° 25'

LATITUDE 39° 22' 30"

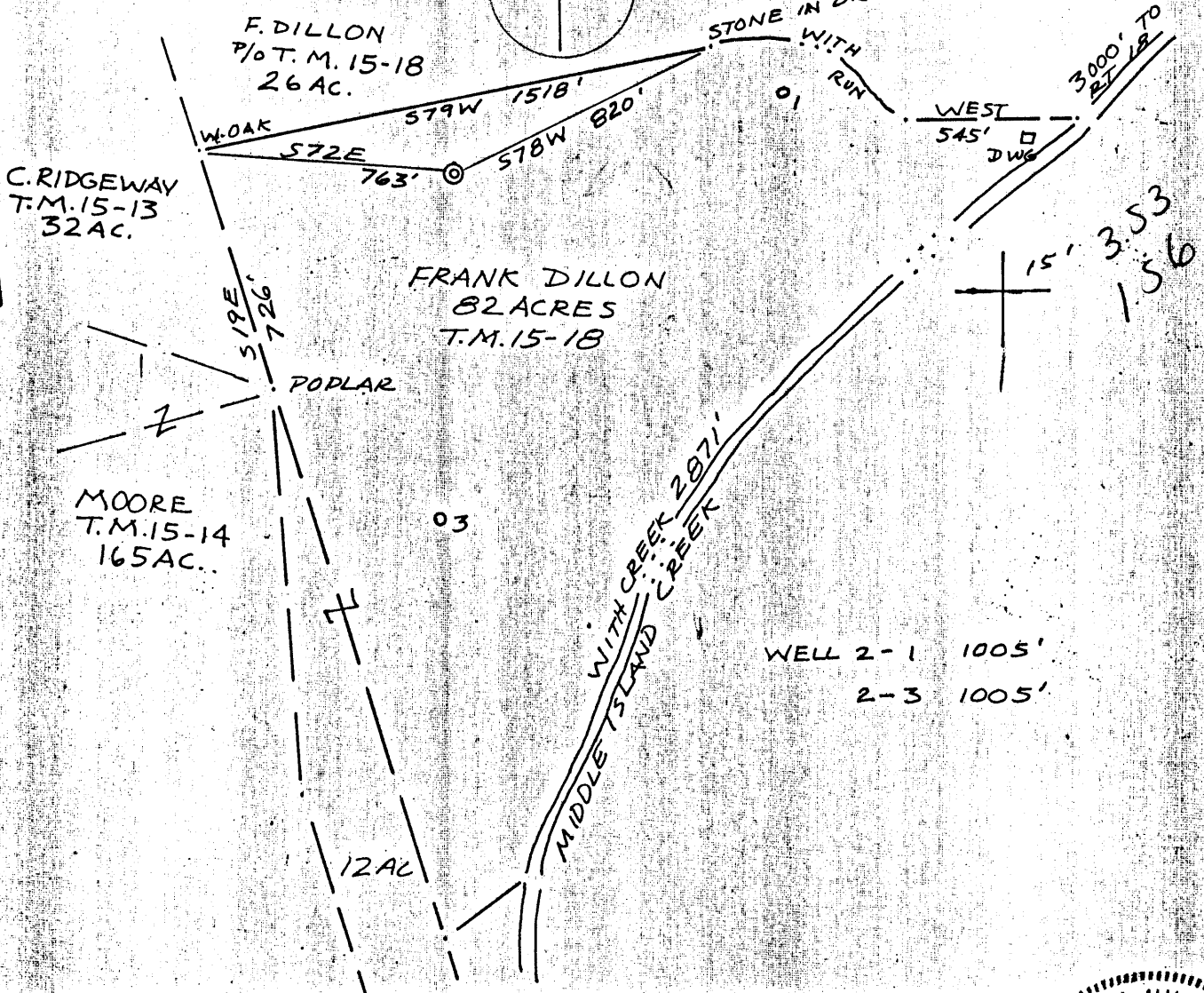
3400 SOUTH

8180' WEST

LATITUDE 80° 50'

