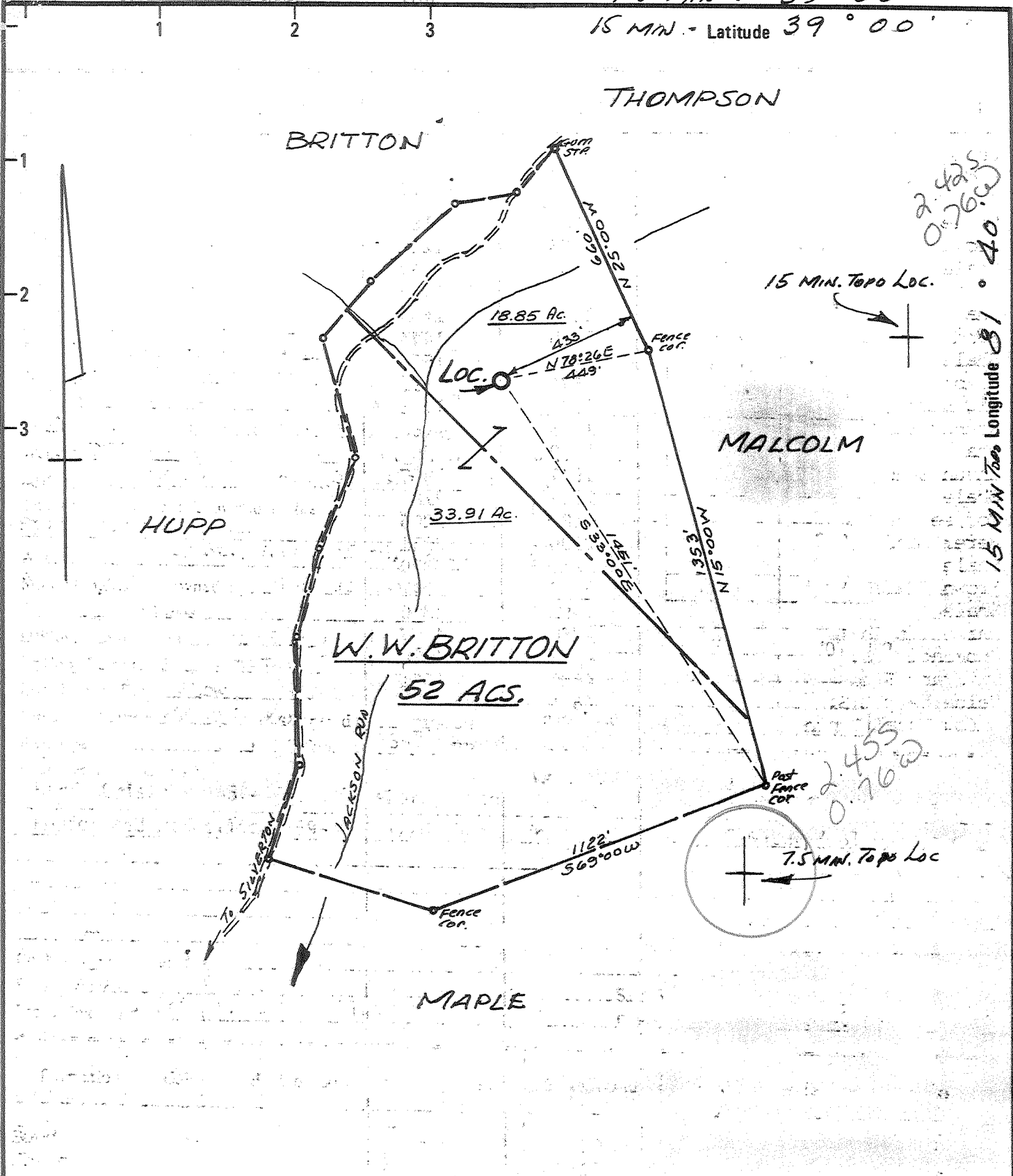


7.5 MIN. = 39° 00' 12/14/76
 15 MIN. = Latitude 39° 00'



2.425
0.760
15 MIN. TOPO Longitude 81° 40' 40"
7.5 MIN. TO = 81° 40'

