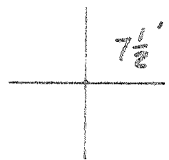
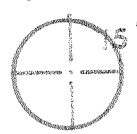
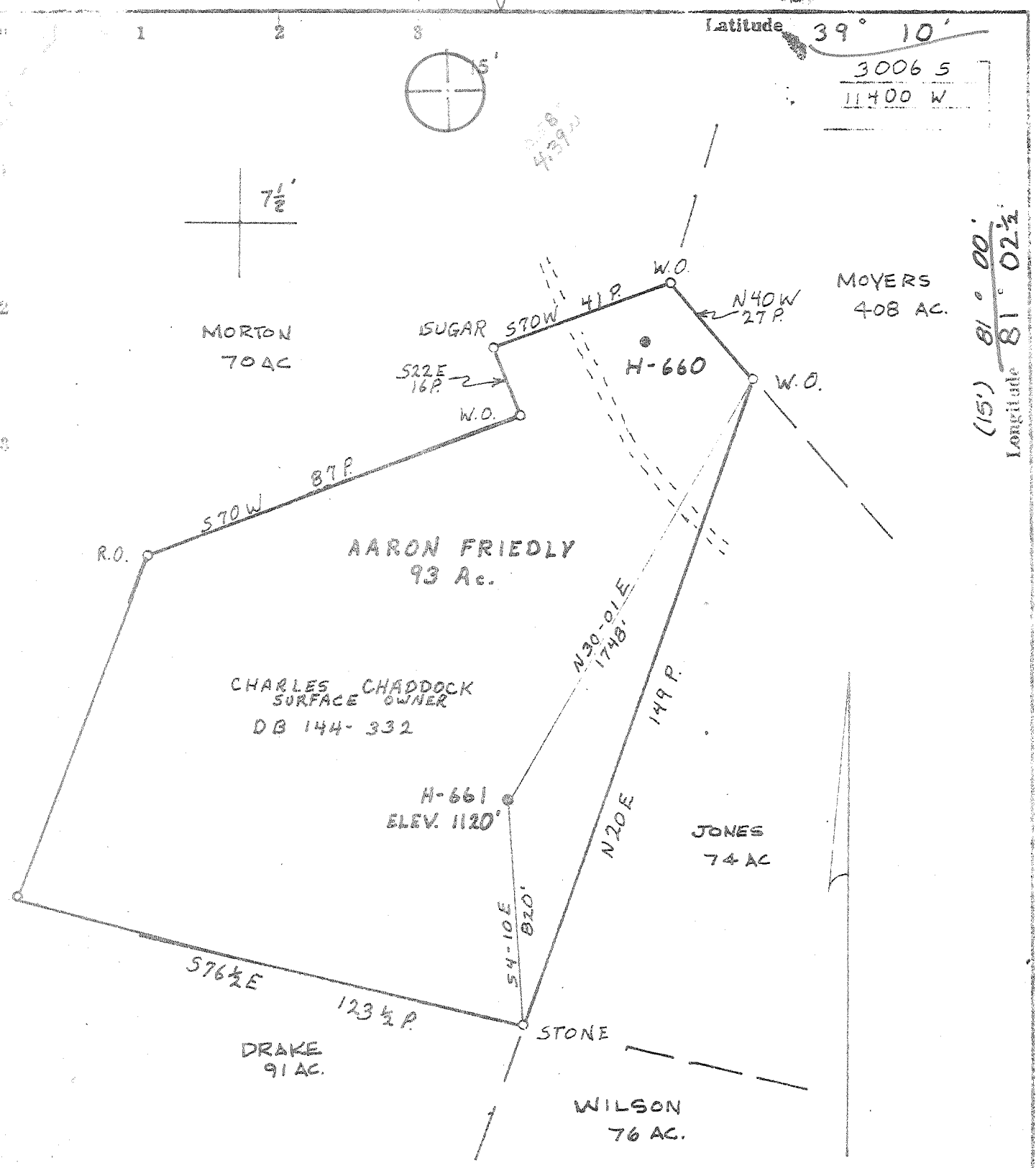


Latitude 39° 10'

3006 S  
11400 W



(15') 81° 00'  
Longitude 81° 02 1/2'



Fracture...   
Re-drill...   
New Location   
Drill Deeper   
Abandonment  12/20/78

Source of Elevation ROAD ELEV. ELEV. 808'  
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.

