

KTM:  
 436013.7 E  
 4310350.8 N

J-631 (02)

N I E S

FILE NO 6-1  
 DRAWING NO \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION ROAD JUNCTION ELEV. = 621', 1750' WEST OF 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: Vincent W. Wood  
 R.P.E. \_\_\_\_\_ L.L.S. 664

PLACE SEAL HERE

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION



DATE APRIL 5, 1983  
 OPERATOR'S WELL NO KEM 377  
 API WELL NO. \_\_\_\_\_  
47 - 035 - 1832-Frac.  
 STATE COUNTY PERMIT

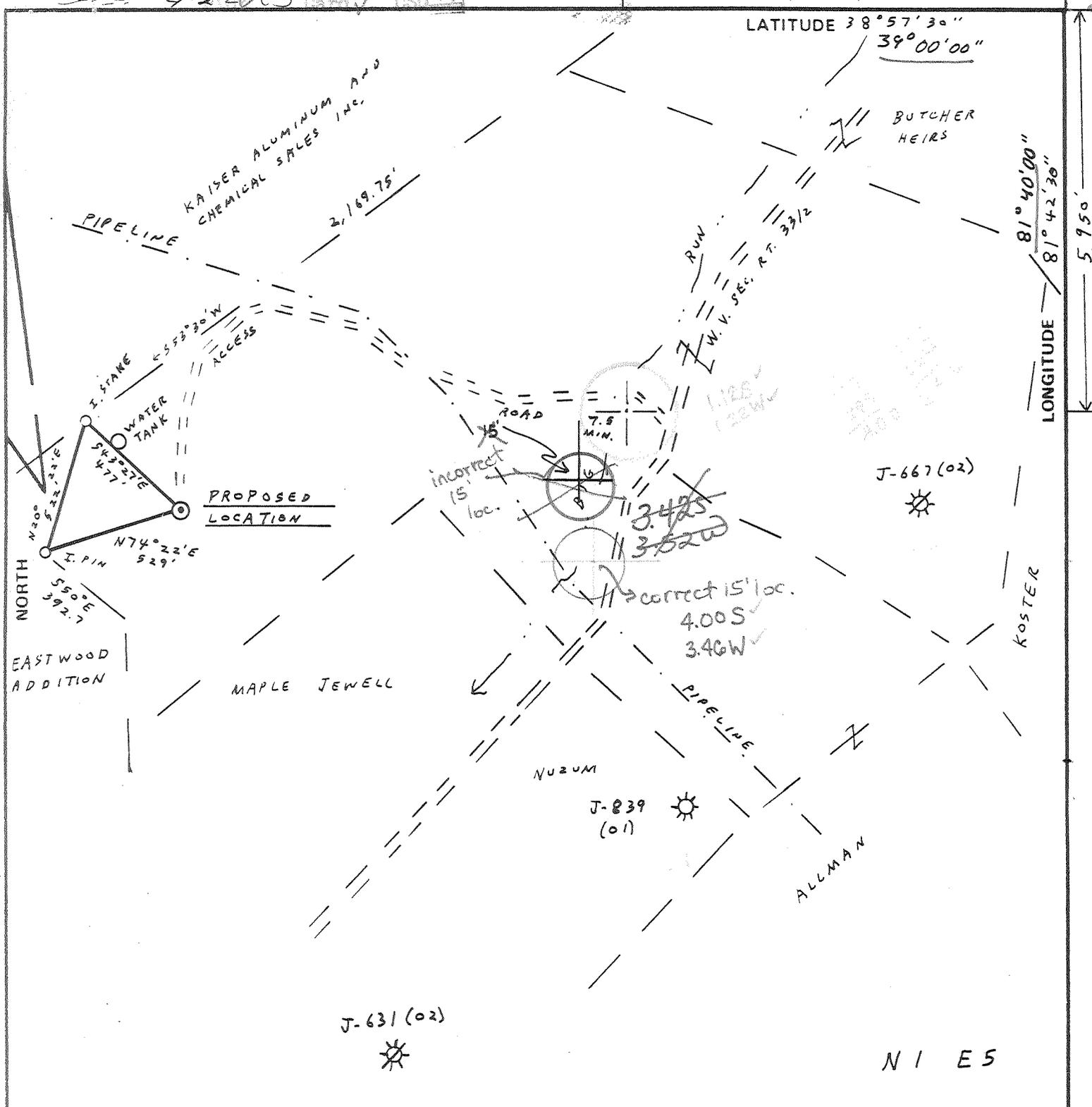
(\*) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 WELL TYPE OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS") PRODUCTION X STORAGE \_\_\_ DEEP X SHALLOW \_\_\_  
 LOCATION ELEVATION 823 WATER SHED BIG RUN  
 DISTRICT RAVENS WOOD COUNTY JACKSON  
 QUADRANGLE SANDYVILLE  
 SURFACE OWNER MAPLE JEWELL ACREAGE 115.25  
 OIL & GAS ROYALTY OWNER C.A. JEWELL HEIRS, ET AL. LEASE ACREAGE 115.25  
 LEASE NO. 86-10-1360