New Location Drill Deeper Abandonment
 Minimum Error of Closure 1 IN. 200
 Source of Elevation USGS Elev. 691 Road Intersection
NORTHWEST 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. 465
 Address Box 98, RAVENSWOOD, WV
 Farm W. W. BRITTON ET. AL.
 Tract _____ Acres 52 Lease No. 3050
 Well (Farm) No. DEK # 11 Serial No. _____
 Elevation (Spirit Level) 706' 0
 Quadrangle RIPLEY 598 112 2 NW
 County JACKSON District RAVENSWOOD
 Engineer N. L. Lutton
 Engineer's Registration No. 1832
 File No. _____ Drawing No. _____
 Date 12-4-76 Scale 1" = 400

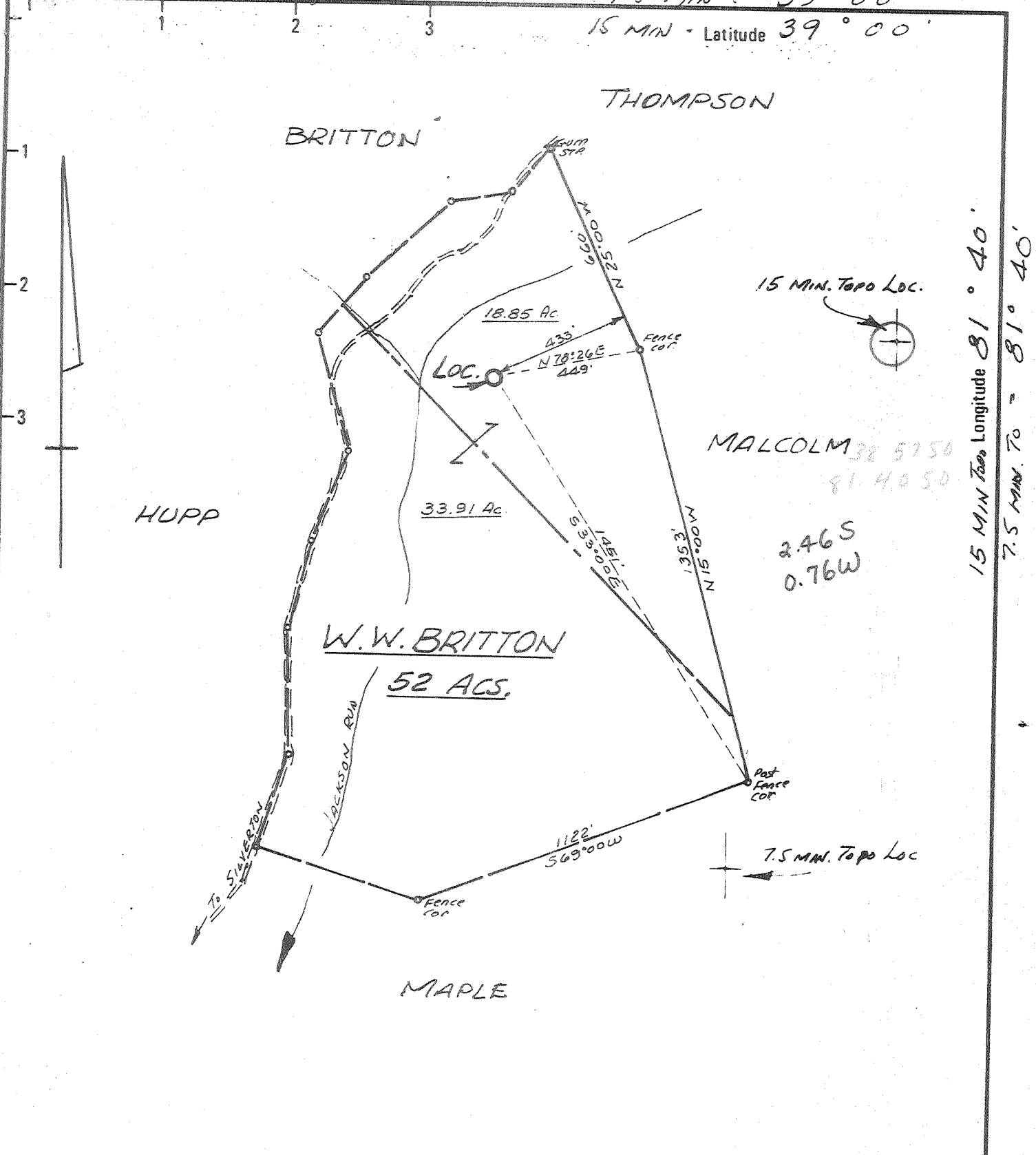
STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP
 FILE NO. JAC-1388-Frac.

