

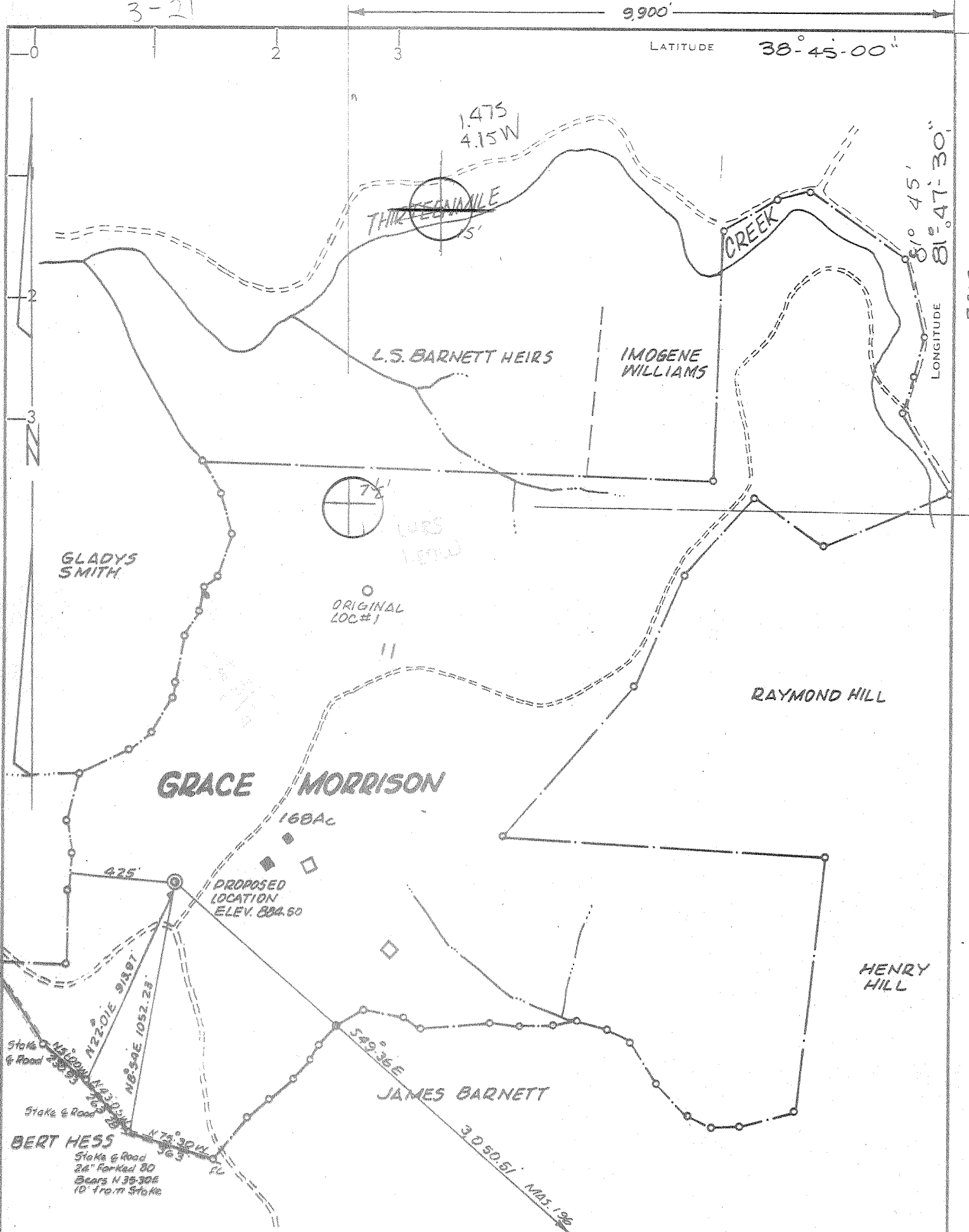
3-21

9,900'

LATITUDE 38° 45' 00"

LONGITUDE 81° 47' 30"

7,800'



- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

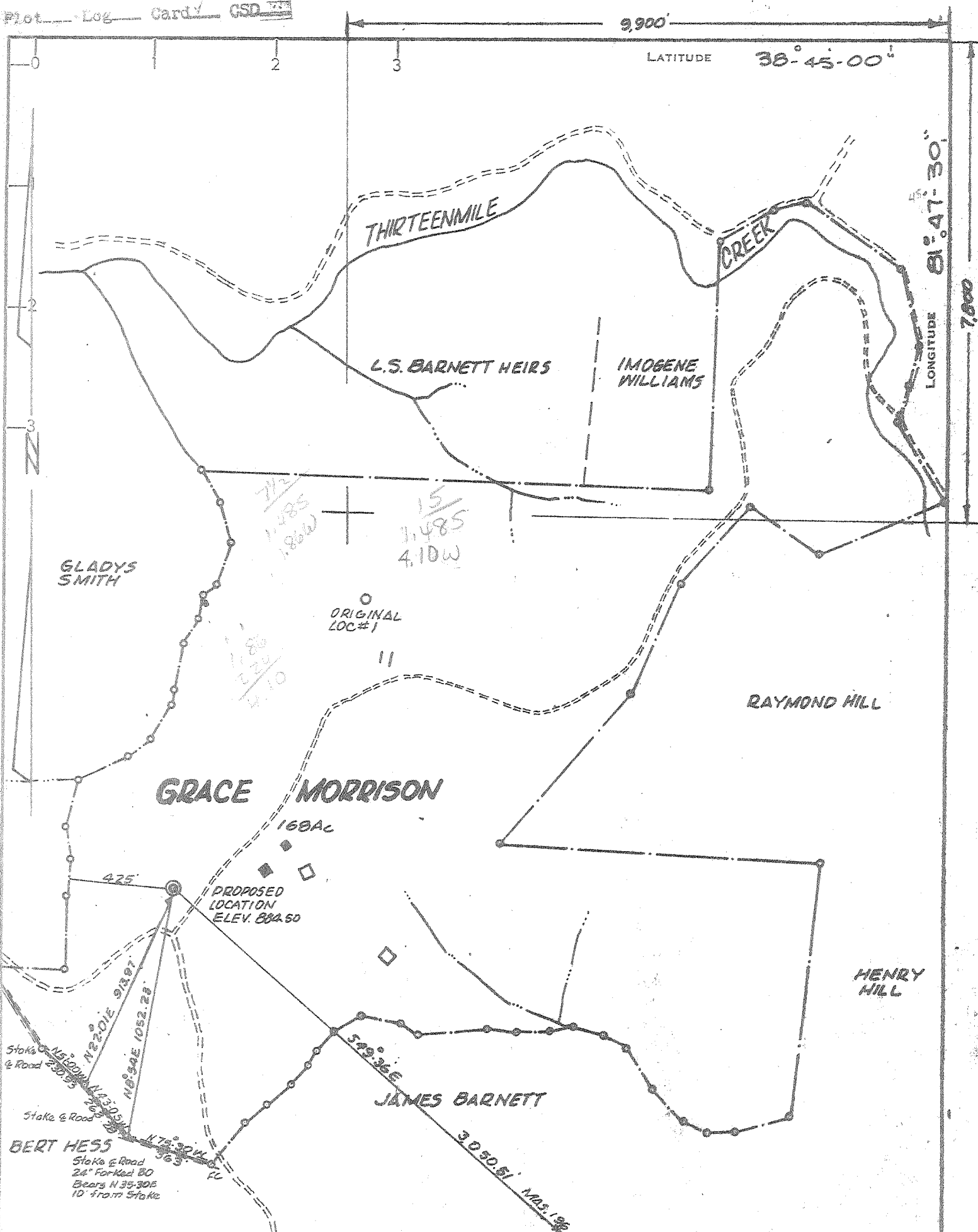
CERTIFICATE
 "I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia."

Minimum degree of accuracy is one part in 200
 Signed *Frank H Barker* LLS#289

COMPANY: KAISER EXPLORATION & MINING COMPANY
 ADDRESS: P.O. BOX 8, RAVENSWOOD, WEST VIRGINIA
 FARM: GRACE MORRISON
 MAP: _____ ACRES: 168 LEASE NO.: _____
 WELL (FARM NO.): 1 REV. SERIAL NO.: KEM 7 REV.
 ELEVATION (SPIRIT LEVEL): 884.50
 QUADRANGLE: ELMWOOD WINFIELD NE
 COUNTY: MASON DISTRICT: UNION
 POINT OF PROVEN ELEVATION: ROAD INTERSECTION ELEV. 951
 FILE NO.: _____ DRAWING NO.: _____
 DATE: NOV. 19, 1979 SCALE: 1" = 500 FT.

