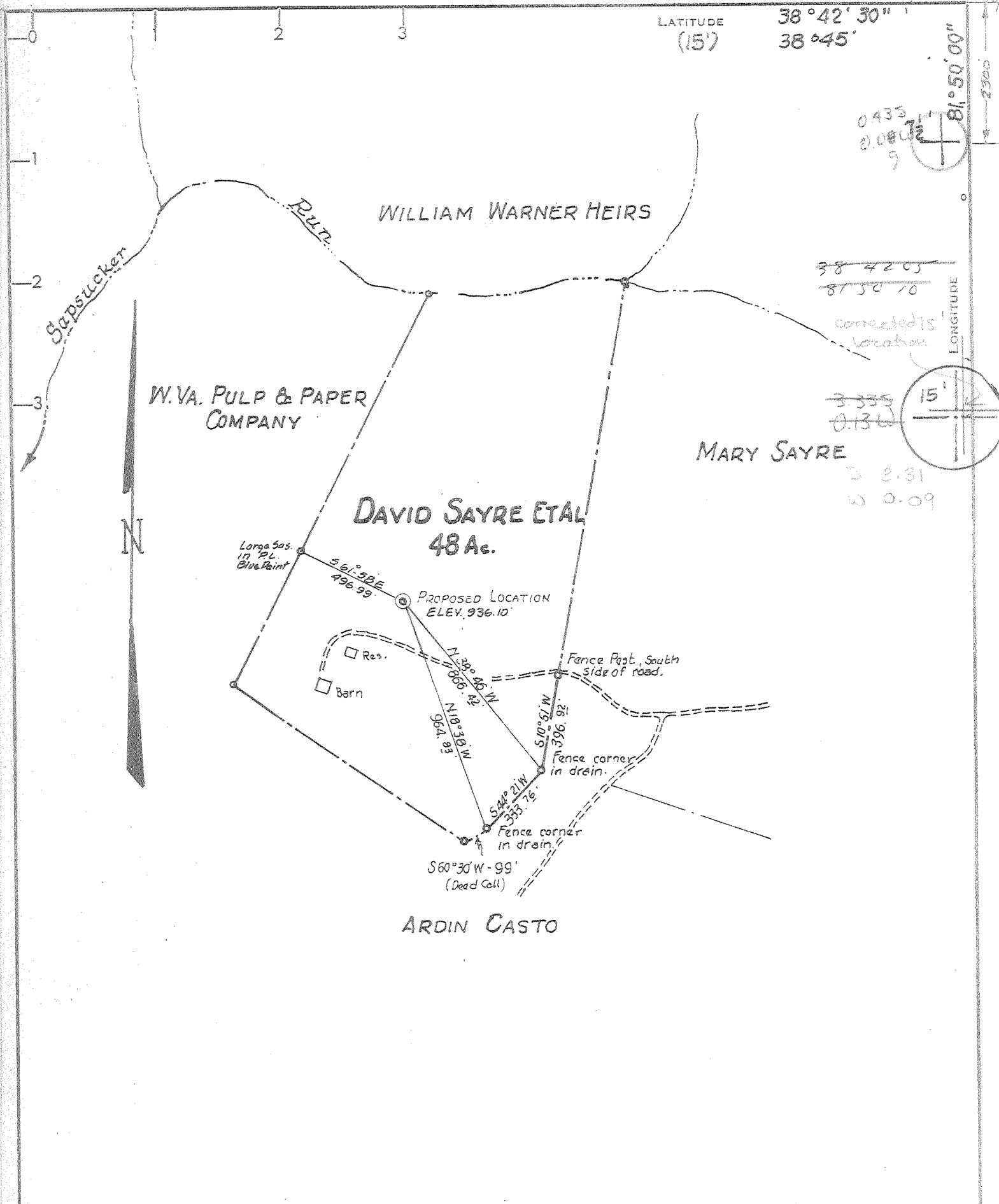


26/79



CERTIFICATE

"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 _____

- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

COMPANY KAISER EXPLORATION & MINING. CO.
 ADDRESS P.O. Box 537 RIPLEY, W. VA.
 FARM DAVID SAYRE ETAL
 MAP _____ ACRES 48 LEASE NO. _____
 WELL (FARM) NO. 1 SERIAL NO. KEM 9
 ELEVATION (SPIRIT LEVEL) 936.10'
 QUADRANGLE ELMWOOD, WINFIELD 15' NC
 COUNTY MASON DISTRICT UNION
 POINT OF PROVEN ELEVATION U.S. G.S. DATUM - Road Intersection

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

WELL LOCATION MAP

FILE NO. 47-053-0186

+ 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.

MAR 21 1979

- DENOTES ONE INCH SPACES ON BORDER LINE OF ORIGINAL TRACING.

