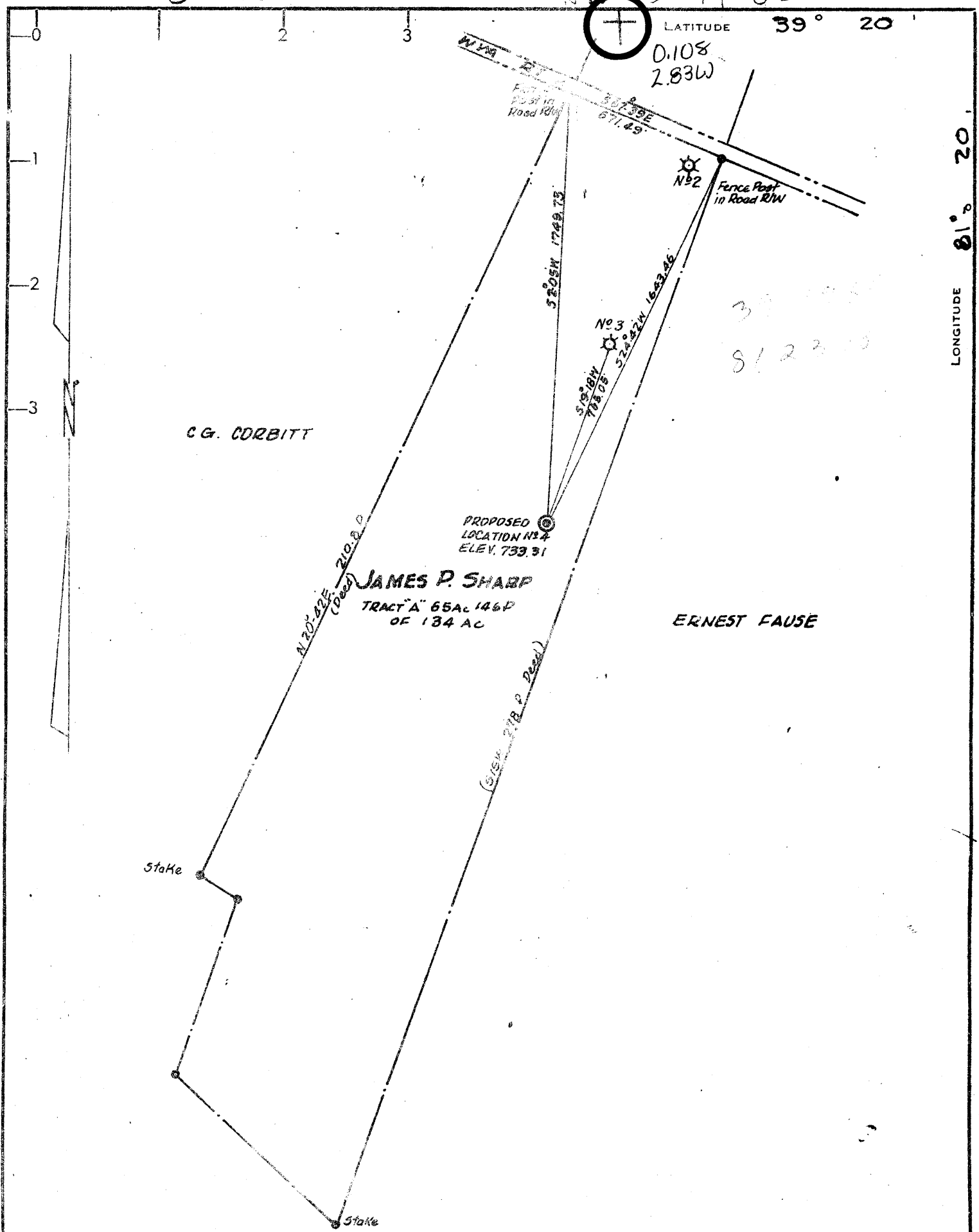


5-14-60



**CERTIFICATE**

"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."