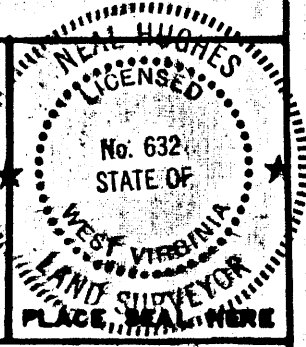


0655
1-260



FILE NO. L+M
DRAWING NO. 2
SCALE 1"=500'
MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION BM 782

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) Neal Hughes
R.P.E. _____ L.L.S. 632



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



DATE JAN 21, 1981
OPERATOR'S WELL NO 2 REVISED
API WELL NO. 47-095-0898-DD
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

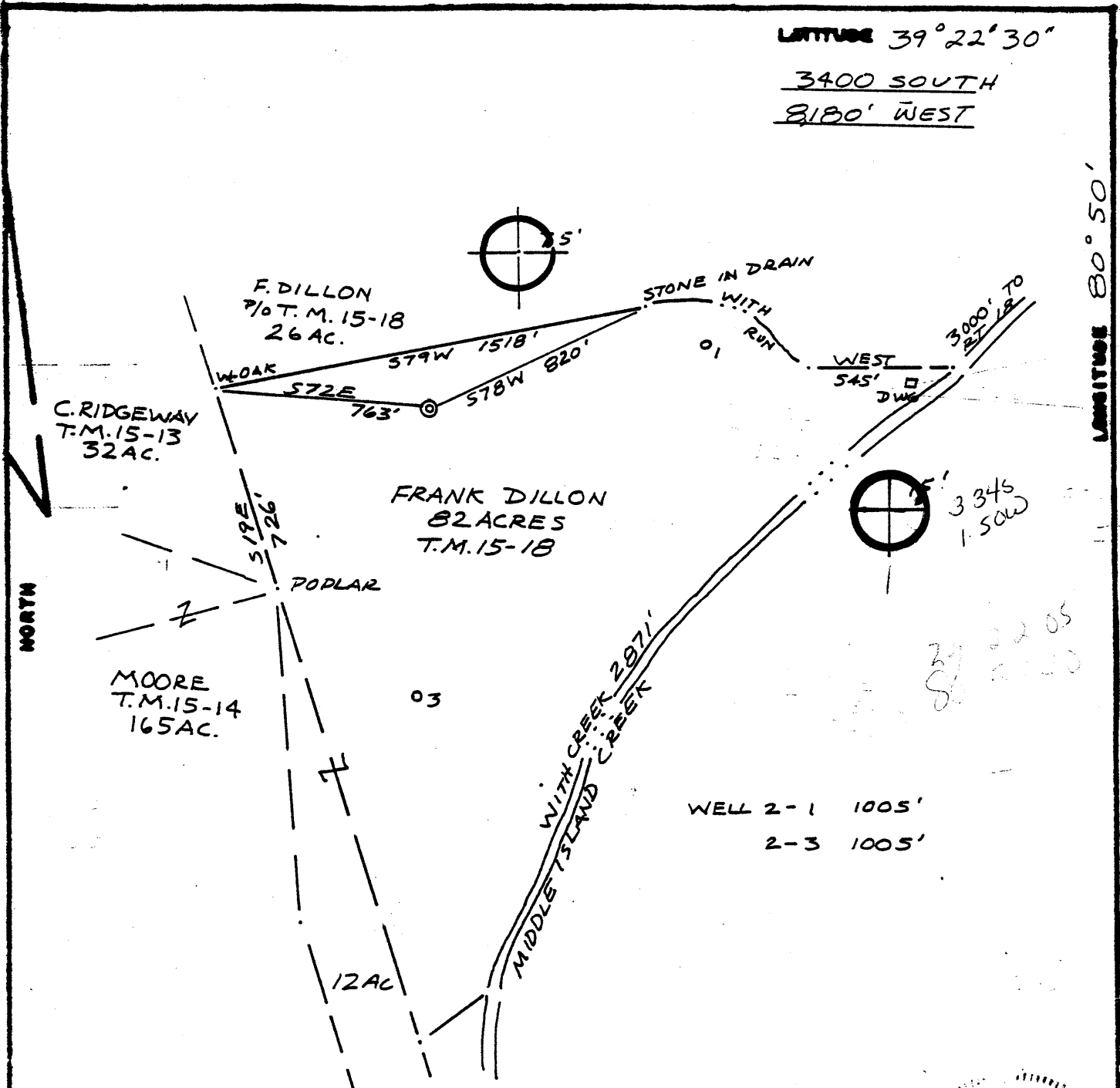
WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
(IF "GAS", PRODUCTION _____ STORAGE _____ DEEP _____ SHALLOW _____
LOCATION: ELEVATION 922' WATER SHED MIDDLE ISLAND CREEK
DISTRICT CENTERVILLE COUNTY TYLER
QUADRANGLE WEST UNION 7.5' 671' 133' C
SURFACE OWNER FRANK DILLON + L.S. DUNN ACREAGE 94
OIL & GAS ROYALTY OWNER RALPH WESTFALL LEASE ACREAGE 94
LEASE NO. 54
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 Dutton Shale ESTIMATED DEPTH 2800 MAY 27 1986
WELL OF APPALACHIAN ENERGY DESIGNATED AGENT GEORGE WILLIAMS
ADDRESS P.O. BOX 902 ADDRESS 113
BELMONT WV 021
OWDD - 66 Wilbur (92)

