

ELK-POCA SP. UNIT # 30

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION SPOT ELEV. 1024 ON KNOLL AT REVISED LOCATION

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.
 (SIGNED) Dennis L. Fisher
 R.P.E. _____ L.L.S. 670

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6 (8-78)



DATE JUNE 1 19 81
 OPERATOR'S WELL NO. KEM 55-REV.
 API WELL NO. 47 - 035 - 1540 - REV.
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS") PRODUCTION ___ STORAGE ___ DEEP X SHALLOW ___
 LOCATION ELEVATION 1024 WATER SHED KESSEL RUN
 DISTRICT RIPLEY COUNTY JACKSON
 QUADRANGLE KENNA (7.5 MIN.) NW 15
 SURFACE OWNER JOHN S. THAXTON, ETUX ACREAGE 52.84
 OIL & GAS ROYALTY OWNER C.E. KESSEL, ETAL LEASE ACREAGE 137
 LEASE NO. _____
 PROPOSED WORK DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL SPECIFY: _____

JUN 31 1981

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION ORISKANY ESTIMATED DEPTH 5200
 WELL OPERATOR KAISER EXPLORATION AND MINING COMPANY DESIGNATED AGENT KAISER EXPLORATION AND MINING COMPANY
 ADDRESS P.O. BOX 8 MINING COMPANY ADDRESS P.O. BOX 8 RAVENSWOOD, WEST VIRGINIA 26164

deep well!

CODE CARD PLOT

LATITUDE 38° 45'

11,500'



Handwritten notes: 0.755 2.20W, 0.755 4.45W

KESSEL

LATHEY

LATHEY

KESSEL RUN

PARCHMENT CREEK

WEST VIRGINIA SEC. RTE. 15

WEST VIRGINIA SEC. RTE. 15

J-1537

LATHEY

C.E. KESSEL, ETAL

137 AC.

REVISED LOCATION ELEV. 1024

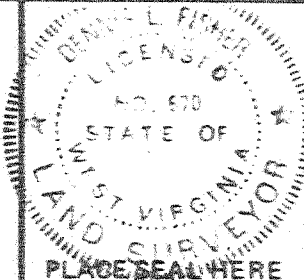
Survey bearings: N. 39°07' E. 306', N. 50°31' E. 164', N. 60°31' E. 1147', N. 84°00' E. 752'

SKIDMORE

ELK-POCA SP. UNIT # 30

FILE NO. _____
DRAWING NO. _____
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY 1:200
PROVEN SOURCE OF ELEVATION SPOT ELEV. 1024 ON KNOLL AT REVISED LOCATION

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.
(SIGNED) Donnie L. Fisher
R.P.E. _____ L.L.S. 670



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
FORM IV-6 (8-78)



DATE JUNE 1 19 81
OPERATOR'S WELL NO. KEM 55-REV.
API WELL NO. _____
47 - 035 - 1540-F
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

