



New Location   
 Drill Deeper   
 Abandonment

Minimum Error of Closure 1 IN. 200  
 Source of Elevation USGS Elev. 921' Road Intersection West of WELL LOC.  
 "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."

Company KAISER EXPL. & MINING CO.  
 Address BOX 98, RAVENSWOOD, W.VA.  
 Farm LERROY SAYRE  
 Tract \_\_\_\_\_ Acres 70.88 Ac Lease No. 3590  
 Well (Farm) No. DEK #23 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 920.0  
 Quadrangle 15 MIN. = RAVENSWOOD 7.5 MIN. = COTTAGEVILLE SE  
 County JACKSON District UNION  
 Engineer N. L. Defton  
 Engineer's Registration No. 1832  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date 6-3-5-77 Scale 1" = 500'

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

WELL LOCATION MAP  
 FILE NO. JAC-1394

+ 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.

47-035



RECEIVED

FEB - 7 1978

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
Oil and Gas Division

OIL & GAS DIVISION  
DEPT. OF MINES

WELL RECORD

Rotary XXXXX Oil \_\_\_\_\_  
Cable \_\_\_\_\_ Gas XXXXXX  
Recycling \_\_\_\_\_ Comb. \_\_\_\_\_  
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind)

Quadrangle Cottageville

Permit No. JAC 1394

Company Kaiser Expl. & Mining Co.  
Address Box 98, Ravenswood, W. Va.  
Farm Leroy Sayre Acres 70  
Location (waters) Isaacs run of Mill Crk.  
Well No. DEK #23 Elev. 920  
District Union County Jackson  
The surface of tract is owned in fee by Leroy Sayre  
Address Rt. 1, Evans, WV 25241  
Mineral rights are owned by Same as above  
Address \_\_\_\_\_  
Drilling Commenced 5/30/77  
Drilling Completed 6/11/77  
Initial open flow 100 M. cu. ft. -0- bbls.  
Final production 129 MCFD ~~XXXXX~~ per day \_\_\_\_\_ bbls.  
Well open \_\_\_\_\_ hrs. before test 1725 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size			
20-16			
Cond.			
13-10"			
9 5/8	216	216	100 Sax
8 5/8			
7	2590	2590	75 Sax
5 1/2			
4 1/2	4900	4900	150 Sax
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record. Halliburton

Perforated 4 1/2" casing 4,769 - 4771 with 16 shots. Fractured Oriskany with 960 bbls. water, 41,000# sand and 186M std. cu. ft. nitrogen

Coal was encountered at None Feet \_\_\_\_\_ Inches \_\_\_\_\_  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Oriskany Sand Depth 4769 - 4771

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Shales			0	23		
Sand			23	48		
Shale			48	97		
Sand			97	108		
Shale			108	192		
Sand			192	198		
Red Rock			198	222		
Shale			222	268		
Sand			268	281		
Red Rock			281	331		
Sand			331	343		
Shale			343	385		
Sand			385	395		
Shale			395	455		
Red Rock			455	559		
Sand			559	573		
Red Rock			573	644		
Shale			644	670		
Red Rock			670	703		
Sand			703	744		
Red Rock			744	805		
Sand			805	832		
Red Rock			832	925		
Sand			925	943		

(over)

\* Indicates Electric Log tops in the remarks section.

FEB 10 1978

Formation	Color	Hard or Soft	Top Feet $\pm$	Bottom Feet	Oil, Gas or Water	* Remarks
Shale			943	1000		
Sand			1000	1021		
Red Rock			1021	1038		
Sand			1038	1054		
Shale			1054	1099		
Red Rock			1099	1140		
Shale			1140	1157		
Red Rock			1157	1205		
Sand			1205	1247		
Red Rock			1247	1275		
Sand			1275	1301		
Shale			1301	1362		
Salt Sand			1362	1445		
Shale			1445	1675		
Sand			1475	1689		
Shale			1689	1821		
Maxon			1821	1867		
Shale			1867	1874		
Big Lime			1874	2012		
Shale			2012	2022		
Injun Sand			2022	2145		
Shale			2145	2490		
Coffee Shale			2490	2508		
Berea			2508	2520		
Shale			2520	3670		
Brown Shale			3670	4127		
Shale			4127	4529		
Marcellus Shale			4529	4674		
Onondaga L.S.			4675	4763		
Oriskany Sand			4763	4786		
Helderberg L.S.			4786	4914		

Date February 3, 19 78

APPROVED KAISER EXPLORATION & MINING Owner

By K. A. Payne  
(Title)  
Operations Manager



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

RECEIVED  
MAY 11 1977  
DEPT. OF MINES

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

DATE March 21, 1977  
Company Kaiser Exploration & Mining Co.  
Address Box 98, Ravenswood, W. Va.  
Farm Leroy Sayre Acres 70 Ac.  
Location (waters) Isaacs Run of Mill Creek  
Well No. DEK #23 Elevation 920  
District Union County Jackson  
Quadrangle Ravenswood 15", Cottageville 7 1/2"

Surface Owner Leroy Sayre  
Address Rt. 1, Evans, WV 25241  
Mineral Owner Same as above  
Address \_\_\_\_\_  
Coal Owner Same as above  
Address \_\_\_\_\_  
Coal Operator Not operated  
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 8-7-77.

INSPECTOR  
TO BE NOTIFIED Richard J. Morris  
ADDRESS P.O. Box 372, Grantsville, W.Va.  
PHONE 354-7259

[Signature]  
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 April 28, 1976 by Leroy & Ethel Sayre made to Devon Corp. & Eason Oil and recorded on the 23rd day of February 1977 in Jackson County, Book 143 Co. Page 250

XXXX 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, Kaiser Exploration & Mining Co.  
(Sign Name) [Signature]  
W. F. Wegener, Well Operator's Representative  
Box 98  
Street  
Ravenswood,  
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.

BLANKET BOARD

JAC-1394 PERMIT NUMBER  
47-035

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 22-2-3 and will carry out the specified requirements."  
Signed by [Signature]  
W. F. Wegener, Owner's Representative

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

PROPOSED WORK ORDER TO XXX DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT: \_\_\_\_\_  
 NAME FWA Drilling Company NAME Bill W. Backus  
 ADDRESS Box 448, Elkview, W. Va. ADDRESS Box 1433, Charleston, W. Va.  
 TELEPHONE 965-3379 TELEPHONE 342-3171  
 ESTIMATED DEPTH OF COMPLETED WELL: 4900 ROTARY XXX CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Oriskany  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS XXX 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	250	250	100 Sacks
8 - 5/8			
7	2600	650	75 Sacks
5 1/2			
4 1/2	4900	4900	125 Sacks
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS \_\_\_\_\_ FEET \_\_\_\_\_ SALT WATER \_\_\_\_\_ FEET \_\_\_\_\_  
 APPROXIMATE COAL DEPTHS None Anticipated  
 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