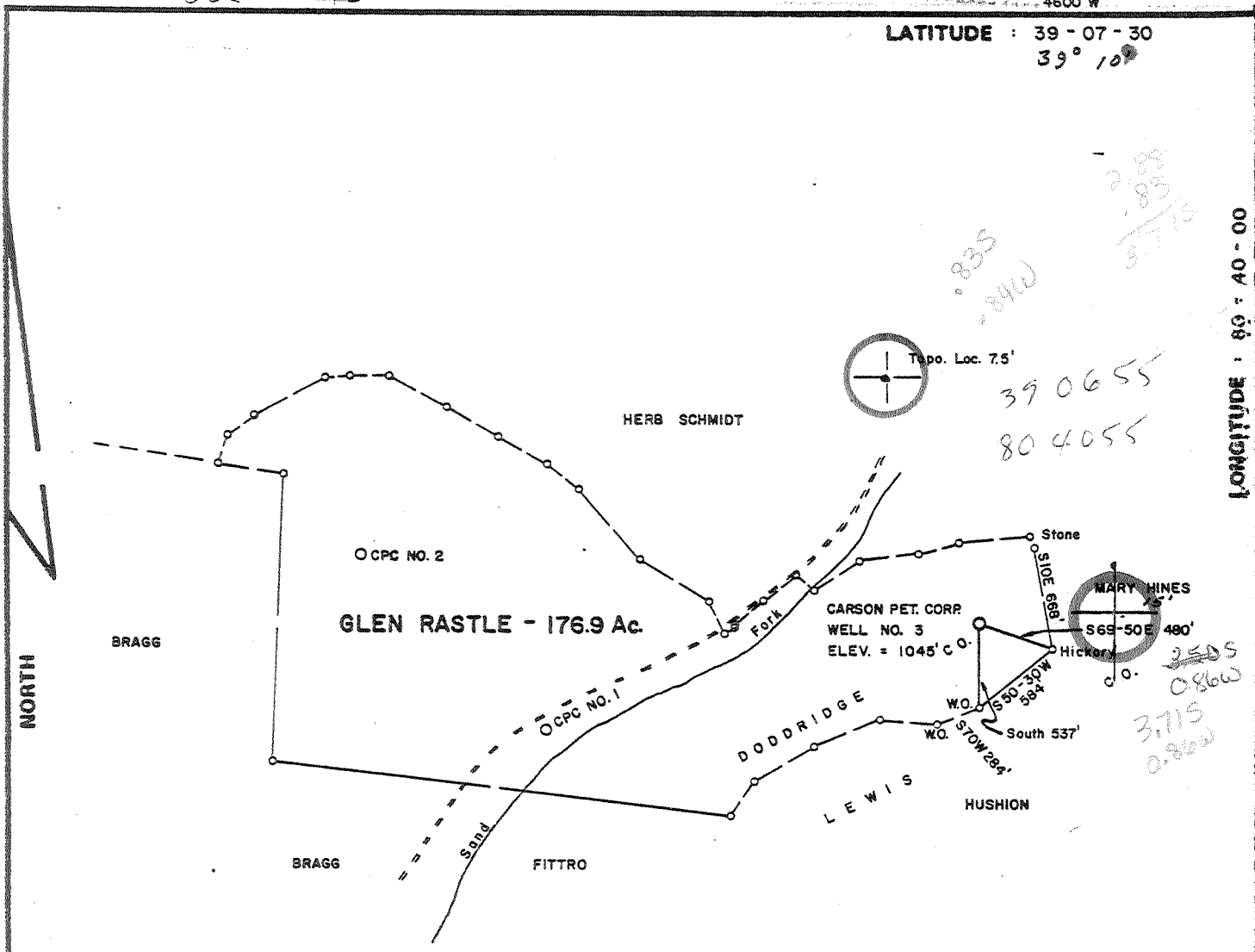


LATITUDE : 39 - 07 - 30
39° 10'

LONGITUDE : 80 - 40 - 00



SURFACE, OIL & GAS : GLEN G. & NINA RASTLE, VADIS, W.V.
COAL : EASTERN ASSOC. COAL CORP.,
KOPPERS BUILDING, PITTSBURGH, PA.

