

10/22/87

8350

3-11-69-DODD

Latitude 37° 50'

Longitude 81° 20'

4650

Topo. Loc. Rev. 2

0.87S
1.57W

0.87S
1.57W

CHAMBERS TRACT

0.57S 7.5

Loc.

7.5 0.87S
1.75W

W.V.A. Pt. 3

Glen Daniel

Rev. Loc. 7

Rt. Fork of Sandlick Creek

JAMES C. SHUMATE HEIRS
216 Acs

W.P.C. TRACT No. 8 (Coal)

W. H. SHUMATE

O. R. STOVER

W.P.C. TRACT 13 (Coal)

REVISED
 New Location
 Drill Deeper
 Abandonment
 Frac - 10/22/87

Minimum Error of Closure 1 in 2000'

Source of Elevation

U.S.G.S. BM Elev 1732' at Stover

"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 GLEN DANIEL GAS CO.
 Address P.O. Box 169, CHARLESTON, WV
 Farm JAMES C. SHUMATE HEIRS
 Tract _____ Acres 216 Lease No. _____
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 1725.80
 Quadrangle ECCLES 15 7.5 331 036
 County RALEIGH District TRAP HILL 7
 Engineer Y.L. Lefton
 Engineer's Registration No. 1832
 File No. _____ Drawing No. _____
 Date 2-21-69 Scale 1" = 500'

1096

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

WELL LOCATION MAP

FILE NO. Ra1-283-R

Trans. to Ra1-286-Frac.

+ 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.

