

New Location
 Drill Deeper
 Abandonment 4/20/90

Minimum Error of Closure 1 IN 200
 Source of Elevation U.S.G.S. ELEV 692' NORTH 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 Peak Energy, Inc.
 Address Box 8, Ravenswood, W.Va. 26164
 Farm E.T. SAYRE
 Tract _____ Acres 56 Lease No. 2987
 Well (Farm) No. DEK #20 Serial No. _____
 Elevation (Spirit Level) 769.0
 Quadrangle 15' RAVENSWOOD 7.5 COTTAGEVILLE
 County JACKSON District UNION
 Engineer N.L. Septon
 Engineer's Registration No. 1832
 File No. _____ Drawing No. _____
 Date 2-13-77 Scale 1" = 500'

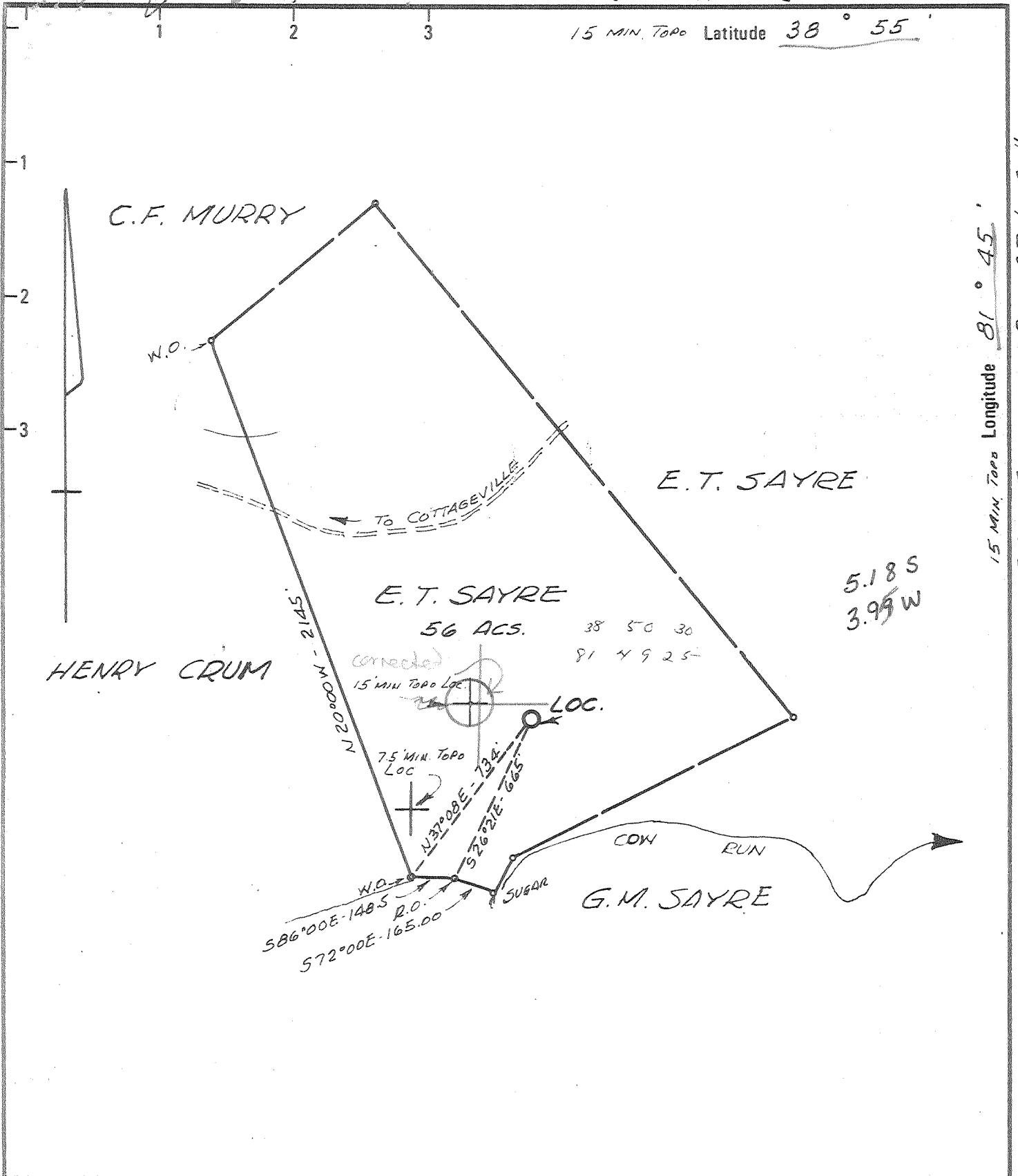
STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP
 FILE NO. JAC-1391 P

+ 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.

APR 20 1990
 47-035

4650' OHISKANY



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Source of Elevation U.S.G.S. Elev 692' NORTH WEST OF Well Loc.

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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."

