

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 February 28, 1980
Surface Owner C. Dallas & Rebecca Kayser	Company Kaiser Exploration and Mining Compan
Address Pt. Pleasant, WV 25550	Address P. O. Box 8, Ravenswood, WV 26164
Mineral Owner Charlie Pickens, et al	Farm Charlie Pickens, et al Acres 397.49
Address Leon, WV	Location (waters) Sapsucker Run
Coal Owner Union Carbide Corporation	Well No. KEM 36 Elevation 834
Address 32 Sanderson Road, Clendenin, WV	그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그
Coal Operator None	District Union County Mason  Quadrangle Elmwood
AddressAT MUS None POSTED AT THE WELL SITE	Quadrangie
Ill provisions being in accordance with Chapter 22, the W. Va. Code, the location is hereby approved drilling. This permit shall expire if operations have not commenced by 11-18-80	INSPECTOR TO BE NOTIFIED Kenneth Butcher
operations have not commenced by	TO BE NOTIFIED Remined Buccher
Nobert to delle	ADDRESS RFD #1, Barboursville, WV 25504
Deputy Director - Oil & Gas Division	PHONE 736-4885
GENTLEMEN:	
The undersigned well operator is entitled to drill upon	on 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 le	ease dated May 26 19 78 by Charlie
Pickens et al made to Kaiser Exploration	and Mining Co day of June
19 79, in Mason County, Book 45	Page 811
	REDRILLFRACTURE OR STIMULATE
OIL AND GAS WELL ORIGINALLY DRI	
	BEI ORE TORE 5, 1909.
The enclosed plat was prepared by a registered engin	neer 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 he to make by Section 3 of the Code, must be received by	ereby notified that any objection they wish to make, or are required, or filed with the Department of Mines within ten (10) days. *
Conies of this notice and the enclosed plat were mail	
copies of this notice and the enclosed plat were many	ed by registered mail, or delivered to the above named coal operators
or coal owners at their above shown respective address	ed by registered mail, or delivered to the above named coal operators  day before, or on the
or coal owners at their above shown respective address same day with the mailing or delivery of this copy to the	day before or on the
or coal owners at their above shown respective address same day with the mailing or delivery of this copy to the	day before or on the
or coal owners at their above shown respective address same day with the mailing or delivery of this copy to the PLEASE SUBMIT COPIES OF ALL	day before, or on the Department of Mines at Charleston, West Virginia.  Very truly yours,
or coal owners at their above shown respective address same day with the mailing or delivery of this copy to the	day before, or on the Department of Mines at Charleston, West Virginia.  Very truly yours,  (Sign Name) A
or coal owners at their above shown respective address same day with the mailing or delivery of this copy to the PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:	Very truly yours,  (Sign Name)  Well Operator  R, A, Pryce
or coal owners at their above shown respective address same day with the mailing or delivery of this copy to the PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:  WEST VIRGINIA GEOLOGICAL AND	Very truly yours,  (Sign Name)  R, A, Pryce P, O, Box 8
or coal owners at their above shown respective address same day with the mailing or delivery of this copy to the please Submit copies of all geophysical logs directly to:  WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY P. O. BOX 879	daybefore, or on the Department of Mines at Charleston, West Virginia.  Very truly yours,  (Sign Name)
or coal owners at their above shown respective address same day with the mailing or delivery of this copy to the PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:  WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY P. O. BOX 879  MORGANTOWN, WEST VIRGINIA 26505	daybefore, or on the Department of Mines at Charleston, West Virginia.  Very truly yours,  (Sign Name) Well Operator  R, A, Pryce     Pryce     P. 0. Box 8  Address Street
or coal owners at their above shown respective address same day with the mailing or delivery of this copy to the please Submit copies of all geophysical logs directly to:  WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY P. O. BOX 879	daybefore, or on the nee Department of Mines at Charleston, West Virginia.  Very truly yours,  (Sign Name)
or coal owners at their above shown respective address same day with the mailing or delivery of this copy to the PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:  WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY P. O. BOX 879  MORGANTOWN, WEST VIRGINIA 26505	Very truly yours,  (Sign Name)  R, A. Pryce P. O. Box 8  Address  Of  Ravenswood

\*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.



