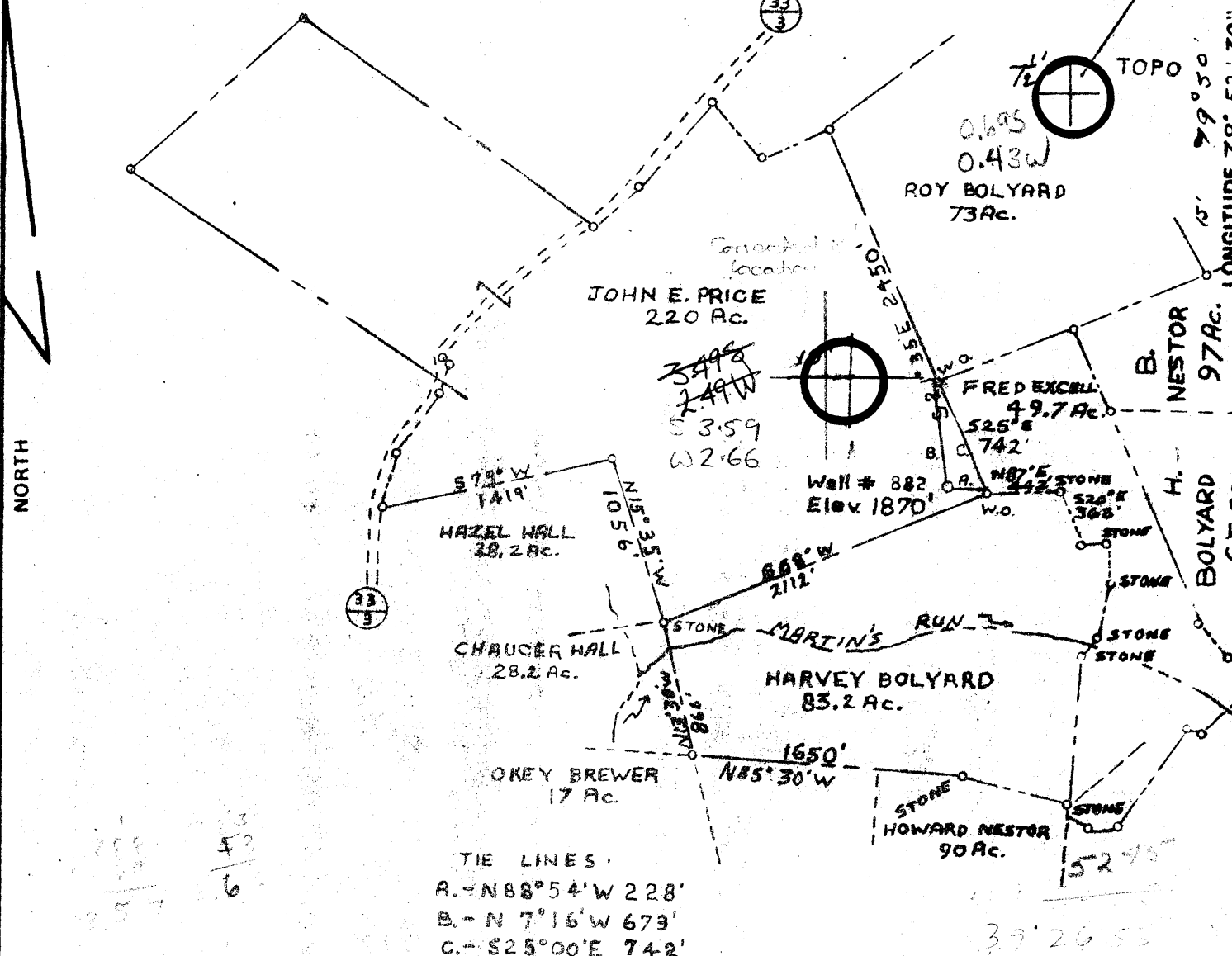


LATITUDE  $39^{\circ} 27' 30''$   
 (15')  $39^{\circ} 30'$   
 TO RAY RESOURCES  
 WELL # 826  
 ± 3920'

JOHN PETERS 105 Ac.



FILE NO. DE. 1 - P9-2  
 DRAWING NO. 1  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1" IN 200'  
 PROVEN SOURCE OF ELEVATION 1846' INT. Co.  
 RT. 33/3 AND 33/13

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) Amiel L. Wheeler  
 R.P.E. \_\_\_\_\_ L.L.S. 530

PLACE SEAL HERE

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



DATE JUNE 2 1980  
 OPERATOR'S WELL NO. 882  
 API WELL NO. \_\_\_\_\_  
47 077 0206  
 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 X STORAGE \_\_\_ DEEP X SHALLOW \_\_\_  
 LOCATION: ELEVATION 1870' WATER SHED MARTIN'S RUN  
 DISTRICT LYON COUNTY PRESTON  
 QUADRANGLE GLADESVILLE T3 THORNTON 15' NC  
 SURFACE OWNER JOHN E. PRICE ACREAGE 220 AC.  
 OIL & GAS ROYALTY OWNER JOHN E. & JUANITA M. PRICE LEASE ACREAGE 334.82 Ac.  
 LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL X 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 ORISKANY ESTIMATED DEPTH 7900'  
 WELL OPERATOR RAY RESOURCES DESIGNATED AGENT RAY RESOURCES  
 ADDRESS 630 COMMERCE SQUARE ADDRESS 630 COMMERCE SQUARE  
CHARLESTON W.V. 25301 CHARLESTON W.V. 25301

**RECEIVED**

OCT - 8 1980

Date: 9/12/1980  
 Operator's Well No. 882  
 API Well No. 27 77 206

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

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 X / Shallow \_\_\_)  
 LOCATION: Elevation: 1870' Watershed: Martins Run  
 District: Lyon County: Preston Quadrangle: Gladesville 7.5'

