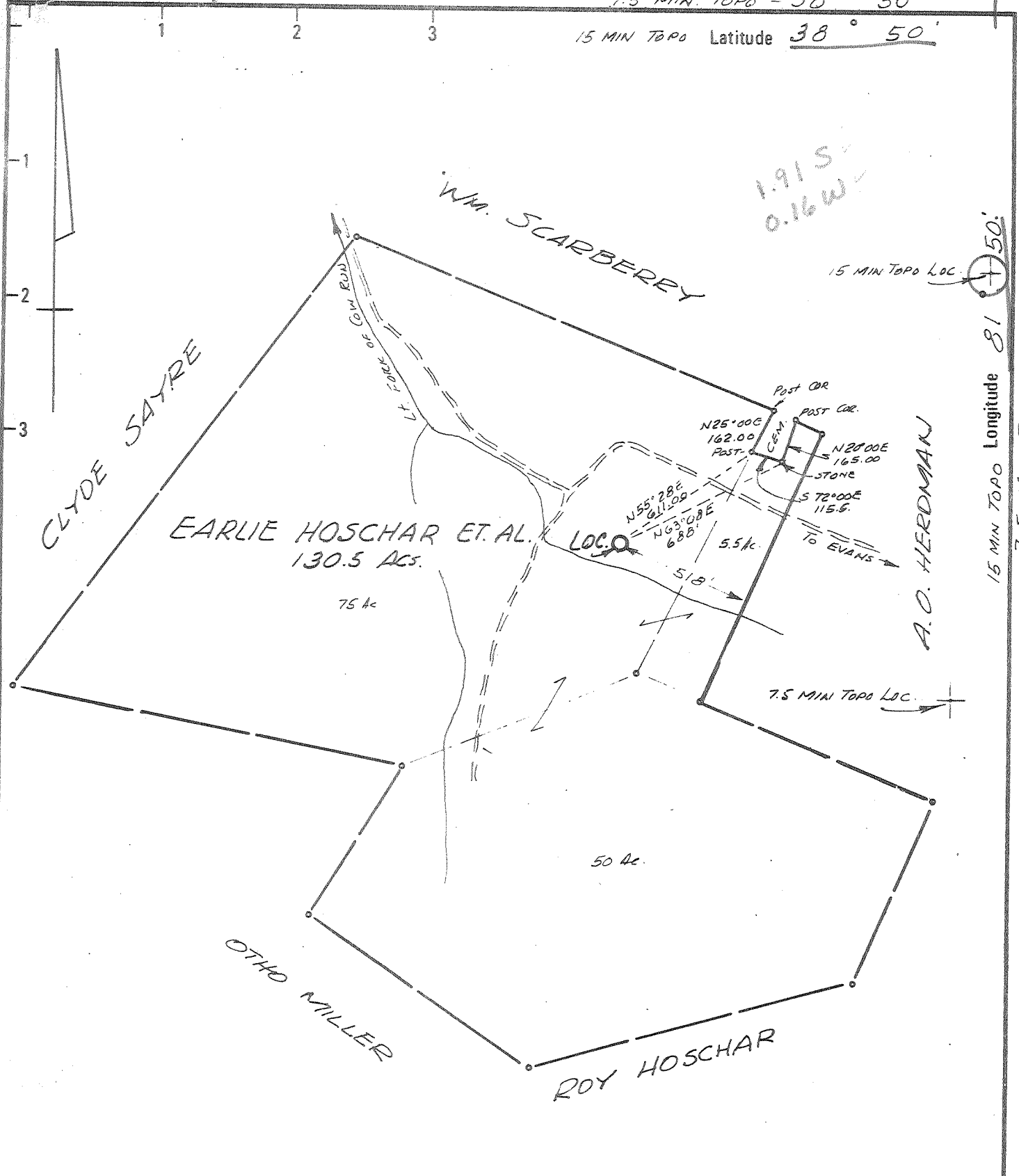


7.5 MIN. TOPO - 38° 50'
 15 MIN TOPO Latitude 38° 50'



1.91 S.
0.16 W.

15 MIN TOPO Longitude 81° 50'
 15 MIN TOPO Longitude 81° 50'
 7.5 MIN TOPO

- New Location
- Drill Deeper
- Abandonment

Minimum Error of Closure 1 IN 200
 Source of Elevation USGS Elev. 623' Road Intersection
N.W. 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, WVA
 Farm EARLIE HOSCHAR ET. AL.
 Tract _____ Acres 130.5 Lease No. 3257
 Well (Farm) No. DEK#24 Serial No. _____
 Elevation (Spirit Level) 624'.0
 Quadrangle 15 MIN. RAVENSWOOD SC
7.5 MIN. COTTAGEVILLE
 County JACKSON District UNION
 Engineer N. J. Sefton
 Engineer's Registration No. 1832
 File No. _____ Drawing No. _____
 Date 3-5-77 Scale 1" = 500'