47-053-0222

PERMIT NUMBER

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

DRILLING CONTRACTOR: (If NAME Not known at this			DEEPEN FRACTURE-STIMULATE  RESPONSIBLE AGENT:				
		Dahamb A Donne					
ADDRESS			Box 8, Ravenswood, WV 26164				
TELEPHONE			5371				
ESTIMATED DEPTH OF COMPI							
PROPOSED GEOLOGICAL FORM		ROTARY	CABLE TOOLS				
		- comp					
TYPE OF WELL: OIL_			AGE DISPOSAL				
TENTATIVE CASING PROGRAM	'A	LING WATER	FLOOD OTHER OTHER				
CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.				
20 - 16							
13 - 10			A CONTRACTOR OF THE SECOND				
9 - 5/8 10 3/4	200 .	200	Cement to surface				
8 - 5/8			- Land				
7 5 ½	2520	2520	125 sks = 570 feet				
4 1/2	4935	4935	125 sks = 1500 feet				
3		1700	Perf. Top				
2			Perf. Bottom				
Liners			Perf. Top				
			Perf. Bottom				
			Moisivici as O & HO - mos MC values				
TO DRILL DEEPER OR REDRIL SUBMIT FIVE (5) COPIES ( WELLS DRILLED PRIOR TO MUST ALSO BE SUBMITTE TO FRACTURE - STIMULATE: OIL AND/OR GAS WELL OF BOND, PERMANENT PLAT OIL AND/OR GAS WELL OF ING ORIGINAL PERMIT NUM	L: OF OG - 1, SHOWING ORI OF 1929, A PERMANENT OD. RIGINALLY DRILLED BEF AND ORIGINAL WELL R RIGINALLY DRILLED ON MBER, AND PERFORMANO	GINAL PERMIT NUMBER COPY OF THE PLAT AN ORE JUNE 5, 1929, FIVE (ECORD.  AND/OR AFTER JUNE 5, 122 BOND.  Completion for bond relea	AND PERFORMANCE BOND. ON D THE ORIGINAL WELL RECORD  5) COPIES OG - 1, PERFORMANCE  1929, FIVE COPIES OG - 1, SHOW- se. Inspector to be notified twenty-				
SUBMIT FIVE (5) COPIES OF PLAT.  TO DRILL DEEPER OR REDRIL SUBMIT FIVE (5) COPIES ( WELLS DRILLED PRIOR T MUST ALSO BE SUBMITTE  TO FRACTURE - STIMULATE: OIL AND/OR GAS WELL OF BOND, PERMANENT PLAT OIL AND/OR GAS WELL OF ING ORIGINAL PERMIT NUT  Required forms must be filed four (24) hours in advance.  The following waiver must be thereof.  WAIVER: I the undersigned, Agenthis lease have examine We the	DF OG - 1, SHOWING ORI TO 1929, A PERMANENT DD.  RIGINALLY DRILLED BEF AND ORIGINAL WELL R RIGINALLY DRILLED ON MBER, AND PERFORMANO I within ninety (90) days of the completed by the coal of the completed on our mine and and place on our mine Coal Company	GINAL PERMIT NUMBER COPY OF THE PLAT AN ORE JUNE 5, 1929, FIVE ( ECORD. AND/OR AFTER JUNE 5, 1022 BOND. If completion for bond release  perator if the permit is to 102 company, Ow maps this proposed well to 103 y have no objections to said	AND PERFORMANCE BOND. ON D THE ORIGINAL WELL RECORD  5) COPIES OG - 1, PERFORMANCE  1929, FIVE COPIES OG - 1, SHOW-  se. Inspector to be notified twenty-  be issued within ten days of receipt				

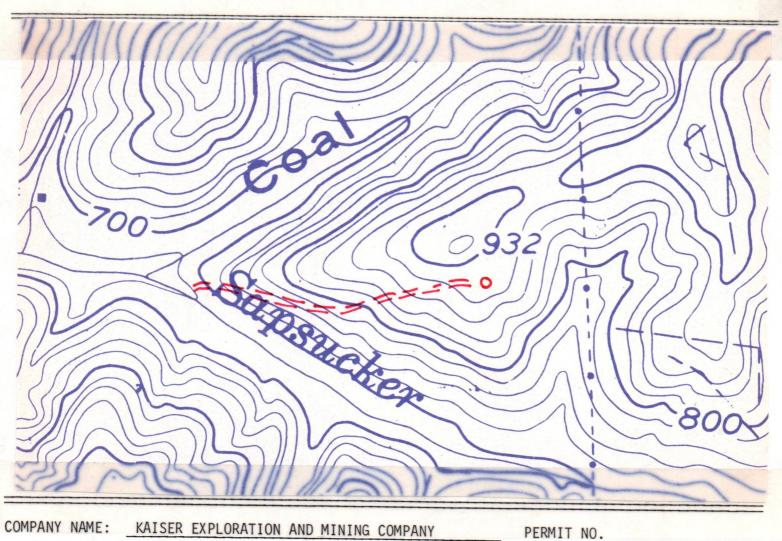
RECLAMATION PLAN

WELL NO. KEM 36

QUADRANGLE E1mwood

1" = 500' SCALE

Locate and show: (1) Well Location, (2) Access Road, (3) Well Site, (4) Drilling Pit and (5) Necessary Drainage Features.



COMPANY NAME: KAISER EXPLORATION AND MINING COMPANY

FARM: Charlie Pickens et al

DISTRICT: Union COUNTY: Mason

STATEMENT OF RECLAMATION PLAN:

The proposed access road to the gas well location will begin at the end of secondary road 33/8 and and follow an existing farm road to the location on a point. No commercial timber will be cut for: construction. A pit will be constructed and a plastic liner will be used to prevent seepage. Upon completion of the well, as soon as practical.....



Ol. & GAS DIVISION DIPT. OF MINES

the pit will be filled and the gas well location site will be returned to its original grade, leaving only an access road for the opertion of the well. Seeding, mulching and fertilizing will be used in restoring this location.

This plan was observed and agreed upon between the well operator, contract 08/26/2023 the district oil and gas inspector.

KENNETH BUTCHER

Please indicate ( ) "YES" if the district inspector was present.

"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." Submitted By: Z, A. P. \_\_\_\_\_ Title: Operations Manager Date: 3/4/80



# STATE OF WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION CHARLESTON 25305

March 12, 1980

Mr. Robert L. Dodd, Administrator Department of Mines Office of Oil and Gas

		ATION AND MINING COMPANY		
ARM:	CHARLIE PICKE	NS ET AL		
OUNTY:	MASON	DISTRICT:	UNION	

The application of the above company is APPROVED FOR ORISKANY COMPLETION (APPROVED-DISAPPROVED)

Applicant HAS complied with the provisions of chapter twenty-(HAS-HAS NOT) two, article four-a, (\$22-4A), of the code of West Virginia, nineteen hundred and thirty-one (1931), as amended, Oil and Gas Conservation, as follows:

- 1. Provided a certified copy of duly acknowledged and recorded consent and easement from all surface owners; Yes
- 2. Provided a tabulation of all deep wells within one mile of the proposed location, including the API number of the deep well, well name, and the name and address of the operator, and, \*\*
- 3. Provided a plat showing that the proposed location is a distance of 514 feet from the nearest unit boundary and showing the following wells drilling to or capable of producing from the objective formation within 3000 feet of the proposed location: None

\*\*

47-053-0186 - 4150'

47-053-0184 - 4500

47-053-0190 - 4500°

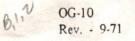
47-053-0116 - 1000' P&A 04/01/73

Very truly yours,

Thomas E. Huzzey

Commissioner

Huzzey (rg)





