

FILE NO. _____
 DRAWING NO. _____
 SCALE 1 inch = 500 feet
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION USGS BM on Bridge over Buck Run Elev. = 888'

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. *Mark C. Echard*
 (SIGNED) MARK C. ECHARD
 R.P.E. _____ L.L.S. 490



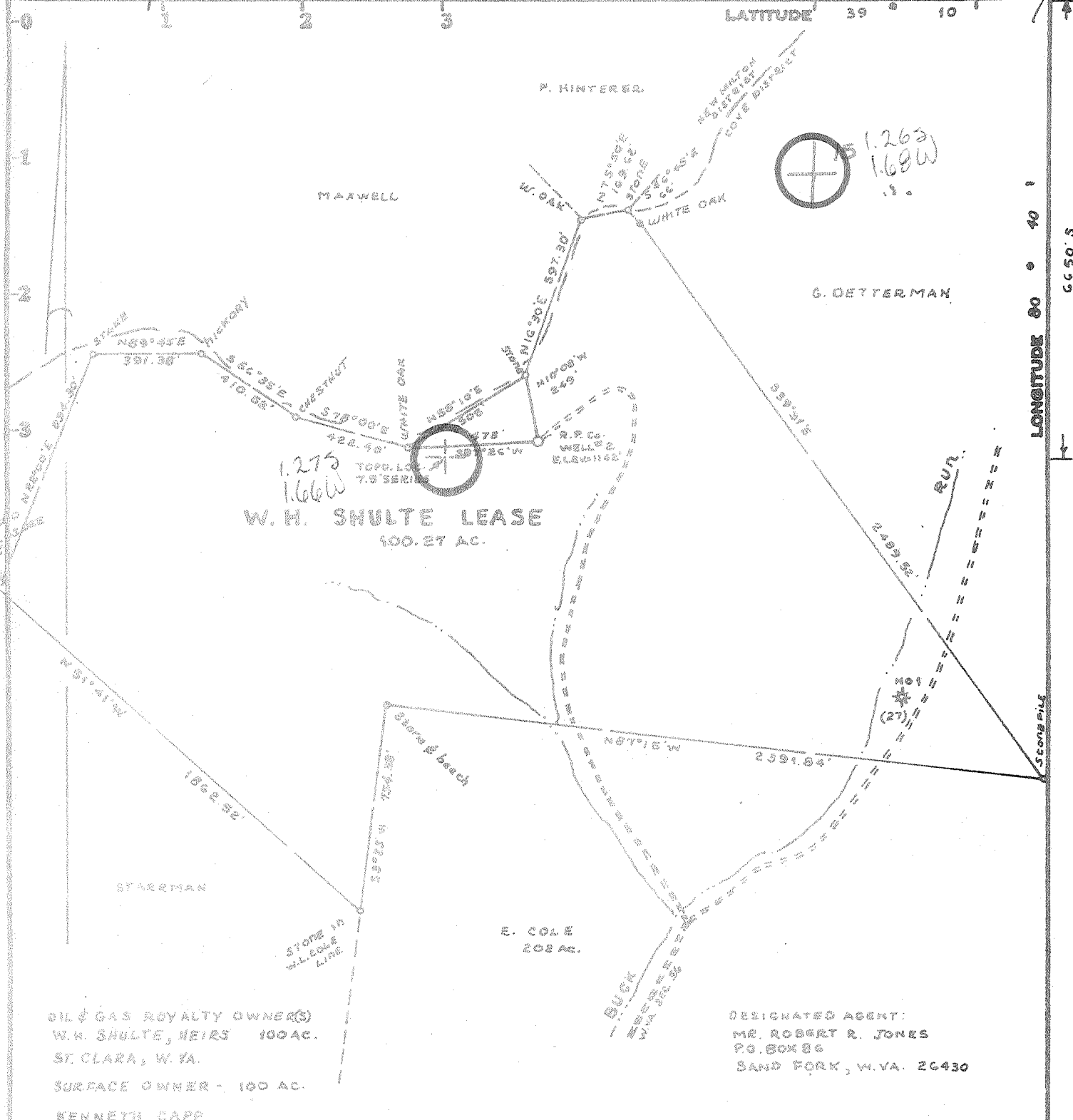
(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6 (8-78)