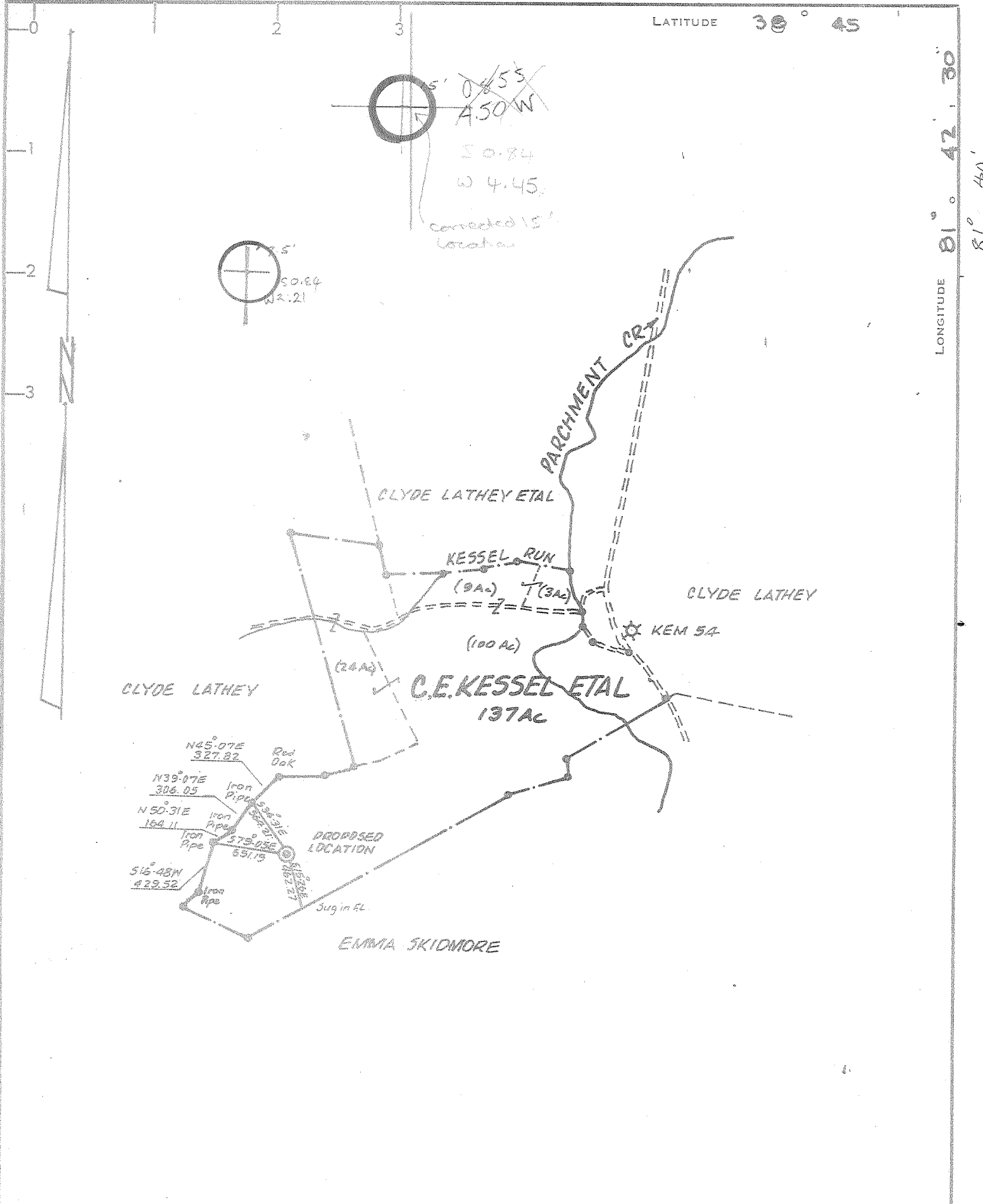
WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP X SHALLOW ___
LOCATION: ELEVATION 1024 WATER SHED KESSEL RUN
DISTRICT RIPLEY 3 COUNTY JACKSON
QUADRANGLE KENNA (7.5 MIN.) 415 063 NW
SURFACE OWNER JOHN J. THAXTON, ETUX ACREAGE 52.84
OIL & GAS ROYALTY OWNER C.E. KESSEL, ETAL LEASE ACREAGE 137
LEASE NO. _____

PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

MAR 31 1985

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION BRITANNY ESTIMATED DEPTH 5200 DEEP WELL
WELL OPERATOR KAISER EXPLORATION AND MINING COMPANY DESIGNATED AGENT KAISER EXPLORATION AND MINING COMPANY
ADDRESS P.O. BOX 8 RAVENSWOOD, WEST VIRGINIA 26164 ADDRESS P.O. BOX 8 RAVENSWOOD, WEST VIRGINIA 26164

cl. 11/13/80



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. Barber 445 289

- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

COMPANY KAISER EXPLORATION & MINING COMPANY
 ADDRESS D.O. BOX 8, RAVENSWOOD, WEST VIRGINIA
 FARM C. E. KESSEL ETAL
 MAP _____ ACRES 137Ac LEASE NO. _____
 WELL (FARM) NO. _____ SERIAL NO. KEM 55
 ELEVATION (SPIRIT LEVEL) 892.15
 QUADRANGLE KENNA 15' NW
 COUNTY JACKSON DISTRICT RIDLEY
 POINT OF PROVEN ELEVATION BM EL 636

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON
WELL LOCATION MAP
 FILE NO. 035-1540

FILE NO. _____ DRAWING NO. _____
 DATE OCT 30, 1980 SCALE 1"=1000 FT.

+ 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.

