

New Location...
 Drill Deeper.....
 Abandonment

Company. Kaiser Exp. & Mining Co. 465
 Address. P.O. Box 8- Ravenswood, WV 26164
 Surface: Gary Waybright
 Farm OTIS SHINN
 Tract _____ Acres 299 Lease No. _____
 Well (Farm) No. 1 Serial No. KEM-635
 Elevation (Spirit Level) 775.00 578
 Quadrangle RIPLEY Ripley 75 SW7
 County JACKSON District RIPLEY
 Engineer S. J. Dye
 Engineer's Registration No. 804
 File No. _____ Drawing No. _____
 Date 9-24-55 Scale 1" = 40 POLES

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

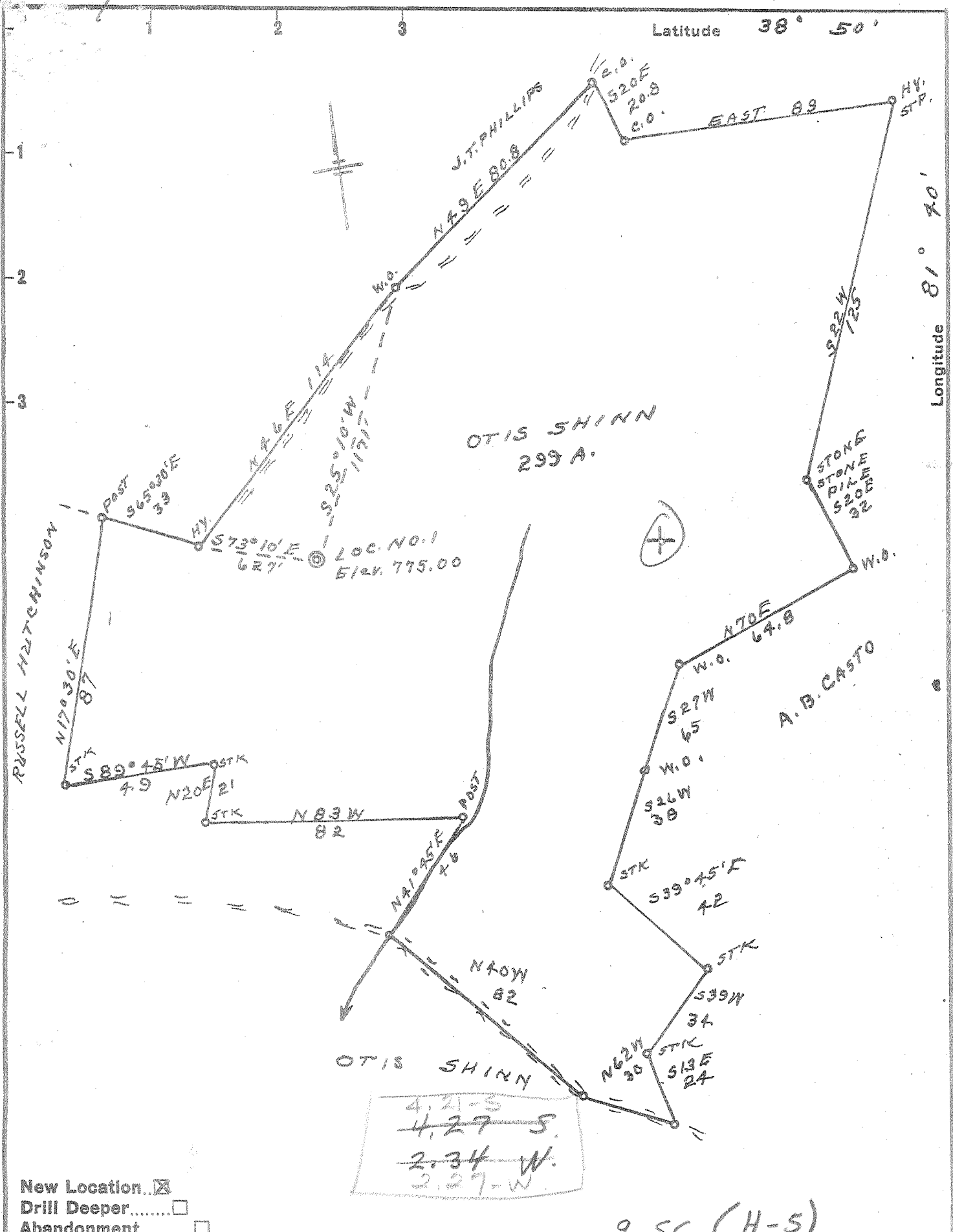
WELL LOCATION MAP
 FILE NO. JAC-905-Frac

+ 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.