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES 6-6
 OIL AND GAS DIVISION Rock Castle
 CHARLESTON (346)
 WELL LOCATION MAP
 FILE NO. 053-0238
 *FORMERLY 053-0204 ←
 + 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
 OCT 10 1980
 - DENOTES ONE INCH SPACES ON BORDER LINE OF ORIGINAL TRACING

→ DEEP WELL ←



- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

CERTIFICATE

"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."

Minimum degree of accuracy is one part in 200

Signed Frank H. Barber LLS # 289

COMPANY KAISER EXPLORATION & MINING COMPANY

ADDRESS P.O. BOX 8, RAVENSWOOD, WEST VIRGINIA

FARM GRACE MORRISON

MAP _____ ACRES 168 LEASE NO. _____

WELL (FARM) NO. 1 REV. SERIAL NO. KEM 7 REV.

ELEVATION (SPIRIT LEVEL) 884.50 NE

QUADRANGLE ELMWOOD

COUNTY MASON DISTRICT UNION

POINT OF PROVEN ELEVATION ROAD INTERSECTION ELEV. 951

FILE NO. _____ DRAWING NO. _____

DATE NOV. 19, 1979 SCALE 1" = 500 FT.

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

OIL AND GAS DIVISION
CHARLESTON

WELL LOCATION MAP

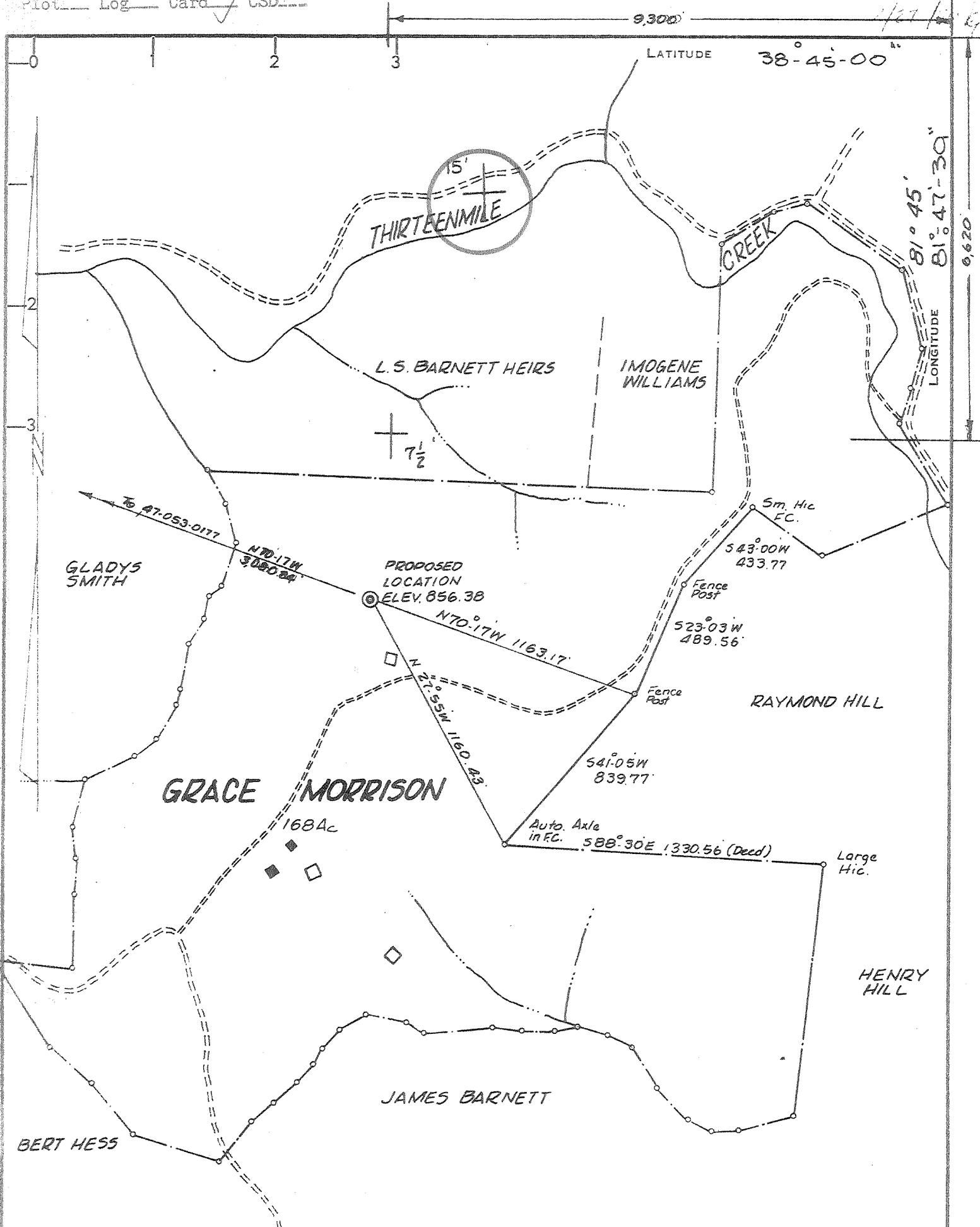
Was: 053-0204

FILE NO. now 238

+ 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.

DEC 20 1979



CERTIFICATE

"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."