+ 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 MAR 24 1985

4725 OWWO Crankney 66 Elk-Poca (Sissonville) (192)



15 MIN TOPO Longitude 81° 40'
 7.5 MIN TO = 81° 40'

New Location
 Drill Deeper
 Abandonment

Minimum Error of Closure 1 IN 200
 Source of Elevation USGS Elev. 691' Road Intersection
 NORTHWEST 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, WV
 Farm W. W. BRITTON ET AL.
 Tract _____ Acres 52 Lease No. 3050
 Well (Farm) No. DEK # 11 Serial No. _____
 Elevation (Spirit Level) 706.0
 Quadrangle RIPLEY NW
 County JACKSON District RAVENSWOOD
 Engineer N. L. Sutton
 Engineer's Registration No. 1832
 File No. _____ Drawing No. _____
 Date 12-4-76 Scale 1" = 400

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON
WELL LOCATION MAP
 FILE NO. JAC-1388

+ 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 *Correct to 5-5*

IV-35
(Rev 8-81)

RECEIVED
JUL 28 1986

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY



State of West Virginia
Department of Mines
Oil and Gas Division

Date July 24, 1986
Operator's _____
Well No. DEK #11
Farm W. W. Britton
API No. 47-035-1388-Frac

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil ___ / Gas X / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas," Production X / Underground Storage ___ / Deep ___ / Shallow X /)

LOCATION: Elevation: 706 Watershed Jackson Run of Straight Fork
District: Ravenswood County Jackson Quadrangle Ripley

COMPANY Kaiser Exploration and Mining Company

ADDRESS P. O. Box 8, Ravenswood, WV 26164

DESIGNATED AGENT R. A. Pryce

ADDRESS P. O. Box 8, Ravenswood, WV 26164

SURFACE OWNER Frank Britton, et ux

ADDRESS 17 Holly Street, New Bedford, MASS

MINERAL RIGHTS OWNER W. W. Britton

ADDRESS Same

OIL AND GAS INSPECTOR FOR THIS WORK Jerry

Tephabock ADDRESS Rt. 1, Box 101A, Ripley, WV

PERMIT ISSUED _____

DRILLING COMMENCED December 16, 1976 ^{Frac.}

DRILLING COMPLETED December 23, 1976 7/18/86

IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON _____

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"	See original OG-10		
9 5/8			
8 5/8			
7			
5 1/2			
4 1/2			
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Oriskany Depth 4659' feet

Depth of completed well 4728 feet Rotary X / Cable Tools _____

Water strata depth: Fresh N/A feet; Salt _____ feet

Coal seam depths: N/A Is coal being mined in the area? No

OPEN FLOW DATA

*Drilled on fluid, not known

Producing formation Brown Shale Pay zone depth 3743'-3907' feet

Gas: Initial open flow -- Mcf/d Oil: Initial open flow -- Bbl/d

Final open flow 293 Mcf/d Final open flow -- Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 1000 psig (surface measurement) after 72 hours shut in
(If applicable due to multiple completion--)

Second producing formation _____ Pay zone depth _____ feet

Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ Mcf/d Oil: Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ hours

Static rock pressure _____ psig (surface measurement) after _____ hours shut in

RECORDS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

- 7/10/86 Young Wireline perforated the Brown Shale from ^{Huron} 3743'-3907' with 19 shots. Set Baker retrievable bridge plug at 3980'.
- 7/11/86 NOWSCO 75% foam fractured the Brown Shale without sand at 2100 psig. Total nitrogen: 380,000 SCF; total fluid: 164 bbl; ISIP: 1240 psig; 5 min SIP: 1100 psig.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Same as previously submitted					

(Attach separate sheets as necessary)

KAISER EXPLORATION AND MINING COMPANY

Well Operator

By:

R. A. P. —

Date: July 24, 1986

Note: Regulation 2.02(i) provides as follows:
 "The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."