William R. Mossdr Minimum accuracy, one part in 300

Company GLENN L. HAUGHT & SONS  
Address SMITHVILLE, W. VA. 26178  
Farm AARON FRIEDLY, CHARLES CHADDOCK  
Tract Acres 93 Lease No.  
Well (Farm) No. H-661 Serial No.  
Elevation (Spirit Level) 1120' EC  
Quadrangle HARRISVILLE, W. VA. 15' 7 1/2' QUAD.  
County RITCHIE District MURPHY  
Surveyor or Engineer WILLIAM R. MOSSDR  
Surveyor's or Engineer's Registration No. L.L.S. #551  
File No. Drawing No.  
Date 25 SEPT. 1978 Scale 1" = 30 P.

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

WELL LOCATION MAP  
FILE NO. 47-085-4139-P

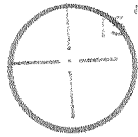
+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.  
- Denotes one inch spaces on border line of original tracing.

G-G MAHONE 124

JAN 10 1979

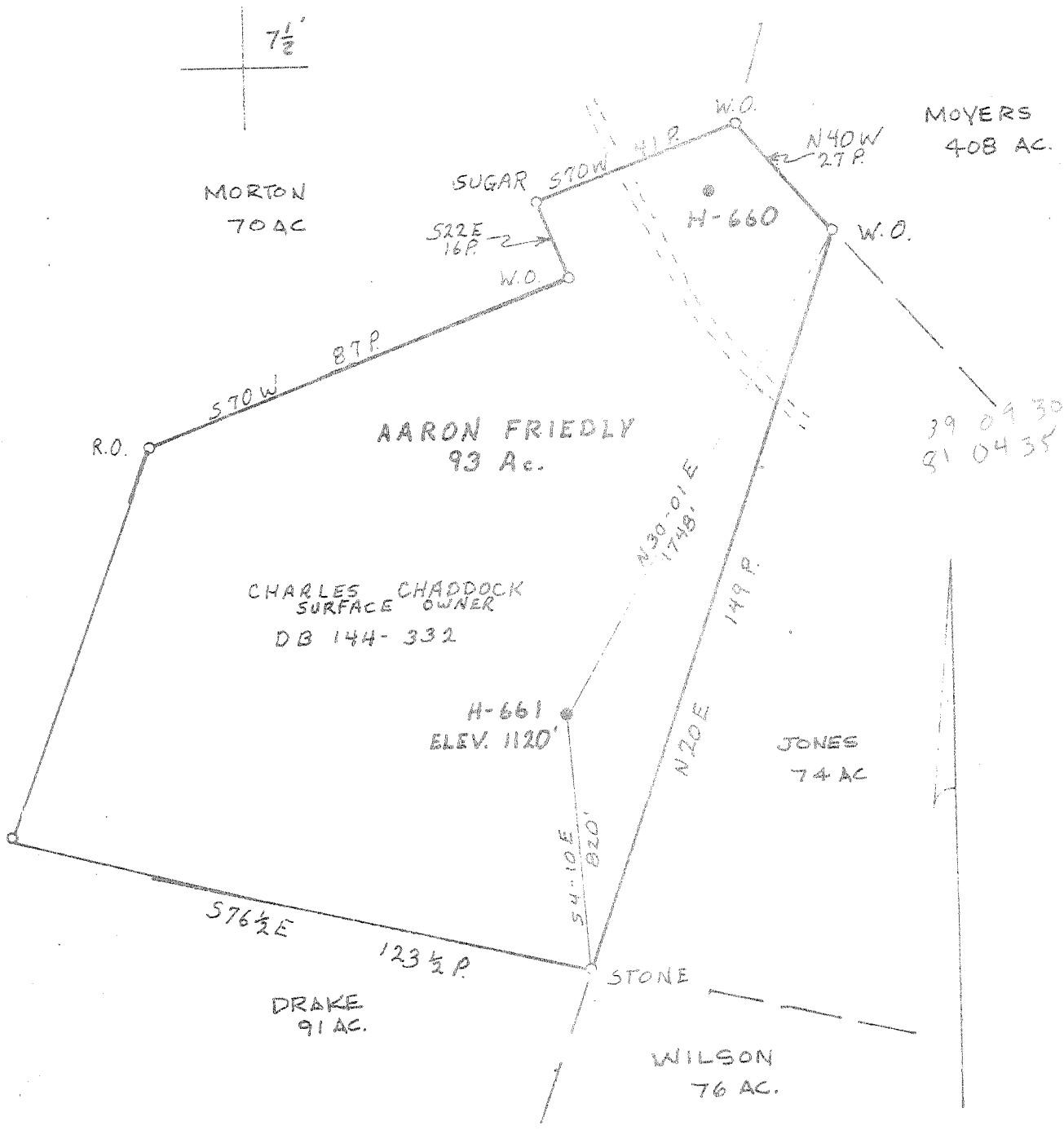
Latitude 39° 10'

