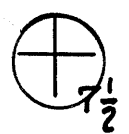
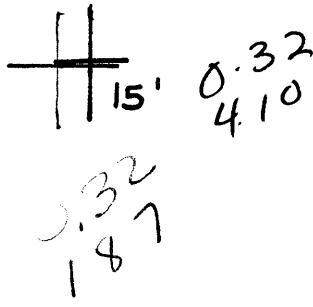


9920

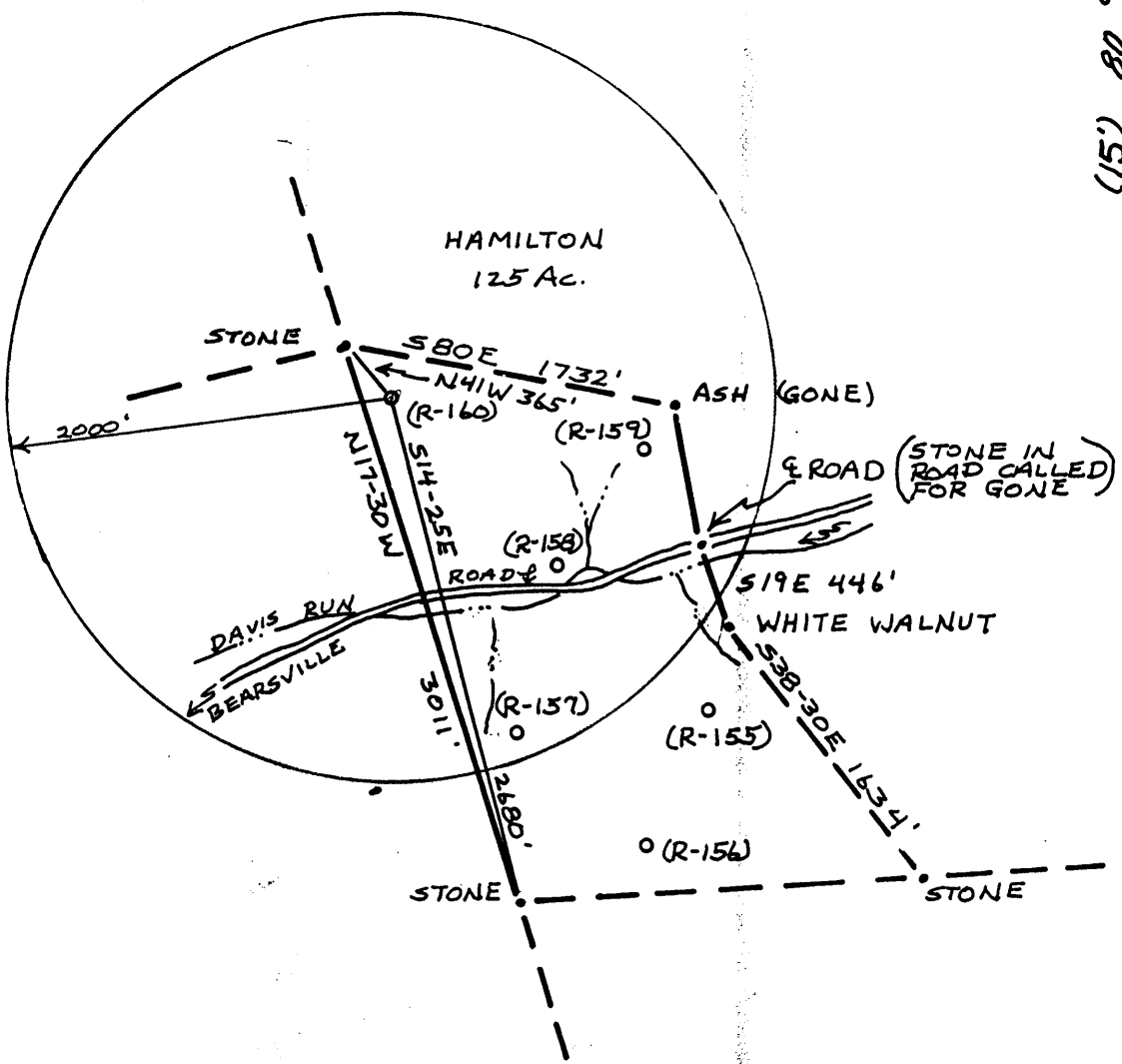
Latitude 39° 25'