MAR 30 1987

47-035



New Location...
 Drill Deeper.....
 Abandonment.....

4.21-3
 4.27 S.
 2.34 W.
 2.27-W.

Company SHINN GAS CO.,
 Address RIPLEY, W.VA.
 Farm OTIS SHINN
 Tract _____ Acres 299 Lease No. _____
 Well (Farm) No. 1 Serial No. 9
 Elevation (Spirit Level) 775.00
 Quadrangle RIPLEY-SW.
 County JACKSON District RIPLEY
 Engineer G. J. Dye
 Engineer's Registration No. 804
 File No. _____ Drawing No. _____
 Date 9-21-55 Scale 1" = 40 POLES

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

WELL LOCATION MAP
 FILE NO. JAC-905

+ 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.

66-192 Deep Well. ✓



IV-35
(Rev 8-81)

RECEIVED
JUN 10 1987

State of West Virginia

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Department of Mines
Oil and Gas Division

Date June 8, 1987
Operator's _____
Well No. KEM #635
Farm Shinn Gas
API No. 47 - 035 - 0905

Fract.

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: 775' Watershed Cox's Fork
District: Ripley County Jackson Quadrangle Ripley

COMPANY Kaiser Exploration & Mining Co.

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

DESIGNATED AGENT R. A. Pryce

ADDRESS Same

SURFACE OWNER Gary Waybright

ADDRESS Ripley, WV 25271

MINERAL RIGHTS OWNER May Shinn

ADDRESS _____

OIL AND GAS INSPECTOR FOR THIS WORK Jerry

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

PERMIT ISSUED 3/25/87

DRILLING COMMENCED 9/29/55 5/2/87

DRILLING COMPLETED 12/28/55 6/1/87

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.			
10 3/4"	25	25	
9 5/8			
8 5/8			
7	2150	2150	
5 3/16 5 x 7/8	1094	1094	
4 1/2	2576	2576	100 sks class
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Oriskany Depth _____ feet

Depth of completed well 5075' 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

OPEN FLOW DATA

Drilled on fluid not known.

Producing formation Berea Sandstone Pay zone depth 250 feet

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

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

Time of open flow between initial and final tests 4 hours

Static rock pressure 680 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

(Continue on reverse side)

JUN 15 1987

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

- 5/2/87 Ran 4 1/2" casing and cemented with 100 sks class A.
- 5/29/87 Young's perforated Berea with 25 holes from 2506' - 2512' (0.39" dia.)
- 6/1/87 Nowsco 75 quality foam fractured the Berea with 652,800 scf of nitrogen; 328 bbls of fluid; 60,000# of 20/40 sand; ISIP: 1400 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 previous IV-35					<p>RECEIVED JUN 10 1987 DIVISION OF OIL & GAS DEPARTMENT OF ENERGY</p>

(Attach separate sheets as necessary)

KAISER EXPLORATION AND MINING COMPANY

Well Operator

By: Kelli A. Perry

Date: June 8, 1987

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 3

Quadrangle Ripley
Permit No. JAC*905

WELL RECORD

Oil or Gas Well Gas
(KIND)

Company SHINN GAS COMPANY
Address RIPLEY, W. VA.
Farm OTIS SHINN Acres 300
Location (waters) COX'S FORK
Well No. 1 Elev. 775?
District RIPLEY County JACKSON
The surface of tract is owned in fee by OTIS SHINN
RIPLEY, W. VA. Address RIPLEY, W. VA.
Mineral rights are owned by OTIS SHINN
Address RIPLEY, W. VA.

Drilling commenced 9-29-55
Drilling completed 12-28-55
Date Shot 12-19 From 4000 To 225
With 2300# Jelatin

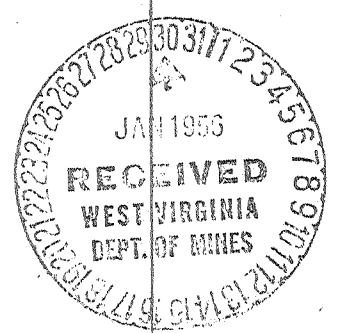
Open Flow 60/10ths Water in 2 Inch
none /10ths Merc. in none Inch
Volume 327,000 Cu. Ft.
Rock Pressure 1000 lbs. 60 hrs.
Oil none bbls., 1st 24 hrs.
Fresh water none feet none feet
Salt water 1700 feet none feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
<u>2 inch</u> Size <u>5065ft</u>	<u>5065ft</u>	<u>tubing left in well</u>	
16	<u>25</u>	<u>left in</u>	Kind of Packer
13			
10	<u>696</u>	<u>left in</u>	Size of
8 1/2	<u>1100</u>	<u>left in</u>	
7	<u>2150</u>	<u>left in</u>	Depth set
5 3/16	<u>1094</u>	<u>liner-left</u>	in
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED	SIZE	No. Ft.	Date