Minimum degree of accuracy is one part in 200

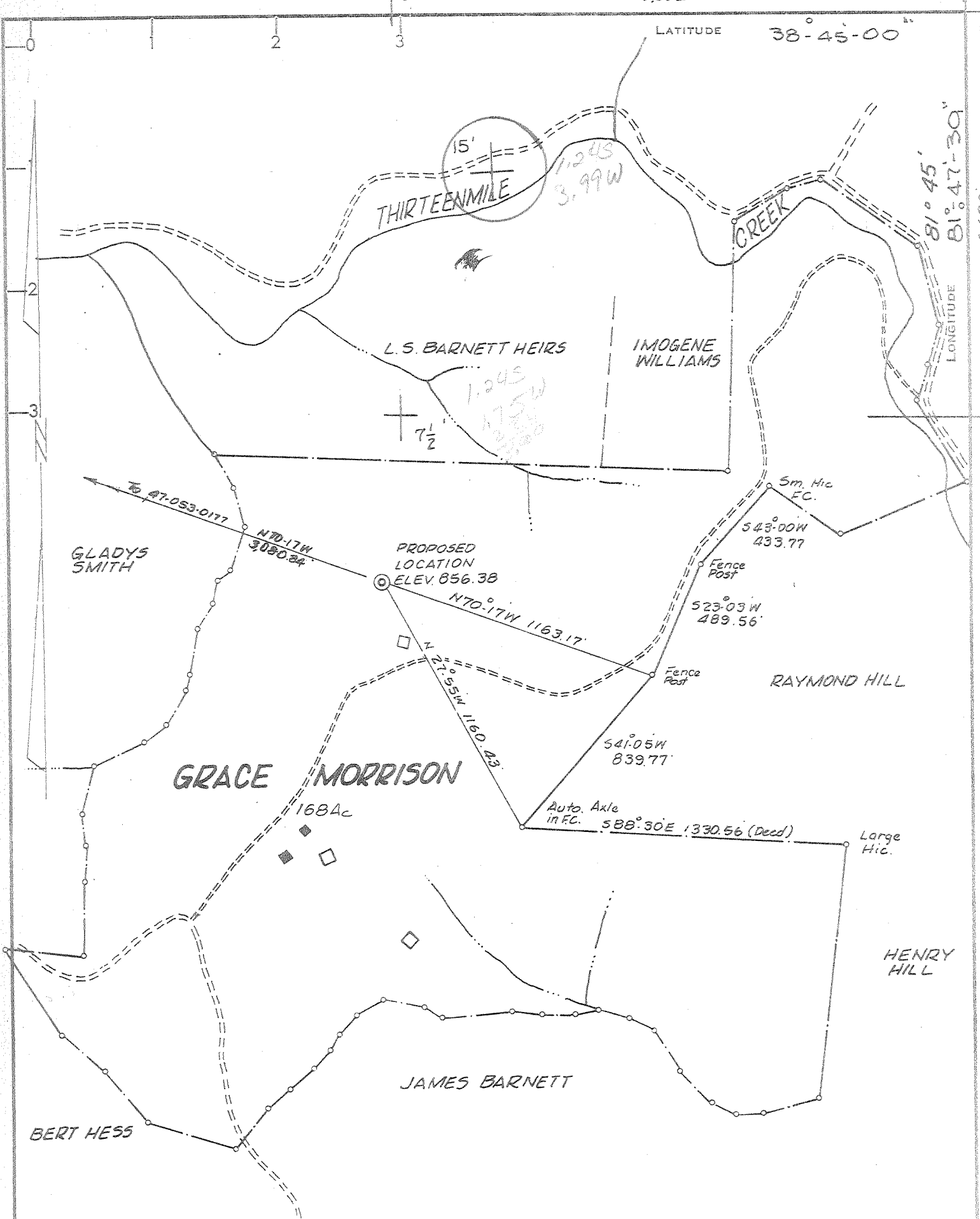
Signed

Frank J. Barker LLS#289

- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

COMPANY KAISER EXPLORATION & MINING COMPANY
 ADDRESS P.O. BOX 537, RIPLEY, WEST VIRGINIA
GRACE MORRISON
 ACRES 168 LEASE NO. _____
 (FARM) NO. 1 SERIAL NO. KEM 7
 ELEVATION (SPIRIT LEVEL) 856.38 NE
 QUADRANGLE ELMWOOD, WINFIELD 15'
 COUNTY MASON DISTRICT UNION
 PART OF PROVEN ELEVATION ROAD INTERSECTION ELEV. 951
 DATE FEB. 26, 1978 DRAWING NO. _____
 SCALE 1"=500 FT.

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON
WELL LOCATION MAP
 FILE NO. 47-053-0204
FORMERLY 47-053-0185
 + DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC
 MAPS. SCALE 1 TO 24,000 LATITUDE AND LONGITUDE LINES
 BEING REPRESENTED BY BORDER LINES AS SHOWN. **NOV 6 1979**
 - DENOTES ONE INCH SPACES ON BORDER LINE OF ORIGINAL TRACING.



CERTIFICATE

"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."

Minimum degree of accuracy is one part in 200

Signed

Frank J. Barker LLS#289

- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

COMPANY KAISER EXPLORATION & MINING COMPANY
 ADDRESS P.O. BOX 537, RIPLEY, WEST VIRGINIA
 FARM GRACE MORRISON
 MAP _____ ACRES 168 LEASE NO. _____
 WELL (FARM) NO. 1 SERIAL NO. KEM 7
 ELEVATION (SPIRIT LEVEL) 856.38
 QUADRANGLE ELMWOOD, WINFIELD 15'
 COUNTY MASON DISTRICT UNION
 POINT OF PROVEN ELEVATION ROAD INTERSECTION ELEV. 951
 FILE NO. _____ DRAWING NO. _____
 DATE FEB. 26, 1978 SCALE 1"=500FT.

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

WELL LOCATION MAP
 was: 47-053-0185