LATITUDE 39° 22' 30"

3400 SOUTH
8180' WEST

LATITUDE 80° 50'



FILE NO. L+M
DRAWING NO. 2
SCALE 1"=500'
MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION BM 782

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) Neal Hughson
R.P.E. _____ L.L.S. 632

PLACE SEAL HERE

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



DATE JAN 21, 19 81
OPERATOR'S WELL NO 2 REVISED
API WELL NO. 47-095-0898-REV.
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 922' WATER SHED MIDDLE ISLAND CREEK
DISTRICT CENTERVILLE COUNTY TYLER
QUADRANGLE WEST UNION 7.5 & 15 C
SURFACE OWNER FRANK DILLON ACREAGE 94
OIL & GAS ROYALTY OWNER RALPH WESTFALL LEASE ACREAGE 94
LEASE NO. 54
PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE _____ PLUS OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
TARGET FORMATION Dominion Shale ESTIMATED DEPTH 2800
WELL OPERATOR L+M Petroleum Co. DESIGNATED AGENT James Cogan
ADDRESS 14 + 1/2 W. 13-6 ADDRESS 113 Shurwood
Marion, W. Va 25750 Williamstown, W.V.



IV-35
(Rev 8-81)

RECEIVED
MAR 06 1987

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

State of West Virginia
Department of Mines
Oil and Gas Division

Date February 9, 1987
Operator's
Well No. Westfall # 2
Farm Westfall
API No. 47 - 095 - 898-D

WELL OPERATOR'S REPORT
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 905' Watershed Middle Island Creek
District: Centerville County Tyler Quadrangle West Union

COMPANY Appalachian Energy Development, Inc.

ADDRESS Rt. 2, Box 499, Grafton, WV 26354

DESIGNATED AGENT George R. Williams

ADDRESS Rt. 2, Box 499, Grafton, WV 26354

SURFACE OWNER Lois J. Duff

ADDRESS Rural Route, Alma, WV

MINERAL RIGHTS OWNER _____

ADDRESS _____

OIL AND GAS INSPECTOR FOR THIS WORK _____

Robert Lowther ADDRESS Middlebourne, WV

PERMIT ISSUED May 19, 1986

DRILLING COMMENCED June 19, 1986

DRILLING COMPLETED June 23, 1986

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

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	274.9'	274.9'	100 sks.
7			
5 1/2			
4 1/2	2356'	2356'	250 sks.
3			
2 7/8"		4925'	2000' fill up
Liners used			

GEOLOGICAL TARGET FORMATION Benson Depth 4824' feet

Depth of completed well 4952' feet Rotary XX / Cable Tools _____

Water strata depth: Fresh _____ feet; Salt _____ feet

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

OPEN FLOW DATA

Producing formation Combination Benson/Riley Pay zone depth 4421'/4827' feet

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

Final open flow 498,000 Mcf/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 8 hours