Jamie 6/23/89



(15') 80° 50' LONG TWO 80° 52 1/2'

1090



NORTH

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1"=1000'  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION HIGH POINT ELEV. 1190'

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. Messer  
 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 15 JUNE, 1979  
 OPERATOR'S WELL NO. R-160  
 API WELL NO. 47-095-0798-DD  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

FORMERLY-TYL-722

WELL TYPE: OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 (IF GAS, PRODUCTION  STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW   
 LOCATION: ELEVATION 978' WATER SHED DAVIS RUN OF SANCHO CREEK  
 DISTRICT CENTERVILLE 1 COUNTY TYLER  
 QUADRANGLE MIDDLEBOURNE 7 1/2' QUAD. WEST UNION 15" 470 1335  
 SURFACE OWNER E.O. McEULOUGH ACRES 97 1/2  
 OIL & GAS ROYALTY OWNER Same LEASE ACRES \_\_\_\_\_  
 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) \_\_\_\_\_

PLUG AND ABANDON \_\_\_\_\_ CLEAN OUT AND REPLUG \_\_\_\_\_  
 TARGET FORMATION UPPER DEVONIAN ESTIMATED DEPTH 3200'  
 WELL OPERATOR Sancho Oil 5645 DESIGNATED LOREN K. Bagley  
 ADDRESS 210 Second Street ADDRESS \_\_\_\_\_  
Seamans Hill 26107 4502 \_\_\_\_\_  
 OWDD 6-6 Bearsville (366) \_\_\_\_\_  
 JUL 7 1989

39° 25'