 now: mas-204

+ DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS, SCALE 1 TO 24,000. LATITUDE AND LONGITUDE LINES BEING REPRESENTED BY BORDER LINES AS SHOWN.

- DENOTES ONE INCH SPACES ON BORDER LINE OF ORIGINAL TRACING.

(Obverse)

REVISED

KEM - 7

[05-79]

WELL OPERATOR'S REPORT

47 - 053 - 02

(Formerly Mas-204)

WELL TYPE: Oil ___ / Gas X / Liquid Injection ___ / Waste Disposal ___
 (If "Gas", Production X / Underground storage ___ / Fuel ___ / Other ___)

LOCATION: Elevation: 884.50 Watershed: Thirteen Mile Creek
 District: Union County: Mason Altitude: Elmwood (7.5')

WELL OPERATOR Kaiser Exploration and Mining Co. DESIGNATED AGENT SAME
 Address P. O. Box 8
Ravenswood, WV 26164

PERMITTED WORK: Drill ___ / Convert ___ / Drill deeper ___ / Re-drill ___
 Plug off old formation ___ / Perforate new formation ___
 Other physical change in well (specify) _____

RECEIVED
 FEB 9 - 1982

PERMIT ISSUED ON September 25, 1980

OIL AND GAS DIVISION
 WV DEPARTMENT OF MINES
 OIL & GAS INSPECTOR FOR THIS WORK:
 Name Kenneth Butcher (736-4885)
 Address RFD #1
Barboursville, WV 25504

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

GEOLOGICAL TARGET FORMATION: Plugged Oriskany; Fracture Shale
 OLD Depth 4942' (KB) feet

NEW Depth of completed well, 4738' (KB) feet Rotary ___ / Cable Tools ___
 Water strata depth: Fresh, ___ feet; salt, ___ feet.
 Coal seam depths: NONE Is coal being mined in the area? NO
 Work was commenced July 28, 1981, and completed December 22, 1981

CASING AND TUBING PROGRAM: See previous well record filed upon completion of Oriskany Sandstone.