3006 S  
11400 W



7 1/2'

(15') 81° 00'  
81° 02 1/2'



39 09 30  
81 04 35

- Electricity
- Water
- Neighborhood
- Drill Deeper
- Abandonment

Source of Elevation ROAD ELEV. ELEV. 808'

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.

*William R. Mossor*

Minimum accuracy, one part in 300

Company GLENN L. HAUGHT & SONS  
 Address SMITHVILLE, W. VA. 26178  
 Farm AARON FRIEDLY, CHARLES CHADDOCK  
 Tract \_\_\_\_\_ Acres 93 Lease No. \_\_\_\_\_  
 Well (Farm) No. H-661 Serial No. \_\_\_\_\_  
 Elevation (Post Level) 1120' **EC**  
 Location HARRISVILLE, W. VA. 151 7 1/2 QUAD.  
 County RITCHIE District MURPHY  
 Surveyor WILLIAM R. MOSSOR  
 State of \_\_\_\_\_  
 Professional Registration No. L.L.S. #551  
 Drawing No. \_\_\_\_\_  
 Date 25 SEPT. 1978 Scale 1" = 30 P.

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

**WELL LOCATION MAP**  
 FILE NO. **RIT-4139**

+ 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.

**47-085**

*6-6 MAHONEY 124*

OCT 19 1978



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

Quadrangle Harrisville, WV 7 1/2'

Permit No. RIT-4139  
47-085

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

Company Glenn L. Haught & Sons  
Address Smithville, W. Va. 26178  
Farm Aaron Friedly Acres 93  
Location (waters) Dog Run  
Well No. H-661 Elev. 1120'  
District Murphy County Ritchie  
The surface of tract is owned in fee by Charles Chaddock  
Address Rt. 1, Harrisville, WV 26362  
Mineral rights are owned by Leo Trader et al Address Rt. 1, Harrisville, WV  
Drilling Commenced 12-21-78  
Drilling Completed 12-18-78  
Initial open flow Show cu. ft. \_\_\_\_\_ bbls.  
Final production 420,000 cu. ft. per day \_\_\_\_\_ bbls.  
Well open 8 hrs. before test 500 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"			
9 5/8			
8 5/8	203	203	75 Sacks
7			
5 1/2			
4 1/2		2233	80 Sacks
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

Hydrafraced by Hallibuton - 1-2-79 -- 1,000 Gal. Acid -- 730 Bbls.  
Water -- 9,000 Lbs. 80-100 Mesh Sand -- 24,000 Lbs. 20-40 Mesh Sand.

Coal was encountered at NONE Feet \_\_\_\_\_ Inches \_\_\_\_\_  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Big Injun Depth Perforations 9--2136-2148  
9--2208-2172

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Clay	Red	Soft	0	5		
Shale	Gray	Soft	5	64		
Sand	Shite	Med.	64	97		
Shale	Gray	Soft	97	125		
Slate (R.R.)	Red	Soft	125	139		
Sand	White	Hard	139	151		
Slate (R.R.)	Red	Soft	151	171		
Sand	White	Hard	171	182		
Shale	Gray	Soft	182	210		
Sand	Gray	Hard	210	240		
Red Rock	Red	Soft	240	270		
Slate	White	Soft	270	305		
Sand	Gray	Hard	305	360		
Slate	Gray	Soft	360	408		
Red Rock	Red	Soft	408	416		
Sand	Gray	Hard	416	438		
Slate	Gray	Soft	438	456		
Red Rock	Red	Soft	456	466		
Slate	Gray	Soft	466	468		
Red Rock	Red	Soft	468	487		
Slate	Gray	Soft	487	521		
Slate	Black	Soft	521	523		

