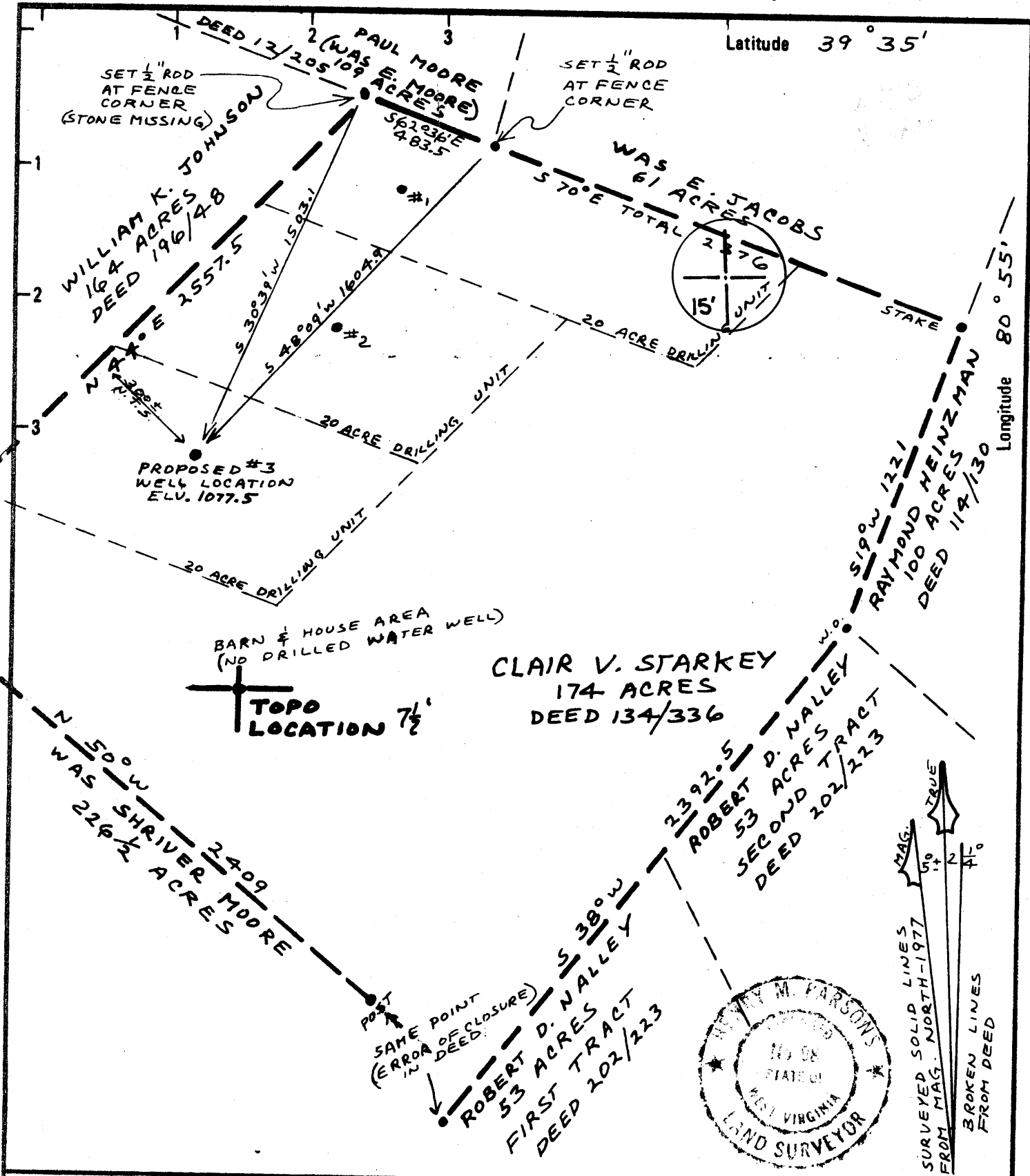


Latitude 39° 35'

Longitude 80° 55'



New Location

Drill Deeper

Abandonment

Minimum Error of Closure METHODS USED SHOULD PRODUCE 1 IN 2500

Source of Elevation BASE ELEV. POINTS WERE 1108 AND 1042 FROM NEAREST ROAD INTERSECTIONS SHOWN ON TOPO MAP

"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. Henry M. Parsons

Company EMES PETROLEUM

Address 619 LACONIA BLDG, WHEELING WK 26003

Farm CLAIR STARKEY (20 ACRE DRILLING UNIT)

Tract 20A Unit Acres 174 Lease No. _____

Well (Farm) No. CLAIR STARKEY #3 Serial No. _____

Elevation (Spirit Level) 1077.5

Quadrangle PADEN CITY, NEW MARTINSVILLE 15'

County TYLER District LINCOLN

SURVEYOR HENRY M. PARSONS

Engineer's Registration No. 98

File No. 78-5288 Drawing No. 78-5288-B

Date JAN. 9, 1979 Scale 1" = 500'

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

WELL LOCATION MAP
FILE NO. 47-095-0684

+ 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.