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling		
Conductor								
Fresh water								Rinds
Coal								
Intermediate								Sizes
Production								Depth set
Lines								
Others								
								Perforations: Marcellus
								4540 Top 4706 Bottom
								Brown Shale
								3979-4170

OPEN FLOW DATA

LD Producing formation Devonian Oriskany Sandstone **OLD** pay zone depth 4806'-4844' (KB)

Gas: Initial open flow, Trace Mcf/d Oil: Initial open flow, 0 bbl/d
 Final open flow, 150 Mcf/d Final open flow, 0 bbl/d

Time of open flow between initial and final tests, N/A hours

Static rock pressure, 1600 psig (surface measurement) after 8 hours shut in.

[If applicable for multiple completion--]

Second producing formation Marcellus, Brown Shale **NEW** pay zone depth 3979-4706' (KB) feet *seeback*

Gas: Initial open flow, 50 Mcf/d Oil: Initial open flow, 0 bbl/d
 Final open flow, N/A Mcf/d Final open flow, 0 bbl/d

Time of open flow between initial and final tests, ___ hours

Static rock pressure, ___ psig (surface measurement) after ___ hours shut in.

JAN 10 1983

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.
 28/81: Set permanent bridge plug in 4 1/2" casing above Oriskany Sandstone at 4738' (KB).
 07/81: Perforated the Marcellus Shale with 22 holes (.50" diameter, 3 1/2" ceramic jets) from 4540'-4706' (KB).
 14/81: Fractured the Marcellus Shale interval with 1,178,000 SCF of nitrogen and spearhead fracture with 500 gallons of 15% HCL Acid. Formation fractured at a rate of 64,000 SCF/m. with an average treating pressure of 2600 psig.
 21/81: Set retrieveable bridge plug at 4235' (KB) and perforated the Brown Shale from 3979'-4170' (KB) with 24 holes using 3 1/2 glass jets.
 22/81: Foam fractured the Brown Shale interval using 15,000# 80/100 sand, 45,000# of 20/40 sand, 380,000 SCF of nitrogen, 311 bbl of water, and spearhead fracture with 500 gal. of HCL Acid. Formation treated at an average rate of 11 BPM and an ave. pressure of 1925 psig. Instantaneous shut in pressure was 1000 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
-----------	-------	--------------	----------	-------------	--

NOTE: See previous well record filed upon completion of Oriskany.

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Soil			0	6		
Sand			6	104		
Shale			104	208		
Sand			208	258		
Shale			258	328		
Red Rock			328	588		
Sand			588	600		
Shale			600	728		
Sand			728	750		
Shale			750	832		
Sand			832	856		
Shale			856	934		
Sand			934	952		
Shale			952	990		
Sand			990	1056		
Shale			1056	1137		
Sand			1137	1154		
Shale			1154	1184		
Sand			1184	1248		
Shale			1248	1324		
Sand			1324	1448		
Shale			1448	1896		
Big Lime			1896	2030		
Shale			2030	2084		
Big Injun			2084	2150		
Shale			2150	2504		
Coffee Shale			2504	2528		
Berea Sand			2528	2540		
Shale			2540	3712		
Brown Shale			3712	4176	Show/Gas	3565', 3623', 3678', 36
Shale			4176	4501	Show/Gas	3852', 4067'
Marcellus			4501	4739		
Onondaga Lime			4739	4813	Show/Gas	4528', 4653'
Oriskany Sand			4813	4856		
Helderberg Lime			4856	4942	Show/Gas	4822', 4842'
Total Depth			4942			

TOPS FROM
KB = 895'

GR log...: sl. 895' KB

- 4 3720
- 5 4162
- 1 4308
- 2 4514
- 3 4740

REG: Regulation 8.01... provides as follows:
 "The...
 drilling..."



