

FILE NO. _____
 DRAWING NO. _____
 SCALE 1"=1000'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION TOP OF KNOB SOUTH OF LOCATION, ELEV. = 1296'

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

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



DATE JUNE 20, 1981
 OPERATOR'S WELL NO. FOUR-A (REVISED)
 API WELL NO. 47-017-3025
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

Formerly: DOD-2669

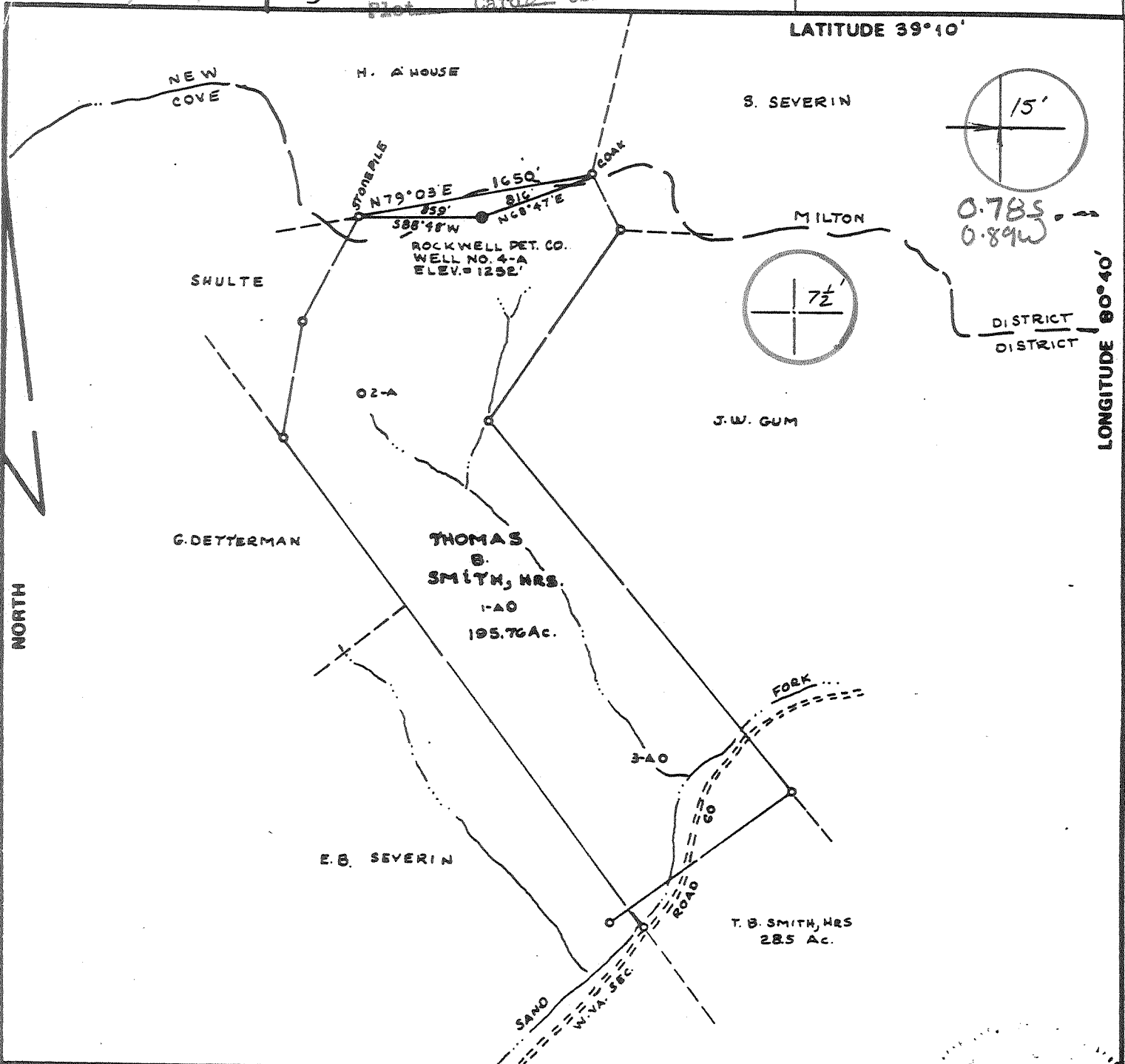
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS,") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1120' WATER SHED SAND FORK OF FINK CREEK
 DISTRICT COVE COUNTY DODDRIDGE
 QUADRANGLE NEW MILTON 7.5' Vad's 15' WC
 SURFACE OWNER THOMAS B. SMITH, HEIRS ACREAGE 28.5
 OIL & GAS ROYALTY OWNER OC. HAUGHT, HEIRS LEASE ACREAGE 225
 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 5450'
 WELL OPERATOR CARSON PETROLEUM CORP DESIGNATED AGENT MR FERRELL M. JOHNSON
 ADDRESS P.O. BOX 133 ADDRESS P.O. BOX 133
SAND FORK, W. VA. 26430 SAND FORK, W. VA. 26430

