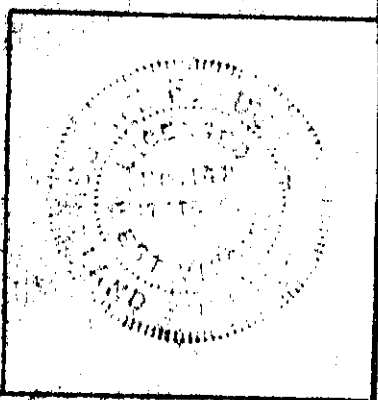


**"BENCH MARK"**

U.S.G.S. STANDARD DISK STAMPED No. 24, W.S.M., 1957 IN ROCK CUT ON NORTH SIDE W.VA. ROUTE 214, 1.8 MILES EAST OF INTERSECTION OF W.VA. ROUTE 214 AND LINCOLN COUNTY ROUTE 3, 500 FEET EAST OF PORTER FORK CHURCH, ELEV. 760.14.



**LOWE ENGINEERS**  
Consulting Engineers  
CHARLESTON, W.VA.

**ACCURACY**  
ONE PART IN 200

- Fracture Before 6/5/29
- New Location
- Drill Deeper
- Redrill
- Abandonment

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by Paragraph 5 of the Rules and Regulations of the Oil and Gas Section of the Mining Laws of West Virginia.

The accuracy of this survey is within the limits and as prescribed in Paragraph 5 by the Oil and Gas Division of the Department of Mines Regulations.

Company EXXON CORPORATION

Address Box 60626, NEW ORLEANS, LOUISIANA 70160

Farm DOUGLAS E. MCCORMICK

Tract        Acres 28.5 Lease No. 747-240  
DOUGLAS E. MCCORMICK 745-761

Well (Farm) No. 1 Serial No.       

Elevation (Spirit Level) 736.5 NW

Quadrangle (GRIFFITHSVILLE-7 1/2') MARION-15'

County LINCOLN District DUVAL

Surveyor Robert F. Rogers

Surveyor's Registration No. 142

File No.        Drawing No. 1

Date MARCH 12, 1973 Scale 1" = 200'

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

**WELL LOCATION MAP**  
FILE NO. Lin-1469-Rev-P

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500 latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.

**DEEP WELL**

MAR 29 1973



RECEIVED

AUG 19 1974

STATE OF WEST VIRGINIA  
OIL & GAS DIVISION  
DEPARTMENT OF MINES DEPT. OF MINES

Oil and Gas Division

WELL RECORD

Rotary X Oil \_\_\_\_\_  
Cable \_\_\_\_\_ Gas Shaw  
Recycling \_\_\_\_\_ Comb. \_\_\_\_\_  
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ Dry Hole  
(Kind)

7 1/2 Griffithville  
Quadrangle 15 Madison  
Permit No. Lin-1469-Rev.P

Company <u>Exxon Corporation</u>	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Address <u>P. O. Box 60626, New Orleans, La. 70160</u>	Size			
Farm <u>Douglas McCormick</u> Acres <u>28.5</u>	<del>20-16</del> <u>26"</u>		<u>269</u>	<u>277</u> sks.
Location (waters) <u>Mouth of McClure Hollow</u> <sup>KB 772</sup>	<del>20-16</del> <u>20"</u>		<u>2300</u>	<u>2000</u> sks.
Well No. <u>Douglas McCormick #1</u> Elev. <u>737.5</u>	<del>20-16</del> <u>13-3/4"</u>		<u>8886</u>	<u>2920</u> sks.
District <u>Duval</u> County <u>Lincoln</u>	<del>20-16</del> <u>10-3/4"</u>	<u>12096</u>	<u>8500 to 12096</u>	<u>1620</u> sks.
The surface of tract is owned in fee by <u>Douglas McCormick</u>	<u>7</u>			
Address <u>G.D. Alum Creek, W. Virginia 25003</u>	<u>5 1/2</u>			
Mineral rights are owned by <u>Douglas McCormick</u>	<u>4 1/2</u>			
Address <u>see above</u>	<u>3</u>			
Drilling Commenced <u>7/9/73</u>	<u>2</u>			
Drilling Completed <u>6/3/74</u>	Liners Used			
Initial open flow <u>Dry Hole</u> cu. ft. _____ bbls.				
Final production _____ cu. ft. per day _____ bbls.				
Well open _____ hrs. before test _____ RP.				

Well treatment details:

Attach copy of cementing record.