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED
FEB 27 1979

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 February 19, 1979

Surface Owner Grace M. Morrison
Address Route 1, Box 372, Leon, WV 25123

Company Kaiser Exploration and Mining Company
Address P. O. Box 537, Ripley, WV 25271

Mineral Owner Same as above
Address Same as above

Farm Grace M. Morrison Acres 168
Location (waters) Thirteen Mile Creek

Coal Owner Same as above
Address Same as above

Well No. 1-KEM #7 Elevation 856.38
District Union County Mason

Coal Operator None
Address None

Quadrangle Elmwood

~~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 INSPECTOR
operations have not commenced by 11-5-79 TO BE NOTIFIED Kenneth Butcher

Deputy Director - Oil & Gas Division

ADDRESS RFD #1, Barboursville, WV 25504
PHONE 736-4885

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 September 10, 1978 by Grace M. Morrison made to Kaiser Exploration & Mining Co and recorded on the 6th day of September 1978 in Mason County, Book 43 Page 665
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:

Very truly yours,
(Sign Name) R. A. Pryce
R. A. Pryce Well Operator Operations Manager
P. O. Box 537
 Street
Ripley,
 City or Town
West Virginia 25271
 State

W. VA. OIL & GAS CONSERVATION COMMISSION
1613 WASHINGTON STREET, EAST
CHARLESTON, WEST VIRGINIA 25311
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.

BLANKET BOARD

was:
47-053-0185 PERMIT NUMBER
now: mas 204

THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO X DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:
 NAME Not known at this time NAME Robert A. Pryce
 ADDRESS _____ ADDRESS P. O. Box 537, Ripley, WV 25271
 TELEPHONE _____ TELEPHONE 372-2827 or 372-2828
 ESTIMATED DEPTH OF COMPLETED WELL: 4900 ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Oriskany
 TYPE OF WELL: OIL _____ GAS X 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 10 3/4	250	250	Cement to surface
8 - 5/8			
7	2550	2550	125 sks = 560 feet
5 1/2			
4 1/2	4900	4900	125 sks = 1500 feet
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS _____ FEET SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS _____
 IS COAL BEING MINED IN THE AREA? None 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



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RENEWAL
RECEIVED
OCT 17 1979

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

R

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

DATE October 11, 1979

Surface Owner Grace M. Morrison
Address Route 1, Box 372, Leon, WV 25123
Mineral Owner Same as above
Address Same as above
Coal Owner Same as above
Address Same as above
Coal Operator None
Address None

Company Kaiser Exploration and Mining Company
Address P.O. Box 8, Ravenswood, WV 26164
Farm Grace M. Morrison Acres 168
Location (waters) Thirteen Mile Creek
Well No. KEM #7 Elevation 856.38
District Union County Mason
Quadrangle Elmwood

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 7-5-80

INSPECTOR
TO BE NOTIFIED Kenneth Butcher
ADDRESS RFD #1, Barboursville, WV 25504
PHONE 736-4885

Robert S. Hill
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 September 10, 1978 by Grace M. Morrison made to Kaiser Exploration & Mining Co. and recorded on the 6th day of September 19 78 in Mason County, Book 43 Page 665

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) R. A. Pryce
Well Operator
R. A. Pryce/Operations Manager
P. O. Box 8
Street
Ravenswood
City or Town
West Virginia 26164
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

(Formerly: MAS-185)
47-053-0204 PERMIT NUMBER

THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO X DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME Not known at this time _____ NAME Robert A. Pryce _____
 ADDRESS _____ ADDRESS P. O. Box 8, Ravenswood, WV 26164 _____
 TELEPHONE _____ TELEPHONE 273-5371 _____
 ESTIMATED DEPTH OF COMPLETED WELL: 4900 _____ ROTARY X _____ CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Oriskany _____
 TYPE OF WELL: OIL _____ GAS X _____ 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 10 3/4	250	250	Cement to surface
8 - 5/8			
7	2550	2550	125 sks = 560 feet
5 1/2			
4 1/2	4900	4900	125 sks = 1500 feet
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS _____ FEET _____ SALT WATER _____ FEET _____
 APPROXIMATE COAL DEPTHS _____
 IS COAL BEING MINED IN THE AREA? None _____ 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



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

SEP 25 1980

Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

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

DATE September 25, 1980

Surface Owner Grace M. Morrison
Address Rt. 1, Box 372, Leon, WV 25123
Mineral Owner Same
Address Same
Coal Owner Same
Address Same
Coal Operator None
Address None

Company Kaiser Exploration and Mining Company
Address P. O. Box 8, Ravenswood, WV 26164
Farm Grace M. Morrison Acres 168
Location (waters) Thirteen Mile Creek
Well No. KEM #7 Elevation 884.50
District Union County Mason
Quadrangle Elmwood

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 5-25-81.