JUL 27 1981

6-6 New Milton South (307)

4-5

Plot Card CSD



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION TOP OF KNOB 2300'SW OF LOC. - ELEV. = 1296'

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)



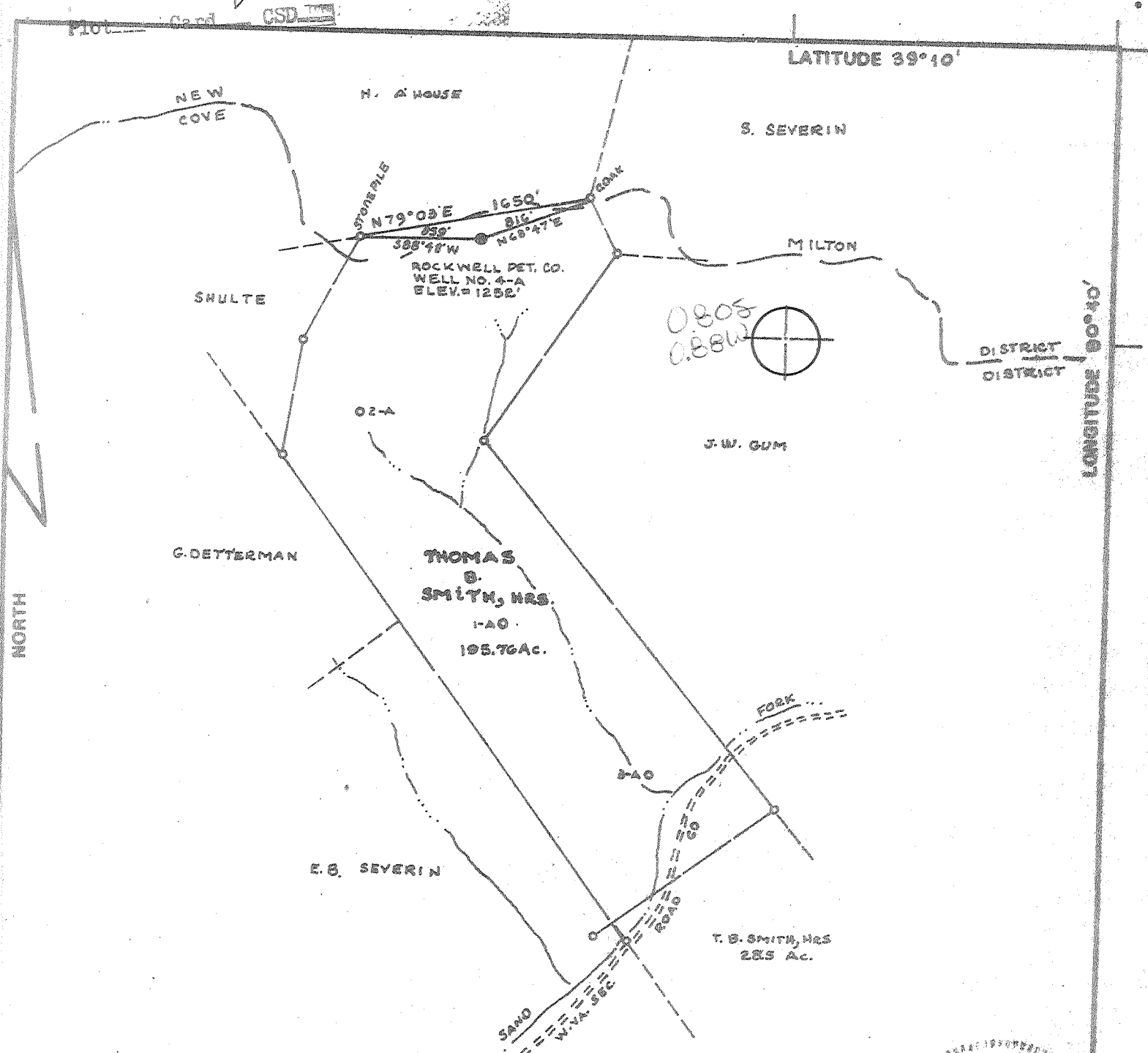
DATE MARCH 1, 19 80
 OPERATOR'S WELL NO. FOUR-A
 API WELL NO. 47-017-2669
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