## STATE OF WEST VIRGINIA DEPARTMENT OF MINES

## Oil and Gas Division

## WELL RECORD

Quadrangle Elmwood
Permit No. MAS-0222

Rotary_X	Oil
Cable	Gas_X
Recycling	Comb
Water Flood	Storage
Disposal	(Vind)

				(Kind)
Company Kaiser Exploration and Mining Company Address P. O. Box 8, Ravenswood, WV 26164 Farm Charlie Pickens, et al Acres 397.49	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Location (waters) Sapsucker Run  Well No. KEM #36  District Union  County Mason	Size 20-16 Cond.			e Pade All control of Marchael San
The surface of tract is owned in fee by C. Dallas & Rebecca Kayser	13-10" 10 3/4" 9 5/8	'252' (KB)	252' (KB	) 150 sks class (to surface)
Address Pt. Pleasant, WV 25550	8 5/8			
Mineral rights are owned by Charlie Pickens, et al	7	2583' (KB	2583 (KB	) 165 sks pozmix
Address_Leon, WV	5 1/2			and class A
Drilling Commenced 7/8/80	4 1/2	4915' (KB	4915' (K	B)(1400' fillup) 225 sks pozmix (1500' fillup)
Drilling Completed 7/17/80	3			(1500 fillup)
Initial open flow Trace cu. ft bbls.	2			B)
Final production 250 MCFcu. ft. per day bbls.	Liners Used			
Well open hrs. before test 1300 RP.				
Well treatment details:	Attach copy of c	ementing reco	rd.	
Basin Surveys perforated 4826'-4832' (K.B.				4 holes/ft.
24 holes: Halliburton & B.J. Hughes hydrof				
30.000# 20/40 sand, 181.000 SCF nitrogen,				

Coal was encountered at None		Feet_	Inches		
Fresh water	_Feet		Salt Water		Feet
Producing Sand Oriskany Sandston	e		Depth 4826'-4832'	(K.B.)	1001

rate, 4150 psig avg. treating pressure, 4300 psig max. pressure; instantaneous shut in: 3500 psig; job done on August 7, 1980; used 1000 gal 28% HCL acid to spearhead treatment.

Formation Color Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water * Remarks
Soil	0	6	
Sand	6	72	
Siltstone	72	106	
Shale	106	168	
Sand	168	260	
Red Rock	260	484	
Shale	484	545	
Siltstone	545	592	
Sand	592	601	
Shale	601	658	
Siltstone	658	695	
Sand	695	707	
Red Rock	707	763	
Sand	763	776	
Red Rock	776	947	
Sand	947	984	
Shale	984	1055	
Sand	1055	1085	20/07/2006
Siltstone & Shale	1085	1236	08/25/2023
Sand	1236	1387	
Shale	1387	1412	
Sand	1412	1445	
Siltstone	1445	1630	

(over)

<sup>\*</sup> Indicates Electric Log tops in the remarks section.

Formation Color Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water * Remarks
Sand Shale Sand Shale Sand Shale Sand Shale Big Lime Shale Big Injun Siltstone Coffee Shale Berea Shale Brown Shale Brown Shale Shale Onondaga Lime Oriskany Sand Helderberg Total Depth	1630 1676 1691 1713 1778 1805 1819 2007 2036 2098 2478 2504 2514 3697 4162 4497 4727 4798 4842 4912	1676 1691 1713 1778 1805 1819 2007 2036 2098 2478 2504 2514 3697 4162 4497 4727 4798 4842 4912	Gas show 3541' - 3604' Gas show 3709'-3750', 3798, 3830' Gas show 4292' Gas show 4505'-85', 4604'-4727' Gas
0.19			in the second of
	in the second se		
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destricted by the second		(1867) T. (1888)	
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			and the second of the second o
			A second
	# 1	No.	The state of the s
		8	08/25/2023

Date December 2,

STATE OF WEST VIRGINIA

Dec DEPARTMENT OF MINES, OIL AND GAS DIVISION

REVISED

Operator's (Obverse) Well No. KEM - 36 WELL OPERATOR'S REPORT [08-78] OF API Wei API We: 1. 47 - 053 -0222
JHANJE State County Pers. WELL TYPE: 011 / Gas X / Liquid Injection / Washa Disposal (If "Gas", Production X / Unierground storage / Feet / Challew\_ LOCATION: Elevation: 834 Watershed: Sapsucker Run District: Union County: Mason Quaimantle: Elmwood (7.5') WELL OPERATOR Kaiser Exploration and Mining Co. DESIGNATED AGENT SAME Address P. O. Box 8 Address \_\_\_\_ Ravenswood, WV 26164 PERMITTED WORK: Drill \_\_ / Convert \_\_ / Drill deeper \_\_ Rearill \_\_ Plug off old formation X / Perforate new formation X / Other physical change in well (specify) FEB 9 - 1982 PERMIT ISSUED ON March 18 , 19 80 OIL & GAS INSPECTOR FOR THIS WORK: (IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED Name Kenneth Butcher (736-4885) Address RFD #1 \_\_, 19 Barboursville, WV 25504 GEOLOGICAL TARGET FORMATION: Plugged Oriskany; Frac'd Marcellus OLD Depth 4912 NEW Depth of completed well, 4750 feet Rotary / Cable Tools Water strata depth: Fresh, \_\_\_\_feet; salt, \_\_\_\_feet. NONE Coal seam depths: Is coal being mined in the area? NO PLUG Work was commenced September 3 , 19 81 , and completed September 14 , 1981 CASING AND TUBING PROGRAM: See previous well record filed upon completion of Oriskany. CASING OR TUBING TYPE SPECIFICATIONS FOOTAGE INTERVALS PACKERS Size Grade per ft New Used For drilling Left in well OR SACKS (Cubic feet) Conductor Kinds Fresh water Ccal Sizes Intermediate Production Depths set Tubing Liners Perforations: Marcellus Top Bottom 4527 4702 OPEN FLOW DATA OLD Producing formation Devonian Oriskany Sandstone OLD Pay zone depth 4826'-4832'(KB) ee-Gas: Initial open flow, Trace Mcf/d Oil: Initial open flow, NONE Bb1/d Final open flow, 250 Mcf/d Final open flow, NONE Bbl/d Time of open flow between initial and final tests, N/A hours Static rock pressure, 1300 psig (surface measurement) after \_\_\_ hours shut in 08/25/2023 [If applicable due to multiple completion--] Second producing formation Devonian Marcellus Shale NEW Pay zone depth 4527'-4702'(KB)teet N Gas: Initial open flow, N/A Mcf/d Oil: Initial open flow, NONE Bbl/d Final open flow, 125 Mer/d NONE BELVE Final open flow, Time of open flow between initial and final tests, N/A hours Static rock pressure, 1275 psig (surface measurement) after 84