DEC 5 1980



IV-35
(Rev 8-81)

JUL 10 1986

State of West Virginia
Department of Mines
Oil and Gas Division

Date July 7, 1986
Operator's Well No. KEM #55
Farm C. E. Kessel
API No. 47 - 035 - 1540-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: 892-15 Watershed Parchment Creek, Kessel Run
District: Ripley County Jackson Quadrangle Kenna

COMPANY Kaiser Exploration and Mining Company

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

DESIGNATED AGENT R. A. Pryce

ADDRESS same

SURFACE OWNER C. E. Kessel

ADDRESS 111 Highlawn Drive, Ripley, WV 25271

MINERAL RIGHTS OWNER same

ADDRESS same

OIL AND GAS INSPECTOR FOR THIS WORK Jerry

Tephabock ADDRESS Rt. 1 Box 101A Ripley, WV

PERMIT ISSUED 3-28-86

DRILLING COMMENCED June 19, 1986

DRILLING COMPLETED June 27, 1986

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 Sand Depth 5150' feet

Depth of completed well 5247 feet Rotary x / Cable Tools

Water strata depth: Fresh feet; Salt feet

Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Brown Shale Pay zone depth 4232-4436 feet

Gas: Initial open flow 0 Mcf/d Oil: Initial open flow Bbl/d

Final open flow (150) Mcf/d Final open flow Bbl/d

Time of open flow between initial and final tests 3 hours

Static rock pressure 1620 psig (surface measurement) after 24 hours shut in

(If applicable due to multiple completion--)

Second producing formation Berea Sandstone Pay zone depth 2725-2729 feet

Gas: Initial open flow 0 Mcf/d Oil: Initial open flow Bbl/d

Final open flow (98) Mcf/d Oil: Final open flow Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 950 psig (surface measurement) after 72 hours shut in

(Continue on reverse side) JUL 14 1986

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

6/19/86 - Young Wireline perforated the Berea Sandstone from 2725' to 2729' with 16 shots.

6/27/86 - Halliburton 75% foam frac the Berea Sandstone with 331 bbl fluid, 612,500 scf Nitrogen, 60,000# 20/40 sand @ average pressure of 2672 psig.
ISIP: 1450 psig.
5 MIN SIP: 1250 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
See original OG-10					

(Attach separate sheets as necessary)

KAISER EXPLORATION AND MINING COMPANY
Well Operator

By: D A P

Date: July 7, 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 Kenna
Permit No. JAC-1540R

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

Company <u>Kaiser Exploration and Mining Company</u> Address <u>P. O. Box 8, Ravenswood, WV 26164</u> Farm <u>C. E. Kessel</u> Acres _____ Location (waters) <u>Parchment Crk. & Kessel Run</u> Well No. <u>KEM #55</u> Elev. <u>892.15</u> District <u>Ripley</u> County <u>Jackson</u> <i>1024 Kessel Loc. GL.</i> The surface of tract is owned in fee by _____ <u>C. E. Kessel, et al</u> Address <u>111 Highlawn Drive, Ripley, WV</u> Mineral rights are owned by <u>Same</u> Address <u>Same</u> Drilling Commenced <u>5/21/81</u> Drilling Completed <u>5/28/81</u> Initial open flow <u>110,000</u> cu. ft. -- bbls. Final production <u>150,000</u> cu. ft. per day -- bbls. Well open <u>3</u> hrs. before test <u>1620</u> RP.	Casing and Tubing Size 20-16 Cond.	Used in Drilling 13-10" 10 3/4" 252' (KB) 9 5/8 8 5/8 7 2602' (KB) 5 1/2 4 1/2 5241' (KB) 3 5241' (KB) 2 5180' (KB)	Left in Well 252' (KB) 2602' (KB) 5241' (KB) 5180' (KB)	Cement fill up Cu. ft. (Sks.) 175 sks class A, 3% Calcium chloride, 1/4#/sk flocele (to surface) 65 sks 50/50 pozmi 100 sks class A 250 sks 50/50 pozmi 10% salt, 1/4#/sk flocele
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Well treatment details: Attach copy of cementing record.
5/31/81: Perforated Oriskany Sandstone from 5168'-5171' (KB) and 5196'-5203' (KB), 40 hours, 2 1/8" glass jets on strip; hydrofractured Oriskany w/15,000# 80/100 sand and 45,000# of 20/40 sand, 165,000 SCF of nitrogen, 500 gal of 28% HCL acid, 2320 HHP. 22 BPM avg rate, 4350 psig avg pressure; instantaneous shut in pressure was 3900 psig.