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

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION NEWBURG ESTIMATED DEPTH 5320'  
 WELL OPERATOR KAISER EXPLOR. & MIN. CO. DESIGNATED AGENT KAISER EXPLORATION AND MINING CO.  
 ADDRESS AWW P.O. BOX 8 DEEP WELL 6-6 ADDRESS P.O. BOX 8 SILVERTON (281)  
RAVENS WOOD W. V. 26164

MAY 13 1983

JACK. 1832



FILE NO. 6-1  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION ROAD JUNCTION ELEV. = 621', 1750' WEST OF 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) Vincent W. Wood  
 R.P.E. \_\_\_\_\_ L.L.S. 664

PLACE SEAL HERE

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION



DATE APRIL 5, 1983  
 OPERATOR'S WELL NO. KEM 377  
 API WELL NO. \_\_\_\_\_  
47 - 035 - 1832  
 STATE COUNTY PERMIT

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP X SHALLOW \_\_\_  
 LOCATION: ELEVATION 823 WATER SHED BIG RUN  
 DISTRICT RAVENS WOOD COUNTY JACKSON  
 QUADRANGLE SANDYVILLE Replay 15' NW  
 SURFACE OWNER MAPLE JEWELL ACREAGE 115.25  
 OIL & GAS ROYALTY OWNER C.A. JEWELL HEIRS, ET AL. LEASE ACREAGE 115.25  
 LEASE NO. 86-10-1360  
 PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_ DEEP WELL SPD. Huron  
 TARGET FORMATION NEWBURG ESTIMATED DEPTH 5320' 64 Silverton (281)  
 WELL OPERATOR KAISER EXPLOR. & MIN. CO. DESIGNATED AGENT KAISER EXPLORATION AND MINING CO.  
 ADDRESS P.O. BOX 8 ADDRESS P.O. BOX 8  
RAVENSWOOD, W.V. 26164 RAVENSWOOD, W.V. 26164

FORM IV-6 (8-78)

JACK. 1832

**RECEIVED**

JUN 19 1985

W. VA. OIL & GAS  
CONSERVATION COMMISSION



State of West Virginia  
Department of Mines  
Oil and Gas Division

Date June 5, 1985  
Operator's \_\_\_\_\_  
Well No. KEM 377  
Farm Jewell  
API No. 47 - 035 - 1832 FRA

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 \_\_\_ /)

LOCATION: Elevation: 823' <sup>833 KB</sup> GL Watershed Big Run  
District: Ravenswood County Jackson Quadrangle Sandyville

COMPANY Kaiser Exploration and Mining Co.  
ADDRESS P. O. Box 8, Ravenswood, WV 26164  
DESIGNATED AGENT R. A. Pryce  
ADDRESS Same  
SURFACE OWNER Maple Jewell  
ADDRESS Rt. 1, Box 311 Ripley, WV 25271  
MINERAL RIGHTS OWNER C. A. Jewell heirs  
ADDRESS Rt. 1, Box 311, Ripley, WV 25271  
OIL AND GAS INSPECTOR FOR THIS WORK Homer Daugherty  
ADDRESS Linden Rt., Box 3-A Looneyville, WV  
PERMIT ISSUED 4/18/83  
DRILLING COMMENCED 5/13/83  
DRILLING COMPLETED 5/23/83 5/14/85 FRA

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
<del>11 3/4</del> 13-10		272'	250 sks class A
9 5/8			
8 5/8			
7		2020	3% CaCl <sub>2</sub> , 1/2#/sack Flocele, 260 sks
5 1/2		100	50/50 poz, 10% sa
4 1/2		5307'	100 sks class A, 2%Ca
3			300 sks 50/50 poz
2			100 sks class A
Liners used			

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

GEOLOGICAL TARGET FORMATION Newburg Depth 5320 feet  
Depth of completed well 5365' KB feet Rotary X / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh -- feet; Salt -- feet  
Coal seam depths: N/A Is coal being mined in the area? NO  
Drilled on fluid not known.

