

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION USGS BM ON BRIDGE
 ABUT. SO. OF LOCATION - 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.

(SIGNED) Mark C. Echard
 MARK C. ECHARD

R.P.E. _____ L.L.S. 490

PLACE SEAL HERE

MARK C. ECHARD

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FORM IV-6 (8-78)



DATE JUNE 30, 19 81
 OPERATOR'S WELL NO. FIVE
 API WELL NO. 47-017-3024
 STATE COUNTY PERMIT

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

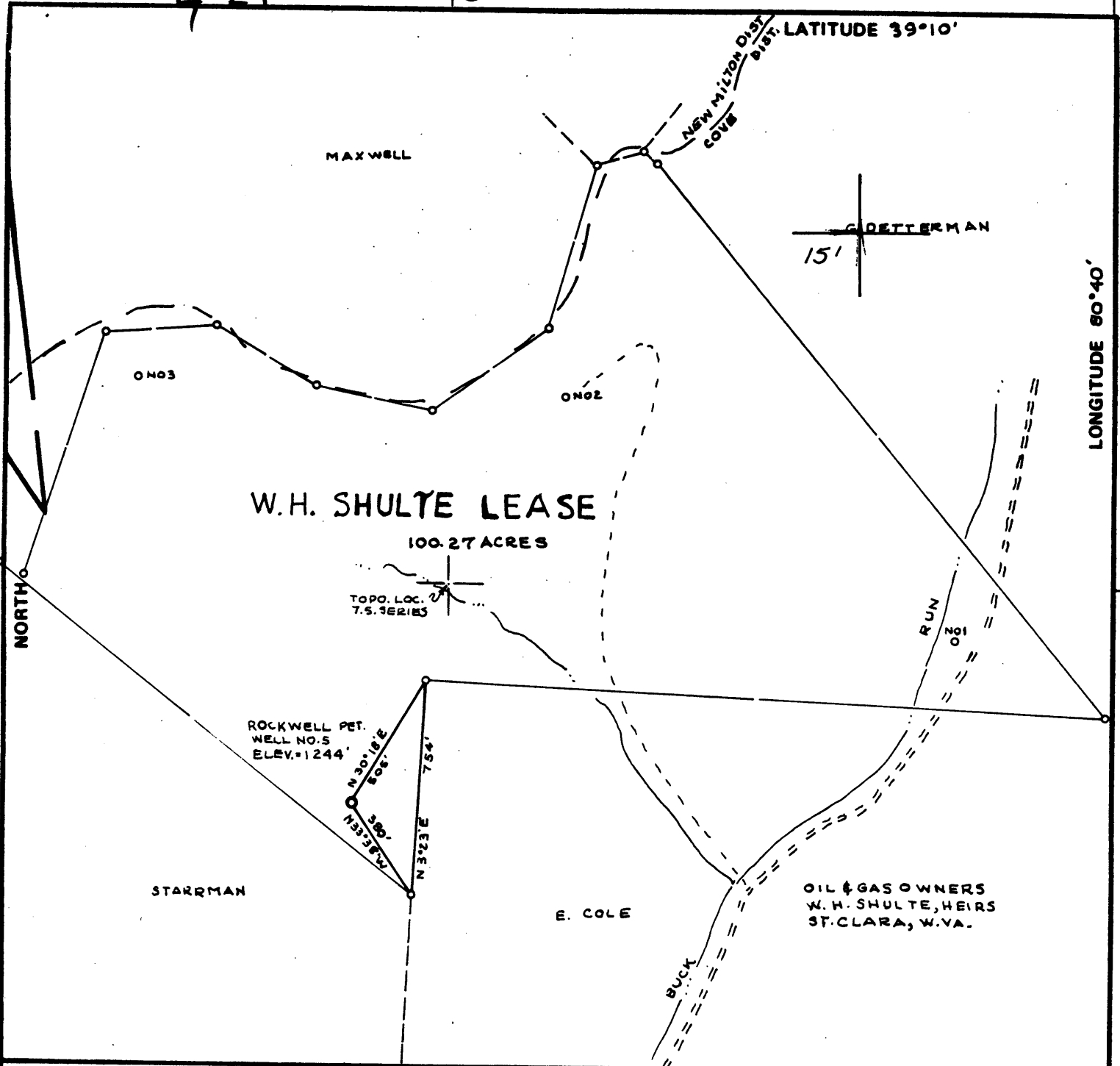
LOCATION: ELEVATION 1230' WATER SHED BUCK RUN
 DISTRICT COVE COUNTY DODDRIDGE
 QUADRANGLE NEW MILTON 7.5' Vades WC

