



**OWNERSHIP:**  
 JOHN GARRISON - MINERALS  
 S. SHULTZ - SURFACE  
No Coal

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1 IN 200  
 PROVEN SOURCE OF ELEVATION BM 807  
ROAD INTERSECTION

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) Darrell R. Boice  
 R.P.E. \_\_\_\_\_ L.L.S. 667

PLACE SEAL HERE

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



DATE 7-20, 1981  
 OPERATOR'S WELL NO. 3  
 API WELL NO. 47-095-0929  
 STATE WEST VIRGINIA COUNTY TYLER 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 961' WATER SHED SUGAR CREEK  
 DISTRICT MEADE COUNTY TYLER  
 QUADRANGLE MIDDLEBOURNE West Union NW  
 SURFACE OWNER STANLEY SHULTZ ACREAGE 271  
 OIL & GAS ROYALTY OWNER JOHN M. GARRISON LEASE ACREAGE 271  
 LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL  CONVERT \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE \_\_\_\_\_ PLUG OFF OLD FORMATION \_\_\_\_\_ PERFORATE NEW FORMATION \_\_\_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

AUG 11 1981

PLUG AND ABANDON \_\_\_\_\_ CLEAN OUT AND REPLUG \_\_\_\_\_  
 TARGET FORMATION SHALE ESTIMATED DEPTH 4000'  
 WELL OPERATOR OIL IND. ~~REF.~~ INC. DESIGNATED AGENT C. R. ALLEN  
 ADDRESS 1602 GRAND CENTRAL AVE VIENNA, W. VA. 26105 ADDRESS 1602 GRAND CENTRAL AVE VIENNA, W. VA. 26105

RECEIVED  
JUN 6 - 1984



IV-35  
(Rev 8-81) OIL & GAS DIVISION  
DEPT. OF MINES

State of West Virginia  
Department of Mines  
Oil and Gas Division

Date 5-31-84  
Operator's \_\_\_\_\_  
Well No. Garrison #3  
Farm John Garrison  
API No. 047 - 095 - 0929

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 x /)

LOCATION: Elevation: 961' Watershed Sugar Creek  
District: Meade County Tyler Quadrangle Middlebourne 7.5'

COMPANY Oil Industries Ltd. Inc.  
ADDRESS 1602 Grand Central Avenue, Vienna, WV  
DESIGNATED AGENT C.R. Allen  
ADDRESS 1602 Grand Central Avenue, Vienna, WV  
SURFACE OWNER Stanley Shultz  
ADDRESS Wick, WV  
MINERAL RIGHTS OWNER John Garrison  
ADDRESS P.O. Box 344, Parkersburg, WV  
OIL AND GAS INSPECTOR FOR THIS WORK Robert  
General Delivery  
Lowther ADDRESS Middlebourne, WV  
PERMIT ISSUED 7-20-81  
DRILLING COMMENCED 2-22-82  
DRILLING COMPLETED 2-27-82  
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 Cord.			
13-10"			
9 5/8			
8 5/8	320	320	To Surface
7			
5 1/2			
4 1/2	4176	4176	To Surface
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 4000 feet  
Depth of completed well 4176 feet Rotary x / 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 Devonian Shale Pay zone depth 3422-3478 feet  
Gas: Initial open flow JUN 1 830 1984 Mcf/d Oil: Initial open flow 1 Bbl/d  
Final open flow 40 Mcf/d Final open flow 2 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.

Perf: 3422-3478 Op Dev. undiff. (401)

Frac with N<sub>2</sub>

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Sand and Shale			Surface	1804	
Big Lime			1804	1870	
Shale			1870	1886	
Big Injun			1886	2052	
Pocono Shale			2052	2408	
Berea Sandstone			2408	2412	
Shale and Silt			2412	2830	
Gordon Sandstone			2830	2844	
Devonian Shale			2844	<u>4176</u>	Huron  4176 2412 <u>1764</u>

(Attach separate sheets as necessary)

Oil Industries Ltd. Inc.

Well Operator

By: S. W. W.

Date: \_\_\_\_\_

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."



RECEIVED

JUL 22 1981

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

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 July 16, 1981  
Company Oil Industries Ltd.  
Address 1602 Grand Cent. Ave., Vienna, WV  
Farm J. D. Garrison Acres 271.23  
Location (waters) Sugar Creek  
Well No. Garrison # 3 Elevation 961  
District Meade County Tyler  
Quadrangle Middlebourne

Surface Owner Stanley Schultz  
Address Wick, West Virginia 26185  
Mineral Owner John M. Garrison, et al  
Address P. O. Box 344, Parkersburg, WV  
Coal Owner \_\_\_\_\_  
Address \_\_\_\_\_  
Coal Operator \_\_\_\_\_  
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 3-28-82.

Deputy Director - Oil & Gas Division

INSPECTOR  
TO BE NOTIFIED Philip L. Tracy  
ADDRESS Rt. #3, Alma, WV 26320  
PHONE 753-4573

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 et al June 12, 1981 by Vessel Resources made to John M. Garrison, and recorded on the 16th day of June 1981, in Tyler County, Book 231 Page 102  
XX 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,   
(Sign Name) \_\_\_\_\_  
Well Operator

1602 Grand Central Avenue  
Street  
Vienna, West Virginia 26105  
City or Town  
West Virginia 26105  
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.

BLANKET BOND

47-095-0929

PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 1, a, 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 XX DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT: \_\_\_\_\_  
 NAME Vessel Resources Corp. NAME C. R. Allen  
 ADDRESS 1602 Grand Central Ave, Vienna WV ADDRESS 1602 Grand Central Ave, Vienna, WV  
 TELEPHONE 1-304-295-9000 TELEPHONE 1-304-295-9000  
 ESTIMATED DEPTH OF COMPLETED WELL: 4000 ROTARY XX CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Devonian Shale  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS \_\_\_\_\_ COMB. XX STORAGE \_\_\_\_\_ DISPOSAL \_\_\_\_\_  
 RECYCLING \_\_\_\_\_ WATER FLOOD \_\_\_\_\_ OTHER \_\_\_\_\_

**TENTATIVE CASING PROGRAM:**

CASING AND TUBING SIZE	USED FOR DRILLING	LIFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8	200	200	
7			Cemented to Surface
5 1/2			<i>As required by Order 1501</i>
4 1/2		T.D. Est. 4000	125 Sacks
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