47-081

255-1010

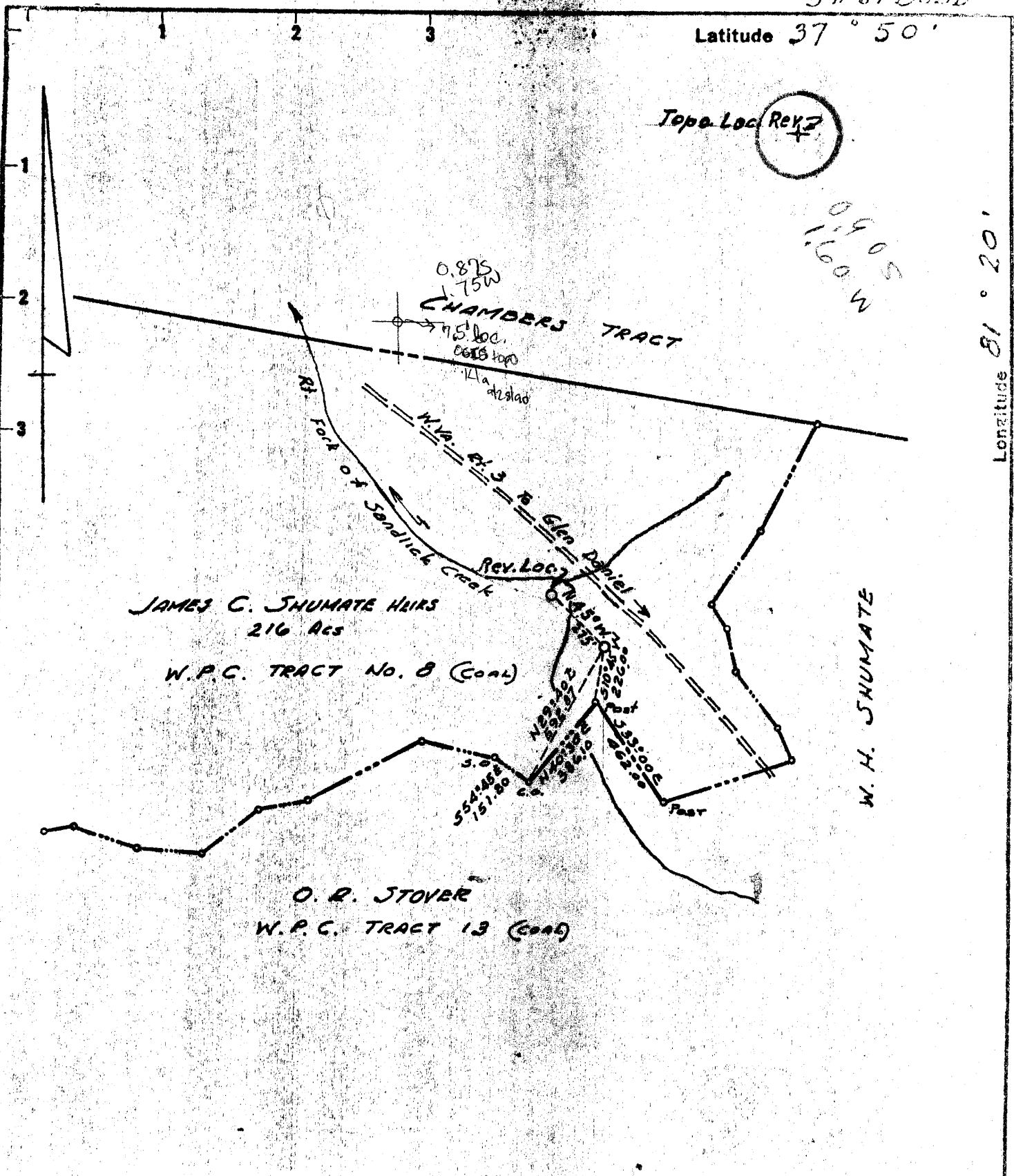
3-11-69-DADD

Latitude 37° 50'

Longitude 81° 20'

Topo. Loc. **REV 2**

0.905
1.60 W



REVISED
 New Location
 Drill Deeper
 Abandonment

Minimum Error of Closure 1 in 2000'
 Source of Elevation U.S.G.S. BM elev 1732' at Stover

"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."

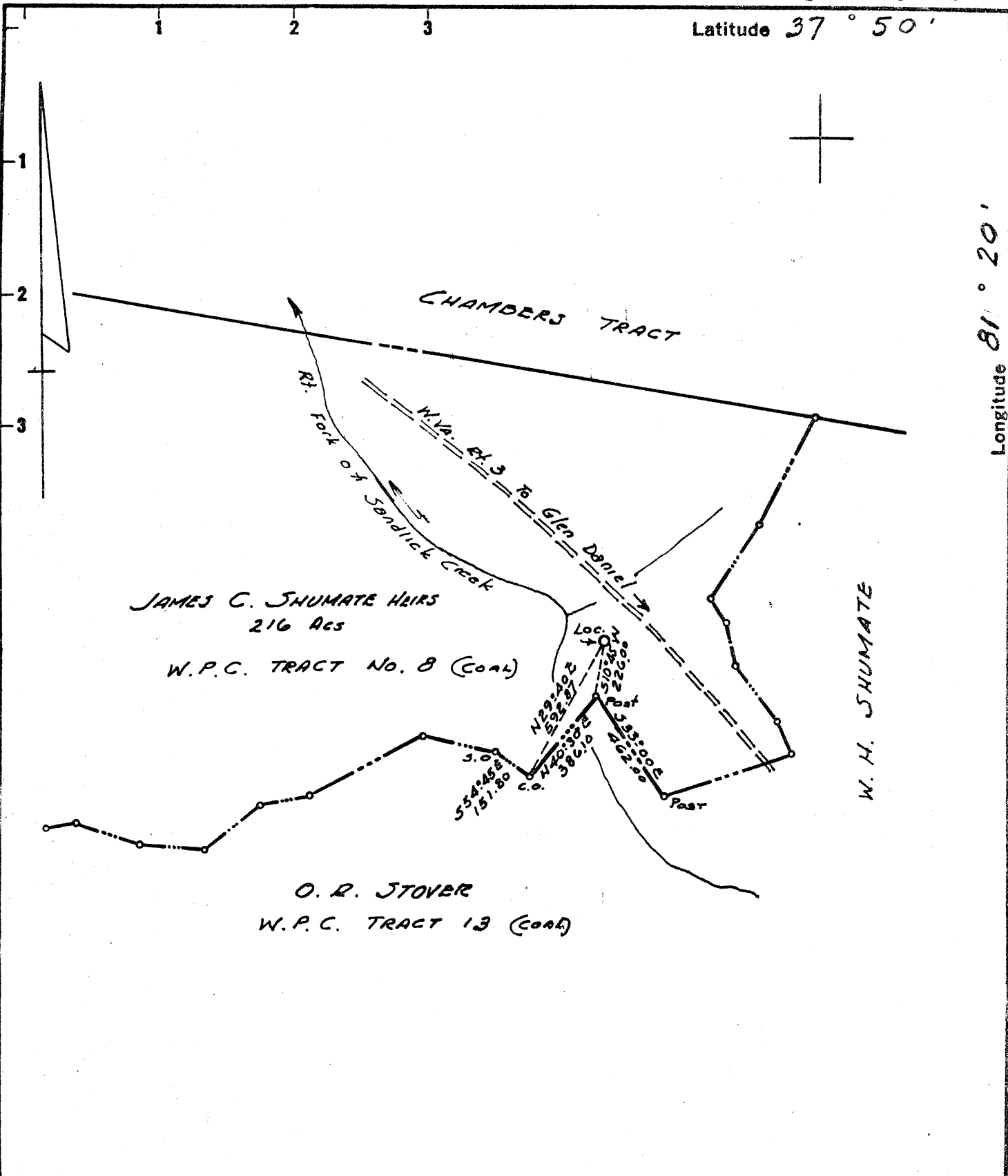
Company GLEN DANIEL GAS CO.
 Address P.O. Box 169, CHARLESTON, W.V.
 Farm JAMES C. SHUMATE HEIRS
 Tract _____ Acres 216 Lease No. _____
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 1725.80
 Quadrangle ECCLES 5C
 County RALEIGH District TRAD HILL
 Engineer Y. L. Sefton
 Engineer's Registration No. 1832
 File No. _____ Drawing No. _____
 Date 2-21-69 Scale 1" = 500'