Minimum degree of accuracy is one part in 200

Signed Frank H. Barkley #209

- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

COMPANY CARL E. SMITH INC.  
 ADDRESS SANDYVILLE, WEST VIRGINIA  
 FARM JAMES P. SHARD  
 MAP \_\_\_\_\_ ACRES 134 LEASE NO. \_\_\_\_\_  
 WELL (FARM) NO. 4 SERIAL NO. \_\_\_\_\_  
 ELEVATION (SPIRIT LEVEL) 733.31  
 QUADRANGLE MARIETTA 15' SC  
 COUNTY WOOD DISTRICT \_\_\_\_\_  
 POINT OF PROVEN ELEVATION Road

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON  
**WELL LOCATION MAP**

108-78,

WELL OF RATOR'S REPORT 35  
OF

API Well No. 47-107-1025  
State Count Ferris

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

TYPE: Oil  / Gas  / Liquid Injection \_\_\_ / Waste Disposal \_\_\_  
(If "Gas", Production \_\_\_ / Under ground storage \_\_\_ / Deep \_\_\_ / Shallow  /)

LOCATION: Elevation: \_\_\_\_\_ Waterbed: CARPENTERS RUN  
District: UNION County: \_\_\_\_\_ Quadrangle: MARIETTA

OPERATOR CARL E. SMITH, INC. DESIGNATED AGENT  
Address P.O. BOX 4 Address SAME  
SANDYVILLE, WV 25275

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

ISSUED ON 5-14-, 19 80 OIL & GAS INSPECTOR FOR THIS WORK:

APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR WORKING. VERBAL PERMISSION OBTAINED  
Name K. PAUL GOODNIGHT  
Address SMITHVILLE, WV

MINERAL TARGET FORMATION: GORDON Depth 2450 feet  
Depth of completed well, 2535 feet Rotary  / Cable Tools \_\_\_  
Water strata depth: Fresh, 190 feet; salt, 1300 feet.  
Coal seam depths: \_\_\_\_\_ Is coal being mined in the area? NO  
Work was commenced 5/15, 19 80, and completed 5/20, 19 80

CEMENT AND TUBING PROGRAM

DRILLING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling		
Water	8 5/8	K55	24#	X		306	306	110 SK Kinds
Immediate completion	4 1/2	K55	10.50#	X		2545	2545	215 SK Sizes Depths set
<b>RECEIVED</b>								Perforations:
JUL 31 1980								Top Bottom

LOW DATA  
Producing formation GORDON Pay zone depth 2427 to 2449 feet  
Gas: Initial open flow, \_\_\_\_\_ Mcf/d Oil: Initial open flow, \_\_\_\_\_ Bbl/d  
Final open flow, 75 Mcf/d Final open flow, 20 Bbl/d  
Time of open flow between initial and final tests, 6 hours  
Static rock pressure, 750 psig (surface measurement) after 72 hours shut in

If applicable due to multiple completion--]

Second producing formation \_\_\_\_\_ Pay zone depth \_\_\_\_\_ feet  
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

AUG 11 1980

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

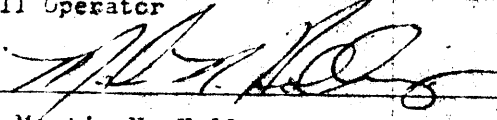
Perforations 2427 to 2449 24 Holes

Treated Nitrogen with Water Fracture  
 100,000 SCF Nitrogen  
 80/100 Sand 200 sks  
 20/40 Sand 450 Sks  
 800 BBL Fluid

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Clay			0	19	
Shale			19	36	
Sand			36	38	
Shale			38	73	
Sand			73	100	
Shale			100	209	
Sand			209	315	
Shale			315	461	
Sand			461	487	
Shale			487	571	
Sand			571	613	
Shale			613	1070	
Sand			1070	1088	
Shale			1088	1201	
Sand			1201	1249	
Shale			1249	1340	
Sand			1340	1385	
Sandy Shale			1385	1496	
Sand			1496	1773	
Sand & Shale			1773	1880	
Lime & Sand			1880	2067	
Berea			2067	2075	Show Gas
Shale			2075	2427	
Gordon			2427	2449	Show Gas & Oil

(Attach separate sheets to complete as necessary)

CARL E. SMITH, INC.  
 Well Operator  
 By   
 Its Martin N. Holley - Mgr. Land Department

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."