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

Quadrangle Ripley
Permit No. JAC 1388

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

Company Kaiser Exploration & Mining Co.
Address Box 98, Ravenswood, W.V.
Farm W.W. Britton Acres 52
Location (waters) Jackson Run of Straight Fork
Well No. DEK #11 Elev. 706
District Ravenswood County Jackson
The surface of tract is owned in fee by _____
Frank Britton, et ux
Address 17 Holly St., New Bedford, Mass.
Mineral rights are owned by Same as above
Address _____
Drilling Commenced December 16, 1976
Drilling Completed December 23, 1976
Initial open flow Show cu. ft. -0- bbls.
Final production 250 MCF/XXXX per day _____ bbls.
Well open _____ hrs. before test 1360 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	208	208	100 Sax
8 5/8			
7	1992	1992	75 Sax
5 1/2			
4 1/2	4701	4701	205 Sax
3			
2			
Liners Used			

Well treatment details: Attach copy of cementing record.
Perf. Oriskany 4657-4659 w/16 shots, frac with 490 BBLs water & 10,500# 20/40 sand.
Perforated Marcellus 4259-4534 w/26 shots, frac with 1070 BBLs water & 81,000# sand.

Coal was encountered at None Feet _____ Inches _____
Fresh water _____ Feet _____ Salt Water _____ Feet _____
Producing Sand Oriskany & Marcellus Depth 4657-4659 & 4259-4534

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand			0	10		
Shale			10	61		
Sand			61	85		
Shale			85	144		
Sand			144	152		
Shale			152	198		
Sand			198	268		
Shale			268	295		
Red Rock			295	341		
Sand			341	346		
Red Rock			346	385		
Shale			385	440		
Red Rock			440	461		
Sand			461	542		
Shale			542	581		
Red Rock			581	623		
Sand			623	649		
Red Rock			649	761		
Sand			761	780		
Shale			780	820		
Red Rock			820	840		
Shale			840	894		
Line			894	901		

(over)

* Indicates Electric Log tops in the remarks section.

AUG 4 1976

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Shale			901	954		
Red Rock			954	985		
Salt Sand			985	1009		
Shale			1009	1185		
Broken Sand			1185	1249		
Shale			1249	1267		
Sand			1267	1327		
Shale			1327	1415		
Sand			1415	1474		
Shale			1474	1576		
Maxon			1576	1692		
Big Lime			1692	1725		
Keener Sand			1725	1760		
Shale			1760	1847		
Injun Sand			1847	1857		
Shale			1857	2181		
Coffee Shale			2181	2206		
Berea Sand			2206	2211		
Shale			2211	3370		
Brown Shale ^H			3370	3911		
Shale ^{JR}			3911	4380		
Marcellus Shale ^{Rh}			4380	4537		
Onondaga L.S.			4537	4636		
Oriskany Sand			4636	4661		
Halderberg L.S.			4661			
Log Total Depth				4728		

Date February 14, 1978

APPROVED Robert A. Payne Owner

By Staff Petroleum Geologist
(Title)



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JUL 25 1977

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FEB 15 1978

OIL & GAS DIVISION
DEPT. OF MINES

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

WELL RECORD

Quadrangle Ripley
Permit No. JAC 1388 - W

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 W. W. Britton Acres 52
Location (waters) Jackson Run of Straight Fork
Well No. DEK #11 Elev. 706
District Ravenswood County Jackson
The surface of tract is owned in fee by _____
Frank Britton, et ux
Address 17 Holly Street, New Bedford, Mass.
Mineral rights are owned by Same as above
Address _____
Drilling Commenced December 16, 1976
Drilling Completed December 23, 1976
Initial open flow Show cu. ft. - 0 - bbls.
Final production 250 M cu. ft. per day _____ bbls.
Well open _____ hrs. before test 1360 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	208	208	100 sax
8 5/8			
7	1992	1992	75 sax
5 1/2			
4 1/2	4701	4701	205 sax
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

Logs show faulty cement job through Oriskany zone.

Squeeze with 50 sax at 4675' - no improvement.