Coal was encountered at \_\_\_\_\_ Feet \_\_\_\_\_ Inches  
Fresh water Surface to 855 Feet 855 Salt Water 855 to 2240 Feet \_\_\_\_\_  
Producing Sand \_\_\_\_\_ Depth \_\_\_\_\_

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Salt Sand	Wh	Hard	855	1500	Saltwater	
Greenbrier	Ls Cream	Soft	1500	1710	*Drilled with air, Foam & salt-water, 269-2300	
Pocono	Tan	Soft	1710	2224	*All tops from electric logs.	
Perea	White	Soft	2224	2240	Saltwater	
Levonian	Sh Brown-Black	Soft	2240	4330	*Drilled with air, 2240-8900	
Onondaga	H brown	Hard	4330	4400	-3552	
Oriskany	SS White	Hard	4400	4410	No water -3628	
Helderberg	H Gray	Hard	4410	4588	-3638	
Silurian	H Gray	Hard	4588	5020	-3816	7436
Newburg	SS Wh	Hard	5020	5040	-4248	No water 737
McKenzie	Lockport	Hard	5040	5215	-4258	
Keefer	SS Wh	Hard	5215	5255	-4443	No water 5077
Rose Hill Shale	Pink-Brn	Hard	5255	5645	-4483	
Tuscarora	SS White	Hard	5645	5730	-4873	No water
Ordovician- Juniata	Red-Brn	Hard	5730	6185	-4958	
Martinsburg	Dk Gray	Hard	6185	6790	-5413	
Trenton Ls	Dk Gray	Hard	6790	7436	-6018	
Black River	Dk Gray	Hard	7436	8495	-6664	
Wells Creek Dolo	Hgr	Hard	8495	9256	-7723	*Drilled w/ mud 8900 to TD
St. Peter	SS Wh.	Hard	9256	9289	-8484	

(over)

\* Indicates Electric Log tops in the remarks section.

March 8, 1977

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Beckmantown	Hgr	Hard	9289	10204	Sl. show/gas	- 4517 → 10,280
Consauga	Dk gray	Hard	11608	14360	Sl. show/gas	- 10,836
Granite		Hard	19074			- 18,302
<b>PRECAMBRIAN</b>						
				TD 19,124		
					19,074	9289
					737	737
					18,237	8552

19124  
 9289  
 ---  
 9835

19,074  
 9289  
 ---  
 9,785 kn → B

9289  
 6790  
 ---  
 2499 Tr → kn (2558 inings)

9289  
 728  
 ---  
 - 8551

Date August 14, 19 74

APPROVED *[Signature]*, Owner

By Oil & Gas Accounting Supervisor



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED  
MAR 13 1973  
OIL & GAS  
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE March 9, 1973

Surface Owner Douglas E. McCormick

Company Exxon Corporation

Address G. D. Alum Creek, W. Virginia 25003

Address Box 60626, New Orleans, La. 70160

Mineral Owner Douglas McCormick

Farm Douglas McCormick Acres 28.5

Address G. D. Alum Creek, W. Virginia 25003

Location (waters) Mouth of McClellan Hollow

Coal Owner None

Well No. 1 Elevation Appr. 735'

Address -----

District Duval County Lincoln

Coal Operator -----

Quadrangle Griffithsville NW/4 Madison 15'

Address -----

Quadrangle N3802.5 - W8152.5/7.5

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 7/15/73.

INSPECTOR TO BE NOTIFIED 774 Kenneth  
Butcher  
R.F.O.#11 PH: 736-4885  
Barboursville  
W. Va. 25504

[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 January 3, 1973 by Douglas E. McCormick made to Exxon Corporation and recorded on the 9 day of March 1973, in Lincoln County, Book 34 Page -----

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.

Very truly yours,  
(Sign Name) [Signature]  
Well Operator

Address P. O. Box 60626  
of New Orleans  
Well Operator Louisiana 70160  
City or Town -----  
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.

1469  
[Signature]

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

PROPOSED WORK ORDER TO X DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT: \_\_\_\_\_  
 NAME Unknown at this time \_\_\_\_\_ NAME \* W. M. Woodroe \_\_\_\_\_  
 ADDRESS \_\_\_\_\_ ADDRESS 1200 Charleston National Plaza \_\_\_\_\_  
 TELEPHONE \_\_\_\_\_ TELEPHONE Charleston, W. Virginia 25301 \_\_\_\_\_  
 ESTIMATED DEPTH OF COMPLETED WELL: 20,000 \_\_\_\_\_ ROTARY X \_\_\_\_\_ CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Cambrian \_\_\_\_\_  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS X \_\_\_\_\_ COMB. \_\_\_\_\_ 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 26"	None	60'	to surf. 73 cu. ft.
13 - 10 20"	"	2500'	to surf. 2399 cu. ft.
9 - 5/8 13 3/8"	"	7500'	350 cu. ft.
8 - 5/8 10 3/4"	"	12500'	900 cu. ft.
7			
5 1/2			
4 1/2			
3			Perf. Top
2			Perf. Bottom
Liners 7 5/8"		5000'	Perf. Top 800 cu. ft.
5 1/2"		2500'	Perf. Bottom 164 cu. ft.

APPROXIMATE FRESH WATER DEPTHS 50-1100 FEET \_\_\_\_\_ SALT WATER 1100 FEET \_\_\_\_\_

APPROXIMATE COAL DEPTHS Unknown \_\_\_\_\_

IS COAL BEING MINED IN THE AREA? No \_\_\_\_\_ BY WHOM? Nearest coal mining is in Woodville area, 7- 8 miles to the south. \_\_\_\_\_

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.

\*Agent for process serving only.

NOT APPLICABLE

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.