INSPECTOR

TO BE NOTIFIED Kenneth Butcher

ADDRESS RFD #1, Barboursville, WV 25504

PHONE 736-4885

Frank Butcher
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
there to, (or as the case may be) under grant or lease dated September 10, 1978 by Grace M
Morrison made to Kaiser Exploration and Mining Co. and recorded on the 6th day of September

78 in Mason County, Book 43 Page 665

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
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
coal owners at their above shown respective address _____ day _____ before, or on the
_____ day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

Very truly yours,

(Sign Name) R. A. Pryce

Well Operator
R. A. Pryce/Operations Manager
P. O. Box 8

Address
of
Well Operator

Street

Ravenswood

City or Town

West Virginia

26164

State

PLEASE SUBMIT COPIES OF ALL
PHYSICAL LOSS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND
ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
733-304 - 292-6331

*SECTION 3. If no objections are filed or filed and
disallowed by the department of mines, within ten days from the receipt of
this notice, the department of mines shall issue a permit for a permit pending
the receipt of the fee or for a permit pending the receipt of the fee if the permit is approved.

47-053-0238

BLANKET BOND

(Formerly MAS 204)

THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO X DRILL _____ DEEPEN _____ FRACTURE STIMULATE _____
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME Not known at this time NAME R. A. Pryce
 ADDRESS _____ ADDRESS P. O. Box 8, Ravenswood, WV 26164
 TELEPHONE _____ TELEPHONE 273-5371
 ESTIMATED DEPTH OF COMPLETED WELL: 4900 ROTARY _____ CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Oriskany
 TYPE OF WELL: OIL _____ GAS X COMB. _____ STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT LIFT UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8 10 3/4	250	250	Cement to surface
8 - 5/8			
7	2550	2550	125 sks = 560 feet
5 1/2			
4 1/2	4900	4900	125 sks = 1500 feet
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS _____ FEET SALT WATER _____ FEET

APPROXIMATE COAL DEPTHS _____

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

5902 12/1/20

PARTIAL PLUGGING

RECEIVED

FORM 00-8

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

AUG - 6 1982

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPPLICATE, ONE COPY MAILED TO THE DEPARTMENT, ONE COPY TO BE RETAINED BY THE WELL OPERATOR AND THE THIRD COPY (AND EXTRA COPIES IF REQUIRED) SHOULD BE MAILED TO EACH COAL OPERATOR AT THEIR RESPECTIVE ADDRESSES.

COAL OPERATOR OR OWNER

KAISER EXPLORATION AND MINING

ADDRESS

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

COAL OPERATOR OR OWNER

WELL AND LOCATION

ADDRESS

UNION District

GRACE M. MORRISON

MASON County

LEASE OR PROPERTY OWNER

RT. 1, BOX 372, LEON, WV 25123

Well No. KEM-7

ADDRESS

GRACE MORRISON Farm

STATE INSPECTOR SUPERVISING PLUGGING KENNETH BUTCHER

AFFIDAVIT

STATE OF WEST VIRGINIA,

County of MASON } SS:

R. A. Pryce and R. L. Coty

being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 28th day of JULY, 19 81, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD FORMATION	FILLING MATERIAL	PLUGS USED SIZE & KIND	CASING	
			CSG PULLED	CSG LEFT IN
ORISKANY Ss	PERMANENT BRIDGE PLUG SET AT 4738' (KB)	3.71" O.D. G.O. PERMA- NENT BRIDGE PLUG IN 4 1/2"	0	
COAL SEAMS		DESCRIPTION OF MONUMENT		
(NAME)		PARTIAL PLUG. NO MONUMENT ERECTED.		
(NAME)				
(NAME)				
(NAME)				

and that the work of plugging and filling said well was completed on the 28th day of JULY, 1981

And further deponents saith not.

Sworn to and subscribed before me this 5th day of August, 1982

My commission expires: 12-1-85

R.A.P.
R.L.Coty
Talith Ann Halbert
Notary Public.

Permit No. MAS-238

05-3-