now see: DOD-3025

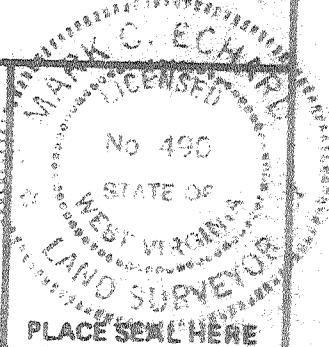
WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS") PRODUCTION STORAGE ___ DEEP ___ SHALLOW
 LOCATION: ELEVATION 1252' WATER SHED SAND FORK
 DISTRICT COVE COUNTY DODDRIDGE
 QUADRANGLE NEW MILTON 7.5' 14015 15' WC
 SURFACE OWNER GILBERT J. CAPOS ACREAGE 195.76
 OIL & GAS ROYALTY OWNER O.C. HAUGHT, HEIRS LEASE ACREAGE 195.76
 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 5000'±
 WELL OPERATOR ROCKWELL PETROLEUM CO DESIGNATED AGENT MR. ROBERT B. JONES
 ADDRESS P.O. BOX 86 ADDRESS P.O. BOX 86
SAND FORK, W.VA. 26430 SAND FORK, W.VA. 26430

JUL 27 1981



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION TOP OF KNOB 2300'S W OF LOC. - ELEV. = 1296'

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 MARCH 1, 1980
 OPERATOR'S WELL NO. FOUR-A
 API WELL NO. 47-017-2669
 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 1252' WATER SHED SAND FORK
 DISTRICT COVE COUNTY DODDRIDGE
 QUADRANGLE NEW MILTON 7.5' W. V. 12
 SURFACE OWNER GILBERT J. CAPOS ACREAGE 195.76
 OIL & GAS ROYALTY OWNER O.G. HAUGHT, HEIRS LEASE ACREAGE 195.76
 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 5000'
 WELL OPERATOR ROCKWELL PETROLEUM CODESIGNATED AGENT MR. ROBERT B. JONES
 ADDRESS P.O. BOX 86 ADDRESS P.O. BOX 86
SAND FORK, W.VA. 26430 SAND FORK, W.VA. 26430

MAY 15 1980

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

Date August 13, 1981

FORM IV-35
(Obverse)

Operator's
Well No. Smith #4A

[08-78]

WELL OPERATOR'S REPORT
OF

API Well No. 47 - 017 - 3025
State County Permit

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil ___ / Gas X / Liquid Injection ___ / Waste Disposal ___
(If "Gas", Production X / Underground storage ___ / Deep X / Shallow ___)
LOCATION: Elevation: 1120 Watershed: SandFork of Fink Creek
District: Cove County: Doddridge Quadrangle: New Milton

WELL 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) _____

PERMIT ISSUED ON July 18, 19 81 OIL & GAS INSPECTOR FOR THIS WORK:
(IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED) Name Steve Casey
Address Jane Lew, WV
884-7470

GEOLOGICAL TARGET FORMATION: Benson Depth 4998 feet
Depth of completed well, 5579 feet Rotary X / Cable Tools ___
Water strata depth: Fresh, 43 feet; salt, N/A feet.
Coal seam depths: N/A Is coal being mined in the area? No
Work was commenced July 24, 19 81, and completed July 30, 19 81

HOUSING AND TUBING PROGRAM

HOUSING 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"					1192'	1192'	To surface
Coal								Sizes
Intermediate								
Production	4 1/2"						5429'	175 sacks
Tubing								Depths set
Liners								Perforations:
								Top = Bottom

RECEIVED
AUG 14 1981

OPEN FLOW DATA OIL & GAS DIVISION 474 MCF + 10 BOPD
DEPT. OF MINES 4994-4998 feet
Producing formation Benson Pay zone depth _____

Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Bbl/d
Final open flow, 474 Mcf/d Final open flow, 10 Bbl/d
Time of open flow between initial and final tests, _____ hours

Static rock pressure, 1725 psig (surface measurement) after 36 hours shut in
[If applicable due to multiple completion--]

Second producing formation _____ Pay zone depth 31 1981

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

Static rock pressure, _____ psig (surface measurement) after _____ hours shut in

AUG 31 1981

[08-78]

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

Fractured: August 10, 1981

Benson - 5,000 lb. 80/100 sand
 35,000 lb. 20/40 sand
 826 bbls. water
 3000 lb. breakdown
 36.9 BPM at 2390 lb.