Coal was encountered at _____ Feet _____ Inches
 Fresh water _____ Feet _____ Salt Water _____ Feet _____
 Producing Sand Oriskany Sandstone Depth 5168'-5171' (KB); 5196'-5203' (KB)

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
*All formation tops taken from electric log depths						
Soil & Shale			0	12		
Sandy Shale			12	59		
Sand			59	154		
Shale			154	330		
Sand & Shale			330	421		
Red Rock			421	538		
Sand & Shale			538	704		
Shale			704	749		
Sand & Shale			749	953		
Sand			953	975		
Shale			975	1019		
Sand			1019	1025		
Shale			1025	1106		
Sand			1106	1114		
Shale			1114	1147		
Sand			1147	1158		
Shale			1158	1318		
Sand			1318	1404		
Shale			1404	1437		
Sand			1437	1581		
Shale			1581	1600		

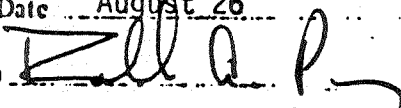
(over)

* Indicates Electric Log tops in the remarks section.

DEC 13 1982

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Sand			1600	1661		
Shale			1661	1873		
Salt Sand			1873	2062		
Big Lime (Greenbrier)			2062	2210		
Shale			2210	2250		
Injun Sand			2250	2301		
Shale			2301	2690		
Coffee Shale (Sunbury)			2690	2711		
Berea Sand			2711	2720	Show/Gas	
Shale			2720	3934		
Brown Shale			3934	4447	Show/Gas	
Shale			4447	4801		
Marcellus Shale			4801	5071	Show/Gas	
Onondaga Lime (Corniferous)			5071	5150	Show/Gas	
Oriskany Sand			5150	5188	Show/Gas	
Helderberg			5188	5247	Show/Gas	
Total Depth			<u>5247</u>			

Date August 26 19 81

APPROVED  General

By General Manager
(Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

Quadrangle Kenna
Permit No. JAC-1540R

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

Company Kaiser Exploration and Mining Company
Address P. O. Box 8, Ravenswood, WV 26164
Farm C. E. Kessel Acres _____
Location (waters) Parchment Crk. & Kessel Run
Well No. KEM #55 Elev. 892.15
District Ripley County Jackson
The surface of tract is owned in fee by _____
C. E. Kessel, et al
Address 111 Highlawn Drive, Ripley, WV
Mineral rights are owned by Same
Address Same
Drilling Commenced 5/21/81
Drilling Completed 5/28/81
Initial open flow 110,000 cu. ft. -- bbls.
Final production 150,000 cu. ft. per day -- bbls.
Well open 3 hrs. before test 1620 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size			
20-16			
Cnd.			
13-10" 10 3/4"	252' (KB)	252' (KB)	175 sks class A Calcium chloride 1/4#/sk flocele (to surface)
9 5/8			
8 5/8			
7	2602' (KB)	2602' (KB)	65 sks 50/50 pc 100 sks class A
5 1/2			
4 1/2	5241' (KB)	5241' (KB)	250 sks 50/50 p 10% salt, 1/4# flocele
3			
2		5180' (KB)	
Liners Used			

Well treatment details: Attach copy of cementing record.
5/31/81: Perforated Oriskany Sandstone from 5168'-5171' (KB) and 5196'-5203' (KB), 40 hours, 2 1/8" glass jets on strip; hydrofractured Oriskany w/15,000# 30/100 sand and 45,000# of 20/40 sand, 165,000 SCF of nitrogen, 500 gal of 28% HCL acid, 2320 HHP. 22 BPM avg rate, 4350 psig avg pressure; instantaneous shut in pressure was 3900 psig.

Coal was encountered at -- Feet -- Inches
Fresh water -- Feet -- Salt Water -- Feet --
Producing Sand Oriskany Sandstone Depth 5168'-5171' (KB); 5196'-5203' (KB)

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
*All formation tops taken from electric log depths						
Soil & Shale			0	12		
Sandy Shale			12	59		
Sand			59	154		
Shale			154	330		
Sand & Shale			330	421		
Red Rock			421	533		
Sand & Shale			533	704		
Shale			704	749		
Sand & Shale			749	953		
Sand			953	975		
Shale			975	1019		
Sand			1019	1025		
Shale			1025	1106		
Sand			1106	1114		
Shale			1114	1147		
Sand			1147	1158		
Shale			1158	1318		
Sand			1318	1404		
Shale			1404	1437		
Sand			1437	1581		
Shale			1581	1600		

(over)

* Indicates Electric Log tops in the remarks section.