MAR 9 1979

3277 5th Sand 6-6 SISTERSVILLE 28

RECORDED
OCT 19 1979

OIL & GAS DIVISION STATE OF WEST VIRGINIA
DEPT. OF MINES DEPARTMENT OF MINES, OIL AND GAS DIVISION
FORM I (Obverse)

Date Aug 23, 1979

Operator's Well No. Starkey #3

(08-78)

WELL OPERATOR'S REPORT 4g

API Well No. 47-095-0689
State County Permi

DRILLING, REWORKING AND/OR STIMULATING, OR PHYS. CHG

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

LOCATION: Elevation: 1077.5 Watershed: Dadpaa Run
District: LINCOLN County: TYLER Quadrangle: Padon City, W.Va.

WELL OPERATOR JAMES PETROLEUM DESIGNATED AGENT C.W. Riggs, Inc.
Address 619 LACANIA BLDG. Address Box 358
WHEELING, W.VA. S. MARYS, W.VA.

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

RECORDED
SEP 24 1979

PERMIT ISSUED ON 2-9, 1979

OIL & GAS INSPECTOR FOR THE DIVISION
Name P.H. DEPT. OF MINES
Address MIDDLEBOURNE, W.Va.

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

GEOLOGICAL TARGET FORMATION: FIRTH SAND Depth 3277'
Depth of completed well, 3404' Feet Rotary Cable Tools ___
Water strata depth: Fresh, N/A feet; salt, N/A feet.
Coal seam depths: N/A Is coal being mined in the area? ___
Work was commenced 3-22, 1979, and completed 4-1, 1979

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	11 3/4			X			280'	115 sks	Kinds
Fresh water	8 7/8		20	X			2306'	300 sks	
Coal									Sizes
Intermediate									
Production	4 1/2		10.5	X			3404'	480 sks	Depth set
Tubing									
Liners									Perforations:
									Top Bottom

OPEN FLOW DATA

Producing formation GORDON Pay zone depth 2880' feet
Gas: Initial open flow, N/A Mcf/d Oil: Initial open flow, N/A Bbl/d
Final open flow, N/A Mcf/d Final open flow, N/A Bbl/d
Time of open flow between initial and final tests, 1648 MCP hours NOV 14 1979
Static rock pressure, _____ psig (surface measurement) after _____ hours shut in
[If applicable due to multiple completion--]
Second producing formation NONE Pay zone depth _____ feet

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

PERFORATIONS

13 50 holes 2878'-2898'

FRACTURING

1500 BBL H₂O, 100,000# SAND, 130,000 N₂

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
1ST COW RUN	SAND	SOFT	NO RECORD	} No Log at this INTERVAL	
2ND COW RUN	SAND	SOFT	NO RECORD		
SALT SAND	SAND	HARD	NO RECORD		
MAXTON	SAND	SOFT/HARD	1616	1666	
PENCIL CAVE	SHALE	SOFT	1720	1734	
BIG LIME	LIME	HARD	1762	1794	
KEENER	SAND	SOFT	1810	1898	
BIG INJUN	SAND SHALE	HARD	1950	2081	
SQUAW	SAND	HARD	2100	2110	
WEIR	SAND	HARD	2302	2384	
BEREA	SAND	HARD	2448	2454	
GORDON	SILT-STONE	SOFT	2852	2910	Gas + Oil TD.
^{shale} FIFTH SAND	No Show		2910	3404	

(Attach separate sheets to complete as necessary)

Jim Emes Petroleum Co. Inc.
Well Operator

By James T. Emes
Pres.

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."



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

RECEIVED

FEB 19 1979

OIL AND GAS WELL PERMIT APPLICATION

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

DATE 1-19-79

Surface Owner Clair Starkey

Company Emes Petroleum

Address Sistersville, W. Va.

Address 619 Laconia Bldg., Wheeling, W. Va.

Mineral Owner Clair Starkey

Farm Starkey Acres 174

Address Sistersville, W. Va.

Location (waters) Badger Run

Coal Owner Clair Starkey

Well No. 3 Elevation 1077.5

Address Sistersville, W. Va.

District Lincoln County Tyler

Coal Operator None

Quadrangle Paden City, W. Va.

Address ~~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

operations have not commenced by 10-13-79

INSPECTOR
TO BE NOTIFIED Philip Tracy

Robert A. [Signature]
Deputy Director - Oil & Gas Division

ADDRESS Middlebourne, W. Va.

PHONE 758-4573

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 Oct 4 1978 by John Richmond made to James T. Emes and recorded on the 4th day of Oct. 1978, in Tyler County, Book 217 Page 9

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:

WEST VIRGINIA GEOLOGICAL AND
ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
AC-304 - 292-6331

Address
of
Well Operator

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

619 Laconia Building
Street
Wheeling
City or Town
W. Va.
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.

**THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION**

PROPOSED WORK ORDER TO DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME Haught Drilling _____ NAME C. W. Riggs, Inc. _____
 ADDRESS Smithville, W. Va. _____ ADDRESS Box 358, St. Marys, W. Va. _____
 TELEPHONE 477-3333 _____ TELEPHONE 684-3974 _____
 ESTIMATED DEPTH OF COMPLETED WELL: 3277' _____ ROTARY CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Fifth Sand _____
 TYPE OF WELL: OIL _____ GAS _____ COMB. STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LIFT IN WELL	CEMENT LIFT UP OR SACKS CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8	<u>250'</u>	<u>250'</u>	<u>Surface</u> Cement Top Bottom
7			
5 1/2			
4 1/2		<u>3277'</u>	<u>200 sbs</u>
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 150 FEET SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS _____
 IS COAL BEING MINED IN THE AREA? no BY WHOM? _____

TO DRILL:

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

TO 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.

TO 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 thereof.

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