Date December 4 , 198

FORM IV-35 (Reverse)

[08-78]

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

9/03/81: Set permanent bridge plug in 4 1/2" casing above Oriskany Sandstone at 4750'(KB). Perforated the Marcellus Shale with 25 holes (.50" diameter; 3 1/2" ceramic jets),

9/12/81: Fractured the Marcellus Shale interval with 1,376,000 SCF of nitrogen and spearhead fracture with 500 gallons of 15% HCL Acid. Formation fractured at a rate of 64,000 SCF/min with an average treating pressure of 3000 psig.

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all frand salt water, coal, cil and
NOTE: See pre	vious well	record fil	ed with th	e completi	on of Oriskany Sandstone.
				ALL THE STATE OF T	

(Attach separate sheets to complete as necessary)

KAISER EXPLORATION AND MINING COMPANY Well Operator

Its Operation Manager

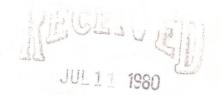
08/25/2023

NOTE: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic, detailed geologial record of all formations, including coal, encountered in the drilling of a well."

#### DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION



INSPECTOR'S WELL REPORT DEPT. OF MINES

Permit No. 47-	053-0222			Oil or G	Sas Well
Company Tans	es Exp. & Mien.	SASING AND	USED IN DRILLING	Left in Well	PACKERS
Address Tous	un wood, lov	Size			
Farm Char	he Prihens	16			Kind of Packer
Well No. 1 . OM	+-36	10 /03	250	Cle	mented la
District MM	County MOS	2 81/4 Jy	yace 1	ey H	Defeurlar
Drilling commenced	1-1-80 Bika Bt 25	6 % / lu	y Wou	Intil	Deptyl set/17
Drilling completed	Total depth 2)	3			Perf. top
Date shot	Depth of shot	2			Perf. bottom
Initial open flow	/10ths Water inInch	Liners Used			Perf. top
Open flow after tubing	/10ths Merc. inInch				Perf. bottom
Volume	Cu. Ft.	CASING CEMEN	NTED	_SIZE	No. FTDate
Rock pressure	lbshrs.	NAME OF SER	VICE COMPAN	Y	
Oil	bbls., 1st 24 hrs.	COAL WAS EN	COUNTERED A	TF	EETINCHES
Fresh water	feetfeet	FEET_	INCHE	SF	EETINCHES
Salt water	feetfeet	FEET_	INCHE	SF	EETINCHES
Drillers' Names	hollower				
Contr.	Burdette D	rellering	80.		
Remarks:					

#### DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

## INSPECTOR'S PLUGGING REPORT

FARM DISTRICT COUNTY  Filling Material Used  Liner Location Amount Packer Location  PLUGS USED AND DEPTH PLACED BRIDGES CASING AND TUE  CEMENT-THICKNESS WOOD-SIZE LEAD CONSTRUCTION-LOCATION RECOVERED SIZE		l No	,,,,,				
Filling Material Used  Liner Location Amount Packer Location  PLUGS USED AND DEPTH PLACED BRIDGES CASING AND TUE  CEMENT-THICKNESS WOOD-SIZE LEAD CONSTRUCTION-LOCATION RECOVERED SIZE			and Special Control of the Control o	ADDRESS			COMPANY
Liner Location Amount Packer Location  PLUGS USED AND DEPTH PLACED BRIDGES CASING AND TUE  CEMENT-THICKNESS WOOD-SIZE LEAD CONSTRUCTION-LOCATION RECOVERED SIZE	- 27 % 2	18	OUNTY		DISTRICT	45.81	FARM
PLUGS USED AND DEPTH PLACED  BRIDGES  CASING AND TUE  CEMENT-THICKNESS  WOOD-SIZE  LEAD  CONSTRUCTION-LOCATION  RECOVERED  SIZE		(12)	N KAN	6 D 11 CO 11			Filling Material Used
CEMENT-THICKNESS WOOD-SIZE LEAD CONSTRUCTION-LOCATION RECOVERED SIZE			Location	Packer	Amount	ation	Liner Loc
CEMENT-THICKNESS WOOD-SIZE LEAD CONSTRUCTION-LOCATION RECOVERED SIZE	BING	S AND TU	CASING	BRIDGES		ND DEPTH PLACED	PLUGS USED A
	LOST			CONSTRUCTION-LUCATION	LEAD	WOOD-SIZE	CEMENT-THICKNESS
			-	And the second	1 1 11	1-6-75	
	1	12				A STATE OF	
		200					
						1. 12. 16. 16.	
rillers' Names							illers' Names
marks:			33.35	00.11		,	marks:
						*	

I hereby certify I visited the above well on this date.

#### DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

## INSPECTOR'S WELL REPORT

Permit No. 4	253-0222			Oil or		
Company Par	er Exp, Jun	CASING AND	USED IN DRILLING	Leftin		PACKERS
Address / Club	us wood w	VO)ze			Kind of	Packer
Well No. / Yem	- 36	13				
District Alle	County Mas or	81/4				
Drilling commenced	1-11-80	5 3/16			Depth s	set
	Total depth	3			Perf. to	p
Date shot	Depth of shot	2			Perf. bo	ottom
Initial open flow	/10ths Water inInch	Liners Used			Perf. to	p
Open flow after tubing	/10ths Merc. inInch				Perf. bo	ottom
Volume	Cu. Ft.	CASING CEMENT	ED	SIZE	No. F	TDate
Rock pressure	lbshrs.	NAME OF SERVI	CE COMPAN	Y		
Oil	bbls., 1st 24 hrs.	COAL WAS ENCO	UNTERED A	т	FEET	INCHES
Fresh water	feetfeet	FEET_	INCHE	SI	FEET	INCHES
Salt water	feetfeet	FEET_	INCHE	5F	EET_	INCHES
Orillers' Names	haffener			The same of the sa	and some is	VEIL
Contr. 1	surdette d	relling	lo.	J	UL 10	1980
Remarks:	H.			OEP 1	Q GAS I	NIVISION MINES
		T			- need I	

7-0-80 DATE

1 6 1 Mais A 125/2023

DISTRICT WELL IMSPECTOR

#### DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

## INSPECTOR'S PLUGGING REPORT

COMPANY			ADDRESS			
ARM		DISTRICT		COUNTY	. \ \ \ \	
filling Material Used						
	cation	Amount	Packer	Location		
PLUGS USED A	ND DEPTH PLACED		BRIDGES		G AND T	LIBING
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LUCATION	RECOVERED	SIZE	LOST
					-	-
						-
					12-2	
					-	
-						
llers' Names						
narks:	,		C. S. D.			
	,					

I hereby certify I visited the above well on this date.

DISTRICT WELL INSPECTOR



## INSPECTOR'S WELL REPORT

OIL & GAS DIVISION OIL DERT. OF MINES

Permit No. 47-053-0222			Oil or	E.T. of	MINE
Company Paiser Exp of this	CASING AND	USED IN	Left in	PACKE	RS
Address Charles las WVa.	Fire al	lus	Wood	Q	
Farm Charlie Pucken	16	innous		Kind of Packe	er
Well No Kern 36	10			_ Size of	
District Illudy County Magor	7 81/4		3415 730	1	100 100 100 100 100 100 100 100 100 100
Drilling commenced / - / 80	5 3/16			Depth set	
Drilling completed 7 D Total depth 4883	3			Perf. top	*
Date shotDepth of shot	2			Perf. bottom.	
Initial open flow/10ths Water inInch	Liners Used			Perf. top Perf. bottom	
Open flow after tubing/10ths Merc. inInch					
VolumeCu. Ft.	CASING CEME	NTED	SIZE	No. FT	Date
Rock pressurehrs.	NAME OF SE	RVICE COI	MPANY		
Oilbbls., 1st 24 hrs.	COAL WAS E	NCOUNTE	RED AT	_FEET	_INCHES
Fresh waterfeetfeet	FEET	I	NCHES	FEET	_INCHES
Salt water feet feet	FEET	I	NCHES	FEET	_INCHES
Drillers' Names haff and					
Contr. Burdette De	rellie	400			

#### DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

## INSPECTOR'S PLUGGING REPORT

OMPANY			ADDRESS		CONTRACTOR STATE	The second second
ARM		DISTRICT		OUNTY		
illing Material Used	Last V		12/10 Part 1 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1			
ner Loc	ation	Amount	Packer	Location		
PLUGS USED A	ND DEPTH PLACED		BRIDGES	CASIN	G AND TU	BING
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LUCATION	RECOVERED	SIZE	LOST
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I hereby certify I visited the above well on this date.

DATE

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#### STATE OF WEST VIRGINIA

## DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

### INSPECTOR'S WELL REPORT

Permit No. 47-05.	2-0222	TOTAL TOTAL			r Gas Well_	
Company Laises (	al + Upen, Co	CASING AND TUBING	DEILLING USED IN	LEFT IN	PA	CKERS
Address Peps	ley, wa,	Size			, Jenstin	
Farm Charles	e Pellenses	as			Kind of P	acker
Well No Hew	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	13			Size of_	
District Ullian	County Masor	81/4				
Drilling commenced		6%			Depth set	
Drilling completed	Total depth	5 3/16				
Date shot		2	CERV	300		on
Initial open flow	/10ths Water inInch	Liners Used	MAR 0 1 1982	THE THEORY		
Open flow after tubing	/10ths Merc. inInch	See Line	AND GAS DIVIDEPARTMENT OF N		Peri, bott	om
· olume	Cu. Ft.	CASING CEME	NTED	SIZE	No. FT.	Date
Lick in an	lbshrs.	NAME OF SER	RVICE COMPA	ΝY		
1,1	bbls., 1st 24 hrs.	COAL WAS EN	COUNTERED	AT	_FEET	INCHES
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Salt water	feetfeet	FEET	INCH	S	_FEET	INCHES
Drillers' Names						
	malian	insom	bleto	>		
Remarkat				*		-

#### DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

### INSPECTOR'S PLUGGING REPORT

COMPANY			ADDRESS			
				COUNTY		
Filling Material Used						
Liner Loc	eation	Amount	Packer	Location		
PLUGS USED A	ND DEPTH PLACED		BRIDGES	CASIN	G AND TU	BING
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE	LOST
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rillers' Names						
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I hereby certify I visited the above well on this date.

