



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1"=500'  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION RD. INT. ELEV. 1122'

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) William R. Harlow  
 R.P.E. \_\_\_\_\_ L.L.S. 551

PLACE SEAL HERE

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



DATE 30 APRIL, 19 82  
 OPERATOR'S WELL NO FOX #1  
 API WELL NO. 47-085-5603  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL & GAS & LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 ("P" GAS", PRODUCTION & STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW \_\_\_\_\_)  
 LOCATION: ELEVATION 939' WATER SHED LOUTHERS RUN  
 DISTRICT MURPHY COUNTY RITCHIE  
 QUADRANGLE MACFARLAN 7 1/2' QUAD. Parisville 15' WC  
 SURFACE OWNER GENEVA LUMBER COMPANY ACREAGE 65  
 OIL & GAS ROYALTY OWNER JAMES B. FOX HEIRS, ET. AL. LEASE ACREAGE 65  
 LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL & CONVERT \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE \_\_\_\_\_ PLUS OFF OLD FORMATION \_\_\_\_\_ PERFORATE NEW FORMATION \_\_\_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

TUB AND CASING \_\_\_\_\_ CLEAN OUT AND REPLUG \_\_\_\_\_  
 TARGET FORMATION MARCELLUS SHALE ESTIMATED DEPTH 5990'  
 WELL OPERATOR RENDOVA OIL COMPANY DESIGNATED AGENT GERALD W. TOWNSEND  
 ADDRESS P.O. BOX 3106, MARIENFELD PL. ADDRESS 5TH & GREEN STREET MAY 17 1982  
MIDLAND, TEXAS 79701 PARKERSBURG, W.VA. 26101

G-6 MacFarlan (119) DEEP



Well No. ONE  
Farm ~~5-1-82~~ Fox  
API # 47-085-5603  
Date 5-5-82

STATE OF WEST VIRGINIA  
OFFICE OF OIL AND GAS - DEPARTMENT OF MINES

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil  / Gas

(If "Gas", Production  / Underground storage \_\_\_ / Deep \_\_\_ / Shallow \_\_\_)

LOCATION: Elevation: 939 Watershed: LOUTHERS RUN  
District: MURPHY County: RITCHIE Quadrangle: MACFARLAN

WELL OPERATOR RENDOVA OIL CO.  
Address PO. BOX 129 RENO, OHIO  
45773

DESIGNATED AGENT GERALD TOWNSEND  
Address 5TH GREEN ST. PARKERSBURG, W. VA.

OIL AND GAS ROYALTY OWNER JAMES B. FOX HEIRS  
Address HARRISVILLE, WV  
Acreage 65

COAL OPERATOR NONE  
Address \_\_\_\_\_

SURFACE OWNER GENEVA LUMBER CO.  
Address HARRISVILLE, WV  
Acreage 65

COAL OWNER(S) WITH DECLARATION ON RECORD:  
NAME NONE  
Address \_\_\_\_\_  
NAME \_\_\_\_\_  
Address \_\_\_\_\_

FIELD SALE (IF MADE) TO:  
NAME NONE  
Address \_\_\_\_\_

COAL LESSEE WITH DECLARATION ON RECORD:  
NAME NONE  
Address \_\_\_\_\_

OIL AND GAS INSPECTOR TO BE NOTIFIED:  
NAME DRO MACE  
Address Rt 1 Box 65  
Sandridge W. VA 25274  
Telephone 655-7398

RECEIVED

MAY - 7 1982

OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed \_\_\_ / lease \_\_\_ / other contract  / dated \_\_\_\_\_, 19\_\_\_, to the undersigned well operator from \_\_\_\_\_.

(If said deed, lease, or other contract has been recorded:)

Recorded on \_\_\_\_\_, 19\_\_\_, in the office of the Clerk of County Commission of \_\_\_\_\_ County, West Virginia, in Book at page \_\_\_\_\_. A permit is

requested as follows:  
PROPOSED WORK: Drill  / 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 §22-4-3 must be filed with the Department of Mines within fifteen (15) days after receipt of this Application by the Dept. 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 lessees on or before the day of the mailing or delivery of this 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  
1613 WASHINGTON ST., E.  
CHARLESTON, WV 25311  
Telephone - 304/348-3092

RENDOVA Oil Co.  
Well Operator

By: [Signature]  
Its: Supt.