Will treat upper zones. -- Perf. Oriskany 4657-4659 w/16 shots, frac with 490 bbls. water & 10,500# 20/40 sand. Perf. marcellus 4259-4534 2/26 shots, frac with 1070 bbls. water & 81,000 # sand.

Coal was encountered at None Feet _____ Inches _____
Fresh water _____ Feet _____ Salt Water _____ Feet _____
Producing Sand Oriskany & Marcellus Depth 4657-4659 & 4259-4534

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Base of Pennsylvanian				1692		
Big Lime			1692	1725		
Keener Sand			1725	1760		
Injun Sand			1847	1857		
Coffee Shale			2181	2206		
Berea Sand			2206	2211		
Brown Shale			3370	3911		
Marcellus Shale			4380	4537		
Onondaga L. S.			4537	4636		
Oriskany Sand			4636	4661		
Helderberg L. S.			4661	4728		
Log Total Depth			4728			

Approved: Date 20 July 1977

Robert A. Pryce
Robert A. Pryce
Kaiser Exploration & Mining

(over)

* Indicates Electric Log tops in the remarks section.



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OCT 12 1977

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

WELL RECORD

Quadrangle Ripley
Permit No. JAC 1388

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

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, WV</u>				
Farm <u>W.W. Britton</u> Acres <u>52</u>				
Location (waters) <u>Jackson Run of Straight Fork</u>	Size			
Well No. <u>DEK #11</u> Elev. <u>706</u>	<u>20-16</u>			
District <u>Ravenswood</u> County <u>Jackson</u>	Cond.			
The surface of tract is owned in fee by _____	<u>13-10"</u>			
<u>Frank Britton, et ux</u>	<u>9 5/8</u>	<u>208</u>	<u>208</u>	<u>100 Sax</u>
Address <u>17 Holly St., New Bedford, Mass.</u>	<u>8 5/8</u>			
Mineral rights are owned by <u>Same as above</u>	<u>7</u>	<u>1992</u>	<u>1992</u>	<u>75 Sax</u>
Address _____	<u>5 1/2</u>			
Drilling Commenced <u>December 16, 1976</u>	<u>4 1/2</u>	<u>4701</u>	<u>4701</u>	<u>205 Sax</u>
Drilling Completed <u>December 23, 1976</u>	<u>3</u>			
Initial open flow <u>Show</u> cu. ft. <u>-0-</u> bbls.	<u>2</u>			
Final production _____ cu. ft. per day _____ bbls.	Liners Used			
Well open _____ hrs. before test _____ RP.				

Well treatment details: Attach copy of cementing record.
Logs show faulty cement job through Oriskany zone.
Squeeze with 50 sax at 4675' - no improvement.
Will treat upper zones.

Coal was encountered at None Feet _____ Inches _____
Fresh water _____ Feet _____ Salt Water _____ Feet _____
Producing Sand _____ Depth _____

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand			0	10		
Shale			10	61		
Sand			61	85		
Shale			85	144		
Sand			144	152		
Shale			152	198		
Sand			198	268		
Shale			268	295		
Red Rock			295	341		
Sand			341	346		
Red Rock			346	385		
Shale			385	440		
Red Rock			440	461		
Sand			461	542		
Shale			542	581		
Red Rock			581	623		
Sand			623	649		
Red Rock			649	761		
Sand			761	780		
Shale			780	820		
Red Rock			820	840		
Shale			840	894		
Lime			894	901		

(over)

* Indicates Electric Log tops in the remarks section.

OCT 21 1977

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Shale			901	954		
Red Rock			954	985		
Salt Sand			985	1009		
Shale			1009	1185		
Broken Sand			1185	1249		
Shale			1249	1267		
Sand			1267	1327		
Shale			1327	1415		
Sand			1415	1474		
Shale			1474	1576		
Maxon			1576	1692		
Big Lime			1692	1725		
Keener Sand			1725	1760		
Shale			1760	1847		
Injun Sand			1847	1857		
Shale			1857	2181		
Coffee Shale			2181	2206		
Berea Sand			2206	2211		
Shale			2211	3370		
Brown Shale			3370	3911		
Shale			3911	4380		
Marcellus Shale			4380	4537		
Onondaga L.S.			4537	4636		
Oriskany Sand			4636	4661		
Helderberg L.S.			4661			
Log Total Depth				4728		

