



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200  
 PROVEN SOURCE OF ELEVATION BIG ISAAC 7 1/2" TOPO ROAD JCT. ELEV. 1366'

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) Douglas P. Moots  
 R.P.E. 7002 L.L.S. \_\_\_\_\_

PLACE SEAL HERE

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



STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

DATE \_\_\_\_\_ 19\_\_\_\_  
 OPERATOR'S WELL NO. D. BOWEN #1  
 API WELL NO. \_\_\_\_\_  
47 - 017 - 2868  
 STATE COUNTY PERMIT

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 1228' WATER SHED BRANCH OF LAUREL RUN  
 DISTRICT GREENBRIER COUNTY DODDRIDGE  
 QUADRANGLE BIG ISAAC 7 1/2" VADIS 15' N4  
 SURFACE OWNER EARL RICHARDS ACREAGE 71.00  
 OIL & GAS ROYALTY OWNER DOVENER BOWEN, ET. AL. LEASE ACREAGE 71.00  
 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 ALEXANDER ESTIMATED DEPTH 5400'  
 WELL OPERATOR STUART PET. CO/HANLEY'S DESIGNATED AGENT BERRY, WATERS, WARNER & HARRIS  
 ADDRESS 28 KENNEDY STREET BRADFORD ADDRESS PO. BOX. 1716, CLARKSBURG  
BRADFORD, PA. 16701 W.VA. 26301



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED

OCT 24 1980

Oil and Gas Division  
OIL AND GAS WELL PERMIT APPLICATION  
OIL & GAS DIVISION  
DEPT. OF MINES

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

DATE October 17, 1980

Surface Owner Earl Richards, et ux  
Address Rt. 3, Salem, WV 26426  
Mineral Owner Dovener Bowen, et al  
Address Rt. 2, Box 145A, Jane Lew, WV 26378  
Coal Owner Eastern Associated Coal Corp.  
Address Koppers Bldg., Pittsburgh, PA 15219  
Coal Operator None  
Address \_\_\_\_\_

Company Stuart Petroleum Company  
Address 28 Kennedy St. Bradford, PA 16701  
Farm D. Bowen, et al Acres 71  
Location (waters) Branch of Laurel Run  
Well No. one (1) Elevation \_\_\_\_\_  
District Greenbrier County Doddridge  
Quadrangle Big Isaac 7 1/2'

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 7-8-81.

INSPECTOR  
TO BE NOTIFIED Paul Garrett  
ADDRESS 321 Beech Street, Clarksburg, WV  
PHONE 622-3871

Paul Garrett  
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 September 18 1971 by William K. Finch, et ex made to Earl Richards and recorded on the 20 day of July 1972 in Doddridge County, Book 96 Page 140  
X 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:

OFFICE OF OIL AND GAS  
1615 Washington Street, East  
Charleston, West Virginia  
Area Code 304 -348-3092 348-3096

Address  
of  
Well Operator

Very truly yours,  
(Sign Name) Stuart Petroleum Company - CONSULTANT  
Well Operator  
Stuart Petroleum Company  
28 Kennedy Street  
Street  
Bradford  
City or Town  
Pennsylvania 16701  
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

47-017-2868

PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-5 and will carry out the specified requirements."

Signed by Scott C. Wilson Agent

**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 \_\_\_\_\_ NAME Berry, Waters, Warner & Harris \_\_\_\_\_  
 ADDRESS \_\_\_\_\_ ADDRESS P.O.Box 1716, Clarksburg, WV 26301 \_\_\_\_\_  
 TELEPHONE \_\_\_\_\_ TELEPHONE 304-624-5571 \_\_\_\_\_  
 ESTIMATED DEPTH OF COMPLETED WELL: 5400' \_\_\_\_\_ ROTARY X \_\_\_\_\_ CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Alexander \_\_\_\_\_  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS X \_\_\_\_\_ COMB. \_\_\_\_\_ STORAGE \_\_\_\_\_ DISPOSAL \_\_\_\_\_  
 RECYCLING \_\_\_\_\_ WATER FLOOD \_\_\_\_\_ OTHER \_\_\_\_\_

