



- New Location
- Drill Deeper
- Abandonment

Minimum Error of Closure 1 IN 200  
 Source of Elevation USGS Elev. 623' Road Intersection South 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 VINTON HOSCHAR ET AL.  
 Tract \_\_\_\_\_ Acres 145.75 Lease No. \_\_\_\_\_  
 Well (Farm) No. DEK #12 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 618' 0  
 Quadrangle RAVENSWOOD SC Cottage  
 County JACKSON District UNION  
 Engineer N. L. Peyton  
 Engineer's Registration No. 1832  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date 3-28-76 Scale 1" = 500'

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

WELL LOCATION MAP  
 FILE NO. JAC-1380

+ 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 NOV 23 1976



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MAY - 3 1982

OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

REVISED

Oil and Gas Division

WELL RECORD

Quadrangle Ravenswood  
Permit No. JAC 1380 - Rev 1

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

Company Kaiser Exploration & Mining Co.  
Address Box 98, Ravenswood, WV  
Farm Vinton Hoschar Acres 145  
Location (waters) Left Fk. of Cow Run  
Well No. DEK #12 Elev. 618  
District Union County Jackson  
The surface of tract is owned in fee by Vinton Hoschar, et al  
Address Rt 2, Box 163, Cottageville, WV  
Mineral rights are owned by Same as above  
Address \_\_\_\_\_  
Drilling Commenced November 11, 1976  
Drilling Completed November 19, 1976  
Initial open flow Show cu. ft. -0- bbls.  
Final production 456 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	205	205	100 Sax
8 5/8			
7	2269	2269	75 Sax
5 1/2			
4 1/2	4502	4502	110 Sax
3			
2			
Liners Used		4418	

Well treatment details:

Attach copy of cementing record.

Perforated 4 1/2" casing at 4398 to 4400 with 16 shots. Fractured with 903 bbls water and 52,000# sand. O.F. - 456 MCF/Day S.I.P. = 1860 psi. Set RBP @ 3830.

Perforated 4 3/4" casing 3491 to 3768 with 16 shots.

Fractured with 1,500 bbls water and 87,000# sand at an average of 1200 psig (Air: 40BPM). Shut in pressure 1200 psi, testing not complete

Pulled RBP and set Baker Packer Oriskany (tubing) pressure = 1100 psig; Shale (csg.) press. = 1075 psi

Coal was encountered at \_\_\_\_\_ Feet \_\_\_\_\_ Inches

Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet

Producing Sand Oriskany Sand, Devonian Shale Depth 4398 - 4400, 3491-3768

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Red Shales & Sand			0	149		
Sand			149	156		
Shales			156	213		
Red Rock			213	243		
Sand			248	272		
Red Rock			272	315		
Sand			315	322		
Red Rock			322	371		
Shale			371	414		
Sand			414	417		
Red Rock			417	525		
Shale			525	580		
Red Rock			580	605		
Sand			605	616		
Shale			616	703		
Red Rock			703	717		
Shale			717	778		
Sand			778	782		
Shale			782	796		
Red Rock			796	825		
Shale			825	903		
Salt Sand			903	990		
Shale			990	1170		
Sand			1170	1172		

(over)

Use Electric Log logs in the remarks section.

MAY 10 1982

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Shale			1172	1304		
and			1304	1311		
Shale			1311	1360		
and			1360	1364		
Shale			1364	1439		
and			1439	1461		
Shale			1461	1486		
and			1486	1543		
Shale			1543	1500		
Shale			1500	1670		
Big Lime			1670	1697		
Shale			1697	1842		
Injun Sand			1842	2167		
Shale			2167	2180		
Coffee Shale			2180	2194		
Berea			2194	3334		
Shale			3334	3775		
Brown Shale			3775	4138		
Shale			4138	4301		
Marcellus Shale			4301	4384		
Corniferous			4384	4402		
Oriskany Sand			4402	4524		
Helderberg L.S.			4524			
Top of Silurian						

Date April 29. 19 82

APPROVED Frank A. Payne Owner

By General Manager

(Title)