Static rock pressure 1400 psig (surface measurement) after 48 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)

MAR 09 1987

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

PERFORATING: Superior Wireline 6-30-86

Benson & Riley 4821'-4827' 26 holes Avg. Press. 3750# A.R. 15 BPM
4421'-4533' 13 holes

FRACTURING: Halliburton Services 6-30-86

10,000 # 80/100 Sand
30,000 # 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
Sandy Shale			2370'	3180'	
Sand & Shale			3180'	4410'	
Riley			4410'	4463'	
Shale			4463'	4816'	
<u>Benson</u>			4816'	4824'	
Shale			4824'	4952'	
T.D.				<u>4952'</u>	

4952 new TD
2370-old TD
25 82 new top

RECEIVED
MAR 06 1987
DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

(Attach separate sheets as necessary)

Appalachian Energy Development, Inc.

Well Operator

By: George R. Williams President

Date: February 9, 1987

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 coal, encountered in the drilling of a well."

CORRECTED COPY



IV-35
(Rev 8-81)

Date 3/2/82
Operator's _____
Well No. 2
Farm Ralph Westfall
API No. 47-095-0898

RECEIVED State of West Virginia

AUG 13 1982

Department of Mines
Oil and Gas Division

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

WELL OPERATOR'S REPORT
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 905 Watershed Middle Island Creek
District: Centerville County Tyler Quadrangle West Union

COMPANY L&M Petroleum Co.
ADDRESS P.O. Box 89, Reno, OH 45773
DESIGNATED AGENT David Clovis
ADDRESS Box 288, Parkersburg, WV 26101
SURFACE OWNER Frank Dillon
ADDRESS Tyler Co., WV
MINERAL RIGHTS OWNER Ralph Westfall
ADDRESS Rt. 1, Box 78, Bridgeport, WV
OIL AND GAS INSPECTOR FOR THIS WORK _____
Phil Tracy ADDRESS Rt. 23, Alma, WV
PERMIT ISSUED _____
• DRILLING COMMENCED 1/21/81
DRILLING COMPLETED 1/24/81
IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON NA

Casing Tubing	Used in Drilling	Left in Well	Current fill up Cu. ft.
Size 20-16 Cord.			
13-10"			
9 5/8			
8 5/8	274.9	274.9	100 sx cu
7			
5 1/2			
4 1/2	2356	2356	250 sx cu
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Berea Depth 2331-2335 feet
Depth of completed well 2370 feet Rotary X / Cable Tools _____
Water strata depth: Fresh _____ feet; Salt _____ feet
Coal seam depths: _____ Is coal being mined in the area? _____

OPEN FLOW DATA
Producing formation Berea/Weir Pay zone depth 2331-1902 feet
Gas: Initial open flow 150 Mcf/d Oil: Initial open flow 2.5 Bbl/d
Final open flow 100 Mcf/d Final open flow .8 Bbl/d
Time of open flow between initial and final tests 6 hours
Static rock pressure _____ psig (surface measurement) after _____ hours shut in
(If applicable due to multiple completion--)
Second producing formation NA Pay zone depth NA 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

AUG 23 1982 (Continue on reverse side)

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

Well was perf'ed on 2/6/81 with 14 shots from 2333-1902', on 2/9/81 pe
were cleaned using 1000 gal. acid. Well began producing naturally. C
11/28/81 well was frac'ed, formation was naturally broken, Fluid: 545
Nitrogen:110MSCF, ATP:2600, ISI:2200

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all and salt water, coal, oil a
Clay			0	13	
Blue Rock			13	35	
Red Rock			35	80	
Lime			80	90	
Sand Rock			90	100	
Slate			100	115	
Lime			115	125	
Slate			125	140	
Lime			140	145	
Slate			145	167	
Red Rock			167	195	
Slate			195	205	
lime & Shell			205	210	
Slate			210	225	
Red Rock			225	300	
Big Red			300	490	
1st Cow Run			490	500	
Shale			500	740	
1st Salt Sand			740	845	
Slate			845	860	
Sand			860	880	
Slate			880	925	
W. Slate			925	1010	
Sand			1010	1030	
B. Slate			1030	1065	
2nd Salt Sand			1065	1110	
Slate			1110	1125	
Sand			1125	1135	
Slate			1135	1155	
Sand			1155	1175	
Slate			1175	1190	
Sand			1190	1215	
Slate			1215	1275	
Black Shale			1275	1321	
Lime			1321	1333	
Black Slate			1333	1355	
Lime			1355	1380	
Slate			1380	1415	

(Attach separate sheets as necessary)

L&M Petroleum Co.

