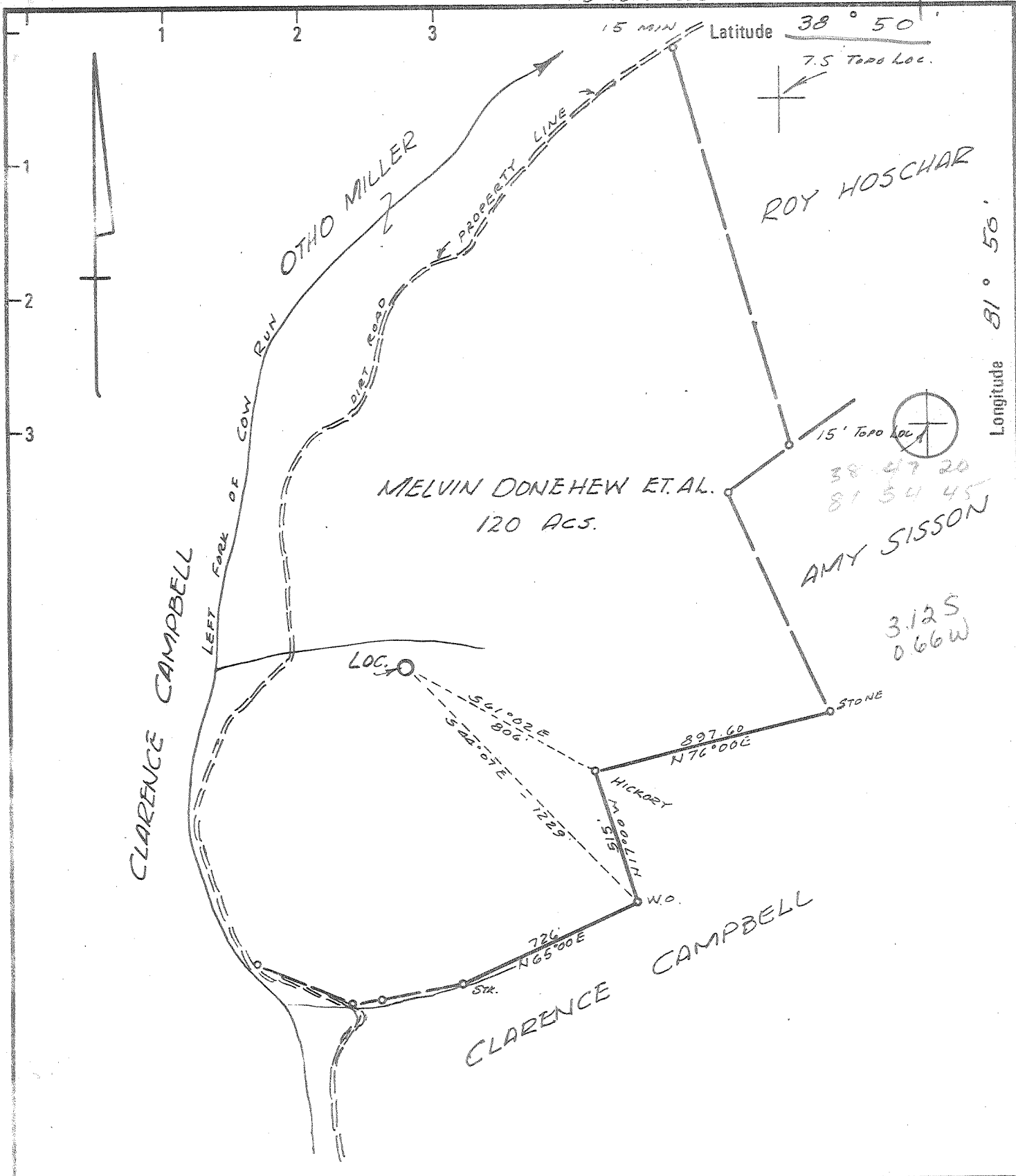


7.5 Topo Loc = 38° 47' - 30"



Longitude 81° 50'

81° 50'

- New Location
- Drill Deeper
- Abandonment

Minimum Error of Closure 1 IN 200
 Source of Elevation USGS EL. 897' Road Intersection South OF 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 MELVIN DONEHEW ET. AL.
 Tract _____ Acres 120 Lease No. 3253
 Well (Farm) No. DEK # 32 Serial No. _____
 Elevation (Spirit Level) 769' SC
 Quadrangle 7.5' COTTAGEVILLE
15' RAVENSWOOD (UNION)
 County MASON District COLOGNE
 Engineer N. L. Defton
 Engineer's Registration No. 1832

File No. _____ Drawing No. _____
 Date 3-19-77 Scale 1" = 500'

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

WELL LOCATION MAP
 FILE NO. MAS-143

+ 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.

