



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 WV
 Farm CLAIR STARKEY (20 ACRE DRILLING UNIT)
 Tract _____ Acres 174 Lease No. _____
 Well (Farm) No. CLAIR STARKEY #2 Serial No. _____
 Elevation (Spirit Level) 986 SW
 Quadrangle PADEN CITY NEW MARTINSVILLE 15'
 County TYLER District LINCOLN
 SURVEYOR HENRY M. PARSONS
 SURVEYOR'S 98
 Engineer's Registration No. 98
 File No. 78-5288 Drawing No. 78-5288-A
 Date DEC. 27, 1978 Scale 1" = 500

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

WELL LOCATION MAP
 FILE NO. 47-095-0688

+ 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.

MAY 8 1979

OWWO 3164 SISTERSVILLE 28

OCT 9 1979

OIL & GAS DIVISION
DEPT. OF MINES

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

Date 8-23, 1979

FORM IV-35
(Obverse)

Operator's
Well No. STARKEY #2

[08-78,

WELL OPERATOR'S REPORT 41
OF

API Well No. 22-095-0288
State County Permit

REVISION, CHANGE, RENEW AND/OR STOP DURING PERIOD OF CHANGE

WELL TYPE: Oil / Gas / Liquid Injection ___ / Waste Disposal ___

(If "Gas", Production / Underground storage ___ / Deep ___ / Shallow ___)

LOCATION: Elevation: 986' Watershed: BADGER RUN

District: LINCOLN County: TYLER Quadrangle: PAIDEN CITY, W.VA.

WELL OPERATOR EMERUS PETROLEUM
Address 619 LACONIA BLDG.
WHEELING, W.VA.

DESIGNATED AGENT C.W. Riggs, Inc.
Address Box 358
St. Marys, W.Va.

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

RECEIVED
SEP 24 1979

PERMIT ISSUED ON 4-25, 1979 OIL & GAS INSPECTOR FOR THIS WORK: PHIL TRACY

(IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED) Address MIDDLEBORNE, W.VA.

GEOLOGICAL TARGET FORMATION: FIELD SAND Depth 3150'
Depth of completed well, 3012 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? No
Work was commenced 5-2, 1979, and completed 5-7, 1979

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	REMARKS	
	Size	Grade	Weight per ft.	New	Used	For drilling			Left in well
Connector	11 3/4			X			120'	75 sks	Kinds
Fresh water	8 5/8		20#	X			1098'	190 sks	
Coal									Sizes
Intermediate									
Production	4 1/2		10.5#	X			3012'	410 sks	Depths set
Tubing									
Liners									Perforations:
									Top Bottom

OPEN FLOW DATA

Producing formation GORDON Pay zone depth 2808' 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, 1,800 Mcf/d hours
Shut-in rock pressure, _____ psig (surface measurement) after _____ hours shut in

NOV 14 1979

[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

14 .50 HOLES

FRACTURING

1500 BBL H₂O, 100,000 # SAND, 135,000 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	}	HOLE Cased 8 5/8" CEMENTED No Log
2ND COW RUN	SAND	SOFT	NO RECORD		
SALT SAND	SAND	HARD	NO RECORD		
MAXTON	SAND	SOFT-HARD	1590	1636	
PENCIL CAVE	SHALE	SOFT	1685	1700	
Big LIME	LIME	HARD	1731	1767	
KEENER	SAND	SOFT	1784	1830	
Big INJUN	LIME SAND SHALE	HARD	1872	1958	
SQUAW	SAND	HARD	1980	2014	
WEIR	SAND	HARD	2219	2298	
BEREA	SAND	HARD	2370	2376	
GORDON	SILTSTONE	SOFT	2804	2840	OIL - GAS
FLINT SAND	SHALE	SOFT	2900	2926	
			2926 -	3012	TD.

(Attach separate sheets to complete as necessary)

Jim Emes Petroleum Co. Inc.
Well Operator

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

RECEIVED

APR 25 1979

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE 4-19-79

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. 2 Elevation 986'

Address Sistersville, W. Va.

District Lincoln County Tyler

Coal Operator None

Quadrangle Paden City

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

INSPECTOR

TO BE NOTIFIED Philip Tracy

operations have not commenced by 12-26-79

ADDRESS Middlebourne, W. Va.

John T. Emes
Deputy Director - Oil & Gas Division

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 19 78 by John Richmond made to James T. Emes and recorded on the 4th day of Oct. 19 78 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

Very truly yours,

(Sign Name) James T. Emes

Well Operator

Address
of
Well Operator

619 Laconia Bldg.

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 can proceed.

HELD BY TREASURER

47-095-0688

PERMIT NUMBER

**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) RESPONSIBLE AGENT:
 NAME Little Swiss Drilling NAME C.W. Riggs, Inc.
 ADDRESS Buchannon, W. Va. ADDRESS St. Marys, W. Va.
 TELEPHONE 472-6396 TELEPHONE 684-3974
 ESTIMATED DEPTH OF COMPLETED WELL: 3150' ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Fifth Sand
 TYPE OF WELL: OIL _____ GAS _____ COMB. X STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LIFT IN WELL	CEMENT FILL UP OR SACKS CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8 <u>250'</u>		<u>250'</u>	<u>cement top-bottom</u>
7			
5 1/2			
4 1/2			
3		<u>3150'</u>	<u>200 sks.</u>
2			Perf. Top
Liners			Perf. Bottom
			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 120' 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