JUL 14 1986

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Sand			1600	1661		
Shale			1661	1873		
Salt Sand			1873	2062		
Big Lime (Greenbrier)			2062	2210		
Shale			2210	2250		
Injun Sand			2250	2301		
Shale			2301	2690		
Coffee Shale (Sunbury)			2690	2711		
Berea Sand			2711	2720	Show/Gas	
Shale			2720	3934		
Brown Shale			3934	4447	Show/Gas	
Shale			4447	4801		
Marcellus Shale			4801	5071	Show/Gas	
Onondaga Lime (Corniferous)			5071	5150	Show/Gas	
Oriskany Sand			5150	5188	Show/Gas	
Helderberg			5188	5247	Show/Gas	
Total Depth			5247			

Date August 26

19 31

APPROVED

Will A. P.

General

By General Manager

(Title)

RECEIVED
MAR - 3 1986



1) Date: February 7, 1986
2) Operator's Well No. KEM #55, Kessel
3) API Well No. 47 035 1540 - F
State County Permit

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

- 4) WELL TYPE: A Oil / Gas X /
B (If "Gas", Production X / Underground storage / Deep / Shallow X /)
- 5) LOCATION: Elevation: 892.15 Watershed: Parchment Creek, Kessel Run
District: Ripley County: Jackson Quadrangle: Kenna
- 6) WELL OPERATOR Kaiser Exploration and Mining Company CODE: 25530
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 101-A
Ripley, WV 25271
- 9) DRILLING CONTRACTOR: Name Kaiser Company Tools
Address Same
- 10) PROPOSED WELL WORK: Drill / Drill deeper / Redrill / Stimulate X /
Plug off old formation / Perforate new formation X /
Other physical change in well (specify) Squeeze 4 1/2" casing, perforate Berea, stimulate, commingle Berea, Shale
- 11) GEOLOGICAL TARGET FORMATION, stimulate, commingle Berea, Shale
- 12) Estimated depth of completed well, 4500 (PRTD) 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 X
- 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	10 3/4	H-40	40.5	X		252(KB)	252(KB)	175 sks		
Coal										
Intermediate	7"	K-55	20	X		2602(KB)	2602(KB)	165 sks		
Production	4 1/2	N-80	11.6	X			5241(KB)	250 sks		Depths set
Tubing										
Lin...										Perforations:
										Top Bottom
										4232 4436(KB)

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-035-1540-F Date March 28 19 86

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 28, 1988 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>✓</u>	Agent: <u>FLB</u>	Plat: <u>AS</u>	Casing: <u>KB</u>	Fee: <u>969384</u>	WPCP: <u>AS</u>	S&E: <u>AS</u>	Other: <u> </u>
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NOTE: Keep one copy of this permit posted at the drilling location.

John H. Johnston by Margaret Hassel
Director, Division of Oil and Gas

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



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

RECEIVED
NOV - 6 1980
OIL & GAS DIVISION
DEPT. OF MINES

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

Surface Owner C. E. Kessel, et al
Address 111 Highlawn Drive, Ripley, WV
Mineral Owner Same as above
Address _____
Coal Owner Same as above
Address _____
Coal Operator Same as above
Address _____

DATE November 5, 1980
Company Kaiser Exploraiton and Mining Company
Address P. O. Box 8, Ravenswood, WV 26164
Farm C. E. Kessel Acres 137
Location (waters) Parchment Creek & Kessel Run
Well No. KEM #55 Elevation 892.15
District Ripley County Jackson
Quadrangle Kenna

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 7-14-81

INSPECTOR
TO BE NOTIFIED Richard Morris
ADDRESS P. O. Box 372, Grantsville, WV
PHONE 354-7259

John R. Kessell
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 July 21 1980 by C. E. &
Martena Kessel made to Kaiser Exploration and Mining Co and recorded on the 27th day of August
1980, in Jackson County, Book 156 Page 749

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
C-304 - 292-6331

Very truly yours,

(Sign Name)

R. A. Pryce
Well Operator

Address
of
Well Operator

P. O. Box 8

Street

Ravenswood

City or Town

West Virginia 26164

State

BLANKET BOND

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 _____
 TELEPHONE _____ TELEPHONE 273-5371 _____
 ESTIMATED DEPTH OF COMPLETED WELL: 5110' _____ 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'	To surface
8 - 5/8			
7	2600'	2600'	125 sks = 570'
5 1/2			
4 1/2	5110'	5110'	125 sks - 1500'
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.