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. 204-4  
API Well No. 47 - 107 1025  
State County Permit

WELL TYPE: Oil  / Gas

(If "Gas", Production  / Underground storage  Deep  / Shallow

LOCATION: Elevation: 733.31 Watershed: CARPENTER RUN

District: UNION County: WOOD Quadrangle: MARIETTA

WELL OPERATOR CARL E. SMITH, INC.  
Address P.O. BOX 4  
SANDYVILLE, WV 25275

DESIGNATED AGENT CARL E. SMITH, INC.  
Address P.O. BOX 4  
SANDYVILLE, WV 25275

OIL & GAS  
PROPERTY OWNER JAMES P. SHARP  
Address WAVERLY, WV

COAL OPERATOR NONE  
Address \_\_\_\_\_

ACREAGE 134

SURFACE OWNER  
Address SAME

COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name JAMES P. SHARP  
Address WAVERLY, WV

ACREAGE 134

WELL SALE (IF MADE) TO:

Name \_\_\_\_\_  
Address \_\_\_\_\_

Address \_\_\_\_\_

COAL LESSEE WITH DECLARATION ON RECORD:  
Name \_\_\_\_\_  
Address \_\_\_\_\_

& GAS INSPECTOR TO BE NOTIFIED  
K. PAUL GOODNIGHT  
Address SMITHVILLE, WV  
PH: 477-3660

**OIL & GAS DIVISION  
DEPT. OF MINES**

**RECEIVED**

**MAY 14 1980**

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed  / lease  / other contract  dated MARCH 27, 1980. The undersigned well operator from QUAKER STATE OIL REFINING CO. [said deed, lease, or other contract has been recorded:]

Recorded on \_\_\_\_\_, 19\_\_\_\_, in the office of the Clerk of the County Commission of WOOD County, West Virginia, in LEASE Book 718 at page 416. A permit in response to this application is hereby granted.

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

--planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any modifications which may be required to make by Code 5-2-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.

Copies of this Permit Application and the enclosed report and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL PHYSICAL LOGS DIRECTLY TO:  
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION  
WASHINGTON STREET EAST  
CHARLESTON, WV 25301  
PHONE: (800) 547-8887

**BLANKET BOND**

CARL E. SMITH, INC.

Well Operator

By [Signature]  
VICE-PRESIDENT

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:  
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DILLING CONTRACTOR (IF KNOWN) CARL E. SMITH, INC.

Address P.O. BOX 4

SANDYVILLE, WV 25275

GEOLOGICAL TARGET FORMATION, GORDON

Estimated depth of completed well, 2800 feet Rotary X / Cable tools      /

Approximate water strata depths: Fresh, 100 feet; salt, 1300 feet.

Approximate coal seam depths: NONE EXPECTED Is coal being mined in the area: Yes      / No     

DRILLING AND TUBING PROGRAM

DRILLING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling		
Conductor	8 5/8	K55	24	X		300	300	to surface
Production casing								Kinds
Intermediate casing	4 1/2	K55	10.5	X		2800	2800	150 Sks.
Production casing								Sizes
Production casing	1 1/2		2.75	X		2800	2800	Depths set
Production casing								Perforations:
								Top Bottom

Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

THIS PERMIT MUST BE POSTED AT THE WELL SITE where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

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 1-14-81.

*[Signature]*

Deputy Director, Oil & Gas Division

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code § 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

The undersigned coal operator      / owner      / lessee      / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the location, the well location has been added to the mine map. The undersigned has no objection to work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

CARL E. SMITH, INC.

By *[Signature]*  
Its VICE-PRESIDENT