FILE NO. _____ DRAWING NO. _____
 DATE FEB. 20, 1979 SCALE 1" = 500'

Deep Well 5-5 Rock Castle (346)

346



Handwritten: 1166-1140

FEB 20 1980

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division
WELL RECORD 39

OIL & GAS DIVISION
DEPT. OF MINES

Quadrangle Elmwood
Permit No. 47-053-0186

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

Company <u>Kaiser Exploration and Mining Company</u>	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Address <u>P. O. Box 8, Ravenswood, WV 26164</u>	Size			
Farm <u>David Sayre</u> Acres <u>48</u>	20-16			
Location (waters) <u>Mud Lick</u>	Cond.			
Well No. <u>KEM 9</u> Elev. <u>936.10</u>	13-10" 10 3/4"	250' (KB)	Same	125 sx class A To Surface (Halliburton)
District <u>Union</u> County <u>Mason</u>	9 5/8			
The surface of tract is owned in fee by <u>David Sayre</u>	8 5/8			
Address <u>2191 Watkins Avenue, Columbus, Ohio</u>	7	2715' (KB)	Same	65 sx pozmix
Mineral rights are owned by <u>Same</u>	5 1/2			100 sx class A (Dowell)
Address <u>Same</u>	4 1/2	4988' (KB)	Same	225 sx pozmix (Halliburton)
Drilling Commenced <u>8/8/79</u>	3			
Drilling Completed <u>8/16/79</u>	2			
Initial open flow <u>103,000</u> cu. ft. -- bbls.	Liners Used			
Final production <u>5000 M</u> cu. ft. per day -- bbls.				
Well open <u>26</u> hrs. before test <u>1825</u> RP.				

Well treatment details:

Attach copy of cementing record.

Perforated the Oriskany S.S. from 4903' - 4911' (K.B.) w/ 4 holes/ft (8/20/79);
Halliburton and Aircowell fractured zone w/30,000# 80/100 mesh sand, 30,000# 20/40
mesh sand, 500 gal 28% HCl, 958 BBL water, and 192,000 SCF nitrogen.

Handwritten: 5,000 MCF

Coal was encountered at _____ Feet _____ Inches
Fresh water _____ Feet _____ Salt Water _____ Feet _____
Producing Sand Oriskany Depth 4903-11

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Soil			0	9		
Shale			9	72		
Red Rock			72	83		
Shale			83	138		
Siltstone			138	264		
Sand			264	280		
Shale			280	312		
Sand			312	328		
Red Rock			328	419		
Sand			419	423		
Shale			423	448		
Red Rock			448	515		
Sand			515	524		
Siltstone			524	565		
Shale			565	582		
Red Rock			582	602		
Sand & Shale			602	624		
Sand			624	632		
Siltstone			632	656		
Red Rock			656	687		
Coal			687	693		
Red Rock			693	730		
Siltstone			730	797		

Handwritten: TOPS FROM KB = 946'

(over)

* Indicates Electric Log tops in the remarks section.

MAR 10 1980

Formation	Color	Hard or Soft	Top Feet ³⁴	Bottom Feet	Oil, Gas or Water	* Remarks
Sand			797	802		
Red Rock & Shale			802	877		
Siltstone			877	992		
Sand			992	1003		
Siltstone			1003	1052		
Sand			1052	1081		
Shale			1081	1110		
Sand			1110	1114		
Shale			1114	1154		
Sand			1154	1188		
Shale			1188	1265		
Sand			1265	1270		
Shale			1270	1353		
Salt Sand			1353	1498		
Shale			1498	1542		
Sand			1542	1548		
Siltstone			1548	1655		
Sand			1655	1664		
Siltstone			1664	1782		
Sand & Siltstone			1782	1820		
Shale			1820	1876		
Sand			1876	1898		
Shale			1898	1916		
Maxton Sand			1916	2012		
Big Lime			2012	2092		
Shale			2092	2128		
Big Injun			2128	2260		
Shale			2260	2571		
Coffee Shale			2571	2595		
Berea ^{2595 to 2608}			2595	2608		
Shale			2608	3793		
Brown Shale			3793	4246		
Shale			4246	4686		
Marcellus ^{4686 to 4806}			4586	4806		
Onondaga			4806	4886		
Oriskany			4886	4918		
Heiderberg			4918	5010		
Total Depth			5010			

2595 to 2608
 4686 to 4806
 On 4805

Date February 20 19 80

APPROVED Kaiser Exploration and Mining Company

By Edith A. P.
Operations Manager



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

FEB 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 February 19, 1979

Surface Owner David Sayre
Address 2191 Watkins Avenue, Columbus, OH 43207

Company Kaiser Exploration and Mining Company
Address P. O. Box 537, Ripley, WV 25271

Mineral Owner Same as above
Address Same as above

Farm David Sayre Acres 48

Coal Owner Same as above
Address Same as above

Location (waters) Mud Lick

Coal Operator None
Address None

Well No. KEM #9 Elevation 936.10

District Union County Mason

Quadrangle Elmwood

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 11-5-79

INSPECTOR

TO BE NOTIFIED

Kenneth Butcher

ADDRESS RFD #1, Barboursville, WV 25504

PHONE 736-4885

Robert K. Todd
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 October 7 19 78 by Launa Sayre, et al made to Kaiser Exploration & Mining Co. and recorded on the 14th day of February 19 79 in Mason County, Book 44 Page 682

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 and 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 OIL & GAS CONSERVATION COMMISSION
1313 WASHINGTON STREET, EAST
CHARLESTON, WEST VIRGINIA 25311

Very truly yours,

(Sign Name)

R. A. Pryce
R. A. Pryce Well Operator / Operations Manager
P. O. Box 537

Ripley Street

City or Town

West Virginia 25271

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

47-053-0186

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 Not known at this time NAME Robert A. Pryce
 ADDRESS _____ ADDRESS P. O. Box 537, Ripley, WV 25271
 TELEPHONE _____ TELEPHONE 372-2827 or 372-2828
 ESTIMATED DEPTH OF COMPLETED WELL: 4990 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	Cement to surface
8 - 5/8			
7	2650	2650	125 sks = 570 feet
5 1/2			
4 1/2	4990	4990	125 sks = 1500 feet
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? None 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