



New Location
 Drill Deeper
 Abandonment

Minimum Error of Closure 1 IN 200
 Source of Elevation U.S.G.S. BM. ELEV. 579' OLD RT. 33. LOGLICK R. RUN
 "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, WV
 Farm CLARA P. BAKER ET AL.
 Tract _____ Acres 108 Lease No. 2429
 Well (Farm) No. DEK #48 Serial No. _____
 Elevation (Spirit Level) 666.0'
 Quadrangle 7.5 MIN. COTTAGEVILLE 15 MIN. RAVENSWOOD EC
 County JACKSON District UNION
 SURVEYOR James D. Sifton
 SURVEYOR Engineer's Registration No. 149
 File No. _____ Drawing No. _____
 Date 7-19-77 Scale 1" = 500'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON
WELL LOCATION MAP
 FILE NO. JAC-1410

+ 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

Deep well 6-6 North Ripley (342)



RECEIVED

MAR - 6 1978

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

WELL RECORD

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

Quadrangle Cottageville 7 1/2"

Permit No. JAC-1410
47-035

Company Kaiser Exploration & Mining Co.
Address Box 98, Ravenswood, WV
Farm Clara Baker Acres 108
Location (waters) Br. Loglick Run
Well No. DEK #48 Elev. 666
District Union County Jackson
The surface of tract is owned in fee by _____
Clara P. Baker Et al.
Address Evans, WV
Mineral rights are owned by Same as above
Address _____
Drilling Commenced 8/3/77
Drilling Completed 8/14/77
Initial open flow 133 M. cu. ft. --- bbls.
Final production 266 MCFD cu. ft. per day _____ bbls.
Well open _____ hrs. before test 1650 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	206	206	100 Sax
8 5/8			
7	2284	2284	75=625'
5 1/2			
4 1/2	4593	4593	150 Sax=1657'
3			
2		4540'	
Liners Used			

Well treatment details: Attach copy of cementing record. Halliburton
Perforated Oriskany section at 4510' - 4511' and 4520' - 4522' with 8 Omega Jet shots/foot.
Fractured Oriskany with 924 bbl water, 7000 lbs. 80/100 and 30,000 lbs. 20/40 sand, 135,000 scf nitrogen at 14.8 bbl/min.

Coal was encountered at None Feet _____ Inches _____
Fresh water _____ Feet _____ Salt Water _____ Feet _____
Producing Sand Oriskany Sand Depth 4510-4522

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Shale			0	54		
Sand			54	62		
Shale			62	234		
Sand			234	248		
Shale			248	322		
Sand			322	340		
Shale			340	422		
Red Rock			422	466		
Sand			466	484		
Red Rock			484	542		
Sand			542	548		
Red Rock			548	572		
Sand			572	577		
Red Rock			577	646		
Shale			646	737		
Red Rock			737	853		
Sand			853	870		
Shale			870	920		
Sand			920	926		
Shale			926	980		
Salt Sand			980	1067		
Shale			1067	1143		
Sand			1143	1168		
Shale			1168	1206		

(over)

* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet/±	Bottom Feet	Oil, Gas or Water	* Remarks
Sand			1206	1231		
Shale			1231	1252		
Sand			1252	1263		
Shale			1263	1273		
Sand			1273	1305		
Shale			1305	1400		
Sand			1400	1411		
Shale			1411	1426		
Sand			1426	1430		
Shale			1430	1463		
Sand			1463	1466		
Shale			1466	1501		
Sand			1501	1506		
Broken Sand			1506	1559		
Maxon			1559	1648		
Big Lime			1648	1720		
Shale			1720	1743		
Injun Sand			1743	1885		
Shale			1885	2203		
Coffee Shale			2203	2220		
Berea Sand			2220	2227		
Shale			2227	3386		
Brown Shale			3386	3854		
Shale			3854	4265		
Marcellus Shale			4265	4412		
Onondaga L.S.			4412	4491		
Oriskany Sand			4491	4523		
Helderberg L.S.			4523	TD		
Log Total Depth				4613		

Date March 2, 19 78

APPROVED *Robert A. Payne*, Owner

By Operations Manager

(Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division

RECEIVED

JUL 29 1977

OIL & GAS DIVISION
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

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

DATE July 27, 1977

Surface Owner Clara P. Baker, et al
Address Evans, West Virginia 25241
Mineral Owner Clara P. Baker, et al
Address Evans, West Virginia 25241
Coal Owner Same as above
Address _____
Coal Operator Not operated
Address _____

Company Kaiser Exploration & Mining Co.
Address Box 98, Ravenswood, WV
Farm Clara Baker Acres 108
Location (waters) Br. Locklick Run
Well No. DEK #48 Elevation 666
District Union County Jackson
Quadrangle Cottageville 7 1/2

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 12-1-77.

INSPECTOR
TO BE NOTIFIED Richard Morris
ADDRESS Grantsville, W. Va.
PHONE 354-7259

Robert A. Pryce
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 May 3 1971 by Clara P. Baker Widow made to Commonwealth Gas Corp. and recorded on the 7 day of May 1971 in Jackson County, Book 117 Page 411
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) x Robert A. Pryce
Well Operator Robert A. Pryce
PO 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-1410 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 Robert A. Pryce
Robert A. Pryce

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, WV ADDRESS Box 1433, Charleston, WV
 TELEPHONE 965-3379 TELEPHONE 342-3171
 ESTIMATED DEPTH OF COMPLETED WELL: 4600' 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=to surface
8 - 5/8			
7	2300'	650'	75 sax=625'
5 1/2			
4 1/2	4600'	4600'	150 sax= 1800'
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