Perforations - 4994 - 4998, 8 shots

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Dirt			0	8	
Shale			8	19	
Shale, Sand, Red Rock			19	160	
Coal			160	165	3/4" stream @ 43' (H ₂ O)
Sand, Shale			165	730	
Coal			730	738	
Red Rock, Sand, Shale			738	1694	
Shale			1694	1700	
Sand and Shale			1700	2086	
Little Lime			2086	2099	
Pencil Cave			2099	2110	
Blue Monday			2100	2164	
Big Lime			2164	2235	
Big Injun			2235	2273	
Sand and Shale			2273	5280	
Elk Sand			5280	5295	
Sand and Shale			5295	5310	
Elk Sand			5310	5325	
Sand and Shale			5325	5579	
Total Depth			5579		

(Attach separate sheets to complete as necessary)

Carson Petroleum Corporation
 Well Operator

By *L. B. 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."

COPY

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's
Well No. Smith #4A

API Well No. 47 - 017 2669
State County Permit

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

LOCATION: Elevation: 1252' Watershed: Sand Fork
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 O. C. Haught Heirs COAL OPERATOR N/A
Address Salem, WV Address

ACREAGE 195.76 COAL OWNER(S) WITH DECLARATION ON RECORD:

SURFACE OWNER Gilbert J. Capos Name N/A
Address 3406 65th Avenue Address
Landover, MD

ACREAGE 195.76 Name N/A

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

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

RECEIVED
APR - 2 1980

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 X / other contract / dated October 25, 1977, to the undersigned well operator from O. C. Haught and Blanche Haught, et al

[If said deed, lease, or other contract has been recorded:]
Recorded on January 10, 1978, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease Book 103 at page 379. 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
1615 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

BLANKET BOND

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

8-78]

PROPOSED WORK ORDER

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

DILLING 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, 144 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		
Drill pipe								Kinds
Fresh water	8 5/8					1320	1320	To surface
Galvanized								Sizes
Intermediate								
Production	4 1/2						5600'	Depths set
Logging								
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

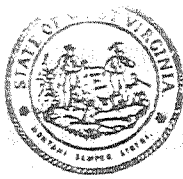


Security for Drilling, Casing and Gas Blasting to be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code § 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

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



Date: _____, 19 81

Operator's Well No. Smith #4A

API Well No. 47 - 017 - 3025

State County Permit

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

OIL AND GAS WELL PERMIT

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

LOCATION: Elevation: 1120' Watershed: Sand Fork of Fink Creek
District: Cove County: Doddridge Quadrangle: New Milton

WELL 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

OIL & GAS ROYALTY OWNER O. C. Haught heirs
Address _____

COAL OPERATOR N/A
Address _____

ACREAGE _____

COAL OWNER(S) WITH DECLARATION ON RECORD:

SURFACE OWNER Thomas B. Smith heirs

Name N/A

Address _____

Address _____

ACREAGE Same

Name N/A

FIELD SALE (IF MADE) TO:

Address _____

Address N/A

COAL LESSEE WITH DECLARATION ON RECORD:

OIL & GAS INSPECTOR TO BE NOTIFIED

Name N/A

Name Steve Casey

Address _____

Address Jane Lew, WV

884-7470

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed _____ / lease _____
other contract _____ / dated _____, 19 _____, to the undersigned well operator from _____

(If said deed, lease, or other contract has been recorded):
Recorded on _____, 19 _____, in the office of the Clerk of the County Commission of Doddridge County, West
Virginia in _____ Book _____ at page _____. 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) N/A

—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 COMMIS-
SION
1615 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

Carson Petroleum Corporation
Well Operator
By Lowell M. Johnson
Its Agent (LH)

BLANKET BOND

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, 5450 feet Rotary X / Cable tools /

Approximate water strata depths: Fresh, 110 feet; salt, N/A feet.

Approximate coal seam depths: N/A 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"					1150'	1150'	To surface		
Coal									Sizes	
Intermediate										
Production	4 1/2"						5450'	750 sacks	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 3-15-82

Paul B. Bennett
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.

WAIVER

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