1750 SOUTH  
9920 WEST

39 24 40

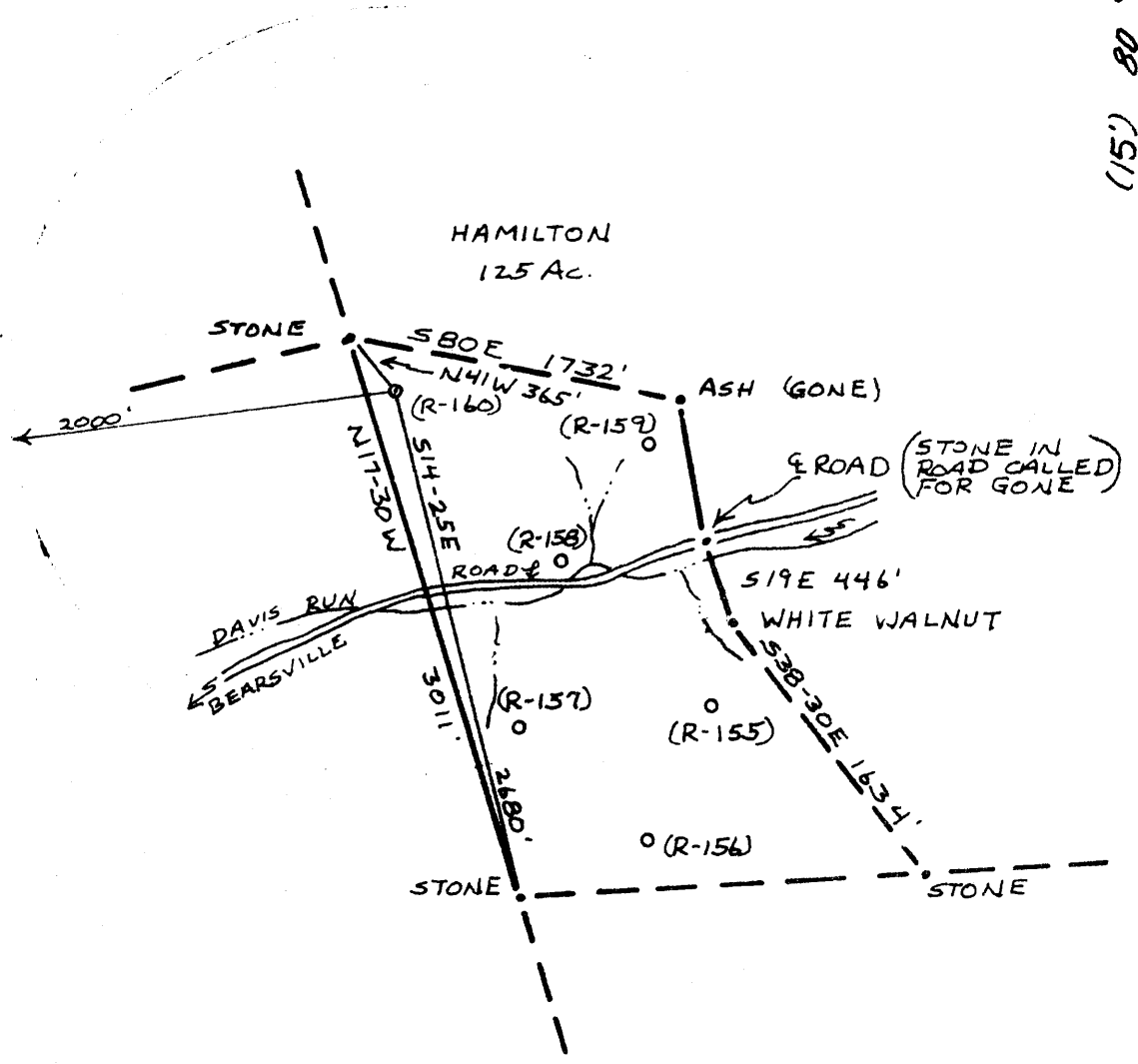
80 54 30

0.335  
1.90W



4.13W  
0.335

(15) 80° 50'  
80° 52 1/2'



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1"=1000'  
 HORIZONTAL CONTROL BY  
 ADJUSTED 11:200  
 PROPOSED SOURCE OF  
 ELEVATION HIGH POINT  
 ELEV. 1190'

THE UNDERSIGNED HEREBY CERTIFY  
 THAT THIS PLAN IS CORRECT AND  
 TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF  
 AND SHOWS ALL THE IMPROVEMENTS REQUIRED  
 BY LAW AND THE RESULTS OF THE SURVEY  
 AND PROCEEDINGS OF THE DISTRICT  
 MINER.  
 (SIGNED) *Willie R. Massol*  
 R-160

THIS WELL IS LOCATED IN  
 WELL IN UNITED STATES  
 TO GRAPHIC MAPS  
 FORM 1018  
 12-79



15 JUNE 1979  
 R-160  
 095 0798  
 COUNTY PLAT  
**FORMERLY-TYL-722**

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINE  
 OIL AND GAS DIVISION

WELL TYPE OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 "GAS" PRODUCTION  STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ HOLLOW   
 LOCATION ELEVATION 978' WATER BED DAVIS RUN OF SANCHO CREEK  
 DISTRICT CENTERVILLE COUNTY TYLER  
 QUADRANGLE MIDDLEBOURNE 7 1/2' QUAD. WEST UNION 15" C  
 SURFACE OWNER E.O. MCCULLOUGH ACRES 97 1/2  
 OIL & GAS ROYALTY OWNER SAME LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL  CONVERT \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ RE-DRILL \_\_\_\_\_  
 STIMULATE \_\_\_\_\_ PLUS OFF OLD FORMATION \_\_\_\_\_ PERFORATE NEW  
 FORMATION \_\_\_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

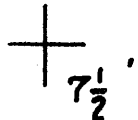
PLUS AND ABANDON \_\_\_\_\_ CLEAN OUT AND RE-PLUS \_\_\_\_\_  
 TARGET FORMATION UPPER DEVONIAN ESTIMATED DEPTH 3000'  
 WELL OPERATOR C.W. RIGGS, INC. DESIGNATED AGENT C.W. RIGGS  
 ADDRESS BOX 358, ST. MARYS, W.VA. ADDRESS BOX 358, ST. MARYS, W.VA.