DATE JANUARY 8, 1981
 OPERATOR'S WELL NO. TWO
 API WELL NO. 47-017-2956
 STATE WEST VIRGINIA COUNTY DODDRIDGE PERMIT 2956

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS,") PRODUCTION STORAGE _____ DEEP _____ SHALLOW
 LOCATION: ELEVATION 1065' WATER SHED BUCK RUN
 DISTRICT COVE COUNTY DODDRIDGE
 QUADRANGLE NEW MILTON 7.5' *Vadis WC*
 SURFACE OWNER KENNETH GAPP ACREAGE 100.27
 OIL & GAS ROYALTY OWNER W.H. SHULTE HEIRS LEASE ACREAGE 100.27
 LEASE NO. _____
 PROPOSED WORK: DRILL 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 DEVONIAN SHALE ESTIMATED DEPTH 5500'
 WELL OPERATOR CARSON PETROLEUM CORP. DESIGNATED AGENT MR. LOWELL M. JOHNSON / MR. JERRY MASONER
 ADDRESS BOX 133 ADDRESS BOX 133
SAND FORK, W.V. 26430 SAND FORK, W.V. 26430



OIL & GAS ROYALTY OWNER(S)
 W.H. SHULTE, HEIRS 100 AC.
 ST. CLARA, W. VA.
 SURFACE OWNER - 100 AC.
 KENNETH CAPP
 HURRICANE, W.VA.

DESIGNATED AGENT:
 MR. ROBERT R. JONES
 P.O. BOX 86
 SAND FORK, W.VA. 26430

Minimum Error of Closure ONE PART IN 200'
 Source of Elevation USGS BM ON BRIDGE ABUT. SOUTH 5700'± FROM
 LOCATION - ELEVATION = BSB'

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.

Fracture GAS-DRILL-SHALLOW
 New Location DEVONIAN SHALE-TF EST. DEPTH 3900'
 Drill Deeper
 Abandonment