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

WELL LOCATION MAP
 FILE NO. Ra1-289-R
 Trans. to Ra1-286

+ 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.



New Location
 Drill Deeper
 Abandonment

Minimum Error of Closure 1 in 2000'
 Source of Elevation U.S.G.S. BM. ELEV. 1732' AT STOVER
 "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 GLEN DANIEL GAS CO.
 Address P.O. Box 169, CHARLESTON, W.V.
 Farm JAMES C. SHUMATE HEIRS
 Tract _____ Acres 216 Lease No. _____
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 1725.80
 Quadrangle ECCLES 50
 County RALEIGH District TRAP HILL
 Engineer F. L. Sefton
 Engineer's Registration No. 1832
 File No. _____ Drawing No. _____
 Date 2-21-69 Scale 1" = 500'

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

WELL LOCATION MAP
 FILE NO. R21-283
777-286

+ 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.

8-4



RECEIVED

MAY 13 1970

STATE OF WEST VIRGINIA OIL & GAS DIVISION
DEPARTMENT OF MINES & REVENUE
OIL AND GAS DIVISION

- Rotary
- Shoulder
- Cable Tools
- Storage

Quadrangle Eccles

WELL RECORD

Permit No. RAL-286

Oil or Gas Well Gas
(KIND)

Company Glen Daniel Gas Co.
Address P.O. Box 169, Charleston, W. Va.
Farm Jas. C. Shumate Heirs Acres 216
Location (waters) Sand Lick Creek
Well No. 1 Elev. 1725.80
District Trap Hill County Raleigh
The surface of tract is owned in fee by B.K. McGraw
118 Pine St., Address Beckley, W. Va.
Mineral rights are owned by Jas. C. Shumate Heirs
Address Glen Daniel, W. Va.

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer <u>Guiberson type AF</u>
16			Size of <u>2" X 7"</u>
13			Depth set <u>2365'</u>
10	<u>22'</u>	<u>22'</u>	Perf. top <u>2456'</u> <i>B.g</i>
8 3/4	<u>224' 2"</u>	<u>224' 2"</u>	Perf. bottom <u>2473'</u> <i>Lime</i>
6 3/4	<u>1047'</u>	<u>1047'</u>	Perf. top _____
5 3/16			Perf. bottom _____
3			
2			
Liners Used	<u>None</u>		

Drilling commenced Nov. 11, 1969
Drilling completed Apr. 15, 1970
Date Shot N.S. From _____ To _____
With _____
Open Flow 2/10ths Water in 1" before acid Inch
8/10ths ~~Water~~ in 2 "After" Inch
Volume _____ Cu. Ft.
Rock Pressure 480 lbs. 84 hrs.
Oil _____ bbls., 1st 24 hrs.
WELL ACIDIZED 5-1-70 w. 2000 gal. 15% acid.
WELL FRACTURED _____

CASING CEMENTED 8" SIZE 224 No. Ft. 12-2-69 Date
7" (1047) Date 1-24-70 1-19-70
COAL WAS ENCOUNTERED AT 382 FEET 36 INCHES
654 FEET 48 INCHES 823 FEET 36 INCHES
882 FEET 24 INCHES FEET INCHES