SURFACE OWNER KENNETH CAPP ACREAGE 100
 OIL & GAS ROYALTY OWNER W.H. SHULTE, HEIRS LEASE ACREAGE 100
 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 GANTZ ESTIMATED DEPTH 2900'
 WELL OPERATOR CARSON PETROLEUM CORP. DESIGNATED AGENT MR. LOWELL M. JOHNSON
 ADDRESS P.O. BOX 133 ADDRESS P.O. BOX 133
SAND FORK, W.VA. 26430 SAND FORK, W.VA. 26430

4-24



W.H. SHULTE LEASE
100.27 ACRES

TOPO. LOC. 7.5. SERIES

ROCKWELL PET. WELL NO. 5
ELEV. 1244

OIL & GAS OWNERS
W. H. SHULTE, HEIRS
ST. CLARA, W. VA.

FILE NO. _____
DRAWING NO. _____
SCALE 1" = 500'
MINIMUM DEGREE OF ACCURACY 1/200'
PROVEN SOURCE OF ELEVATION TOP OF KNOB 3400' NW OF LOC - ELEV. 1374'

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

PLACE SEAL HERE

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



DATE FEBRUARY 26, 1980
OPERATOR'S WELL NO. FIVE
API WELL NO. 47-017-2673
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

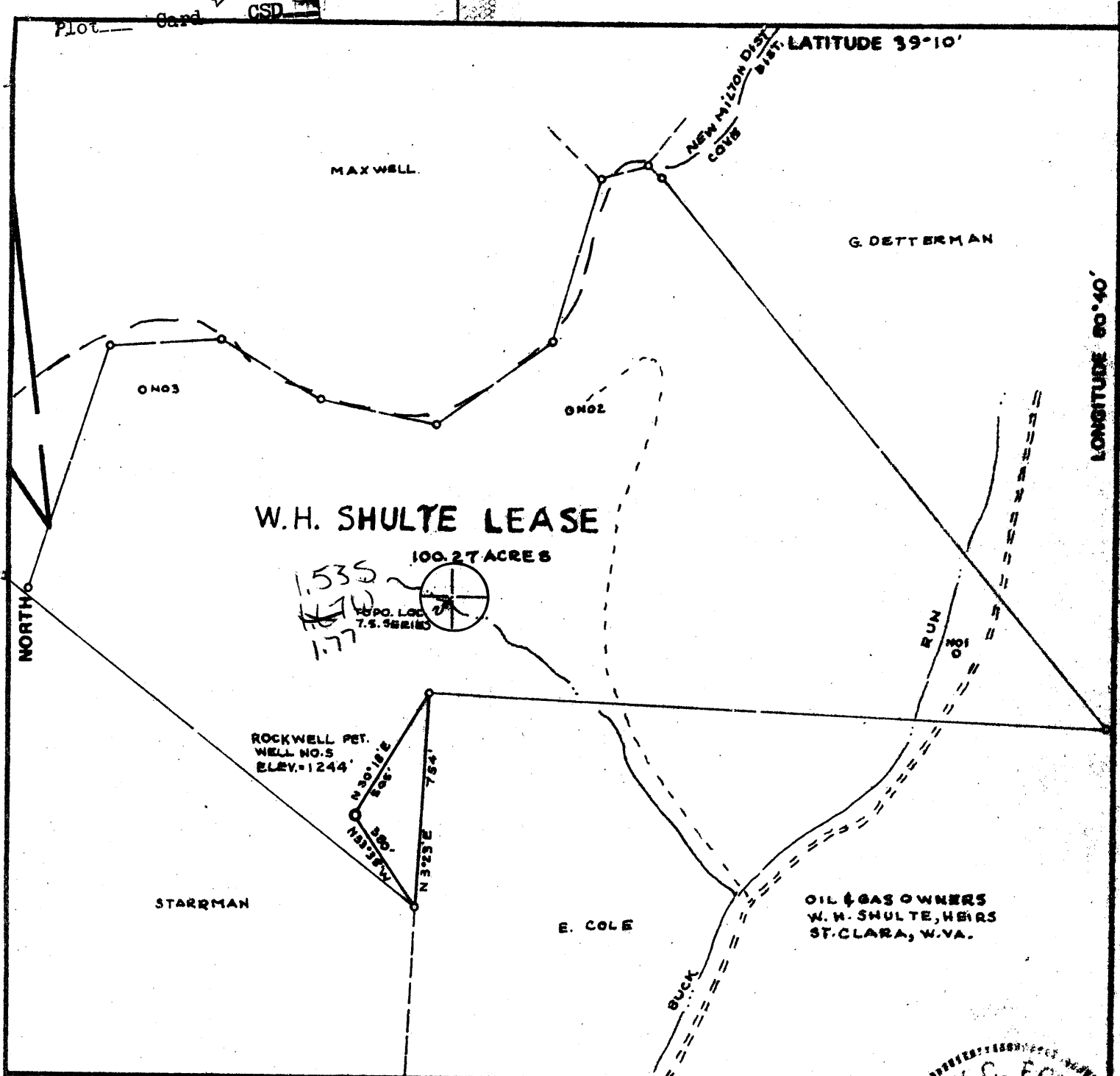
WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION STORAGE ___ DEEP ___ SHALLOW
LOCATION: ELEVATION 1244' WATER SHED BUCK RUN
DISTRICT COVE COUNTY DODDRIDGE
QUADRANGLE NEW MILTON 7.5' VADIS 15'
SURFACE OWNER KENNETH CAPP ACREAGE 100.27