47-053 JUN 21 1977



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STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

WELL RECORD

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

Quadrangle Cottageville

Permit No. MAS-143

Company <u>Kaiser Exploration & Mining Co.</u>	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Address <u>Box 98, Ravenswood, W. Va.</u>				
Farm <u>Melvin Donohew</u> Acres <u>120</u>	Size			
Location (waters) <u>Left fork of Cow Run</u>	20-16			
Well No. <u>DEK #32</u> Elev. <u>769</u>	Cond.			
District <u>Cologne</u> County <u>Mason</u>	13-10"			
The surface of tract is owned in fee by <u>Melvin Donohew, et al</u>	9 5/8	249	249	110 Sax to surface
Address <u>Rt. 1, Evans, W. Va. 25241</u>	8 5/8			
Mineral rights are owned by <u>Same</u>	7	2431	2431	75 Sax = 625'
Address _____	5 1/2			
Drilling Commenced <u>June 9, 1977</u>	4 1/2	4616	4616	150 Sax = 1800'
Drilling Completed <u>June 19, 1977</u>	3			
Initial open flow <u>100 MCFD</u> cu. ft. _____ bbls.	2			
Final production <u>263 MCFD</u> xxxxxx bbls.	Liners Used			
Well open _____ hrs. before test <u>1675</u> RP.				

Well treatment details: Attach copy of cementing record. Halliburton
Perforated 4 1/2" casing 4560 - 4566 - with 48 shots fractured with 1000 gal HCl, 7000# 80/100 sand, 49,000# 20/40 sand and 1300 bbl water. Break down pressure = 3500 PSI

Coal was encountered at _____ Feet _____ Inches
Fresh water _____ Feet _____ Salt Water _____ Feet _____
Producing Sand Oriskany Sand Depth 4560 - 66

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Red Shales			0	80		
Red Shales & Sand			80	218		
Sand			218	248		
Red Rock			248	275		
Shale			275	293		
Red Rock			293	329		
Sand			329	347		
Red Rock			347	375		
Sand			375	398		
Red Rock			398	534		
Sand			534	544		
Shale			544	613		
Sand			613	635		
Shale			635	680		
Red Rock			680	692		
Sand			692	701		
Red Rock			701	730		
Sand			730	747		
Red Rock			747	774		
Shale			774	812		
Sand			812	831		
Red Rock			831	849		
Sand			849	863		

(over)

* Indicates Electric Log tops in the remarks section.

FEB 10 1978

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Red Rock			863	889		
Shale			889	908		
Red Rock			908	962		
Shale			962	1032		
Salt Sand			1032	1105		
Shale			1105	1187		
Sand			1187	1215		
Shale			1215	1226		
Sand			1226	1270		
Shale			1270	1294		
Sand			1294	1322		
Shale			1322	1336		
Sand			1336	1372		
Shale			1372	1500		
Sand			1500	1507		
Shale			1507	1526		
Sand			1526	1551		
Shale			1551	1619		
Maxson Sand			1619	1731		
Big Lime			1731	1842		
Shale			1842	1860		
Injun Sand			1860	1990		
Shale			1990	2324		
Coffee Shale			2324	2338		
Berea			2338	2354		
Shale			2354	3498		
Brown Shale			3498	3933		
Shale			3933	4329		
Marcellus			4329	4464		
Corniferous			4464	4544		
Oriskany			4544	4568		
Lime - HELDERBERG			4568	4628		

TOPS FROM
KB = 777'

GRWG - el 777' KB

H 3500
J 3932
K 4067
Lh 4266
On 4464

Date February 3, 19 78

APPROVED KAISER EXPLORATION & MINING Owner

By K. A. P. [Signature]
(Title)
Operations Manager



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JUN 7 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 March 29, 1977

Surface Owner Melvin Donohew, et al
Address Rt. 1, Evans, WV 25241
Mineral Owner Melvin Donohew, et al
Address Rt. 1, Evans, WV 25241
Coal Owner Same as above
Address _____
Coal Operator Not Operated
Address _____

Company Kaiser Exploration & Mining Co
Address Box 98, Ravenswood, W. Va
Farm Melvin Donohew Acres 120
Location (waters) Left Fork of Cow Run
Well No. DEK #32 Elevation 769
District Cologne County Mason
Quadrangle Cottageville 7 1/2', Ravenswood 15'

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 10-8-77

INSPECTOR Kenneth Butcher
TO BE NOTIFIED _____
ADDRESS Barboursville, W. Va.
PHONE 736-4885

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 11 1969 by Mamie Donohew, et al made to Commonwealth Gas Corp. and recorded on the 17th day of June 1969, in Mason County, Book 32 Page 413
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, 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

MAS-143 PERMIT NUMBER
47-053

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 22-4-1 and will carry out the specified requirements."

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 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: 4675 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	250'	250'	100 Sax = To Surface
8 - 5/8			
7	2425'	650'	75 Sax = 625'
5 1/2			
4 1/2	4675'	4675'	125 Sax = 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