OPEN FLOW DATA

Producing formation Berea Sandstone Pay zone depth 2303-2307 feet  
Gas: Initial open flow -- Mcf/d Oil: Initial open flow -- Bbl/d  
Final open flow 192 Mcf/d Final open flow -- Bbl/d  
Time of open flow between initial and final tests 4 hours  
Static rock pressure 400 psig (surface measurement) after 72 hours shut in  
(If applicable due to multiple completion--)  
Second producing formation Brown Shale Pay zone depth 3750-3956 feet  
Gas: Initial open flow -- Mcf/d Oil: Initial open flow -- Bbl/d  
Final open flow 231 Mcf/d Oil: Final open flow -- Bbl/d  
Time of open flow between initial and final tests 4 hours  
Static rock pressure 650 psig (surface measurement) after 72 hours shut in

(Continue on reverse side)

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

5/07/85 Young's perf Berea @ 2303' to 2307' with 16 shots (.40") and set Alpha frac plug in 5 1/2" casing at 2400'.

5/14/85 Halliburton to 75% foam frac the Berea. Broke formation @ 1990 psig; frac zone with 60,000# 20/40 sand @ 4 - 10 ppg concentrations; total nitrogen: 720,000 scf; total sand laden fluid: 264 bbl; total fluid: 362 bbl; ISIP: 1240 psig; 5 min SIP: 1170 psig. Flow back through 1/4" choke.

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 Co.  
Well Operator

By: Z. A. P.

Date: June 5, 1985

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 ... encountered in the drilling of a well."

RECEIVED



IV-35 (Rev 8-81)

JAN 26 1984

OIL & GAS DIVISION DEPT. OF MINES

State of West Virginia Department of Mines Oil and Gas Division

Date June 24, 1983 Operator's Well No. KEM 377 Farm Jewell API No. 47 - 035 - 1832

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 /)

LOCATION: Elevation: 823' 64 Watershed Big Run District: Ravenswood County Jackson Quadrangle Sandyville

COMPANY Kaiser Exploration and Mining Company ADDRESS P. O. Box 8, Ravenswood, WV 26164 DESIGNATED AGENT Robert A. Pryce ADDRESS P. O. Box 8, Ravenswood, WV 26164 SURFACE OWNER Maple Jewell ADDRESS Rt. 1, Box 311, Ripley, WV 25271 MINERAL RIGHTS OWNER C. A. Jewell Heirs ADDRESS Rt. 1, Box 311, Ripley, WV 25271 OIL AND GAS INSPECTOR FOR THIS WORK Homer Daugherty ADDRESS Linden Rt., Box 3-A, Looneyville, WV PERMIT ISSUED April 18, 1983 DRILLING COMMENCED 5/13/83 DRILLING COMPLETED 5/23/83 IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

Table with 4 columns: Casing Tubing, Used in Drilling, Left in Well, Cement fill up Cu. ft. Rows include sizes 20-16, 13-10, 9 5/8, 8 5/8, 7, 5 1/2, 4 1/2, 3, 2, and Liners used.

GEOLOGICAL TARGET FORMATION Newburg Depth 5320 feet Depth of completed well 5365 KB feet Rotary x / Cable Tools Water strata depth: Fresh feet; Salt feet Coal seam depths: N/A Is coal being mined in the area? No DRILLED ON FLUID - NOT KNOWN

OPEN FLOW DATA

Producing formation Newburg Pay zone depth feet Gas: Initial open flow 0 Mcf/d Oil: Initial open flow Bbl/d Final open flow 0 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 (If applicable due to multiple completion--) Second producing formation Brown Shale Pay zone depth 3750 - 3956 feet Gas: Initial open flow -- Mcf/d Oil: Initial open flow Bbl/d Final open flow 231 Mcf/d Oil: Final open flow Bbl/d Time of open flow between initial and final tests 4 hours Static rock pressure 650 psig (surface measurement) after 48 hours shut in

ugged Newburg & loomsburg Dolomite

JUN 4 1984

(Continue on reverse side)