Company KAISER EXPL. & MINING CO.
 Address BOX 98, RAVENSWOOD, W.VA.
 Farm E.T. JAYRE
 Tract _____ Acres 56 Lease No. 2987
 Well (Farm) No. DEK #20 Serial No. _____
 Elevation (Spirit Level) 769.0 EC
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 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON
 WELL LOCATION MAP
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47-035 FEB 22 1977



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD ⁸

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

Quadrangle Cottageville

Permit No. JAC-1391

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

Company Kaiser Exploration & Mining Co.
Address Box 98, Ravenswood, WV
Farm E.T. Sayre Acres 56
Location (waters) Cow Run of Mill Creek
Well No. DEK #20 Elev. 769
District Union County Jackson
The surface of tract is owned in fee by E.T. Sayre
Rt.1, Cottageville, WV
Address _____
Mineral rights are owned by Same as above
Address _____
Drilling Commenced 5/27/77
Drilling Completed 6/6/77
Initial open flow N/A cu. ft. _____ bbls.
Final production 300 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	216	216	110 Sax
8 5/8			
7	2367	2367	75 Sax 625'
5 1/2			
4 1/2	4567	4567	150 Sax=1481'
3			
2			
Liners Used			

Well treatment details: Attach copy of cementing record. Halliburton
Perforated 4 1/2" casing 4444 - 4446, 4487 - 4489 & 4500 - 4502.
Fractured with 954 bbls. water, 48,000# sand and 163 M Cu.Ft. of nitrogen
Perforated 4 1/2" casing 4339 to 4411 with 13 holes

Coal was encountered at None Feet _____ Inches _____
Fresh water _____ Feet _____ Salt Water Hole Dam Feet 3810-50
Producing Sand Oriskany & Marcellus Depth 4444 - 4502

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Shale			0	90		
Sand			90	141		
Red Shales			141	226		
Sand			226	241		
Red Rock			241	258		
Shale			258	333		
Sand			333	337		
Red Rock			337	414		
Sand			414	428		
Red Rock			428	547		
Sand			547	553		
Shale			553	567		
Sand			567	572		
Red Rock			572	694		
Shale			694	740		
Red Rock			740	828		
Sand			828	836		
Shale			836	915		
Sand			915	953		
Red Rock			953	970		
Shale			970	1067		
Salt Sand			1067	1173		
Shale			1173	1247		
Sand			1247	1267		

(over)

* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Shale			1267	1328		
Sand			1328	1330		
Shale			1330	1350		
Sand			1350	1357		
Shale			1357	1400		
Sand			1400	1406		
Shale			1406	1437		
Sand			1437	1440		
Shale			1440	1626		
Maxon			1626	1703		
Big Lime			1703	1803		
Shale			1803	1836		
Injun Sand			1836	1981		
Shale			1981	2276		
Coffee Shale			2276	2292		
Berea Sand			2292	2304		
Shale			2304	3450		
Brown Shale			3450	3890		
Shale			3890	4287		
Marcellus Shale			4287	4414		
Onondaga L.S.			4414	4490		
Oriskany Sand			4490	4508		
Helderberg L.S.			4508	TD		
Log Total Depth				4681		

Date November 2, 19 77

APPROVED: Zelma Puzic Owner

By Staff Petroleum Geologist

(Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD 22

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

Quadrangle Cottageville

Permit No. JAC-1391

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

Company Kaiser Exploration & Mining Co.
Address Box 98, Ravenswood, WV
Farm E.T. Sayre Acres 56
Location (waters) Cow Run of Mill Creek
Well No. DEK #20 Elev. 769
District Union County Jackson
The surface of tract is owned in fee by E.T. Sayre
Rt.1, Cottageville, WV
Address _____
Mineral rights are owned by Same as above
Address _____
Drilling Commenced 5/27/77
Drilling Completed 6/6/77
Initial open flow N/A cu. ft. _____ 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	216	216	110 Sax
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Fractured with 954 bbls. water, 48,000# sand and 163 M Cu.Ft. of nitrogen
Perforated 4 1/2" casing 4339 to 4411 with 13 holes
Testing not complete 300 MCF

Coal was encountered at None Feet _____ Inches _____
Fresh water _____ Feet _____ Salt Water Hole Damp Feet 3810-50
Producing Sand Oriskany & Marcellus Depth 4444 - 4502
4444-89 4339-4411

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
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Sand			333	337		
Red Rock			337	414		
Sand			414	428		
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Sand			547	553		
Shale			553	567		
Sand			567	572		
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Shale			694	740		
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Shale			3890	4287		
Marcellus Shale			4287	4414		
Onondaga L.S.			4414	4490		
Oriskany Sand			4490	4508		
<u>Helderberg</u> L.S.			4508	TD		
Log Total Depth				4681		

Date November 2, 19 77

APPROVED

Zola A. Payne

Owner

By Staff Petroleum Geologist

(Title)



RECEIVED

FEB 14 1977

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

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 14, 1977

Surface Owner E. T. Sayre

Company Kaiser Exploration & Mining Co.

Address Rt. 1, Cottageville, W. Va.

Address Box 98, Ravenswood, W. Va.

Mineral Owner Same as above

Farm E. T. Sayre Acres 56

Address _____

Location (waters) Cow Run of Mill Creek

Coal Owner Same as above

Well No. DEK #20 Elevation 769

Address _____

District Union County Jackson

Coal Operator Not operated

Quadrangle Ravenswood 15', Cottageville 7 1/2'

Address _____

THIS PERMIT MUST BE POSTED AT THE WELL SITE

If 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 6-14-77.

INSPECTOR
TO BE NOTIFIED Richard Morris

ADDRESS Grantsville, W. Va.

PHONE 354-7259

Robert L. [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 November 27 1976 by E. T. Sayre et ux made to Devon Corporation & Eason and recorded on the 2nd day of December 1976 in Jackson County, Book 142 911 Co. Page 353

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.

Very truly yours, Kaiser Exploration & Mining Co.

(Sign Name) [Signature]
W. F. Wegener, Well Operator's Representative
Box 98

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

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

"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."

Signed by [Signature]
W. F. Wegener, Owner's Representative

Jac-1391 PERMIT NUMBER
47-035
[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 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: 4650' 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	2375	2375	75 Sax
5 1/2			
4 1/2	4650	4650	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