OIL & GAS ROYALTY OWNER W.H. SHULTE, HEIRS LEASE ACREAGE 100.27
LEASE NO. _____

Cancelled
see: Log-3024
now: 017-3024

PROPOSED WORK: DRILL CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

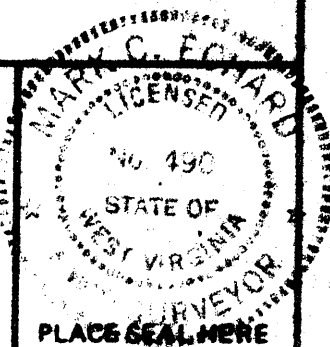
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION DEVONIAN SHALE ESTIMATED DEPTH 5600'
WELL OPERATOR ROCKWELL PETROLEUM CO. DESIGNATED AGENT MR. ROBERT R. JONES
ADDRESS P.O. BOX 86 ADDRESS P.O. BOX 86
SAND FORK, W. VA. 26430 SAND FORK, W. VA. 26430

FEB 22 1982



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200'
 PROVEN SOURCE OF ELEVATION TOP OF KNOR 3400' NW OF LOC - ELEV. 1274'

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 FEBRUARY 26, 1980
 OPERATOR'S WELL NO. FIVE
 A#1 WELL NO. 47-017-2673
 STATE WEST VIRGINIA COUNTY DODDRIDGE PERMIT

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 1244' WATER SHED BUCK RUN
 DISTRICT COVE COUNTY DODDRIDGE
 QUADRANGLE NEW MILTON 7.5' W.V. 18
 SURFACE OWNER KENNETH CAPP 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 5600'
 WELL OPERATOR ROCKWELL PETROLEUM CO. DESIGNATED AGENT MR. ROBERT R. JONES
 ADDRESS P.O. BOX 86 ADDRESS P.O. BOX 86
SAND FORK, W.VA. 26430 SAND FORK, W.VA. 26430