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

Young's set permanent plug at 4040', plugging Newburg and Bloomsburg Dolomite.  
 Young's perforated Brown Shale from 3750' to 3956' with 20 .39" holes.  
 Newsco and BJ Hughes foam fracture: broke down at 1730 psig with 75% quality foam.  
 Treated with 75% quality foam at 1690 psig and 2000 psig; used 20/40 sand in concentrations from 2-10 ppg.

<u>Rates</u>	<u>Totals</u>
H <sub>2</sub> O = 10 bbl/min	N <sub>2</sub> = 930 MSCF
N <sub>2</sub> = 30 MSCF/min	Sand = 60,000#
Foam = 40 bbl/min	

ISIP: 1460 psig; 5 min SIP: 1270 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
Shale			0	80	
Sandstone			80	277	
Shale			277	317	
Sandstone			317	392	
Shale			392	561	
Sandstone and Shale			561	838	
Shale and Sandstone			838	1084	
Sandstone			1084	1217	
Shale			1217	1350	
Sandstone and Shale			1350	1705	
Greenbrier Limestone			1705	1855	
Shale			1855	1953	
Pocono Injun			1953	1974	
Shale			1974	2276	
Coffee Shale ✓			2276	2300	
Berea Sandstone ✓			2300	2304	
Shale			2304	3720	
Brown Shale			3720	3957	
Shale			3957	4343	
Marcellus Shale			4343	4544	
Onondaga Limestone ✓			4544	4622	
Oriskany Sandstone ✓			4622	4656	
Helderberg ✓			4656	4834	
Salina			4834	5332	
Williamport Sandstone			5332	5338	3750 2304
Lockport (- Marcellus)			5338	5360 TD	1446

from el. log:

	top	thickness
Up. Dev	2304	1154
Low Huron	3452	499
Jawa	3957	137
Anglo	4094	240
Rimcrest	4234	114
Cochise	4448	56
Muddy	4504	10
Genesee	4514	16
Marcellus	4530	14
Onondaga	4544	

(Attach separate sheets as necessary)

KAISER EXPLORATION AND MINING COMPANY

Well Operator

By: John A. P.

Date: June 19, 1983

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."



1) Date: April 18, 19 83  
 2) Operator's Well No. KEM #377  
 3) API Well No. 47 State 039 County 1832 Permit

DRILLING CONTRACTOR:  
Clint Hurt

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

OIL AND GAS WELL PERMIT APPLICATION

- 4) WELL TYPE: A Oil X / Gas X /  
 B (If "Gas", Production X / Underground storage X / Deep X / Shallow X)
- 5) LOCATION: Elevation: 323' / Watershed: Big Run  
 District: Ravenswood / County: Jackson / Quadrangle: Sandyville
- 6) WELL OPERATOR Kaiser Exploration and Mining Co. 11) DESIGNATED AGENT R. A. Pryce  
 Address P. O. Box 8 Address Same  
Ravenswood, WV 26164
- 7) OIL & GAS ROYALTY OWNER C. A. Jewell heirs, et al 12) COAL OPERATOR None  
 Address Rt. 1, Box 311 Address \_\_\_\_\_  
Ripley, WV 25271  
 Acreage 115.25
- 8) SURFACE OWNER Maple Jewell 13) COAL OWNER(S) WITH DECLARATION ON RECORD:  
 Address Same Name None  
 Address \_\_\_\_\_  
 Acreage 115.25
- 9) FIELD SALE (IF MADE) TO:  
 Address \_\_\_\_\_
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED  
 Name Homer Dougherty  
 Address Linden Rt. Box 3A  
Looneyville, WV
- 14) COAL LESSEE WITH DECLARATION ON RECORD:  
 Name \_\_\_\_\_  
 Address \_\_\_\_\_
- 15) PROPOSED WORK: Drill X / Drill deeper \_\_\_\_\_ / Redrill \_\_\_\_\_ / Fracture or stimulate \_\_\_\_\_  
 Plug off old formation \_\_\_\_\_ / Perforate new formation \_\_\_\_\_  
 Other physical change in well (specify) \_\_\_\_\_
- 16) GEOLOGICAL TARGET FORMATION, Newburg  
 17) Estimated depth of completed well, 5320 feet  
 18) Approximate water strata depths: Fresh, \_\_\_\_\_ feet; salt, \_\_\_\_\_ feet.  
 19) Approximate coal seam depths: \_\_\_\_\_ Is coal being mined in the area? Yes \_\_\_\_\_ / No \_\_\_\_\_