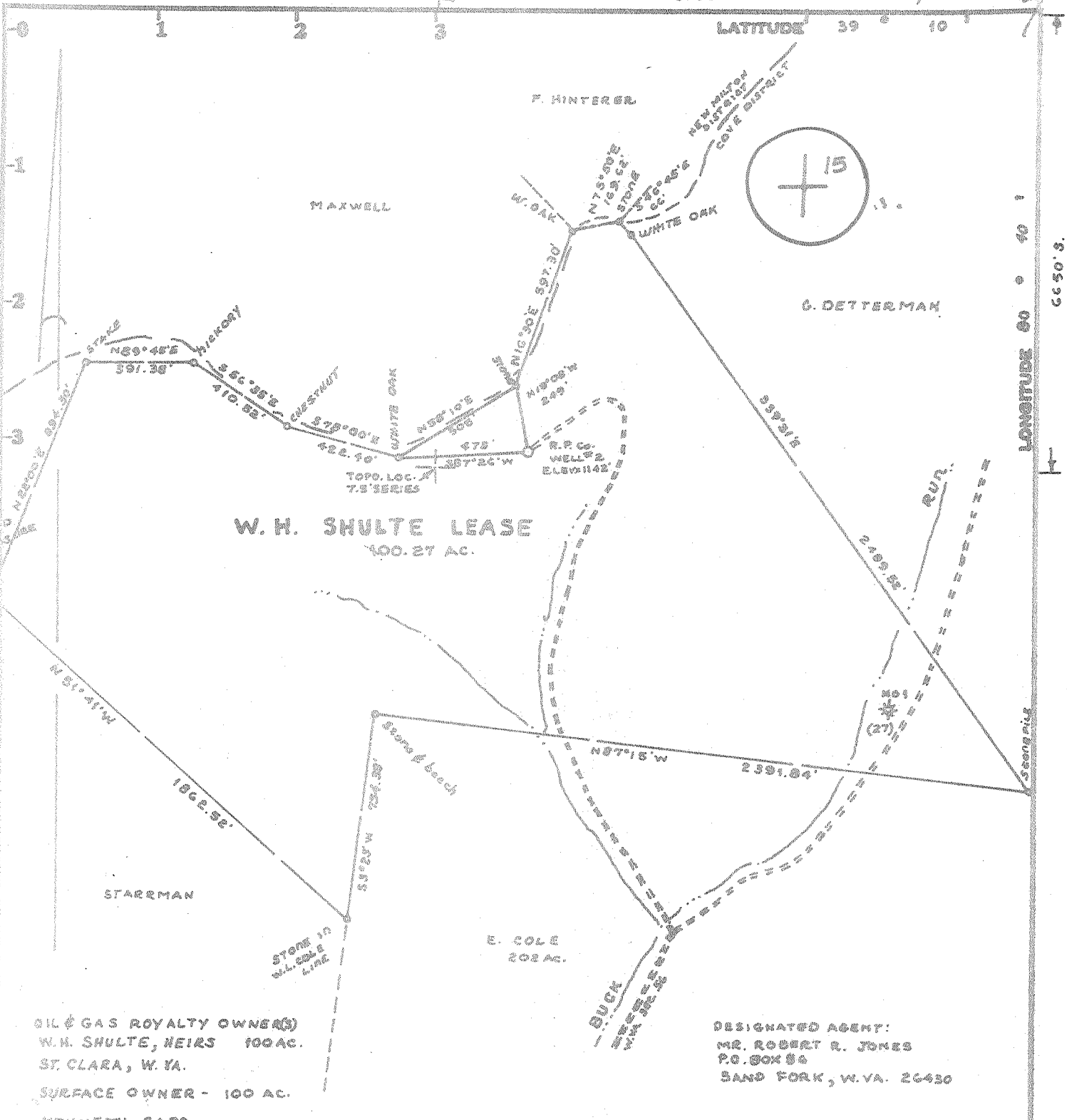
Sign: Mark C. Echard
 Squares: N S E W

WELL OPERATOR/
 Company ROCKWELL PETROLEUM COMPANY
 Address P.O. BOX 86, SAND FORK, W.VA. 26430
 Farm W.H. SHULTE LEASE (K. CAPP)
 Tract _____ Acres 100.27 Lease No. _____
 Well (Farm) No. TWO Serial No. _____
 Elevation (Spirit Level) 1142'
 Quadrangle NEW MILTON 7.5' VADIS 15' W
 County BOONVILLE District COYE
 Surveyor MARK C. ECHARD
 Surveyor's Registration No. 490
 File No. _____ Drawing No. _____
 Date AUGUST 18, 1979 Scale 1" = 500'

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

WELL LOCATION MAP
 Now: 2956
 FILE No. 47-017-2706
 FORMERLY 017-2475

+ Denotes location of well on United States Topographic Maps, scale 1 to 25,000, latitude and longitude lines being represented by border lines as shown.
 -- Denotes one inch spaces on border line of original tracing.



OIL & GAS ROYALTY OWNER(S)
W.M. SHULTE, HEIRS 100 AC.
ST. CLARA, W. VA.
SURFACE OWNER - 100 AC.
KENNETH CAPP
HURRICANE, W. VA.

DESIGNATED AGENT:
MR. ROBERT R. JONES
P.O. BOX 86
SAND FORK, W. VA. 26430

Minimum Error of Closure ONE PART IN 200'
Source of Elevation USGS BM ON BRIDGE ABOUT SOUTH 5700'E FROM
LOCATION - ELEVATION = 888'

Fracture GAS-DRILL-SHALLOW
New Location DEVONIAN SHALE-7F
EST. DEPTH 5500'
Drill Deeper
Abandonment

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.