BLANKET BOND

(Revised 3-81)

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:  
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) OVER-JOHN

Address RT 3 BOX 2

ST. MARYS WVA. 26170

GEOLOGICAL TARGET FORMATION

Estimated depth of completed well 5990 feet. Rotary X / Cable tools     /  
Approximate water strata depths: Fresh, 200 feet; salt, 1700 feet.  
Approximate coal seam depths: UNKNOWN.  
Is coal being mined in this area: Yes     / No X /

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL UP OR SACKS Cubic ft.	PACKERS
	Size	Grade	Weight per ft	New	Used	For Drill-ling	Left in Well		
Conductor	<u>1 3/4</u>	<u>SARAL</u>	<u>53</u>	<u>X</u>		<u>250</u>	<u>250</u>	<u>150 SA</u>	Kinds <u>CTS</u>
Fresh water									
Coal									Sizes
Intermed.	<u>3 5/8</u>	<u>XJ</u>	<u>20</u>	<u>X</u>		<u>1000</u>	<u>1000</u>	<u>275 SA</u>	<u>CTS</u>
Production	<u>A 1/2</u>	<u>XJ</u>	<u>10.5</u>	<u>X</u>		<u>5990</u>	<u>5990</u>	<u>800 SA</u>	Depths set
Tubing									
Liners									Perforations: Top Bottom

NOTE: 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 §22-4-5, (iii) Form IV-9, "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 §22-4-3a 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 to 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,

ARTICLE 4 OF THE W. VA. CODE, THE LOCATION IS HEREBY

APPROVED FOR drilling. THIS PERMIT SHALL EXPIRE

IF OPERATIONS HAVE NOT COMMENCED BY 1-11-83.

BY [Signature]

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 §22-4-20, 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 location 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 regularions.

Date:    , 19    .

By:    

Its:



IV-35  
(Rev 8-81)

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SEP 12 1983

State of West Virginia

Department of Mines  
Oil and Gas Division

Date 08/19/83  
Operator's  
Well No. #1-65  
Farm Fox  
API No. 47 - 085 - 5603

OIL & GAS DIVISION  
DEPT. 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 X /)

LOCATION: Elevation: 939' Watershed Louthers Run  
District: Murphy County Ritchie Quadrangle MacFarlan 7.5' Quad.

COMPANY Rendova Oil Company  
ADDRESS P. O. Box 129, Reno, OH 45773  
DESIGNATED AGENT Gerald W. Townsend  
ADDRESS 5th & Green St. Parkersburg, WV 26101  
SURFACE OWNER Geneva Lumber Company  
ADDRESS Harrisville, West Virginia  
MINERAL RIGHTS OWNER Jas. B. Fox Heirs  
ADDRESS Harrisville, West Virginia  
OIL AND GAS INSPECTOR FOR THIS WORK Deo  
Mace ADDRESS Sandridge, WV 25274  
PERMIT ISSUED 05-07-82  
DRILLING COMMENCED 05-13-82  
DRILLING COMPLETED 05-17-82  
IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED  
ON N/A

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	2028'	2028'	685 f <sup>3</sup>
7			
5 1/2			
4 1/2	5812'	5812'	
3			
2			
Liners used	None	None	None

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 5990 feet  
Depth of completed well 5896 feet Rotary X / Cable Tools      
Water strata depth: Fresh N/A feet; Salt N/A feet  
Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA  
Producing formation Devonian Shale Pay zone depth 3810-20 feet  
Gas: Initial open flow 0 Mcf/d Oil: Initial open flow 0 Bbl/d  
Final open flow 431.2 Mcf/d Final open flow 406 Bbl/d  
Time of open flow between initial and final tests 24 hours  
Static rock pressure 500/1000 psig (surface measurement) after 72 hours shut in  
(If applicable due to multiple completion--)  
Second producing formation None 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

SEP 19 1983  
(Continue on reverse side)

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

A. Perforations: 3810' to 3820', 10', 4 jspf, 40 Total, .39" E Hole.

B. Fracturing:

1. 1.687 mm scf/N<sub>2</sub>
2. 250 gal foamed 15% acid

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Soil			0	20	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>same as 085 5184 5190  5881 0051  073 1139 1551</p> </div>
Sand, Shale			20	100	
Siltstone, red			100	150	
Sand & Shale			150	300	
Shale			300	475	
Lime			475	504	
Sand			504	559	
Coal, dirty			559	560	
Red Shale			560	760	
Sand			760	860	
Red Shale			860	898	
Dunkard Sand Shale			898	1098	
Sand, Cow Run			1098	1164	
Shale			1164	1250	
1st Salt			1250	1310	
Shale			1310	1360	
2nd Salt			1360	1390	
Shale			1390	1418	
3rd Salt			1418	1496	
Shale			1496	1534	
Maxon			1534	1596	
Big Lime			1596	1640	
Keener Sd			1640	1690	
Lime			1690	1720	
Big Injun			1720	1814	
Shale			1814	1832	
Squaw			1832	1852	
Shale			1852	2205	
Berea			2205	2215	
Shale			2215	2605	
Gordon			2605	2635	
Dev. Shale			2635	TD	

Onondaga = 5812

5896 TD.      5896  
2215  
3681

(Attach separate sheets as necessary)

Rendova Oil Company

Well Operator

By: Mark A. Fairchild

Mark A. Fairchild

Date: August 26, 1983

Note: Regulation 2.02(i) provides as follows:  
"The term 'log' or 'well' shall mean a systematic detailed geological record of formations, including well, encountered in the drilling of a well."