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
Oil and Gas Division

**RECEIVED**  
OCT 12 1977  
OIL & GAS DIVISION  
DEPT. OF MINES

**WELL RECORD**

Quadrangle Ravenswood  
Permit No. JAC 1380

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

Company Kaiser Exploration & Mining Co.  
Address Box 98, Ravenswood, WV  
Farm Vinton Hoschar Acres 145  
Location (waters) Left Fk. of Cow Run  
Well No. DEK #12 Elev. 618  
District Union County Jackson  
The surface of tract is owned in fee by \_\_\_\_\_  
Vinton Hoschar, et al  
Address Rt. 2, Box 163, Cottageville, WV  
Mineral rights are owned by Same as above  
Address \_\_\_\_\_  
Drilling Commenced November 11, 1976  
Drilling Completed November 19, 1976  
Initial open flow Show cu. ft. -0- bbls.  
Final production \_\_\_\_\_ 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	205	205	100 Sax
8 5/8			
7	2269	2269	75 Sax
5 1/2			
4 1/2	4502	4502	110 Sax
3			
2			
Liners Used		4418	

Well treatment details:

Attach copy of cementing record.

Perforated 4½" casing at 4398 to 4400 with 16 shots. Fractured with 903 bbls water and 52,000# sand. O.F. - 456 MCF/Day S.I.P. = 1860 psi.  
Perforated 4½" casing 3491 to 3768 with 16 shots. Fractured with 1,500 bbls water and 87,000# sand. Shut in pressure - 1200 psi, testing not complete

Coal was encountered at \_\_\_\_\_ Feet \_\_\_\_\_ Inches  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Oriskany Sand Depth 4398 - 4400

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Red Shales & Sand			0	149		
Sand			149	156		
Shales			156	213		
Red Rock			213	248		
Sand			248	272		
Red Rock			272	315		
Sand			315	322		
Red Rock			322	371		
Shale			371	414		
Sand			414	417		
Red Rock			417	525		
Shale			525	580		
Red Rock			580	605		
Sand			605	616		
Shale			616	703		
Red Rock			703	717		
Shale			717	778		
Sand			778	782		
Shale			782	796		
Red Rock			796	825		
Shale			825	903		
Salt Sand			903	990		
Shale			990	1170		
Sand			1170	1172		

(over)

\* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Shale			1172	1304		
Sand			1304	1311		
Shale			1311	1360		
Sand			1360	1364		
Shale			1364	1439		
Sand			1439	1461		
Shale			1461	1486		
Maxon			1486	1543		
Shale			1543	1500		
Big Lime			1500	1670		
Shale			1670	1697		
Injun Sand			1697	1842		
Shale			1842	2167		
Coffee Shale			2167	2180		
Berea			2180	2194		
Shale			2194	3334		
Brown Shale			3334	3775		
Shale			3775	4138		
Marcellus Shale			4138	4301		
Corniferous			4301	4384		
Oriskany Sand			4384	4402		
Helderberg L.S.			4402	4524		
Top of Silurian			4524			

Date October 10, 19 77

APPROVED

*Earle A. Payne*

Owner

By Staff Petroleum Geologist

(Title)



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED  
NOV 9 1976  
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 NOVEMBER 8, 1976

Surface Owner Vinton Hoschar, et al  
Address Rt. 2, Box 163, Cottageville, WV

Company Kaiser Exploration & Mining Co.  
Address Box 98, Ravenswood, W. Va.

Mineral Owner Vinton Hoschar, et al & J. A. Fries  
Address Rt. 2, Box 163, Cottageville, W. Va.

Farm Vinton Hoschar, et al Acres 145.75

Coal Owner Same as above

Location (waters) Left Fork of Cow Run of Mill Creek

Address \_\_\_\_\_

Well No. DEK #12 Elevation 626

Coal Operator Not operated

District Union County Jackson

Address \_\_\_\_\_

Quadrangle Ravenswood 15', Cottageville 7½'

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 3-9-77

INSPECTOR  
TO BE NOTIFIED Richard Morris

ADDRESS 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 October 6 1976 by Vinton Hoschar, et al made to Devon Corp. & Eason Oil Co. and recorded on the \_\_\_\_\_ day of \_\_\_\_\_ 19\_\_\_\_, in Jackson County, Book \_\_\_\_\_ Page \_\_\_\_\_ (Being Recorded)

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, Kaiser Exploration & Mining Co.  
(Sign Name) Ronald H. Lovell

D. H. Lovell, Resident Engineer  
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.

JAC-1380 PERMIT NUMBER

47-035

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

Signed by Ronald H. Lovell

BLANKET BOARD

[Signature]

**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 Co. 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	2275	2275	75 Sax
5 1/2			
4 1/2	4500	4500	110 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