Signed: Mark C. Echard
Squares: N S E W

WELL OPERATOR/
Company ROCKWELL PETROLEUM COMPANY
Address P.O. BOX 86, SAND FORK, W. VA. 26430
Farm W.H. SHULTE LEASE (K. CAPP)
Tract _____ Acres 100.27 Lease No. _____
Well (Farm) No. IWO Serial No. _____
Elevation (Spirit Level) 1142' WC
Quadrangle NEW MILTON 7.5' Vadis 15'
County DODDRIDGE District COYE
Surveyor MARK C. ECHARD
Surveyor's Registration No. 490
File No. _____ Drawing No. _____
Date AUGUST 18, 1979 Scale 1" = 500'

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

WELL LOCATION MAP
was
FILE NO. 47-017-2475
now: 017-2706

+ Denotes location of well on United States Topographic Maps, scale 1 to 24,000, latitude and longitude lines being represented by border lines as shown.
SEP 7 1979
- Denotes one inch spaces on border line of original tracing.

[08-78]

COPY

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. Shulte #2
API Well No. 47 - 017 - 2475
State County Permit now: 017-2706

WELL TYPE: Oil ___ / Gas X /
(If "Gas", Production X / Underground storage ___ / Deep ___ / Shallow X /)
LOCATION: Elevation: 1142' Watershed: Buck Run now: 2956
District: Cove County: Doddridge Quadrangle: New Milton 7.5'

WELL OPERATOR Rockwell Petroleum Company
Address P O Box 86
Sand Fork, WV 26430

DESIGNATED AGENT Robert R. Jones
Address P O Box 86
Sand Fork, WV 26430

OIL & GAS
ROYALTY OWNER W. H. Shulte, Heirs
Address St. Clara, WV

COAL OPERATOR N/A
Address _____

ACREAGE 100
SURFACE OWNER Kenneth Capp
Address Hurricane, WV
ACREAGE 100

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name N/A
Address _____
Name N/A
Address _____

FIELD SALE (IF MADE) TO:
Name N/A
Address _____

COAL LESSEE WITH DECLARATION ON RECORD:
RECEIVED
Address _____
AUG 23 1979

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Paul Garrett
Address Clarksburg, WV
622-3871

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

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed ___ / lease *** / other contract ___ / dated January 3, 19 79, to the undersigned well operator from W. H. Shulte Heirs. If said deed, lease, or other contract has been recorded:]

Recorded on _____, 19 79, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in deed Book 110 at page 223. A permit is requested as follows:

PROPOSED WORK: Drill X / 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 objection they wish to make or are required to make by Code § 22-4-3 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 plat 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 or before 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
5 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

Rockwell Petroleum Company
Well Operator
By Robert R. Jones
Its Partner

Y905

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) Union Drilling, Inc
Address Drawer 40
Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Devonian Shale

Estimated depth of completed well, 5500 feet Rotary X / Cable tools /
Approximate water strata depths: Fresh, 127 feet; salt, feet.
Approximate coal seam depths: None **Is coal being mined in the area?** Yes / No X /

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		
Conductor									Kinds
Fresh water	8 5/8					1225 ft	1225 ft	To surface	Reg
Coal									Sizes
Intermediate									
Production	4 1/2						5500'	160 sks	Depths set
Tubing									
Liners									Perforations:
									Top Bottom

NOTE: 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.

A separate Form IV-2 shall not be required for fracturing or stimulating a well 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.

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 4-23-80.

[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 well location, the well location has been added to the mine map. The undersigned has no objection to the 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.

Date: , 19

By
Its

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

Date: February 25, 1981

Operator's Well No. Shulte #2

API Well No. 47 - 017 - 2956
State County Permi

FORM IV-35
(Obverse)

WELL OPERATOR'S REPORT
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

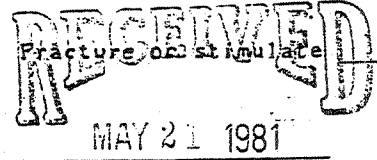
[08-78]

WELL TYPE: Oil ___ / Gas X / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas", Production X / Underground storage ___ / Deep ___ / Shallow ___ /)

LOCATION: Elevation: 1065' Watershed: Buck Run
District: Cove County: Doddridge Quadrangle: New Milton