**TENTATIVE CASING PROGRAM:**

CASING AND TUBING SIZE	USED FOR DRILLING	LIFT IN WELL	CEMENT LIFT UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10	30	30	Circulate
9 - 5/8			
8 - 5/8	1300	1300	Circulate
7			
5 1/2			
4 1/2		5300	
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 50' FEET \_\_\_\_\_ SALT WATER 1100' FEET \_\_\_\_\_  
 APPROXIMATE COAL DEPTHS 200, 600 \_\_\_\_\_  
 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

Oil and Gas Division

WELL RECORD

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

Quadrangle Big Isaac 7 1/2'

Permit No. 47-017-2868

Company <u>Stuart Petroleum Co./Hanley &amp; Bird</u>	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Address <u>38 Kennedy Street, Bradford, PA 16701</u>	Size			
Farm <u>D. Bowen, et al</u> Acres <u>71</u>	20-16			
Location (waters) <u>Branch of Laurel Run</u>	Cond.			
Well No. <u>One (1)</u> Elev. <u>1228'</u>	13-10"	31'	0	
District <u>Greenbrier</u> County <u>Doddridge</u>	9 5/8			
The surface of tract is owned in fee by <u>Earl Richards, et ux</u>	8 5/8	1316.60	1316.60	320 Sacks
Address <u>Rt 3, Salem, WV 26426</u>	7			
Mineral rights are owned by <u>Dovener Bowen, et al</u>	5 1/2			
Address <u>Rt. 2, Box 145A, Jane Lew WV</u>	4 1/2		5404.70	420 Sacks
Drilling Commenced <u>12-27-80</u>	3			
Drilling Completed <u>1-3-81</u>	2			
Initial open flow <u>45,000</u> cu. ft. _____ bbls.	Liners Used			
Final production <u>163</u> cu. ft. per day _____ bbls.				
Well open <u>4</u> hrs. before test <u>1175#</u> RP.				

Well treatment details:

Attach copy of cementing record.

Speechley	20,000#	80/100	40,000#	20/40	480 BBL	S/L Fluid
Balltown	20,000#	80/100	40,000#	20/40	480 BBL	S/L Fluid
Benson	15,000#	80/100	35,000#	20/40	407 BBL	S/L Fluid
Alexander	20,000#	80/100	40,000#	20/40	460 BBL	S/L Fluid

163 MCF

Coal was encountered at \_\_\_\_\_ Feet \_\_\_\_\_ Inches  
Fresh water 70' Feet \_\_\_\_\_ Salt Water 1539 Feet \_\_\_\_\_  
Producing Sand Speechley, Balltown, Benson, Alexander Depth 3539-3661, 3786-3948  
4948-4960, 5294-5304

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand & Shale			0	75		1/4" FW @ 70'
White sand			75	90		
Sand & Shale			90	170		
Red Rock & Shale			170	260		
Sand & Shale			260	345		
Red Rock & Shale			345	550		
Shale			550	960		
Red Rock & Shale			960	1250		
Sand & Shale			1250	1760		Damp @ 1539'
Red Rock & Shale			1760	2030		S.O. @ 1715'
Big Lime			- 2030	2170		Gas Checks
Sand & Shale			2170	3169		@ 2170' No Show
Shale			3169	3770		@ 3250' No Show
Balltown			3770	3820		@ 3847' 4/10 wtr thru 1"
Shale			3820	4940		@ 5425' 18/10 wtr thru 1"
Benson			- 4940	4955		
Sand & Shale			4955	5230		
Sand			5230	5250		
Sand & Shale <i>Alexander</i>			5250	5425		
Total Depth			5425			

RECEIVED

JUN 23 1981

(over)

\* Indicates Electric Log tops in the remarks section.

JUN 31 1981

OIL & GAS DIVISION  
DEPT. OF MINES

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks

Date JUNE 12 1981

APPROVED [Signature] CONSULTANT