



New Location   
 Drill Deeper   
 Abandonment

Minimum Error of Closure 1 IN 200  
 Source of Elevation U.S.G.S. BM 21.579 NORTH 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.V.  
 Farm ROBERT K. PARK  
 Tract \_\_\_\_\_ Acres 170 Lease No. \_\_\_\_\_  
 Well (Farm) No. DEK 22 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 582.0 SE  
 Quadrangle RAVENSWOOD 15' 7.5 COTTAGEVILLE  
 County JACKSON District UNION  
 Engineer N.L. Sefton  
 Engineer's Registration No. 1832  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date 2-5-77 Scale 1" = 500'

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

WELL LOCATION MAP  
 FILE NO. JAC-1390

+ 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 FEB 22 1977



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD <sup>7</sup>/<sub>24</sub>

RECEIVED  
NOV 4 - 1977  
OIL & GAS DIVISION  
DEPT. OF MINES

Quadrangle Cottageville

Permit No. JAC-1390

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

Company Kaiser Expl. & Mining Co.  
Address Box 98, Ravenswood, WV  
Farm Robert K. Park Acres 170  
Location (waters) Mill Creek  
Well No. DEK #22 Elev. 582  
District Union County Jackson  
The surface of tract is owned in fee by \_\_\_\_\_  
Robert K. Park, Et Ux.  
Address Park Lane, Ravenswood, WV.  
Mineral rights are owned by Same  
Address \_\_\_\_\_  
Drilling Commenced 5/24/77  
Drilling Completed 5/31/77  
Initial open flow N/A cu. ft. \_\_\_\_\_ bbls.  
Final production 25 M. cu. ft. per day \_\_\_\_\_ bbls.  
Well open \_\_\_\_\_ hrs. before test \_\_\_\_\_ 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	204	204	110 Sax
8 5/8			
7	2148	2148	75 Sax
5 1/2			
4 1/2	4485	4485	125 Sax
3			
2			
Liners Used			

Well treatment details: Attach copy of cementing record. Halliburton  
Perforated 4 1/2" casing 4403 - 4404 & 4415 - 4416 with 16 shots. Fractured with 765 bbls. water and 46,000# sand.  
Perforated 4 1/2" casing 3443 to 3788 with 25 shots, Formation would not break at 4200 psi.

Coal was encountered at \_\_\_\_\_ Feet \_\_\_\_\_ Inches  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Oriskany Sand Depth 4403' - 4416'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Shale			0	15		
Sand			15	31		
Red Shale			31	57		
Sand			57	77		
Red Shale			77	144		
Sand			144	149		
Shale			149	167		
Sand			167	170		
Red Shale			170	201		
Sand			201	205		
Red Rock			205	249		
Sand			249	265		
Red Rock			265	331		
Sand			331	336		
Red Rock & Shales			336	805		
Shale			805	928		
Sand			928	1008		
Shale			1008	1045		
Salt Sand			1045	1132		
Shale			1132	1190		
Sand			1190	1203		
Shale			1203	1233		
Sand			1233	1254		
Shale			1254	1386		

(over)

\* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet <sup>7</sup>	Bottom Feet	Oil, Gas or Water	* Remarks
Sand			1386	1391		
Shale			1391	1454		
Maxon			1454	1542		
Big Lime			1542	1645		
Shale			1645	1660		
Injun			1660	1796		
Shale			1796	2126*		
*Above section made by correlations						
Coffee Shale			2126	2140		
Berea			2140	2150		
Shale			2150	3304		
Brown Shale			3304	3760		
Shale			3760	4170		
Marcellus Shale			4170	4312		
Onondaga L.S.			4312	4392		
Oriskany Sand			4392	4418		
Helderberg L.S.			4418	4513		
Log Total Depth				4513		

Date November 2 19 77

APPROVED Ralph A. Pyce Owner

By Staff Petroleum Geologist

(Title)



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD <sup>21</sup>

RECEIVED  
NOV 4 - 1977  
OIL & GAS DIVISION  
DEPT. OF MINES

Quadrangle Cottageville

Permit No. JAC-1390

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

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District Union County Jackson  
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Drilling Completed 5/31/77  
Initial open flow N/A cu. ft. \_\_\_\_\_ bbls.  
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at 4200 psi.

~~Testing not complete.~~

Coal was encountered at \_\_\_\_\_ Feet \_\_\_\_\_ Inches  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Oriskany Sand Depth 4403' - 4416'

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Onondaga L.S.			4312	4392		
Oriskany Sand			4392	4418		
Helderberg L.S.			4418	4513		
Log Total Depth				4513		

Date November 2, 1977

APPROVED Ralph A. Payne, Owner

By Staff Petroleum Geologist  
(Title)



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE January 31, 1977

Surface Owner Robert K. Parks II, et ux

Company Kaiser Exploration & Mining Co.

Address Park Lane, Ravenswood, W. Va.

Address Box 98, Ravenswood, W. Va.

Mineral Owner Robert K. Parks II, et ux

Farm Robert K. Parks Acres 170

Address Park Lane, Ravenswood, W. Va.

Location (waters) Mill Creek

Coal Owner Same as above

Well No. DEK #22 Elevation 582

Address \_\_\_\_\_

District Union County Jackson

Coal Operator Not Operated

Quadrangle Cottageville 7 1/2', Ravenswood 15'

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 6-8-77

INSPECTOR TO BE NOTIFIED Richard J. Morris

ADDRESS Grantsville, W.Va.

PHONE 354-7259

Robert K. Parks  
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 19 1976 by R. K. Parks, et ux made to Devon Corporation & Eason and recorded on the 3rd day of November 1976 in Jackson Oil Company County, Book 142 Page 151

XXX 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) W. F. Wegener  
W. F. Wegener, <sup>Well Operator</sup> Owner's Representative  
Box 98  
Street  
Ravenswood  
City or Town  
West Virginia  
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

JAC-1390

PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

47-035

Signed by W. F. Wegener

**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: 4500' 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	200	200	100 sax
8 - 5/8			
7	2175	2175	75 sax
5 1/2			
4 1/2	4500	4500	125 sax
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