E-D Bearsville (366)

MAY 29 1980

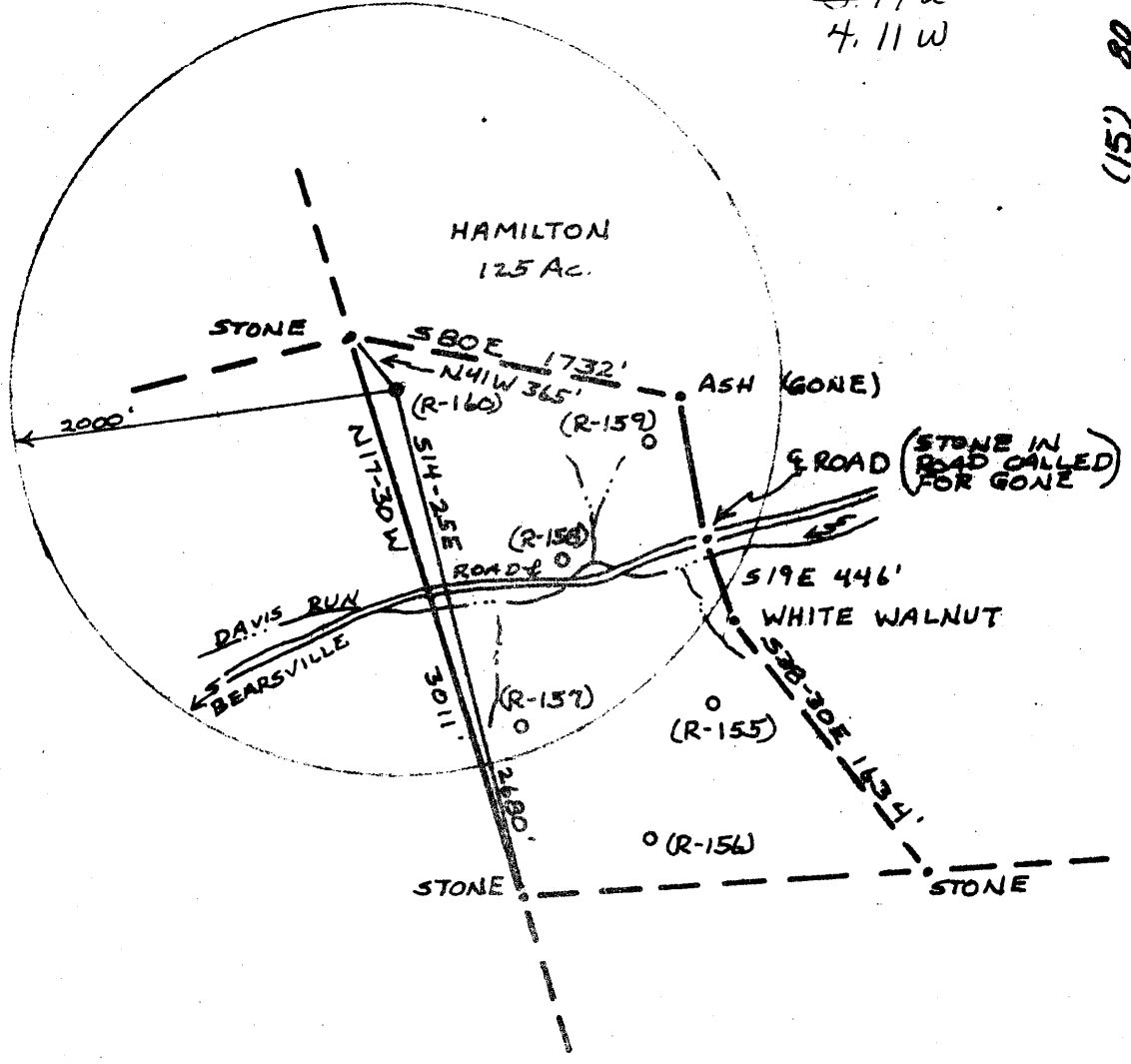
LATITUDE 39° 25'