COAL WAS ENCOUNTERED AT	FEET	INCHES	FEET	INCHES	FEET	INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Surface			00	10			
Sand	white	hard	10	35			
slate		soft	35	100			
red rock		soft	100	135			
slate		soft	135	245			
red rock		soft	245	270			
sand		hard	270	325			
red rock		soft	325	375			
blue lime		hard	375	380			
white sand - 1 st P.H. 2		hard	380	440			
slate		soft	440	465			
red rock		soft	465	495			
lime shells		hard	495	505			
slate		soft	505	563			
sand		hard	563	590			
blue slate		soft	590	600			
sand - 1 st P.H. 2		hard	600	685			
slate		soft	685	705			
sand		hard	705	725			
slate		soft	725	735			
pink rock		soft	735	705			
gray lime		hard	805	820			
slate shells		soft	820	965			
red rock		soft	965	1015			
shale		soft	1015	1066			
sand		hard	1066	1075			
slate		soft	1075	1140			
sand		hard	1140	1290			
slate shells		soft	1290	1320			
sand		hard	1320	1395			
slate		soft	1395	1415			
sand		hard	1415	1460			
slate shells		soft	1460	1708			
sand		hard	1708	1800			
slate		soft	1800	1845			
maxes sand		hard	1845	1905			



Formation	Color	Hard or Soft	Top ³	Bottom	Oil, Gas or Water	Depth Found	Remarks
slate		soft	1905	1910			
big lime		hard	1910	2022			
slate shells	340	soft	2022	2040			
sand		hard	2040	2120			
slate shells		soft	2120				
Bre Sand - Berea		hard	2498	2513			
slate & shells		soft	2513	3740			
brown shale - 441		soft	3740	3865			
slate shells		soft	3865	3990			
brown shells		soft	3990	4275			
white slate		soft	4275	4680			
brown shale		soft	4680	4760			
slate shells		soft	4760	4840			
brown shells		soft	4840	4909			
car lime - 463		hard	4940	5045			
Trusjady Sand - 475		hard	5045	5055			
Lime - Helmsburg		hard	5055	5075			
Total depths.....			5075				
				485			
				4940	5045	5055	
				775	775	775	
				4165	4270	4280	

Date 1-28, 1956

APPROVED E. M. Reynolds, Owner

By Quinn (Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION 3

No. Jac. 905
No. OV 25
3 EAST
Oil or Gas Well Gas
(KIND)

Quadrangle Ripley
Permit No. JAC#905

WELL RECORD

Company SHINN GAS COMPANY
Address RIPLEY, W. VA.
Farm OTIS SHINN Acres 300
Location (waters) COX'S FORK
Well No. 1 Elev. 775
District RIPLEY County JACKSON
The surface of tract is owned in fee by OTIS SHINN
RIPLEY, W. VA. Address RIPLEY, W. VA.
Mineral rights are owned by OTIS SHINN
Address RIPLEY, W. VA.

Drilling commenced 9-29-55
Drilling completed 12-28-55
Date Shot 12-19 From 1000 ' To 225
With 2300# Gelatin
Open Flow 60/10ths Water in 2 Inch
10ths Merc. in none Inch
Volume 327.5 Cu. Ft.
Rock Pressure 1000 lbs. 60 hrs.
Oil none bbls., 1st 24 hrs.
Fresh water none feet none feet
Salt water 1700 feet none feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
<u>2 inch</u> Size <u>50</u>	<u>5ft</u>	<u>tubing left</u>	<u>in well</u>
16	<u>25</u>	<u>left in</u>	Kind of Packer
13			
10	<u>696</u>	<u>left in</u>	Size of <u>packed</u>
8 1/2	<u>1100</u>	<u>left in</u>	<u>packed</u>
7 1/2	<u>2150</u>	<u>left in</u>	Depth set
5 3/16	<u>109 1/4</u>	<u>liner-left</u>	<u>in</u>
8			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Dat _____

COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES
_____ FEET _____ INCHES _____ FEET _____ INCHES
_____ FEET _____ INCHES _____ FEET _____ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Surface			00	10			
Sand	white	hard	10	35			
slate		soft	35	100			
red rock		soft	100	135			
slate		soft	135	215			
red rock		soft	215	270			
sand		hard	270	325			
red rock		soft	325	375			
blue limo		hard	375	380			
white sand		hard	380	440			
slate		soft	440	465			
red rock		soft	465	495			
lime shells		hard	495	505			
slate		soft	505	563			
sand		hard	563	590			
blue slate		soft	590	600			
sand		hard	600	685			
slate		soft	685	705			
sand		hard	705	725			
slate		soft	725	735			
pink rock		soft	735	805			
gray lime		hard	805	820			
slate shells		soft	820	965			
red rock		soft	965	1015			
shale		soft	1015	1065			
sand		hard	1065	1075			
slate		soft	1075	1140			
sand		hard	1140	1290			
slate shells		soft	1290	1320			
sand		hard	1320	1395			
slate		soft	1395	1415			
sand		hard	1415	1460			
slate shells		soft	1460	1708			
sand		hard	1708	1800			
slate		soft	1800	1845			
maxes sand		hard	1845	1905			

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MAR 17 1987

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

JAN 1953
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WEST VIRGINIA
DEPT. OF MINES

(Over)

JUN 15 1987

Formation	Color	Hard or Soft	Top 3	Bottom	Oil, Gas or Water	Depth Found	Remarks
slate		soft	1005	1910			
big lime		hard	1910	2022			
slate shells		soft	2022	2040			
sand		hard	2040	2120			
slate shells		soft	2120				
Bre Sand		hard	2498	2513			
slate shells		soft	2513	3740			
brown shale		soft	3740	3865			
slate shells		soft	3865	3990			
brown shells		soft	3990	4275			
white slate		soft	4275	4680			
brown shale		soft	4680	4760			
slate shells		soft	4760	4840			
brown shells		soft	4840	4909			
car lime		hard	4940	5045			
Irusjaby Sand		hard	5045	5055			
Lime		hard	5055	5075			
Total depts.....			5075				

2040
2120
1265

1910
-175
A-165

5045
-775
A-70

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MAR 17 1981
DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Date 1-28, 1981
APPROVED C. M. Reynolds
By [Signature]
(Title)

FORM WV-2 (B) FILE COPY
 (Observer)
 7/85
RECEIVED
 MAR 17 1987



1) Date: March 10, 1987
 2) Operator's Well No. KEM #635
 3) API Well No. 47 035 905-FRAC
 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: 775' Watershed: Cox's Fork
 District: Ripley County: Jackson 0.35 Quadrangle: Ripley 577
- 6) WELL OPERATOR Kaiser Exploration and Mining Company CODE: 25350 7) DESIGNATED AGENT R. A. Pryce
 Address P. O. Box 8 Address Same
Ravenswood, WV 26164
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Jerry Tephabock
 Address Rt. 1, Box 101A
Ripley, WV 25271
- 9) DRILLING CONTRACTOR: Name KEMGAS
 Address Same
- 10) PROPOSED WELL WORK: Drill _____ / Drill deeper _____ / Redrill _____ / Stimulate X / from TD. To
 Plug off old formation X / Perforate new formation X / Spot cement plug top at 4300'
 Other physical change in well (specify) to plug Oriskany back to Br. Sh. Run approx. 2600'
- 11) GEOLOGICAL TARGET FORMATION, Berea of 4 1/2" casing & cement. Perforate and
 12) Estimated depth of completed well, 4300' feet stimulate Berea. Max drill out 4 1/2" shoe to produce
 13) Approximate trata depths: Fresh, N/A feet; salt, N/A feet. Br. Sh.
 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		Formation	
Conductor	13 3/8"	K-55				25	25	--	Kinds	Formation	
Fresh water	10"	K-55				696	696		"		
Coal									Sizes	4 1/2 x 6 1/2	
Intermediate	7"	K-55	20#	X		2150	2150	--			
Production	4 1/2"	K-55	9.5	X		2600	2699	199 sks	Depths set	2600	
Tubing											
Lin.									Perforations:		
									Top	2498 Bottom 2513	

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-035-0905-FRAC Date March 25, 19 87

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 25, 1989 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <input checked="" type="checkbox"/>	Agent: <input checked="" type="checkbox"/>	Plat: <input checked="" type="checkbox"/>	Casing: <input checked="" type="checkbox"/>	Fee <u>96993</u>	WPCP <input checked="" type="checkbox"/>	S&E <input checked="" type="checkbox"/>	Other
---	--	---	---	------------------	--	---	-------

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

John D. Johnston
 Director, Division of Oil and Gas
Ray D. Hays

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