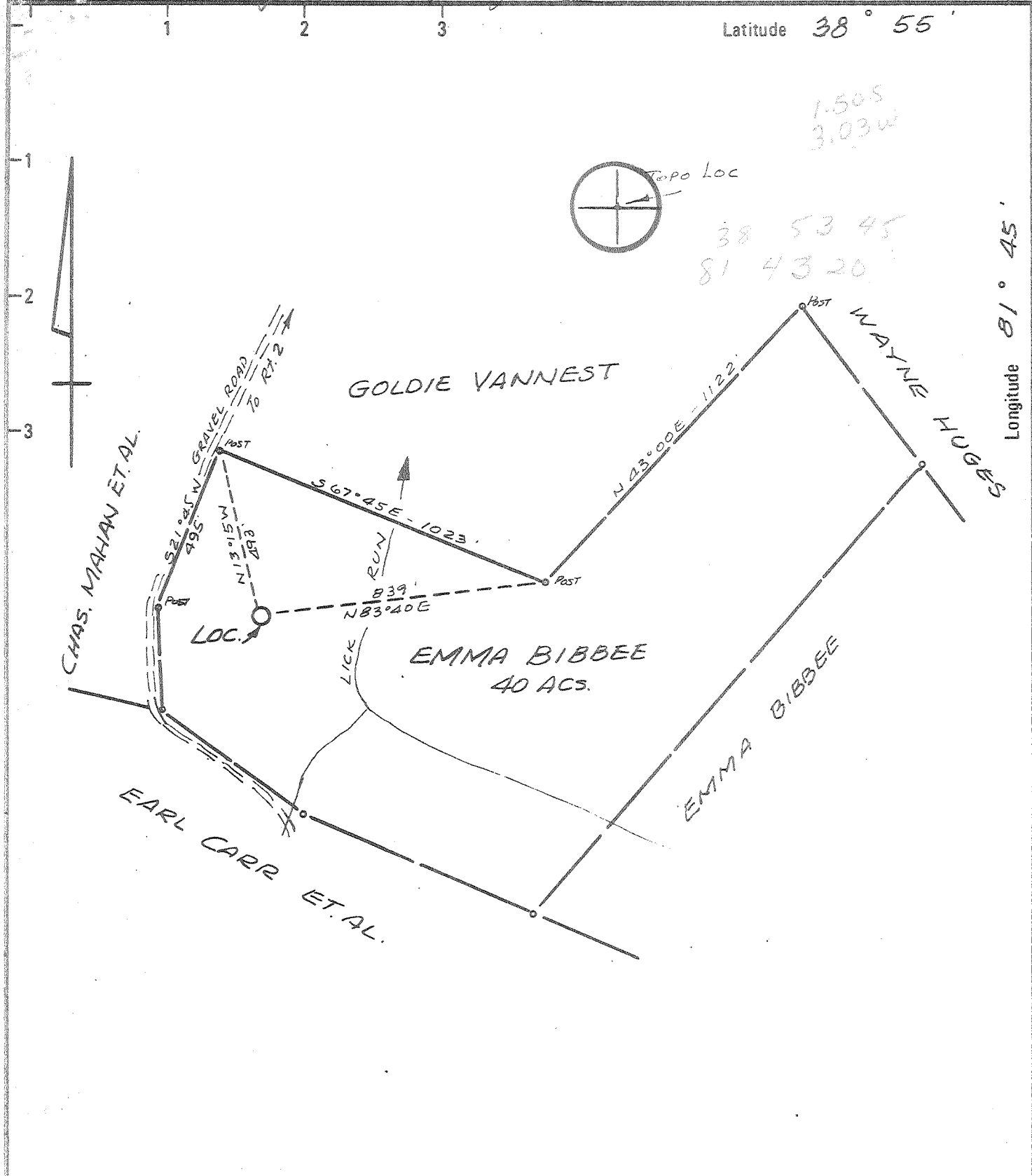


1.50S
3.03W

38 53 45
81 43 20

Longitude 81° 45'



- New Location
- Drill Deeper
- Abandonment

Minimum Error of Closure 1 IN 200.
 Source of Elevation U.S.G.S. E1. 605' ROAD INTERSECTION
 LICK 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 COMPANY
 Address P.O. Box 98 RAVENSWOOD, W.VA. 26169
 Farm EMMA BIBBEE
 Tract _____ Acres 40 Lease No. 2574
 Well (Farm) No. DEK #1 Serial No. _____
 Elevation (Spirit Level) 637.0
 Quadrangle RAVENSWOOD EC
 County JACKSON District UNION
 Engineer N.L. Sefton
 Engineer's Registration No. 1832
 File No. _____ Drawing No. _____
 Date 7-30-76 Scale 1" = 400'

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

WELL LOCATION MAP
 FILE NO. JAC-1374

+ 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



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division
WELL RECORD

RECEIVED
OCT 12 1977

OIL & GAS DIVISION
DEPT. OF MINES
Rotary Oil _____
Cable _____ Gas
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ (Kind)