Well Operator

By: Jean Kettering

Date: 3/3/81

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 drill ; of a well."

WELL NAME & NO: Ralph Westfall #2

<u>FORMATION</u>	<u>TOP FEET</u>	<u>BOTTOM FEET</u>
Black Shale	1415	1450
Maxon	1450	1475
Shale	1475	1505
Lime	1505	1512
Sand	1512	1540
Shale	1540	1576
Lime	1576	1589
Sand	1589	1623
Shale & Lime	1623	1654
Shale	1654	1689
Slate	1689	1713
Shale	1713	1738
Sandstone	1738	1770
Big Lime	1770	1859
Shal e	1859	1886
B. Injun Sand	1886	1974
Siltstone	1974	2010
Shale	2010	2040
Siltstone	2040	2100
Shale	2100	2142
Weir Sand	2142	2250
Shale	2250	2331
Berea	2331	2335
Shale	2335	<u>2370</u> TD.

*more
detailed than
original -*

AUG 23 1982

RECEIVED

JAN 13 1982



IV-35
(Rev 8-81)

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

State of West Virginia

Department of Mines
Oil and Gas Division

Date 12/15/81

Operator's

Well No. 2

Farm Ralph Westfall

API No. 47-095-0898

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

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

LOCATION: Elevation: 905 Watershed Middle Island Creek
District: Centerville County Tyler Quadrangle West Union

COMPANY L&M Petroleum Co.
ADDRESS P.O. Box 89, Reno, OH 45773
DESIGNATED AGENT David Clovis
ADDRESS Box 288, Parkersburg, WV 26101
SURFACE OWNER Frank Dillon
ADDRESS Tyler Co., WV
MINERAL RIGHTS OWNER Ralph Westfall
ADDRESS Rt. 1, Box 78, Bridgeport, WV
OIL AND GAS INSPECTOR FOR THIS WORK
Phil Tracy ADDRESS Rt. 23, Alma, WV
PERMIT ISSUED
DRILLING COMMENCED 1/21/81
DRILLING COMPLETED 1/24/81
IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON NA

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	274.9	274.9	100 sx cmt
7			
5 1/2			
4 1/2	2356	2356	250 sx cmt
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Berea Depth 2331-2335 feet
Depth of completed well 2370 feet Rotary / Cable Tools ___
Water strata depth: Fresh ___ feet; Salt ___ feet
Coal seam depths: ___ Is coal being mined in the area? ___

OPEN FLOW DATA

Producing formation Berea/Weir Pay zone depth 2331-1902 feet
Gas: Initial open flow 150 Mcf/d Oil: Initial open flow 2.5 Bbl/d
Final open flow 100 Mcf/d Final open flow 7.8 Bbl/d
Time of open flow between initial and final tests 6 hours
Static rock pressure ___ psig (surface measurement) after ___ hours shut in
(If applicable due to multiple completion--)
Second producing formation NA Pay zone depth NA 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)

FEB 01 1982

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

Well was perf'ed on 2/6/81 with 14 shots from 2333-1902', on 2/9/81 perfs were cleaned using 1000 gal. acid. Well began producing naturally. On 11/28/81 well was frac'ed, formation was naturally broken, Fluid: 545 BW, Nitrogen:110MSCF, ATP:2600, ISI:2200

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Big Lime			1770	1859	
B. Injun Sand			1886	1974	
Weir Sand			2142	2250	
<u>Berea</u>			2331	2335	

NOTE: NO LOGS OR SAMPLES WERE TAKEN ABOVE THESE DEPTHS.

(Attach separate sheets as necessary)

L&M Petroleum Co.

Well Operator

By: Jean Kettering

Date: 1-13-82

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 coal, encountered in the drilling of a well."