DATE

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## STATE OF WEST VIRGINIA DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION OIL A

AUG - 6 1982

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OIL AND GAS DIVISION WY DEPARTMENT OF MINES

## AFFIDAVIT OF PLUGGING AND FILLING WELL

	L OPERATOR OR OWNER	KAIS	ER EXPLORATION AND		OMPANY
***************************************	ADDRESS	P.O.	Box 8 RAVENSWOOD		4
***************************************					19
COA	L OPERATOR OR OWNER		WELL AND LO	CATION	
***************************************	ADDRESS	***************************************	UNION		_District
_ Charlie Pick	ens. EtA1	-	MASON		County
Leon, WV	ON PROPERTY OWNER	Wall	<b>No.</b> KEM-36		
	ADDRESS	wen.	140. REM-50		
			PICKENS		Farm
STATE INSPECTO	R SUPERVISING PLUGGING	KENNETH	BUTCHER		
			***************************************	***************************************	***************************************
STATE OF WES		DAVIT			
	lee.				
County of MASO	N				
R	. A. Pryce	and	R. L. Coty		
being first duly s	worn according to law depose	and say t	that they are experien	nced in the	work of
<b>plugging</b> and filling	of oil and gas wells and wore on	anlawad h			
was commenced o	n the 3 day of September	r	$\frac{81}{19}$ , and that th	e well was	plugged
and filled in the f	manner:				Praggea
SAND OR ZONE RECOR	FILLING MATERIAL		PLUGS USED	CAE	ING
FORMATION			SIZE & KIND	CSG	CSG
				PULLED	LEFT IN
DRISKANY Ss	PERMANENT BRIDGE PLUG		BAKER PERMANENT	0	
•	SET AT 4750'(3/9/81)		BRIDGE PLUG IN		
	-		4 1/2" CASING		
ADCELLIG CHATE					
ARCELLUS SHALE	PERMANENT BRIDGE PLUG		BAKER PERMANENT	0	
	SET AT 4200 (1/27/82)		BRIDGE PLUG MO-		
			DEL S IN 4 1/2"		
			CASING		
					1
COAL SEAMS			PECCE		
MK)				OF MONUMEN	
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ME)			EKECTED		
MK)			PARTIAL PLUGGING ERECTED		
ME)					
MK)	of plugging and guing	rell was c	completed on the	27	day of
and that the work	of plugging and filling said w			O.S	3/25/20
and that the work January	, 19	_	A O		J1 201 20
and that the work January	of plugging and filling said we have the said we have the said not.	_	D. P -		******
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#### STATE OF WEST VIRGINIA

## DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION



JAN1 7 1983



## INSPECTOR'S WELL REPORT

Permit No. 47-053-0222	ar		Oil o	r Gas Well
Company Laises Exp. & Mis	CASING AND	USED IN DRILLING	LEFT IN	PACKERS
Address Pipley Wa	Size		* 2 × 6000	Language Cara
Farm felken et al	_ 16			Kind of Packer
Well No / Kem - 36	13			
District Illian County Marce	81/4			Size of
Drilling commenced	6%		E4 5 (6.2)	Depth set
Drilling completed	5 3/16			
Drilling completedTotal depth	3			Perf ton
Date shot Depth of shot	2		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Perf. top
nitial open flow/10ths Water inInch	Liners Used			Perf. top
Open flow after tubing/10ths Merc. inInch				Perf. bottom
/olumeCu. Ft.	CASING CEMEN	TED	SIZE	No. FTDate
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-13-83		1/6	0 11	Ø <del>8/25/</del> 2023

DATE

#### STATE OF WEST VIRGINIA

#### DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

### INSPECTOR'S PLUGGING REPORT

Permit No					
		ADDRESS		624.4	
FARMDISTRICTCOUNTY					
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Location	Amount	Packer	Location	14-7 - Aug	a tage to the control of the
ID AND DEPTH PLACED		BRIDGES	CASIN	G AND T	UBING
WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE	LOST
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					- <b>S</b> - 15-20-20
		Suppose the second seco		. 114	C. A. C
				-1, u - 11	. 102 77 101
_ I hereby certify I w	risited the abov	e well on this date			
	Location  ED AND DEPTH PLACED  WOOD-SIZE	Location Amount  ED AND DEPTH PLACED  WOOD-SIZE LEAD	Location Amount Packer  ED AND DEPTH PLACED BRIDGES  WOOD-SIZE LEAD CONSTRUCTION-LOCATION	ADDRESS  DISTRICT COUNTY  Location Amount Packer Location  D AND DEPTH PLACED BRIDGES CASIN  WOOD-SIZE LEAD CONSTRUCTION-LOCATION RECOVERED	ADDRESS  DISTRICT COUNTY  Location Amount Packer Location  DI AND DEPTH PLACED BRIDGES CASING AND TO  WOOD-SIZE LEAD CONSTRUCTION-LOCATION RECOVERED SIZE  OF THE PLACED SIZE SIZE SIZE SIZE SIZE SIZE SIZE SIZE

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STATE OF WEST VIRGINIA

#### DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

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OIL AND GAS DIVISION WY DEPARTMENT OF MINES

#### INSPECTOR'S WELL REPORT

Permit No. 47-053-0212		Oil or	Gas Well
Company Kaises Exp & Lini	OGING AND USED IN	LEFT IN WELL	PACKERS
Address Ripley Wa.	Size		
Farm Charles Vickenset	16		Kind of Packer
Well No / Com - Sp.	- 10		Size of
Drilling commenced County /// Was	65%	· · · · · · · · · · · · · · · · · · ·	Depth set
Drilling completedTotal depth	5 3/16		Perf. top
Date shot Depth of shot	2		Perf. bottom
In tial open flow/10ths Water inInci	Liners Used		Perf. topPerf. bottom
Open flow after tubing /10ths Merc. inIncl			
, olumeCu. Ft	NAME OF SERVICE COMP		No. FTDa
bbls., 1st 24 hrs		D AT	FEETINCHE
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Zemarks:			

5-20-82

#### DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

## INSPECTOR'S PLUGGING REPORT

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STAN SO THEMPSON	INSPE	CTOR'S	PLUGGING REPO	PRT		6.
ermit Na			NO AN	W.	11 Na	
OMPANY	- 4502		ADDRESS			
ARM	91 T32 A 32	DISTRIC		COUNTY	11/	
lling Material Used		on a second of the second of t	The state of the s	Jen M.	11	
ner Loc	eation	Amount	Packer	Location		No of the second
PLUGS USED A	ND DEPTH PLACED		BRIDGES	CARIN	G AND TO	BING
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LUCATION	RECOVERED	SIZE	LOST
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08/25/2023



### State of West Virginia

### Department of Mines Gil and Gas Division Charleston 25305

WALTER N. MILLER DIRECTOR

THEODORE M. STREIT ADMINISTRATOR

February 8, 1983

Kaiser Exploration & Mining Company P. O. Box 8 Ravenswood, W. Va. 26164

In Re:	PERMIT NO:	47-053-0222-PP
	FARM: Cha:	rlie Pickens, et al
	WELL NO:	KEM-36
	DISTRICT:	Union
	COUNTY	Mason

#### Gentlemen:

	ffice. Only the column check below applies:
	The well designated by the above permit number has been released under your Blanket Bond.
	Please return the enclosed cancelled single bond which covered the well designated by the above permit number to the surety company who executed said bond in your behalf, in order that they may give you credit on their records.
XXXXXX	Your well record was received and reclamation requirements approved. In accordance with Chapter 22, Article 4, Section 2, the above captioned well

will remain under bond coverage for life of the well.