20) 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		
Conductor									Kinds
Fresh water	<u>11 3/4"</u>			<u>X</u>		<u>275-280</u>	<u>22-280</u>	<u>150 sbs class A to surface</u>	
Coal				<u>X</u>		<u>2200</u>	<u>2200</u>	<u>65 sbs 50/30</u>	Sizes <u>logmix</u>
Intermediate	<u>8 5/8"</u>			<u>X</u>		<u>5320</u>	<u>5320</u>	<u>100 sbs class A</u>	
Production	<u>5 1/2"</u>			<u>X</u>				<u>225 sbs 50/30</u>	Depths set
Tubing									
Liners									Perforations: Top Bottom

- 21) EXTRACTION RIGHTS  
 Check and provide one of the following:  
 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.  
 The requirement of Code 22-4-1-(c) (1) through (4). (See reverse side for specifics.)
- 22) ROYALTY PROVISIONS  
 Is the right to extract, produce or market the oil or gas based upon a lease or other continuing contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes  No
- If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.
- 23) Required Copies (See reverse side.)
- 24) Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

Notary: \_\_\_\_\_ Signed: E. A. Pryce  
 My Commission Expires \_\_\_\_\_ Its: General Manager

OFFICE USE ONLY  
DRILLING PERMIT

Permit number 47-039-1832 Date April 27 19 83

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. 10) 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.)

Permit expires \_\_\_\_\_ unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond: <u>100</u>	Agent: _____	Plat: _____	Casing: _____	Fee: _____
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Administrator, Office of Oil and Gas



1) Date: April 24, 19 85  
 2) Operator's Well No. KEM #377  
 3) API Well No. 47 035 1832 Frac  
 State County Permit

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES, 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: 823' Watershed: Big Run  
 District: Ravenswood County: Jackson Quadrangle: Sandyville
- 6) WELL OPERATOR Kaiser Exploration and Mining Co DESIGNATED AGENT R. A. Pryce  
 Address P. O. Box 8 Address Same  
Ravenswood, WV 26164 25560
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Jerry Tephabock  
 Address Rt. 1  
Ripley, WV 25271
- 9) DRILLING CONTRACTOR: Name Unkown  
 Address \_\_\_\_\_
- 10) PROPOSED WELL WORK: Drill \_\_\_\_\_ / Drill deeper \_\_\_\_\_ / Redrill \_\_\_\_\_ / Stimulate X /  
 Plug off old formation \_\_\_\_\_ / Perforate new formation X /  
 Other physical change in well (specify) Treat Berea
- 11) GEOLOGICAL TARGET FORMATION, Berea Sandstone
- 12) Estimated depth of completed well, \_\_\_\_\_ feet
- 13) Approximate trata depths: Fresh, \_\_\_\_\_ feet; salt, \_\_\_\_\_ 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		
Conductor									Kinds
Fresh water	<u>11 3/4</u>			<u>X</u>		<u>272'</u>	<u>272'</u>	<u>250 sks class A</u>	
Coal									Sizes
Intermediate	<u>7"</u>			<u>X</u>		<u>2020'</u>	<u>2020'</u>	<u>260 sks 50/50 proxmix</u>	
Production	<u>4 1/2"</u>			<u>X</u>		<u>5307'</u>	<u>5307'</u>	<u>100 sks class A</u>	
Tubing								<u>330 sks 50/50 proxmix</u>	
Liners								<u>100 sks class A</u>	Perforations:
									Top Bottom

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-035-1832 Frac Date May 6 1985

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 May 6, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
<u>86</u>	<u>MH</u>	<u>MH</u>	<u>MH</u>	<u>988</u> <u>786</u>

Margaret J. Hass  
 Administrator, Office of Oil and Gas

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

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

File