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

WELL LOCATION MAP
 FILE NO. JAC-1393

+ 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 MAY 13 1977



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division

RECEIVED

MAR - 6 1978

OIL & GAS DIVISION
DEPT. OF MINES

WELL RECORD

Quadrangle Cottageville

Permit No. JAC 1393

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

Company Kaiser Exploration & Mining Co.
Address Box 98, Ravenswood, W. Va.
Farm Earlie Hoschar Acres 130 1/2
Location (waters) Left Fk of Cow Run
Well No. DEK #24 Elev. 624
District Union County Jackson
The surface of tract is owned in fee by _____
Earlie Hoschar et al
Address Rt. 1, Box 127 - Evans, W. Va.
Mineral rights are owned by Same as above
Address _____
Drilling Commenced 6/30/77
Drilling Completed 7/14/77
Initial open flow Show cu. ft. _____ bbls.
Final production 100 MCFD ~~cu. ft.~~ per day _____ bbls.
Well open _____ hrs. before test 1880 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 | 214 | 214 | 110 sax= to surf |
| 8 5/8 | | | |
| 7 | 2281 | 2281 | 75 sax=625' |
| 5 1/2 | | | |
| 4 1/2 | 4486 | 4486 | 150 sax=1800' |
| 3 | | | |
| 2 | | | |
| Liners Used | | | |

Well treatment details: Perforated 4 1/2" casing at 4420 -4422 with 16 shots Attach copy of cementing record. Halliburton

Fractured Oriskany with 772 Bbls water and 42,600# sand

Coal was encountered at _____ Feet _____ Inches
Fresh water _____ Feet _____ Salt Water _____ Feet _____
Producing Sand Oriskany Sand Depth 4420-4422

| Formation | Color | Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water | * Remarks |
|------------------|-------|--------------|----------|-------------|-------------------|-----------|
| Soil | | | 0 | 25 | | |
| Sandstone | | | 25 | 50 | | |
| Shale | | | 50 | 240 | | |
| Sandstone | | | 240 | 260 | | |
| Shale | | | 260 | 265 | | |
| Sandstone | | | 265 | 280 | | |
| Shale | | | 280 | 373 | | |
| Sandstone | | | 323 | 405 | | |
| Shale | | | 405 | 415 | | |
| Sandstone | | | 415 | 425 | | |
| Red Rock | | | 425 | 492 | | |
| Sandstone | | | 492 | 522 | | |
| Shale & Red Rock | | | 522 | 640 | | |
| Sandstone | | | 640 | 680 | | |
| Shale & Red Rock | | | 680 | 742 | | |
| Sandstone | | | 742 | 770 | | |
| Shale | | | 770 | 794 | | |
| Sandstone | | | 794 | 810 | | |
| Shale & Red Rock | | | 810 | 937 | | |
| Salt Sand | | | 937 | 1011 | | |
| Slate & Shells | | | 1011 | 1072 | | |
| Sandstone | | | 1072 | 1087 | | |
| Slate | | | 1087 | 1118 | | |

(over)

* Indicates Electric Log tops in the remarks section.

| Formation | Color | Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water | * Remarks |
|----------------------|-------|--------------|----------|-------------|-------------------|-----------|
| Sandstone | | | 1118 | 1125 | | |
| Slate | | | 1125 | 1193 | | |
| Sandstone | | | 1193 | 1208 | | |
| Slate & Shells | | | 1208 | 1270 | | |
| Sandstone | | | 1270 | 1300 | | |
| Slate | | | 1300 | 1375 | | |
| Salt Sand | | | 1375 | 1432 | | |
| Slate | | | 1432 | 1500 | | |
| Maxon Sand | | | 1500 | 1575 | | |
| Big Lime | | | 1570 | 1685 | | |
| Shale | | | 1685 | 1714 | | |
| Injun Sand | | | 1714 | 1816 | | |
| Shale | | | 1816 | 2178 | | |
| Coffee Shale | | | 2178 | 2194 | | |
| Berea Sand | | | 2194 | 2207 | | |
| Shale | | | 2207 | 3354 | | |
| Br. Shale | | | 3354 | 3794 | | |
| White Slate | | | 3794 | 4122 | | |
| Br. Shale | | | 4122 | 4188 | | |
| Marcellus Shale | | | 4188 | 4323 | | |
| Onondaga Limestone | | | 4323 | 4406 | | |
| Oriskany Sand | | | 4406 | 4426 | | |
| Helderberg Limestone | | | 4426 | 4512 | | |
| Log Total Depth | | | 4512 | | | |

Date March 2, 19 78

APPROVED Frank A. Poyner Owner

By Operations Manager

(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 March 21, 1977

Surface Owner Earlie Hoschar, et al

Company Kaiser Exploration & Mining Co.

Address Rt. 1, Box 127, Evans, WV

Address Box 98, Ravenswood, WV

Mineral Owner Same as Above

Farm Earlie Hoschar Acres 130 1/2 Ac

Address _____

Location (waters) Left Fk. of Cow Run of Mill Ck.

Coal Owner Same as Above

Well No. DEK #24 Elevation 624

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

All provisions being in accordance with Chapter 22,
of the W. Va. Code, this location is hereby approved

for drilling. This permit shall expire if
operations have not commenced by 8-5-77.

INSPECTOR Richard J. Morris
TO BE NOTIFIED _____

ADDRESS Box 372, Grantsville, W.Va.

PHONE 354-7259

Robert H. Jones
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 10 1969 by Earlie Hoschar, et ux made to Commonwealth Gas Corp. and recorded on the 17th day of June 1969 in Jackson County, Book 109 Page 393

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) W. F. Wegener
Well Operator, 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-1393

PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 3, Section 12-b and will carry out the specified requirements."

47-035

Signed by W. F. Wegener
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 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: 4525 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 Sacks = To Surface |
| 8 - 5/8 | | | |
| 7 | 2275' | 650 | 75 Sacks = 625' |
| 5 1/2 | | | |
| 4 1/2 | 4525' | 4525 | 125 Sacks = 1500' |
| 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