Very truly yours,

Theodore M. Streit, Administrator Office of Oil & Gas-Dept. Mines

1.0 API well number 47-053-0222 (If not available, leave blank. 14 digits ) 2.0 Type of determination being sought (Use the codes found on the front of this form ) Section of NGPA Category Code 3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.) 4832'(KB) feet 4.0 Name, address and code number of applicant: (35 letters per line Kaiser Energy, Inc. maximum. If code number not Seller Code evailable, leave blank.) 300 Lakeside Drive 94643 Oakland CA Zip Coite 5.0 Location of this well: [Complete (a) or (b).) E1mwood (a) For onshore wells Field Name 135 letters maximum for field Mason WV name.) County State (b) For OCS wells: Area Name Block Number Date of Lease: OCS Lease Number (c) Name and identification number of this well: (35 letters and digits Charlie Picken KEM #36 maximum.) (d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters N/A maximum.) 6.0 (a) Name and code number of the purchaser: (35 letters and digits maximum. If code number not Roaring Fork Gas Corn available, leave blank.) Buyer Code (b) Date of the contract: Mo. Day Yr. (c) Estimated annual production. MMcf (a) Base Price (b) Tax (c) All Other (d) Total of (a), (\$/MMBTU) . Prices (Indicate (t) and (c) (+) or (-).] 7.0 Contract price: 1982 (As of filing date. Complete to 3 Jan. 6 0 7 decimal places.) 5 7 5 1 8.0 Maximum lawful rate: (As of filing date. Complete to 3 .Deregulated decimal places.) 9.0 Person responsible for this application . Coty Petroleum Engineer Agency Use Only Dure Received by Juris, Agency EB 221982 Signa: urr Date Received by FERC 1/22/82 273-537108/25/2023 304 Date Application is Completed Phone Number

# APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL PRICE UNDER THE NATURAL GAS POLICY ACT (NGPA) (Sections 102, 103, 107 and 108)

#### PLEASE READ SEFORE COMPLETING THIS FORM:

#### General Instructions:

Complete this form if you are att. lying for price classification under sections 102, 103, 107 or 108 of the NGPA. A separate application is required for each well. If any reservoir qualifies for a category which differs from the category applicable to the producing well, separate applications must be made for the producing well and the reservoir. Complete each appropriate item on the reverse side of this page. The code numbers used in items 4.0 and 6.0 can be obtained from the Buyer/Seller Code Book. If there is more than one purchaser or contract, identify the additional information in the space below. Enter any additional remarks in the space below.

Submit the completed application to the appropriate Jurisdictional Agency as listed in title 18 of the CFR, part 270.103. If there are any questions, call (202), 275-4539.

#### Specific Instructions for Item 2.0, Type of Determination:

Section of N	GPA Category Code	Description
102	1	New OCS Lease
102	2	New onshore well (2.5 mile test)
102	3	New onshore well (1,000 feet deeper test)
- 102	4	New onshore reservoir
102	5	New reservoir on old OCS Lease
103		New onshore production well
107		High cost natural gas
108		Stripper well

#### Other Purchasers/Contracts:

Contract D		Purchase		Buyer Code
		N/A	<u>:</u>	
		•		

Remarks:

C3
PARTICIPANTS: DATE: JUN 28 1982 BUYER-SELLER CODE
WELL OPERATOR: Kaiser Energy, Inc.
FIRST PURCHASER: Roaring Fork Gas Corp.
OTHER:
W Vo Bonedant of Miner Cit & C. Divis
W. Va. Department of Mines, Oil & Gas Division WELL DETERMINATION FILE NUMBER
820222-107-053-0222 DEFERRED FOR
Uso Above File Number on all Communications
Relating to Determination of this Well
CHECK EACH ITEM AS COMPLETE OR NOTE WHAT IS MISSING
1. FERC -121 Items not completed - Line No. 7.0 c 8.0 Deregulated
2. IV-1 Agent R. L. Coty
3. IV-2 Well Permit ✓
4. IV-6 Well Plat
5. IV-35 Well Record
6. IV-36 Gas-Oil Test: Gas Only Was Oil Produced? Ratio
7. IV-39 Annual Production years
8. IV-40 90 day Production Days off line:
9. IV-48 Application for certification. Complete? V
10-17. IV Form 51 - 52 - 53 - 54 - 55 - 56 - 57 - 58 Complete? Affidavit Signed
18-28. Other: Survey Logs Geological Charts
Structure Map1: 4000 Map Well Tabulations
(5) Date commenced: 9-3-81 Date completed 9-14-81 Deepened
(5) Production Depth: 4826-32 , 4527-4702
(5) Production Formation: Devonion Orishan Sandstone, Devouing Marcelly Shake
(5) Final Open Flow: 250 MCF
(5) After Frac. R. P. 1300 # 84 hrs.
(6) Other Gas Test:
(7) Avg. Daily Gas from Annual Production:
(8) Avg. Daily Gas from 90-day ending w/1-120 days
(8) Line Pressure: PSIG from Daily Repor
(5) Oil Production: From Completion Report
10-17. Does lease inventory indicate enhanced recovery being done $\mathcal{N}_{\mathcal{O}}$
10-17. Is affidavit signed?
Does official well record with the Department confirm the submitted information?
Additional information Does computer program confirm?
Was Determination Objected to By Whom?