1750 SOUTH  
9920 WEST



0.345  
3.944  
4.11 W

(15') 80° 50'  
LONGITUDE 80° 52.1/2'



FILE NO. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
SCALE 1"=1000'  
MINIMUM DEGREE OF ACCURACY 1:200  
PROVEN SOURCE OF ELEVATION HIGH POINT ELEV. 1190'

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 Messer  
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 15 JUNE 1979  
OPERATOR'S WELL NO R-160  
API WELL NO. 47-095-0722  
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

See Tyler 798

WELL TYPE: OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
(IF "GAS", PRODUCTION  STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW   
LOCATION: ELEVATION 978' WATER SHED DAVIS RUN OF SANCHO CREEK  
DISTRICT CENTERVILLE COUNTY TYLER  
QUADRANGLE MIDDLEBOURNE 7 1/2' QUAD. WEST UNION  
SURFACE OWNER E.O. MCCULLOUGH ACRES 97 1/2  
OIL & GAS ROYALTY OWNER SAME LEASE NO. \_\_\_\_\_ LEASE ACRES \_\_\_\_\_  
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 UPPER DEVONIAN ESTIMATED DEPTH 3100' AUG 10 1979  
WELL OPERATOR C.W. RIGGS, INC. DESIGNATED AGENT C.W. RIGGS  
ADDRESS BOX 358, ST. MARYS, W.VA. ADDRESS BOX 358, ST. MARYS, W.VA.



WR-35

Date September 8, 1989  
Operator's Well No. R160 E.O. McCullough  
Farm E.O. McCullough  
API No. 47-095-0798-dd

**RECEIVED**  
SEP 12 1989

State of West Virginia  
DEPARTMENT OF ENERGY  
Oil and Gas Division

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

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 x / Underground Storage \_\_\_ / Deep \_\_\_ / Shallow xy)

LOCATION: Elevation: 978 gl Watershed Davis Run  
District: Centreville County Tyler Quadrangle Middlebourne

COMPANY Sancho Oil And Gas Corp  
ADDRESS 210 Second Street, St Marys, WVa  
DESIGNATED AGENT Loren E. Bagley  
ADDRESS Rt 1 Middlebourne, WVa.  
SURFACE OWNER Paul McCullough  
ADDRESS Bearsville, West Virginia  
MINERAL RIGHTS OWNER Paul McCullough  
ADDRESS Bearsville, West Virginia  
OIL AND GAS INSPECTOR FOR THIS WORK  
Glen Robinso ADDRESS Mineral Wells  
PERMIT ISSUED 7, 6, 89  
DRILLING COMMENCED July 6, 1989  
DRILLING COMPLETED July 12, 1989

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"	250	250	125 sks
9 5/8			
8 5/8			
7			
5 1/2			
4 1/2	3030	3030	230 sks
3			
2 7/8	5081	5081	55 sks
Liners used			

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

GEOLOGICAL TARGET FORMATION Chemung Formation Depth 5000' feet  
Depth of completed well 5105 feet Rotary xxx / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh 100 feet; Salt 1200 feet  
Coal seam depths: none Is coal being mined in the area? no

OPEN FLOW DATA

Producing formation Chemung Pay zone depth 4538-4911 feet  
Gas: Initial open flow 25 Mcf/d Oil: Initial open flow 0 Bbl/d  
Final open flow 25 Mcf/d Final open flow 0 Bbl/d  
Time of open flow between initial and final tests 48 hours  
Static rock pressure 600 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 15 1989

(Continue on reverse side)

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

perforated from 4538 to 4911 with 9 shots  
 acidized with 500 gallons 15% HCl  
 frac'd with 700,000 scf N<sub>2</sub> at 30,000 scf/minute