B-1670 OK
w/ O.K. JB 1/5/81
CEMENT OVER GANTZ SAND

FILE NO. _____
 DRAWING NO. _____
 SCALE 1 inch = 1000 feet
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION Jct. Rds. 1200' W of Location Elev. = 839'

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 DECEMBER 30, 1980
 OPERATOR'S WELL NO. THREE
 API WELL NO. 2830
 47 - 017 - 2935
 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 1045' WATER SHED SAND FORK
 DISTRICT COVE COUNTY DODDRIDGE
 QUADRANGLE VADIS 75' x 15' WC
 SURFACE OWNER GLEN RASTLE ACREAGE 176.9
 OIL & GAS ROYALTY OWNER GLEN RASTLE LEASE ACREAGE 176.9
 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 5650'
 WELL OPERATOR CARSON PETROLEUM CORP. DESIGNATED AGENT MR. LOWELL M. JOHNSON
 ADDRESS BOX 133 SAND FORK, W.V. 26430 ADDRESS BOX 133 SAND FORK, W.V. 26430

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

Date February 25, 1981

FORM IV-35
(Obverse)

Operator's
Well No. Rastle #3

[08-78]

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

API Well No. 47 - 017 - 2930
State County Permit

WELL TYPE: Oil / Gas / Liquid Injection / Waste Disposal /
(If "Gas", Production / Underground storage / Deep / Shallow /)
LOCATION: Elevation: 1045' Watershed: Sand Fork
District: Cove County: Doddridge Quadrangle: Vadis

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

PERMIT ISSUED ON January 5, 1981

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: Elk Depth 5260 feet

Depth of completed well, 5400 feet Rotary / Cable Tools

Water strata depth: Fresh, 113 feet; salt, _____ feet.

Coal seam depths: None Is coal being mined in the area? No

Work was commenced January 22, 1981, and completed January 27, 1981

CEMENTING AND TUBING PROGRAM

CEMENTING 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					1206'	1206'	To surface
Intermediate								Sizes
Production	4 1/2					5330'	320 sks	Depths set
Tubing								Perforations:
Packers								Top Bottom

RECEIVED
FEB 27 1981
OIL & GAS DIVISION
DEPT. OF MINES

OPEN FLOW DATA

Producing formation Benson Pay zone depth 4941-4944 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

[If applicable due to multiple completion--]

Second producing formation Elk Alex Pay zone depth 5066-5260 feet

Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, 0 Bbl/d

Final open flow, 539,000 Mcf/d Final open flow, 0 Bbl/d

Time of open flow between initial and final tests, 16 hours

Static rock pressure, 1510 psig (surface measurement) after 40 hours shut in

MAR 23 1981

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

Fractured February 11, 1981

Elk - 20,000 lb. 80/100 sand
40,000 lb. 20/40 sand
2100 lb. breakdown
490 bbls. water
23.3 BPM at 2000 lb.

Benson - 20,000 lb. 80/100 sand
40,000 lb. 20/40 sand
2000 lb. breakdown
485 bbls. water
16.7 BPM at 2000 lb.

Perforations - 5066 - 5260, 6 holes

Perforations - 4941 - 4944, 6 holes

ELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Red Rock & Sand & Shale			12	113	Water at 113'
Coal			113	118	
Red Rock, Sand, Shale			118	670	
Coal			670	675	
Red Rock, Sand, Shale			675	1478	
First Salt Sand			1478	1580	
Red Rock, Shale			1580	1626	
Second Salt Sand			1626	1710	
Red Rock, Shale			1710	1792	
Third Salt Sand			1792	1909	
Red Rock, Shale			1909	2016	
Maxton Sand			2016	2031	
Red Rock & Shale			2031	2046	
Little Lime			2046	2060	
Gray Shale			2060	2073	
Blue Monday Sand			2073	2087	
Big Lime			2087	2142	
Big Injun			2142	2247	
Gray Shale			2247	2285	
Weir Sand			2285	2377	
Gray Shale			2377	2488	
Gantz Sand			2488	2497	
Gray Shale			2497	4988	
Benson Sand			4988	4998	
Gray Shale			4998	5147	
Elk Sand			5147	5290	
Gray Shale			5290	5400	
Total Depth			5400		

(Attach separate sheets to complete as necessary)

Carson Petroleum Corporation
Well Operator

By

T. J. 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."

RECEIVED
JAN - 5 1981

Oil and Gas Division
OIL AND GAS WELL PERMIT APPLICATION
OIL & GAS DIVISION
DEPT. OF MINES

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

Surface Owner Glen Rastle
Address Vadis, WV
Mineral Owner Glen Rastle
Address Vadis, WV
Coal Owner Eastern Assoc. Coal Corp.
Address Kioppers Building, Pittsburgh, PA
Coal Operator N/A
Address _____

DATE January 2, 1981
Company Carson Petroleum Corporation
Address P O Box 133, Sand Fork, WV 26430
Farm Rastle Acres 176.9
Location (waters) Sand Fork
Well No. Three Elevation 1045'
District Cove County Doddridge
Quadrangle Vadis

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All operations 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 9-8-81.

[Signature]
Deputy Director - Oil & Gas Division

INSPECTOR Carrett
TO BE NOTIFIED Steve Casey
ADDRESS Jane Lew, WV
PHONE 884-7470

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 October 1980 by Consolidated Gas Supply Corp. made to Carson Petroleum Corporation and recorded on the _____ day of _____ 19____ in NOT OF RECORD County, Book _____ Page _____

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.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:

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

OFFICE OF OIL AND GAS
615 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- 2930 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]