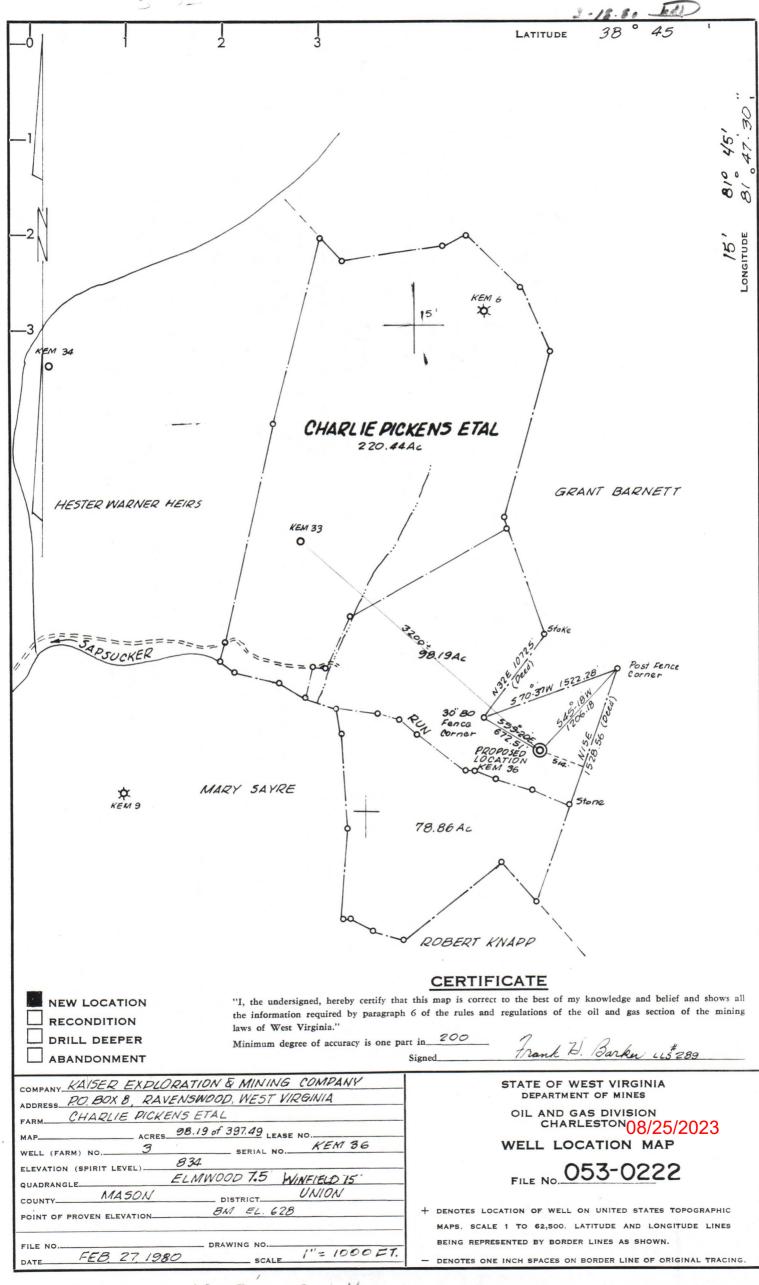
DEPARTMENT OF MINES, DIL AND GAS DIVISION

	3456	January 22	:1982
***	Nell No	KEM #36	

### MELL CLASSIFICATION FORM MIGH COST GAS WELL - DEVONIAN SHALE

META Section 107

	DESIGNATED AGENT RL. Coty
	ADDRESS P O BOX 8
	Ravenswood, WV 26164
WELL SPERATOR Kaiser Energy, Inc.	LOCATION Elevation 834'
ACCRESS 300 Lakeside Drive	Watershed Sapsucker Run
Oakland, CA 94643	DistUnion County Mason Guad Elmwood
GAS PURCHASER Roaring Fork Gas Corp.	Gas Purchase Contract No.
ADDRESS P. O. Box 3752	Meter Chart Code
Charleston, WV 25337	Date of Contract 12/22/8/
	黄 按 章 章 4
Date surface drilling began: 7/8/80	
Indicate the bottom hole pressure of the well and	explain how this was calculated.
BHP = $P_1 + P_1 (e^X - 1)$ $P_1 = 1275 psig = 1275 $	1290 psia · T = 106 <sup>0</sup> F = 566 <sup>0</sup> R
BHP = P] + P1 (e <sup>X</sup> - 1) P1 = 1275 psig = $X = \frac{GL}{53.34T} = \frac{(0.65)(4650)}{(53.34)(566)} = \frac{3022.5}{30190.44} = 0.16$	001144
BHP = $1290 + 1290 (e^{0.1001144} - 1)$	
BHP = 1290 + 1290 (e - 1) BHP = 1290 + 1290 (1.1053 - 1)	
BHP = 1290 + 135.84	
BHP = 1425.84 PSIA AFFIDAY	T .
I. R. L. Coty , having been fitted percentage of footage of the producing interval which is less than 0.7 if a Gamma Ray log described subparagraph (3)(port described in subparagraph (3)(ii)(B); I have demonstrate shale footage is equal to or less than five (5) percent of the application which is in high cost natural gas well.	ed that the percentage of potentially disqualifying non-
THE AT LECT LIBERTY.	
STATE OF WEST VIRGINIA.	
COUNTY OFlackson TO WIT	
I. <u>Faith Ann Holbert</u> , a Nota	ry Public in and for the state and county aforesaid.
to certify that R. L. Coty . whose name	is signed to the writing above, bearing date
the 22nd day of <u>January</u> , 1982, has a	
foresaid	
Given under my hand and official seal	this 25th day ofJanuary _ 19 82.
My term of office expires on the	day of December . 19 85
	Gaith ann Halbeit
NOTARIAL SEAL;	Notary Public



4935 Criskany