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
unconsolidated clay & gravel			0	60'	
sandstone			60	100'	fresh water
shale & siltstone					
Big Injun Sandstone			1862'	2090'	trace gas
Squaw Sand			2090'	2105'	
Cuyahoga Sahle			2105'	2440'	
Sunbury Shale			2440'	2448'	
Berea Sandstone			2448'	2450'	
Ohio Shale (top)			2460'		
Gordon			2807'	2875'	
Chemung Formation			4538'	4911'	
TD				5105'	

**RECEIVED**  
 SEP 12 1989

DIVISION OF OIL & GAS  
 DEPARTMENT OF ENERGY

DF

new TD 5105  
 old TD 3039  
 new log 1966

(Attach separate sheets as necessary)

Sancho Oil And Gas Corp  
 Well Operator

SEP 15 1989

By: Paul Brown

Date: Sept 9, 1989

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."

9043

# RECEIVED

OCT 29 1980

OIL & GAS DIVISION STATE OF WEST VIRGINIA  
DEPT. OF MINES, OIL AND GAS DIVISION  
FORM IV-35 (Obverse)

Date 10-28, 1980

Operator's Well No. McCullough R-1

[08-78,

WELL OPERATOR'S REPORT OF

API Well No. 47-095-079  
State County Perm

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: 978' Watershed: DAVIS RUN  
District: CENTERVILLE County: TYLER Quadrangle: MIDDLEBOURNE

WELL OPERATOR C.W. Riggs, Inc. DESIGNATED AGENT SAME AS OPERATOR  
Address Box 358 Address \_\_\_\_\_  
ST. MARYS, WVA

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

PERMIT ISSUED ON 4-21, 1980

OIL & GAS INSPECTOR FOR THIS WORK:  
Name PHILLIP TRACY  
Address MIDDLEBOURNE, W.VA.

(IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED \_\_\_\_\_, 19\_\_\_\_)

GEOLOGICAL TARGET FORMATION: UPPER DEVONIAN Depth 3039 feet  
Depth of completed well, 3039 feet Rotary X / Cable Tools \_\_\_  
Water strata depth: Fresh, N/A feet; salt, N/A feet.  
Coal seam depths: N/A Is coal being mined in the area? NO  
Work was commenced 6-14, 1980, and completed 6-19, 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		
Conductor								Kinds
Fresh water	<u>10 3/4"</u>		<u>32.25#</u>	<u>X</u>		<u>250'</u>	<u>250'</u>	<u>125 sks.</u>
Coal								Sizes
Intermediate								Depths set
Production	<u>4 1/2"</u>		<u>10.5#</u>	<u>X</u>			<u>3030'</u>	<u>230 sks.</u>
Tubing								Perforations:
Liners								Top Bottom

### OPEN FLOW DATA

Producing formation GORDON, GORDON STRAY Pay zone depth 2884' feet  
Gas: Initial open flow, 30 Mcf/d Oil: Initial open flow, 0 Bbl/d  
Final open flow, 10 Mcf/d Final open flow, 0 Bbl/d  
Time of open flow between initial and final tests, 2 hours  
Static rock pressure, 400# psig (surface measurement) after 27 hours shut

[If applicable due to multiple completion--]  
30'

NOV 25 1980

2775'

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

4 shots .50 CALIBER 2775'-78'  
 4 " " " 2807'-2811'  
 8 " " " 2869'-84'

STIMULATION

1200 BBL H<sub>2</sub>O, 60,000 # 20-40 SAND, 150,000 SCF 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
COW RUN			1272	1320	
1ST SALT			1332	1384	
2ND SALT			1444	1490	
3RD SALT			1520	1550	
MAXON			1680	1720	
KEENER			1750	1784	
INJUN			1862	2071	
SQUAW			2090	2110	
WEIR			2276	2308	
WELCH STRAY			2334	2378	
BEREA			2448	2453	
50'			2665	2690	
30'			2767	2778	GAS
GORDON			2862	2886	GAS
5th SAND			2968	2976	
4th SAND			3022	3030	

(Attach separate sheets to complete as necessary)

C. W. Riggs, Inc.  
Well Operator

By John Cox  
Its K.P.