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

JAN 20 1981

Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

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

DATE January 16, 1981

Surface Owner Frank Dillon

Company L&M Petroleum Co.

Address Tyler Co., WV

Address Rt. #1, Box 18-B, Marietta, OH

Mineral Owner Ralph J. Westfall

Farm Ralph J. Westfall Acres 94

Address Rt. 1, Box 78, Bridgeport, WV 26330

Location (waters) Middle Island Creek

Coal Owner Ralph Westfall

Well No. 2 Elevation 782' 905

Address same as above

District Centerville County Tyler

Coal Operator None

Quadrangle West Union

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 drilling. This permit shall expire if operations have not commenced by 9-20-81.

INSPECTOR TO BE NOTIFIED Phil Tracy

ADDRESS Rt. 23, Alma, WV 26320

PHONE 758-4573

[Signature]
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 3/7 19 73 by Ralph J. & Shirley Westfall made to Royal Resources Corp. and recorded on the 20th day of Dec. 19 79 in Tyler County, Book 200 Page 111

XXX NEW WELL _____ DRILL DEEPER _____ REDRILL _____ 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.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
AC-304 - 292-6331

Address of Well Operator

Very truly yours, L&M Petroleum Co.
(Sign Name) *[Signature]*
Well Operator

Rt. #1, Box 18-B
Street
Marietta
City or Town
Ohio 45750
State

*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.

MARKET BOND

47-095-0898 PERMIT NUMBER

"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 _____

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

PROPOSED WORK ORDER TO XXXX DRILL DEEPEN FRACTURE-STIMULATE
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT:
 NAME _____ NAME Joanne Cogan
 ADDRESS _____ ADDRESS 113 Sherwood, Williamstown, WV
 TELEPHONE _____ TELEPHONE 375-2252
 ESTIMATED DEPTH OF COMPLETED WELL: 2800 ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Devonian Gordon
 TYPE OF WELL: OIL _____ GAS _____ COMB. XX STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8	<u>275'</u>		<u>CTS</u>
7			
5 1/2			
4 1/2	<u>2450</u>		<u>200' Cement</u>
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS _____ FEET SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS _____
 IS COAL BEING MINED IN THE AREA? No 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
MAY 12 1986



1) Date: May 10, 1986
2) Operator's Well No. Westfall #2
3) API Well No. 47 095 898-D
State County Permit

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

- 4) WELL TYPE: A Oil / Gas /
B (If "Gas", Production / Underground storage / Deep / Shallow /)
- 5) LOCATION: Elevation: 905 Watershed: Middle Island Creek
District: Centerville County: Tyler Quadrangle: West Union
- 6) WELL OPERATOR Appalachian Energy CODE: 2325 7) DESIGNATED AGENT George Williams
Address P.O. Box 902 Address P.O. Box 902
Belington WV Belington WV
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
Name Bob Lowther Name Tri State
Address General Delivery Address Berea Plaza
Middlebourne WV Bridgeport WV
- 10) PROPOSED WELL WORK: Drill / Drill deeper / Redrill / Stimulate /
Plug off old formation / Perforate new formation /
Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Benson
12) Estimated depth of completed well, 4950 feet
13) Approximate strata depths: Fresh, cased off feet; salt, _____ feet.
14) Approximate coal seam depths: cased off Is coal being mined in the area? Yes _____ / No /

15) 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									Kinds
Fresh water									
Coal	8 5/8						274.9	100sx	existing
Intermediate	4 1/2						2356	250 sx	existing
Production	2 7/8					4925	4925	2-00' fill	depths set
Tubing									
Lin...									Perforations:
									Top Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-095-0898-D Date May 19 1986

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. 8) 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.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires May 19, 1988 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>AS</u>	Agent: <u>AS</u>	Plat: <u>AS</u>	Casing: <u>AS</u>	Fee: <u>254</u>	WPCP: <u>AS</u>	S&E: <u>AS</u>	Other: <u>AS</u>
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NOTE: Keep one copy of this permit posted at the drilling location.

John H. Johnston by Margaret L. Hagan
Director, Division of Oil and Gas File

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.