**RECEIVED**  
MAR - 8 1979

OIL & GAS DIVISION  
DEPT. OF MINES

(over)

\* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand	Gray	Hard	523	532		
Slate	Gray	Soft	532	562		
Red Rock	Red	Soft	562	580		
Slate	White	Soft	580	660		
Sand	White	Hard	660	716		
Red Rock	Red	Soft	716	726		
Slate	Gray	Med.	726	780		
Red Rock	Red	Soft	780	816		
Sand	Gray	Med.	816	830		
Shale	Gray	Soft	830	920		
Red Rock	Red	Soft	920	935		
Shale	Gray	Soft	935	945		
Red Rock	Red	Soft	945	990		
Slate	Gray	Soft	990	1140		
Sand	White	Hard	1140	1160		
Slate	Gray	Soft	1160	1195		
Sand	White	Med	1195	1257		
Slate	Gray	Soft	1257	1267		
Sand	White	Med.	1267	1310		
Shale	Gray	Med.	1310	1450		
Sand	White	Med.	1450	1490		
Slate	Black	Soft	1490	1530		
Sand	White	Med.	1530	1565		
Shale	Gray	Soft	1565	1600		
Sand	White	Med.	1600	1650		
Slate	Black	Soft	1650	1670		
Sand	White	Med.	1670	1762		
Shale	Gray	Soft	1762	1860		
Sand	White	Hard	1860	1882		
Slate	Gray	Med.	1882	1890		
Sand	White	Hard	1890	1895		
Slate	Gray	Soft	1895	1902		
Sand	White	Hard	1902	1955		
Shale	Gray	Med.	1955	1975		
Sand	Gray	Hard	1975	1995		
Lime	White	Hard	1995	2040		
Sand	White	Hard	2040	2208		
Slate & Shale	Gray.	Med.	2208	2280	T. D.	

Date January 11, 19 79

APPROVED GLENN L. HAUGHT & SONS (Owner)

By Walter R. Haught  
 President



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED  
OCT 5 1978  
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 Charles Chaddock  
Address Rt. 1, Harrisville, W. Va. 26362  
Mineral Owner Leo Trader et als  
Address Rt. 1, Harrisville, W. Va. 26362  
Coal Owner \_\_\_\_\_  
Address \_\_\_\_\_  
Coal Operator None  
Address \_\_\_\_\_

DATE October 5, 1978  
Company Glenn L. Haught & Sons  
Address Smithville, W. Va. 26178  
Farm Aaron Friedly Acres 93  
Location (waters) Dog Run  
Well No. H-661 Elevation 1120'  
District Murphy County Ritchie  
Quadrangle Harrisville, WV 7 1/2' Quad.

PERMIT MUST BE POSTED AT THE WELL SITE

provisions being in accordance with Chapter 22,  
the W. Va. Code, the location is hereby approved  
drilling. This permit shall expire if  
operations have not commenced by 2-6-79.

INSPECTOR  
TO BE NOTIFIED Kenneth Paul Goodnight  
ADDRESS Smithville, W. Va. 26178  
PHONE 477-3660

Kenneth Paul Goodnight  
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 May 6th 1977 by Dale Wolfe made to Warren R. Haught and recorded on the 10th day of May 1977, in Ritchie County, Book 123 Page 156

\_\_\_\_\_  
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) GLENN L. HAUGHT & SONS  
Well Operator  
BY: Warren R. Haught  
Street Partners  
Smithville, W. Va. 26178  
City or Town  
\_\_\_\_\_  
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

RIT-4139 PERMIT NUMBER

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

PROPOSED WORK ORDER TO REX DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:  
 NAME Glenn L. Haight & Sons NAME Warren K. Haight  
 ADDRESS Smithville, W. Va. 26178 ADDRESS Smithville, W. Va. 26178  
 TELEPHONE 304-477-3333 TELEPHONE 304-477-3333  
 ESTIMATED DEPTH OF COMPLETED WELL: 2300' ROTARY RE CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Big Injan  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS RE 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	200'	200'	75 Sacks
7			
5 1/2			
4 1/2		2300'	100 Sacks
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 30 FEET \_\_\_\_\_ SALT WATER \_\_\_\_\_ FEET \_\_\_\_\_  
 APPROXIMATE COAL DEPTHS None  
 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