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**  
JUN 21 1989

Date: April 11, 1989  
Operator's well number \_\_\_\_\_  
R160  
API Well No: 47 - 095 - 0798 -DD  
State - County - Permit

3)  
DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY  
STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- |  |  |
|--|--|
| <p>4) Surface Owner(s) to be served:</p> <p>(a) Name <u>Paul McCullough</u><br/>Address <u>Rt 1 Box 100</u><br/><u>Middlebourne, W.Va. 26149</u></p> <p>(b) Name _____<br/>Address _____</p> <p>(c) Name _____<br/>Address _____</p> | <p>5) (a) Coal Operator:</p> <p>Name <u>none</u><br/>Address _____</p> <p>(b) Coal Owner(s) with Declaration<br/>Name _____<br/>Address _____</p> <p>(c) Coal Lessee with Declaration<br/>Name <u>none</u><br/>Address _____</p> |
| <p>6) Inspector <u>Glen Robinson</u><br/>Address <u>Rt 1, Mt. Pleasant Estate</u><br/><u>Mineral Wells, W.Va.</u><br/>Telephone (304)- <u>489-9162</u></p>   |  |

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

\_\_\_\_\_ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR

✓ Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 5 on the above named parties, by:

\_\_\_\_\_ Personal Service (Affidavit attached)

xx Certified Mail (Postmarked postal receipt attached)

\_\_\_\_\_ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Sancho Oil And Gas Corporation  
By: Loren E. Bagley *Loren E. Bagley*  
Its: President  
Address 210 Second Street  
St. Marys, West Virginia 26170  
Telephone (304)684-7170

Subscribed and sworn before me this 9th day of June, 1989

S. L. Lowther Notary Public  
My commission expires February 11, 1997



47-095-0798D

Issued 7/6/89 Expires 7/6/1991

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

- 1) Well Operator: Sancho Oil and Gas Corporation *44005, 1, 470*
- 2) Operator's Well Number: E. O. McCullough R160 3) Elevation: 978 g1
- 4) Well type: (a) Oil   / or Gas xx/  
(b) If Gas: Production xx/ Underground Storage   /  
Deep   / Shallow xx/
- 5) Proposed Target Formation(s): Chemung Group of the Ohio Shale
- 6) Proposed Total Depth: 5200' feet
- 7) Approximate fresh water strata depths: 100
- 8) Approximate salt water depths: 1200
- 9) Approximate coal seam depths: none
- 10) Does land contain coal seams tributary to active mine? Yes   / No xx/
- 11) Proposed Well Work: deepen existing well
- 12)

CASING AND TUBING PROGRAM

*Open Casing*

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
<i>pk</i> Conductor	<i>10 3/4</i>		<i>32.25"</i>		<i>250'</i>	<i>125 SKS.</i>
Fresh Water						
Coal						
Intermediate	<i>4 1/2"</i>	J55	<i>10 1/2#</i>	3039	3039	<i>230 SKS</i> @900' g1
Production	<i>2 7/8"</i>	J55	6.5	5200	5200	38CSR18-11.1
Tubing						
Liners						

**RECEIVED**  
JUN 21 1989

PACKERS : Kind \_\_\_\_\_  
Sizes \_\_\_\_\_  
Depths set \_\_\_\_\_

For Division of Oil and Gas Use Only  
DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

Fee(s) paid:    Well Work Permit    Reclamation Fund    WPCP  
Plat    WW-9    WW-2B    Bond    Agent

124  
11  
1073



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED

APR 21 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.

Surface Owner E. O. McCullough  
Address Bearsville, W. Va.  
Mineral Owner E. O. McCullough  
Address Bearsville, W. Va.  
Coal Owner E. O. McCullough  
Address Bearsville, W. Va.  
Coal Operator None  
Address \_\_\_\_\_

DATE 4-3-80  
Company C. W. Riggs, Inc.  
Address Box 358, St. Marys, W. Va.  
Farm E. O. McCullough Acres 97 1/2  
Location (waters) Davis Run  
Well No. R-160 Elevation 978'  
District Centerville County Tyler  
Quadrangle Middlebourne

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 12-23-80.