RESULT AFTER TREATMENT _____ 119,000
ROCK PRESSURE AFTER TREATMENT _____
Fresh Water _____ Feet Salt Water _____ Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Sandy soil			0	10			
Sand			10	45	Fresh water	35'	Hole full
Slate & shells			45	100			
Lime			100	135			
Slate			135	145			
Sandy lime			145	208			
Slate			208	225			
Sand			225	345			
Slate & shells			345	382			
Coal			382	385			
Slate			385	435			
Sand			435	654			
Coal			654	658			
Sand			658	823			
Coal			823	825			
Sand			825	882			
Coal			882	884			
Slate			884	1013			
Red Rock			1013	1063			
Sand			1063	1129			
Slate			1129	1155			
Sand			1155	1170			
Red Rock			1170	1180			
Sand			1180	1210			
Slate			1210	1225			
Gritty lime			1225	1236			
Sand			1236	1255			
Slate & shells			1255	1395			
Sand			1395	1432			
Sandy lime			1432	1440	Gas 2/10 w. 1"	1440'	

(over)

MAY 25 1970

Formation	Color	Hard or Soft	Top ζ	Bottom	Oil, Gas or Water	Depth Found	Remarks
Sand			1440	1470			
Lime			1470	1511			
Red Rock			1511	1560			
Sandy lime			1560	1585			
Red Rock			1585	1665			
Red lime			1665	1690			
Gritty lime			1690	1702			
Red Rock			1702	1760			
Lime			1760	1965			
Red lime			1965	2014			
Grey lime			2014	2200			
Slate			2200	2240			
Lime			2240	2340			
Slate			2340	2352			
Big Lime			2352	2744	Gas, 2/10	small quantity	2700-2744
Sand	Red	(Injun)	2744	2793		w. 1" 2440	s. water in
Lime			2793	2861			
Slate			2861	2866			
Sand		(Weir)	2866	2888	S. water -	5 bailers	in 3 hrs.
				2888	Total depth	2885 - 88	

Well partly plugged as follows:

Cement from 2888 back to 2860; hole then filled solid (packed down with tools) with clay back to 2744; cement back to 2716; then fill solid to 2525; cement to 2500; solid clay to 2480; cement to 2476.

Date _____, 19____

APPROVED Allen Daniel Hess Co., Owner

By J. E. Allen (Title)

FORM WV-2 (B)
 RECEIVED
 OCT 22 1987



1) Date: September 3, 1987
 2) Operator's Well No. Shumate Hrs. #1
 3) API Well No. 47-081-0286 -FRAC
 State County Permit

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

- 4) WELL TYPE: A Oil Gas /
 B (If "Gas", Production / Underground storage / Deep / Shallow /)
- 5) LOCATION: Elevation: 1726' Watershed: Sand Lick Creek
 District: Trap Hill County: Raleigh 081 Quadrangle: Eccles 7.5' 331
- 6) WELL OPERATOR Glen Daniel Gas Co. CODE: 19350 7) DESIGNATED AGENT David H. Rollins
 Address P. O. Box 169 Address P. O. Box 169
 Charleston, WV 25321 Charleston, WV 25321
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Rodney Dillon Name Unknown at this time
 Address P. O. Box 100 Address
 Oak Hill, WV 25901
- 10) PROPOSED WELL WORK: Drill / Drill deeper / Redrill / Stimulate /
 Plug off old formation / Perforate new formation /
 Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Maxton 325
 12) Estimated depth of completed well, PB to 2476' feet
 13) Approximate trata depths: Fresh, 15 feet; salt, --- feet.
 14) Approximate coal seam depths: _____ Is coal being mined in the area? Yes / No /

15) 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	Left in well		Kinds	Sizes
Conductor	10"		40#	X		22'	22'			
Fresh water	8 1/4"		24#	X		224'	224'			
Coal										
Intermediate	7"		20#	X		1047'	1047'	OTS		
Production	4 1/2"	J-55	10.5#	X		Plan To Run	2500' 1550'			Depths set
Tubing										Perforations:
Lin...										Top Bottom

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-081-0286-FRAC Date October 22, 1987

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.
 Permit expires October 22, 1989 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee 235	WVCP	SEP	Other
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NOTE: Keep one copy of this permit posted at the drilling location.
 Director, Division of Oil and Gas
 John D. Johnston by Margaret J. Hesse