



CERTIFICATE

- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

"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."

Minimum degree of accuracy is one part in 200
 Signed, Frank J. Barber LLS #289

COMPANY KAISER EXPLORATION & MINING COMPANY
 ADDRESS P.O. BOX 8 RAVENSWOOD, WEST VIRGINIA
 FARM F. M. SAYRE HEIRS
 MAP _____ ACRES PT. OF 400 LEASE NO. _____
 WELL (FARM) NO. 1 SERIAL NO. KEM 59
 ELEVATION (SPIRIT LEVEL) 636.15
 QUADRANGLE RIPLEY 7 1/2 x 15 SW
 COUNTY JACKSON DISTRICT RIPLEY
 POINT OF PROVEN ELEVATION USGS BM EL. 636
 FILE NO. _____ DRAWING NO. _____
 DATE NOV. 15, 1980 SCALE 1" = 1000 FT.

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON
 WELL LOCATION MAP
 FILE NO. 035-1546
 + DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS SCALE 1 TO 25,000 LATITUDE AND LONGITUDE LINES BEING REPRESENTED BY BORDER LINES AS SHOWN.
 - DENOTES ONE INCH SPACES ON BORDER LINE OF ORIGINAL TRACING.

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division

WELL RECORD

Quadrangle Ripley

Permit No. JAC-1546

Rotary X Oil _____
Cable _____ Gas X
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ (Kind) _____

Company Kaiser Exploration and Mining Co.

Address P. O. Box 8, Ravenswood, WV

Farm F. M. Sayre, Heirs Acres 400

Location (waters) Parchment Creek

Well No. KEM #59 Elev. 636.15

District Ripley County Jackson

The surface of tract is owned in fee by _____

F. M. Sayre, Heirs

Address P. O. Box 1777, Beckley, WV 25801

Mineral rights are owned by Same

Address Same

Drilling Commenced 5/12/81

Drilling Completed 5/19/81

Initial open flow Trace cu. ft. -- bbls.

Final production 200,000 cu. ft. per day -- bbls.

Well open 4 hrs. before test 1500 RP.

Well treatment details:

Attach copy of cementing record.

5/20/81: perforated Oriskany sandstone from 4797'-4807' (KB), 28 holes, 3 5/8" hollow steel carrier; 5/21/81: hydrofractured Oriskany w/15000# 80/100 sand, 45,000# 20/40 sand, 500 gal 28% HCL acid, 194,000 SCF of nitrogen 865 bbl of water, 20.5 BPM avg rate; 4550 psig avg pressure; 4000 psig instantaneous shut in pressure.

Coal was encountered at -- Feet -- Inches
Fresh water -- Feet -- Salt Water -- Feet --
Producing Sand Oriskany Sandstone Depth 4797-4807

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size			
20-16			
Cond.			
13-10" 10 3/4	229' (KB)	229' (KB)	150 sks class A 3% calcium chloride 1/4#/sk flocele
9 5/8			
8 5/8			
7	2389' (KB)	2389' (KB)	65 sks 50/50 pozmi 10% salt; 100 sks Class A, 3% HCL
5 1/2			
4 1/2	4858' (KB)	4358' (KB)	230 sks 50/50 pozmi 10% salt, 1/4#/flocele
3			
2		4796' (KB)	
Liners Used			

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
* All formation tops taken from electric log depths						
Soil & Siltstone			0	72		
Sand			72	86		
Siltstone			86	162		
Sand			162	201		
Shale & Siltstone			201	485		
Sand			485	512		
Siltstone & Shale			512	599		
Sand			599	614		
Shale			614	646		
Sand			646	669		
Siltstone			669	788		
Sand			788	801		
Shale			801	950		
Sand			950	1183		
Shale & Siltstone			1183	1520		
Salt Sand			1520	1612		
Shale			1612	1664		
Big Lime (Greenbrier)			1664	1818		
Shale			1818	1857		
Big Injun Sand			1857	1900		

(over)

* Indicates Electric Log tops in the remarks section.

DEC 13 1982

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Shale			1900	2295		
Coffee Shale (Sunbury)			2295	2317		
Berea Sand			2317	2324		
Shale			2324	3536		
Brown Shale			3536	4054	Show/Gas	
Shale			4054	4426		
Marcellus Shale			4426	4689		
Onondaga Lime (Corniferous)			4689	4778		
Oriskany Sand			4778	4816		
Helderberg			4816	4860		
Total Depth			4860			

Date August 18 19 81

APPROVED Karl A. P. Owner

By General Manager

(Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

DEC 16 1980

Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

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

DATE December 11, 1980

Surface Owner F. M. Sayre, heirs

Company Kaiser Exploration and Mining Company

Address P. O. Box 1777, Beckley, WV 25801

Address P. O. Box 8, Ravenswood, WV 26164

Mineral Owner Same as above

Farm F. M. Sayre, heirs Acres Pt. of 400

Address Same

Location (waters) Parchment Creek

Coal Owner Same as above

Well No. KEM #59 Elevation 636.15

Address Same

District Ripley County Jackson

Coal Operator None

Quadrangle Ripley

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 if operations have not commenced by 8-18-81.

INSPECTOR

TO BE NOTIFIED Richard Morris

ADDRESS P. O. Box 372, Grantsville, WV

PHONE 354-7259

J. R. Murray
Deputy Director - Oil & Gas Division

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 January 21 1980 by F. M. Sayre, heirs made to Kaiser Exploration and Mining Co. recorded on the 25 day of March 1980, in Jackson County, Book 155 Page 346

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)

R. A. Pryce
Well Operator

Rt. 2, South
Street

Ravenswood
City or Town

West Virginia 26164
State

Address of Well Operator:

BLANKET BOND

*SECTION 3... If no objections are filed... from the receipt of... a permit...

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 Not known at this time _____ NAME Robert A. Pryce _____
 ADDRESS _____ ADDRESS P. O. Box 8, Ravenswood, WV _____
 TELEPHONE _____ TELEPHONE 273-5371 _____
 ESTIMATED DEPTH OF COMPLETED WELL: 4850' _____ ROTARY X _____ CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Oriskany _____
 TYPE OF WELL: OIL _____ GAS X _____ COMB. _____ STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - (CUBIC FT.)
20 - 16			
13 - 10			
9 - 5/8 10 3/4"	250'	250'	To surface
8 - 5/8			
7	<u>2400'</u>	2400'	125 sks = 570'
5 1/2			
4 1/2	<u>4850'</u>	4850'	125 sks = 1500'
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS _____ 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