INSPECTOR  
TO BE NOTIFIED Phil Tracy  
ADDRESS Middlebourne, W. Va.  
PHONE 758-4573

Robert R. [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 June 6 1979 by Paul & Mary McCullough made to Loren E. Bagley and recorded on the 22nd day of June 1979 in Tyler County, Book 219 Page 431

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) C. W. Riggs  
Well Operator  
Box 358  
Street  
St. Marys  
City or Town  
W. Va.  
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

(Formerly: TYL-722)

47-095-0798

PERMIT NUMBER

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

PROPOSED WORK ORDER TO  DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:  
 NAME Haught Drilling NAME C. W. Riggs, Inc.  
 ADDRESS Smithville, W. Va. ADDRESS St. Marys, W. Va.  
 TELEPHONE 477-3333 TELEPHONE 684-3974  
 ESTIMATED DEPTH OF COMPLETED WELL: 3200' ROTARY  CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Upper Devonian (Gordon)  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS \_\_\_\_\_ COMB.  STORAGE \_\_\_\_\_ DISPOSAL \_\_\_\_\_  
 RECYCLING \_\_\_\_\_ WATER FLOOD \_\_\_\_\_ OTHER \_\_\_\_\_

**TENTATIVE CASING PROGRAM:**

CASING AND TUBING SIZE	USED FOR DRILLING	LIFT IN WELL	CEMENTED UP OR SACKS (CUBIC FT)
20 - 16			
13 - 10			
8 - 5/8 250'		250'	Cement top-bottom
4 - 5/8			
7			
5 1/2			
4 1/2		3200'	200 sks.
3			
2			Perf. Top
Liners			Perf. Bottom
			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 120 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



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

JUL 20 1979  
OIL & GAS DIVISION  
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

Surface Owner E.O. McCullough  
Address Bearsville, W. Va.  
Mineral Owner E.O. McCullough  
Address Bearsville, W. Va.  
Coal Owner E.O. McCullough  
Address Bearsville, W. Va.  
Coal Operator None  
Address \_\_\_\_\_

DATE 7-6-79  
Company C.W. Riggs, Inc.  
Address Box 358, St. Marys, W. Va.  
Farm E.O. McCullough Acres 97 1/2  
Location (waters) Davis Run  
Well No. R-160 Elevation 978'  
District Centerville County Tyler  
Quadrangle Middlebourne

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 3-23-80.

INSPECTOR  
TO BE NOTIFIED Phillip Tracy  
ADDRESS Middlebourne, W. Va.  
PHONE 758-4573

[Signature]  
GENERAL DEPUTY DIRECTOR - OIL & GAS DIVISION

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 June 6 19 79 by Paul & Mary McCullough made to Loren Bagley and recorded on the 22nd day of June 19 79 in Tyler County, Book 219 Page 431

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,  
(Sign Name) C.W. Riggs  
Well Operator

Address of Well Operator  
Box 358 Street  
St. Marys City or Town  
W. Va. 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.

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

PROPOSED WORK ORDER TO  DRILL  DEEPEN  FRACTURE-STIMULATE

DRILLING CONTRACTOR: (If Known) Little Swiss Drilling RESPONSIBLE AGENT: C.W. Riggs, Inc.  
 NAME Little Swiss Drilling NAME C.W. Riggs, Inc.  
 ADDRESS Buchannon, W.Va. ADDRESS St. Marys, W.Va.  
 TELEPHONE 472-6396 TELEPHONE 684-3974

ESTIMATED DEPTH OF COMPLETED WELL 3200' ROTARY  CABLE TOOLS

PROPOSED GEOLOGICAL FORMATION Upper Devonian

TYPE OF WELL: OIL  GAS  COMB.  STORAGE  DISPOSAL   
 RECYCLING  WATER FLOOD  OTHER

**TENTATIVE CASING PROGRAM:**

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENTED UP OR SACKS (CUBIC FT)
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3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 120 FEET SALT WATER FEET

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

IS COAL BEING MINED IN THE AREA? NO BY WHOM? \_\_\_\_\_

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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