[08-78]

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

RECEIVED
SEP 25 1981

TYPE: Oil ___ / Gas X / Liquid Injection ___ / Waste Disposal ___
(If "Gas", Production X / Underground storage ___ / Deep ___ / Shallow X)
Elevation: 1230 Watershed: Buck Run
District: Cove County: Doddridge Quadrangle: New Milton

NEW MONTGOMERY
WV DEPARTMENT OF MINES

OPERATOR Carson Petroleum Corporation DESIGNATED AGENT Lowell M. Johnson
Address P O Box 133 Address P O Box 133
Sand Fork, WV 26430 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) N/A

PERMIT ISSUED ON July 13, 19 81

OIL & GAS INSPECTOR FOR THIS WORK:
Name Steve Casey
Address Jane Lew, WV
884-7470

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

LOGICAL TARGET FORMATION: Gantz Depth 2748 feet
Depth of completed well, 2857 feet Rotary X / Cable Tools ___
Water strata depth: Fresh, 78 feet; salt, N/A feet.
Coal seam depths: N/A Is coal being mined in the area? No
Work was commenced August 8, 19 81, and completed August 14, 19 81

LOGGING AND TUBING PROGRAM

LOGGING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling		
Drill pipe								Kinds
Production tubing	8 5/8"					1117'	1117'	To surface
Intermediate								Sizes
Perforation	4 1/2"						2850'	200 sacks
Logging								Deaths set
Tools								Perforations:
								Top Bottom

PRODUCTION FLOW DATA

Producing formation Gantz Pay zone depth 2748 feet
Gas: Initial open flow, ___ Mcf/d Oil: Initial open flow, ___ Bbl/d
Final open flow, 350 Mcf/d Final open flow, ___ Bbl/d
Time of open flow between initial and final tests, 4 hours
Static rock pressure, 700 psig (surface measurement) after 24 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
Combined Final open flow, ___ Mcf/d Final open flow, ___ Bbl/d
Time of open flow between initial and final tests, ___ hours

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

Acidized:
Fractured: August 19, 1981

25 bbl. water
25 bbl. acid

RECEIVED

SEP 25 1981

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh water, gas, oil and salt water, coal, oil and gas
Rock			0	4	
le, Sand, Red Rock			4	702	
l			702	711	
le, Sand, Red Rock			711	2258	
tle Lime			2258	2270	
ncil Cave			2270	2280	
Monday			2280	2309	
y Lime			2309	2384	
y Injum			2384	2463	
d and Shale			2463	2540	
r Sand			2540	2658	
d and Shale			2658	2745	Show of gas (odor)
tz			2745	2755	Show of gas
d and Shale			2755	2925	
			2925		

(Attach separate sheets to complete as necessary)

Carson Petroleum Corporation
Well Operator

By Lowell M. Johnson
Its Agent

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 #5
API Well No. 47 - 017 - 2673
State County Permit

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

LOCATION: Elevation: 1244' 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 Address P O Box 86
Sand Fork, WV 26430 Sand Fork, WV 26430

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

ACREAGE 100.27 COAL OWNER(S) WITH DECLARATION ON RECORD:

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

ACREAGE 100.27 Name N/A

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

COAL LESSEE WITH DECLARATION ON RECORD: Name N/A
Address

OIL & GAS INSPECTOR TO BE NOTIFIED Name Paul Garrett
Address Clarksburg, WV 26301
622-3871

OIL & GAS DIVISION
DEPT. OF MINES

APR - 2 1990

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 Lease 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
1605 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

BLANKET BOND

Rockwell Petroleum Company
Well Operator
By Mark R. Wood
Its Partner

Y900

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, 5600 feet Rotary X / Cable tools /
Approximate water strata depths: Fresh, 158 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

DRILLING 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					1320	1320	To surface	
Coal									Sizes
Intermediate									
Production	4 1/2						5600'		Depths set
Tubing									
Packers									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 12-3-80.

[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