WELL OPERATOR Ray Resources Div. BVX DESIGNATED AGENT Same  
 Address 630 Commerce Sq. Address \_\_\_\_\_  
Chas., WV 25301

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

PERMIT ISSUED ON 6/21, 1980 OIL & GAS INSPECTOR FOR THIS WORK:  
 (IF APPLICABLE: FLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED) Name William Blosser  
 Address Colfax, WV  
363-9105

GEOLOGICAL TARGET FORMATION: Oriskany Depth 7940' feet  
 Depth of completed well, 7940' feet Rotary X / Cable Tools \_\_\_  
 Water strata depth: Fresh, 60 feet; salt, \_\_\_ feet.  
 Coal seam depths: \_\_\_\_\_ Is coal being mined in the area? NO  
 Work was commenced 7/21, 1980, and completed 8/13, 1980

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	138"			X		107.60	107.60	80 Sacks	Rands
Fresh water									
Coal	9 5/8"			X		1874.49	1874.49	570 Sks	Stacs
Intermediate									
Production	4 1/2"			X			7935	270 Sks	Becks sep
Tubing	2 3/8"			X			7627.95		
liners									Perforations:
									Top

OPEN FLOW DATA

Producing formation Huntersville Chert Pay zone depth 7630-7698  
 Gas: Initial open flow, Smell Mcf/d Oil: Initial open flow, \_\_\_ Bbl/d  
 Final open flow, 739 Mcf/d Final open flow, \_\_\_ Bbl/d  
 Time of open flow between initial and final tests, \_\_\_ hours  
 Static rock pressure, 2750 psig (surface measurement) after \_\_\_ hours shut in  
 [If applicable due to multiple completion--]  
 Second producing formation None Pay zone depth \_\_\_\_\_  
 Gas: Initial open flow, \_\_\_ Mcf/d Oil: Initial open flow, \_\_\_ Bbl/d  
 Final open flow, \_\_\_ Mcf/d 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)

OCT 28 1980

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

Well was fraced with 1,400 BBLs H<sub>2</sub>O, 6,500 gal raw HCl, 60,000# 80/100 sand and 80,000# 20/40 sand

Breakdown Pressure 3,000 PSI  
Max Pressure 5,500 PSI  
Avg. Pressure 4,500 PSI

Max. Rate 38 BPM  
Avg. Rate 36 BPM  
ISIP 3,800 PSI  
HHP 3,766

WELL LOG

FORMATION	Color	Hard or Soft	24 Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Sand			0	38	
Sand			38	44	
Sand			44	67	
Sand			67	95	
Sand			95	116	
Sdy Shale			116	163	
Sandy Shale			163	276	
Sand			276	292	
Sand			292	341	
Sand & Shale			341	361	
Sand & Shale			361	486	
Sand			486	640	
Sdy Shale			640	722	
Sand			722	737	
Red Rock			737	743	
Sand			743	761	
Sdy Shale			761	796	
Sand			796	960	
Shale			960	1035	
Sand			1035	1274	
Sdy Shale			1274	1311	
Sand			1311	1326	
Sand & Shale			1326	1435	
Shale			1435	1573	
Sand			1573	1670	
Sand & Shale			1670	1842	
Red Rock			1842	1865	
Sand			1865	1871	
Sand & Shale			1871	1895	
Sdy Shale			1895	1960	
Red Rock			1960	1987	
Sdy Shale			1987	2044	
Shale			2044	6938	
Shale			6938	7232	

(Attach separate sheets to complete as necessary)

RAY RESOURCES DIV., BVX (U.S.), INC.

Well Operator  
By John C. Bell  
Geologist

NOTE: Regulation 2.02(f) 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."

API Well No. 47-077-0206Well Log Continued

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
Tully Lime			7232	7324	
Shale			7324	7618	
Lime			7618	7630	
Chert			7630	7805	
Orisk Sand			7805	7940 TD	

RAY RESOURCES DIV., BVX (U.S.), INC.  
Well Operator

BY

*J. Craig Culbert*  
Its Geologist

OCT 28 1980



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED  
JUN 9 1980

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 June 9, 1980

Surface Owner John E. Price  
Address Gladesville, WV

Company Ray Resources Div. BVX  
Address Charleston, WV

Mineral Owner John E. Price  
Address Gladesville, WV

Farm John E. Price Acres 334.82  
Location (waters) Martins Run

Coal Owner Same  
Address same

Well No. 882 Elevation 1870

Coal Operator None

District Lyon County Preston

Quadrangle Gladesville

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 2-12-81.

INSPECTOR  
TO BE NOTIFIED William Blosser

ADDRESS Colfax, WV

Deputy Director - Oil & Gas Division

PHONE 363-9105

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 March 27, 1968 by John E. Price made to Phillips Pet. Co. and recorded on the 27th day of March 19 68 in Preston County, Book 397 Page 677

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

Very truly yours, RAY RESOURCES DIV., BVX

(Sign Name)   
Well Operator

Address  
of  
Well Operator

630 Commerce Sq.  
Street  
Charleston,  
City or Town  
West Virginia  
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.

077  
PRESTON-206

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

BLANKET BOND

**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 Ray Resources NAME Smokey Stover  
 ADDRESS Charleston, WV ADDRESS Culloden, WV  
 TELEPHONE 344-8393 TELEPHONE 727-8480  
 ESTIMATED DEPTH OF COMPLETED WELL: 7950' ROTARY XX CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Oriskany  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS XX 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			
13 - 10 13 3/8	90'	90'	To Surface
9 - 5/8	1870'	1870'	To Surface
8 - 5/8			
7			
5 1/2			
4 1/2		7940	200 Sacks
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 60' 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