

"I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia."

Company **WEIRTON STEEL DIV. NATIONAL STEEL**  
 Address **WEIRTON, W.V. 26062**  
 Form *1*  
 Tract \_\_\_\_\_ Acres \_\_\_\_\_ Lease No. \_\_\_\_\_  
 Well (Farm) No. *1* Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) **716.25'**  
 Quadrangle **STUBENVILLE 15'** *(C) NE*  
 County **HANCOCK** District **BUTLER**  
 Engineer *J.J. Wargachi*  
 Engineer's Registration No. **2246**

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON

WELL LOCATION MAP  
 FILE NO. **HAN-89**

Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

Denotes one inch spaces on border line of original tracing.

File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date **4/10/75** Scale **1" = 200'**

**47-029** MAY 19 1975



**RECEIVED**

SEP 1 1976

OIL & GAS DIVISION  
DEPT. OF MINES

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
**Oil and Gas Division**  
**WELL RECORD**

Quadrangle Steubenville

Permit No. HAN-89

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

Company <u>Weirton Steel - Div. Nat. St. Corp.</u>	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Address <u>Weirton, W. Va. 26062</u>	Size			
Farm <u>Detinning Plant</u> Acres <u>--</u>	20-16			
Location (waters) <u>Harmon Creek</u>	Cond.			
Well No. <u>1</u> Elev. <u>725 EKB</u>	13-10"			
District <u>Butler</u> County <u>Hancock</u>	9 5/8			
The surface of tract is owned in fee by <u>Nat. St. Corp.</u>	8 5/8			
Address <u>Same</u>	7	205	205	
Mineral rights are owned by _____	5 1/2			
Address _____	4 1/2	--	1748	220 sks.
Drilling Commenced <u>5-6-75</u>	3			
Drilling Completed <u>5-18-75</u>	* 1 1/2"	--	1692	
Initial open flow <u>--</u> cu. ft. <u>--</u> bbls.	Liners Used			
Final production _____ cu. ft. per day _____ bbls.				
Well open _____ hrs. before test _____ RP.				

Well treatment details:

Attach copy of cementing record.

Fractured in silt stringers below Gordon, Gordon, Berea.  
Weir perf. but not treated

Tested 8-9-76

70 mcf + oil 540#

Coal was encountered at \_\_\_\_\_ Feet \_\_\_\_\_ Inches

Fresh water \_\_\_\_\_ Feet Salt Water \_\_\_\_\_ Feet

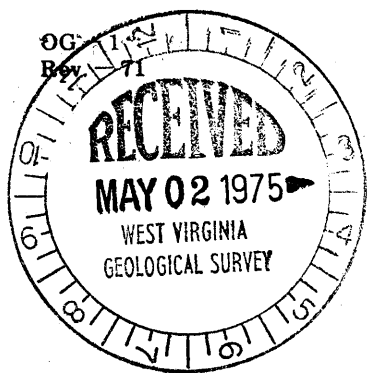
Producing Sand Gordon & Berea Depth 1432-1439 & 1118-1127  
*Gordon Lower Berea*

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand & Shale			0	400		
Broken Sand			400	478		
Sand & Shale			478	540		
Sand			540	570		
Shale			570	578		
Sand			578	582		
Shale			582	623		
Shaley Sand			623	640		
Shale			640	652		
Sand, shaley (Injun)			652	736		
Sandy shale			736	860		
Sand, shaley (Weir)			860	872		
Shale, sandy			872	1012		Gas show
Sand, shaley			1012	1054		Poss. gas show 978'
Shale, Sandy			1054	1094		
Sand (Berea)			1094	1112		
Shale			1112	1118		
Sand <del>Lower</del> Berea?			1118	1128		
Shale & Sand Str.			1128	1430		
Sand (Gordon)			1430	1440		
Shale & Sand Str.			1440	--		
Total Depth			--	1810		Poss. gas show 1748'

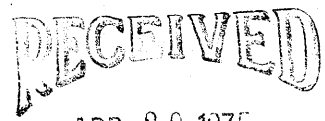
(over)

\* Indicates Electric Log tops in the remarks section.

extends Gordon gas disc. in Hanc-81 (Corrig. a disposal well) SEP 29 1976



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES



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 Weirton Steel Division - National Steel Corporation  
Address P.O. Box 431, Weirton, W.Va. 26062  
Mineral Owner Weirton Steel Division - NSC  
Address P.O. Box 431, Weirton, W.Va. 26062  
Coal Owner Weirton Steel Division - NSC  
Address P.O. Box 431, Weirton, W.Va. 26062  
Coal Operator Not Applicable  
Address \_\_\_\_\_

DATE April 22, 1975  
Company Weirton Steel Division - National Steel Corporation  
Address P.O. Box 431, Weirton, W.Va. 26062  
Farm National Steel Corporation  
Location (waters) Ohio  
Well No. Hancock No. 2 Elevation 716.25  
District Butler County Hancock  
Quadrangle W.Va. - Ohio - Pa. Steubenville

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 9-1-75.  
Robert Roads  
Deputy Director - Oil & Gas Division

INSPECTOR TO BE NOTIFIED Richard J. Morris  
PH: 354-7259 ADDRESS Grantville, W.Va.

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 \_\_\_\_\_ 19\_\_\_\_ by \_\_\_\_\_ made to \_\_\_\_\_ and recorded on the \_\_\_\_\_ day of \_\_\_\_\_ 19\_\_\_\_, in \_\_\_\_\_ County, Book \_\_\_\_\_ Page \_\_\_\_\_  
 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, W. Va. 26505  
AC 304-296-4461

Very truly yours,  
(Sign Name) [Signature] Well Operator  
Address P.O. Box 431 Street  
of Weirton City or Town  
Well Operator West Virginia 26062 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

Han-89 PERMIT NUMBER  
47-029

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 Calvert Western Exploration Company NAME \_\_\_\_\_  
 ADDRESS Box 330, Waynesburg, Pa. 15370 ADDRESS \_\_\_\_\_  
 TELEPHONE (412) 627-6964 TELEPHONE \_\_\_\_\_  
 ESTIMATED DEPTH OF COMPLETED WELL: 1800' 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	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8			
7	<b>170' or 20 Feet Below Freeport Coal</b>		
5 1/2			
4 1/2	<b>1800'</b>		
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 85 FEET SALT WATER \_\_\_\_\_ FEET  
 APPROXIMATE COAL DEPTHS 160' **Lower Freeport**  
 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 **National Steel Corporation** Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the **National Steel Corporation** 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.

**Weirton Steel Division - National Steel Corporation**  
**Vice President - Engineering**  
 Official Title