Quadrangle Ravenswood
Permit No. JAC-1374

Company Kaiser Exploration & Mining Co.
Address Box 98, Ravenswood, WV
Farm Emma Bibbee Acres 40
Location (waters) Lick Run of Mill Creek
Well No. DEK #1 Elev. 637
District Union County Jackson
The surface of tract is owned in fee by _____
John W. Bibbee, et al
Address 378 Witcher Rd., Belle, WV
Mineral rights are owned by Same as above
Address _____
Drilling Commenced September 10, 1976
Drilling Completed September 28, 1976
Initial open flow Show cu. ft. -0- bbls.
Final production 86M cu. ft. per day -0- 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	232	232	100 Sax
8 5/8			
7	2129	2129	75 Sax
5 1/2			
4 1/2	3783	3783	100 Sax
3			
2		3674	
Liners Used			

Attach copy of cementing record.

Well treatment details:
Perforated 4 1/2" casing 3502 - 3534, 3570 - 3598, 3603 - 3628 and 3642 - 3668.
Fractured with 900 bbl water and 50,000# sand.
Open flow after frac; 86 MCFD Shut in pressure - 600 psi.
Note: 2115' of 4 1/2" casing dropped in hole - top of fish at 3871'. Set wireline bridge plug @ 3814' with 100' cement plug on top.

Coal was encountered at _____ Feet _____ Inches
Fresh water _____ Feet _____ Salt Water Hole wet at - Feet 5150
Producing Sand Brown Shale Depth _____

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Shale			0	78		
Sand			78	132		
Shale			132	164		
Sand			164	181		
Shale			181	306		
Red Rock			306	337		
Sand			337	378		
Red Rock			378	435		
Shale			435	477		
Sand			477	488		
Red Rock			488	563		
Sand			563	587		
Red Rock			587	645		
Shale			645	677		
Red Rock			677	764		
Sand			764	782		
Shale			782	795		
Sand			795	815		
Red Rock			815	837		
Shale			837	893		
Sand			893	922		
Shale			922	943		
Sand			943	972		
Shale			972	996		

(over)

* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand			996	1018		
Shale			1018	1044		
Sand			1044	1077		
Shale			1077	1115		
Sand			1115	1132		
Shale			1132	1175		
Sand			1175	1201		
Broken Sand			1201	1279		
Shale			1279	1521		
Maxon			1521	1538		
Big Lime			1538	1630		
Shale			1630	1711		
Injun Sand			1711	1775		
Shale			1775	2078		
Coffee Shale			2078	2092		
Berea Sand			2092	2095		
Shale			2095	3230		
Brown Shale			3230	3673		
Shales			3673	4077		
Marcellus Shale			4077	4208		
Onondaga L.S.			4208	4288		
Oriskany Sand			4288	4301		
Helderberg L.S.			4301	4406		
Top of Silurian			4406			
Newburg			4955	4958		
Rose Hill Shales			5257			
Packer Shell			5483	5498		
Clinton Iron Ore			5584	5587		
Clinton Sands & Shales			5617	5748		
Top of Ordovician Shales			5748			
Log Total Depth				5812		

5812
3673

2139 expl. ft

4985

Date October 10, 19 77

APPROVED Karl A. Payer, Owner

By Staff Petroleum Geologist
(Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

AUG 31 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 August 30, 1976
Company Kaiser Expl. & Mining Company
Address PO Box 98, Ravenswood, W. Va. 26164
Farm Emma Bibbee Acres 40 ac
Location (waters) Lick Run of Mill Creek
Well No. DEK#1 Elevation 637
District Union County Jackson
Quadrangle Ravenswood

Surface Owner John W. Bibbee, et al
Address 378 S. Witcher Road, Belle, WV
Mineral Owner Same as above
Address _____
Coal Owner Same as above
Address _____
Coal Operator Not operated
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 12-31-76.

Robert H. Morris
Deputy Director - Oil & Gas Division

INSPECTOR TO BE NOTIFIED Richard J. Morris
PH: 354-7259 ADDRESS Grantsville, W.Va.

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 January 16th 1975 by John W. Bibbee, et al made to Devon Corp. & Eason Oil Co and recorded on the 20th day of February 1975, in Jackson County, Book 130 Page 83
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 COMPANY

(Sign Name) Donald H. Lovett
D. H. Lovett, Resident Engineer
P. O. Box 98
Street
Ravenswood,
City or Town
West Virginia 26164
State

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY TO:

West Virginia Geological and Economic Survey
P. O. Box 879
Morgantown, W. Va. 26505

Address
of
Well Operator

*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-1374

PERMIT NUMBER

47-035

BLANKET BAND

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 PO Box 448, Elkview, W. Va. ADDRESS PO Box 1433, Charleston, WV 25325
 TELEPHONE 965-3379 TELEPHONE 342-3171
 ESTIMATED DEPTH OF COMPLETED WELL: 5900 ROTARY XXX CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Clinton
 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	2150'	2150'	75 Sax
5 1/2			
4 1/2	5900'	5900'	195 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