Date October 10, 19 77

APPROVED Robert A. Payne, Owner

By Staff Petroleum Geologist
(Title)

RECEIVED
MAR - 3 1986



1) Date: February 11, 1986
 2) Operator's Well No. DEK #11, Britton
 3) API Well No. 47 035 1388-F
 State County Permit

DIVISION OF OIL & GAS STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY, OIL AND GAS DIVISION
 DEPARTMENT OF ENERGY
 APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil / Gas
 B (If "Gas", Production / Underground storage / Deep / Shallow)
- 5) LOCATION: Elevation: 706 Watershed: Jackson Run of Straight Fork
 District: Ravenswood County: Jackson Quadrangle: Ripley SANDYVILLE
- 6) WELL OPERATOR: Kaiser Exploration and Mining Company CODE: 2533-0
 Address: P. O. Box 8 Ravenswood, WV 26164
- 7) DESIGNATED AGENT: R. A. Pryce
 Address: Same
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED: Name Jerry Tephabock
 Address: Rt. 1, Box 101A Ripley, WV 25271
- 9) DRILLING CONTRACTOR: Name Kaiser Company Tools
 Address: Same
- 10) PROPOSED WELL WORK: Drill / Drill deeper / Redrill / Stimulate
 Plug off old formation / Perforate new formation
 Other physical change in well (specify): Squeeze 4 1/2" casing over Berea; perforate, stimulate Berea and Brown Shale; commingle Berea, Shale, Oris.
- 11) GEOLOGICAL TARGET FORMATION, stimulate Berea and Brown Shale; commingle Berea, Shale, Oris.
- 12) Estimated depth of completed well, 4701' (KB) feet
- 13) Approximate strata depths: Fresh, N/A feet; salt, N/A feet.
- 14) Approximate coal seam depths: None Is coal being mined in the area? Yes / No

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS	
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		Kinds	Sizes
Conductor										None
Fresh water	9 5/8	N/A	N/A	N/A		208' (KB)	208' (KB)	100 sk		
Coal										
Intermediate	7"	K-55	20	X		1992' (KB)	1992' (KB)	75 sks		
Production	4 1/2	K-55	10.5	X			4701' (KB)	205 SKS		Depths set
Tubing	2 3/8	J-55	4.6	X			4539 (KB)			
Lin...										Perforations:
									Top	Bottom
									4675	4659 (KB)
									4259	4534 (KB)

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-035-1388-Frac Date March 20, 1986

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires March 20, 1988 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <input checked="" type="checkbox"/>	Agent: <u>KB</u>	Plat: <u>MS</u>	Casing: <u>MS</u>	Fee: <u>969383</u>	WPCP: <u>MS</u>	S&E: <u>MS</u>	Other: <u>MS</u>
---	------------------	-----------------	-------------------	--------------------	-----------------	----------------	------------------

NOTE: Keep one copy of this permit posted at the drilling location.

[Signature]
 Director, Division of Oil and Gas

File

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED
DEC 15 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.

Surface Owner	Frank Britton, et ux	DATE	December 10, 1976
Address	17 Holly Street, New Bedford, Mass.	Company	Kaiser Exploration & Mining Co.
Mineral Owner	Same as above	Address	Box 98, Ravenswood, WV
Address		Farm	W. W. Britton
Coal Owner	Same as above	Acres	52 Ac
Address		Location (waters)	Jackson Run of Straight Fork
Coal Operator	Not operated	Well No.	DEK #11
Address		Elevation	706 GR
		District	Ravenswood
		County	Jackson
		Quadrangle	Ripley 15' Sandyville 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 4-15-77.

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

Robert H. Road
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 April 21 1967 by W. M. Britton, et ux made to Commonwealth Gas Corp. and recorded on the 6th day of June 1967 in Jackson County, Book 105 Page 267
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 COMPANY
(Sign Name) *Harold H Howell*
D. H. Love, Resident Engineer
Box 98
Ravenswood
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-1388

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."

Signed by *Harold H Howell*

47-035

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 Company 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: 4725 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	2000	2000	75 Sax
5 1/2			
4 1/2	4725	4725	150 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