WELL OPERATOR: Carson Petroleum Corporation DESIGNATED AGENT: Lowell M. Johnson
Address: P O Box 133 Sand Fork, WV 26430
Address: P O Box 133 Sand Fork, WV 26430

PERMITTED WORK: Drill X / Convert ___ / Drill deeper ___ / Redrill ___ / Fracture or stimulate ___
Plug off old formation ___ / Perforate new formation ___
Other physical change in well (specify) _____



PERMIT ISSUED ON January 20, 1981

OIL & GAS DIVISION
OIL & GAS INSPECTOR FOR THE DEPT. OF MINES

(IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED _____, 19__)

Name: Steve Casey
Address: Jane Lew, WV 884-7470

GEOLOGICAL TARGET FORMATION: Big Injun Depth: 2238 feet
Depth of completed well, 5495 feet Rotary X / Cable Tools ___
Water strata depth: Fresh, ___ feet; salt, ___ feet.
Coal seam depths: None Is coal being mined in the area? No
Work was commenced February 13, 1981, and completed February 19, 1981

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		
Conductor								Kinds
Fresh water	8 5/8					1212'	1212'	To surface
Coal								Sizes
Intermediate								
Production	4 1/2						5445'	625 sks
Tubing								Depth set
Liners								Perforations:
								Top Bottom

OPEN FLOW DATA

Producing formation: Big Injun Pay zone depth: 2234-2238 feet
Gas: Initial open flow, ___ Mcf/d Oil: Initial open flow, 0 Bbl/d
Final open flow, 250 Mcf/d Final open flow, 0 Bbl/d
Time of open flow between initial and final tests, 8 hours
Static rock pressure, 850 psig (surface measurement) after 48 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, 0 Bbl/d
Final open flow, ___ Mcf/d Final open flow, 0 Bbl/d
Time of open flow between initial and final tests, ___ hours
Static rock pressure, ___ psig (surface measurement) after ___ hours shut in

JUN 4 1981

[08-78]

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

Fractured April 24, 1981

Big Injun - 40,000 lb. 20/40 sand
17 BPM at 2500 lb.
2400 lb. breakdown
580 bbls. water

Perforations - 2234 - 2238

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks
					Including indication of all fresh and salt water, coal, oil and gas
Sand & Shale			0	269	
Sand, Shale, Red Rock			269	684	
Sand, Red Rock			684	1246	
Sand, Shale			1246	2085	
Little Lime			2085	2098	
Gray Shale			2098	2112	
Blue Monday Sand			2112	2141	
Big Lime			2141	2196	
Big Injun			2196	2289	
Gray Shale			2289	2358	
Weir Sand			2358	2476	
Gray Shale			2476	2564	
Gantz Sand			2564	2580	
Gray Shale			2580	5044	
Benson Sand			5044	5048	
Gray Shale			5048	5308	
Elk Sand <i>ALEX.</i>			5308	5397	
Gray Shale			5397	5495	
Total Depth			5495		

(Attach separate sheets to complete as necessary)

Carson Petroleum Corporation
Well Operator

By _____
Its Agent *Lowell M. Johnson*

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]

COPY

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. Shulte #2

API Well No. 47-017-2706 State County Permit

now: 017-2956

WELL TYPE: Oil / Gas X / (If "Gas", Production X / Underground storage / Deep / Shallow X /)

LOCATION: Elevation: 1142' Watershed: Buck Run District: Cove County: Doddridge Quadrangle: New Milton

WELL OPERATOR Rockwell Petroleum Company DESIGNATED AGENT Robert R. Jones Address P O Box 86 Sand Fork, WV 26430

OIL & GAS ROYALTY OWNER W. H. Shulte Heirs Address St. Clara, WV COAL OPERATOR N/A

ACREAGE 100 COAL OWNER(S) WITH DECLARATION ON RECORD:

SURFACE OWNER Kenneth Kapp Address Hurricane, WV Name N/A

ACREAGE 100 Name N/A

FIELD SALE (IF MADE) TO: Name N/A

Address Address

OIL & GAS INSPECTOR TO BE NOTIFIED Name Paul Garrett

Address Clarksburg, WV 26301 622-3871

OIL & GAS DIVISION DEPT. OF MINES

RECEIVED APR 25 1980

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease X / other contract / dated January 3, 1979, to the undersigned well operator from W. H. Shulte Heirs

[If said deed, lease, or other contract has been recorded:] Recorded on August 18, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Deed Book 110 at page 223. A permit is requested as follows:

PROPOSED WORK: Drill X / 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 objection they wish to make or are required to make by Code § 22-4-3 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 plat 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 or before 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 GEOPHYSICAL LOGS DIRECTLY TO: WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION 615 WASHINGTON STREET EAST CHARLESTON, WV 25311 TELEPHONE: (304) 348-3092

BLANKET BOND

Rockwell Petroleum Company Well Operator

By Mark R. Wood Its Partner

PROPOSED WORK ORDER

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

DRIILLING CONTRACTOR (IF KNOWN) Union Drilling, Inc. Address Drawer 40 Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Devonian Shale

Estimated depth of completed well, 5500 feet Rotary X / Cable tools /

Approximate water strata depths: Fresh, 127 feet; salt, N/A feet.

Approximate coal seam depths: N/A Is coal being mined in the area? Yes / No X /

DRILLING AND TUBING PROGRAM

Table with columns: DRILLING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight per ft, New, Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS (Kinds, Sizes, Depths set, Perforations: Top, Bottom)

NOTE: 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. A separate Form IV-2 shall not be required for fracturing or stimulating a well 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.

of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 1-5-81

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 well location, the well location has been added to the mine map. The undersigned has no objection to the 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.

By Its



Shulte #2

COPY

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED
JAN 20 1981

Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

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

DATE January 15, 1981

Surface Owner Kenneth Capp
Address Hurricane, WV
Mineral Owner W. H. Shulte Heirs
Address St. Clara, WV
Coal Owner N/A
Address _____
Coal Operator N/A
Address _____

Company Carson Petroleum Corporation
Address P O Box 133, Sand Fork, WV 26430
Farm Shulte Acres 100.27
Location (waters) Buck Run
Well No. Two Elevation 1065'
District Cove County Doddridge
Quadrangle New Milton

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 9-21-81

INSPECTOR
TO BE NOTIFIED Steve Casey

ADDRESS Jane Lew, WV

PHONE 884-7470

[Signature]
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 January 3 19 79 by W.H. Shulte Heirs made to Rockwell Petroleum Company and recorded on the 18 day of August 1979 in Doddridge County, Book 110 Page 223

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.

Very truly yours, Carson Petroleum Corporation
(Sign Name) [Signature]
Well Operator

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

P O Box 133

Street

Sand Fork

City or Town

West Virginia 26430

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

47-017-2956

PERMIT NUMBER

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

Signed by [Signature]

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) Union Drilling, Inc. RESPONSIBLE AGENT: Lowell M. Johnson

NAME Union Drilling, Inc. ADDRESS P O Box 133, Sand Fork, WV 26430

ADDRESS Drawer 40, Buckhannon, WV 26201 TELEPHONE 462-7009

TELEPHONE 472-4610 ROTARY X CABLE TOOLS

ESTIMATED DEPTH OF COMPLETED WELL: 5500'

PROPOSED GEOLOGICAL FORMATION: Devonian Shale

TYPE OF WELL: OIL GAS X COMB. STORAGE DISPOSAL

RECYCLING WATER FLOOD OTHER

PROPOSED CEMENT PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
16			
10			
5/8			
5/8	1200'	1200'	To surface
		5500'	750 sks
			Perf. Top
			Perf. Bottom
			Perf. Top
			Perf. Bottom

PROXIMATE FRESH WATER DEPTHS 125 FEET SALT WATER FEET

PROXIMATE COAL DEPTHS N/A

COAL BEING MINED IN THE AREA? No BY WHOM?

DRILL:
 SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

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.

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 of.

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