



STATE OF WEST VIRGINIA DEPARTMENT OF MINES

### Oil and Gas Division WELL RECORD =/

Casing and

Tubing

10 3/4

Size

20-16

Cond

9 5/8

8 5/8

5 1/2

4 1/2

13-10"

Elev. 1018,7

\_ County<u>Jackson</u>

Quadrangle\_Sandyville Permit No. 47-035-1506

Well No. DEK 70

District Ravenswood

Company KAISER EXPLORATION AND MINING COMPANY

Address P. O. Box 8. Ravenswood, WV

Address Rt. 2, Box 63, Ravenswood, W

Mineral rights are owned by Same as above

Address Same as above

Initial open flow 2 MCFD cu. ft. bbls.

Location (waters) Straight Fork

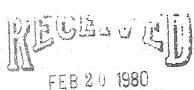
The surface of tract is owned in fee by\_

Drilling Commenced June 14, 1979

Drilling Completed June 23, 1979

Walter J. LeMaster, Jr.

Farm Walter J. LeMaster, Jr. Acres 116



	Cable Recycling Water Floo	GAS DIVISION  GAS DIVISION  GAS X  Comb.  Storage  (Kind)
	Left in Well	
-		
203	203	100 sax = to surfac
2616	2616	165 sax = 1400'
	5033	225 sax = 2600'
	4168	<b>š</b> .
nting record		
No resul	t. Perf	orated 4 1/2"

Final production 30 M Well open 10 Well treatment details: Perforated 4 1/2" Frac Oriskany San casing 4600' to 4	cu. ft. per dayhrs. before test _ casing at 494 d with 948 bb] 636' with 10 s	bbls.  Z50RP.  21 to 49441  S water and bots Ran	with 16 shot 47,800# sand	1. No result.	Perforated 4 1/2'
and perforated Brosand, 496,000 SCF	e 7100 ps1; ma own Shale 4073 of nitrogen. None	* - 4211' (	psi; well scr K.B.); foam f	reened off: set ractured Brown	permanent plug Shale w/60,000#
Fresh water Producing Sand Brown	ShaleFee	2 1	management Salt V	Mark on a	Feet
Formation Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	
No Record Shale Sand Shale Sand Shale Sand Shale Sand Shale Sand Shale Maxton Sand Shale Big Lime Shale Injun Sand Shale Coffee Shale Berea Sand Shale Brown Shale Brown Shale Shale		0 1200 1305 1422 1517 1580 1608 1650 1762 1792 1990 1948 1957 2062 2156 2186 2480 2510 2515 3678 4213	1200 1305 1422 1517 1580 1608 1650 1762 1792 1900 1948 1957 2062 2156 2186 2480 2510 2515 3678 4213 4678		

(over)

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

Formation Col	or Hard or Soft	Top Feet 2	Bottom Feet	Oil, Gas or Water * Kemarks
Oriskany Sand Helderberg L.	S.	4932 4953	4953 5064	
Log Total	Depth	5064		
		Production of the Control of the Con		
		- Original reprise and Color		
Maria de la companya		en de versage de la constant de la c		
and the second s				Beginschungschung (1947 in der eine der
		i i i i i i i i i i i i i i i i i i i	i i i i i i i i i i i i i i i i i i i	
	en de la companya de			
				Control of the Contro
				a stak grada kala 1990 ya ke ilikur. Balansari da Ak
	And the second s			
	Section 1			
	Fadding of the control of the contro		ing the second second	
	1			
		8		i di di di kabupatèn kabupatèn kabupatèn kabupatèn kabupatèn kabupatèn kabupatèn kabupatèn kabupatèn kabupatèn Kabupatèn kabupatèn
		SCHWeisenstein Communication (Communication Communication	- 1 .at A	
en de la companya de La companya de la co	A Property of the Control of the Con		· · · · · · · · · · · · · · · · · · ·	
		Security of the security of th	######################################	
			res-fall-magnetischen der	
	- Investment of the control of the c	nide volence and a second	**************************************	
	exercised and a second			
	TO PARKAGO PROPERTY.		The state of the s	
	auxiji princing na			
	and control of the co			engali saata wii saa Saata waxaa w
	. and an analysis of the state			
	· ·			
		(A.A.)		
	out translations or to Aug.			
a iska kapundungi. Asamoni itapisi nong saka kasah sahat sawak sangganyan yang saka satu samou sulta kasay ka	NO PROVIDENCE COMPANIENT ANNIHALIST CONTRACTOR ANNIHALIST CAMPIONE DE COMPANIENT ANNIHALIST COMPANIENT COMPANI	and the second distribution of the second	n Alle Balle and Balle (St. Carpelle and the St. Carpelle	

Date February 20 1080

APPROVED Kaiser Exploration and Mining Company

By Jell ()

Operations Manager

State of West Virginia DEPARTMENT OF ENERGY Division of Oil and Gas

Division of Energy

Well Operator's Report of Well Work

MAY 1 3

Farm name: LEMASTER, W. J., JR.	Operator Well No.: DEK-70 Permitting rangle: SANDYVILLE	
LOCATION: Elevation: 1018.70 Quad	rangle: SANDYVILLE . and Gas Section	
Latitude: 41109 Feet Sou Longitude 7000 Feet Wes	County: JACKSON th of 39 Deg. 0 Min. 0 Sec. t of 81 Deg. 40 Min. 0 Sec.	* *
Company: PEAKE ENERGY, INC. P. O. BOX 8		
RAVENSWOOD, WV 26164-0008	Casing   Used in   Left   Cement   &   Fill U	a
Agent: DAVID L. COX	Tubing   Drilling   in Well   Cu. Ft	•
Inchestor: CLEN D. DODINGON	Size	
Inspector: GLEN P. ROBINSON Permit Issued: 03/28/91 Well work Commenced: 05/06/91	NO CHANGE IN EXISTING CASING- SEE	
Well work Completed: 05/06/91  Verbal Plugging  Permission granted on:	ORIGINAL WELL RECORD FILED BY	-
Rotary Cable Rig Total Depth (feet) Fresh water depths (ft)	KAISER EXPLORATION & MINING COMPAN	NY
Salt water depths (ft)	ON FEBRUARY 20, 1980	-
Is coal being mined in area (Y/N)?N Coal Depths (ft): NONE		-    -  -
OPEN FLOW DATA		1
Producing formation BEREA SANDSTG	ONE Pay zone depth (ft) 2510-1	
rinal open flow 150 MCF	d Final open flow	
Time of open flow between in	litial and final testsuo	
Static rock Pressure 500 psic	g (surface pressure) after 24 Hour	
Second producing formation * Gas: Initial open flow MCF	Pay zone depth (ft)  d Oil: Initial open flow  Bbl	7.3
Final open flow MCF	d Final open flow Phi	
Time of open flow between in	nitial and final tests Hour	
Static rock Pressure psic *DEVONIAN SHALE IS TEMPORARILY ABANDO	(surface pressure) after	
NOTE: ON BACK OF THIS FORM PUT THE	FOLLOWING: 1). DETAILS OF PERFORATE	ΞD

For: PEAKE ENERGY, INC.

INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS,

DAVID L. COX, MANAGER OF GEOLOGY

MAY 10, 1991 Date:

#### API # 47-035-01506F OPERATORS WELL # DEK 70 The same of the sa WELL NAME: LE MASTER

FORM WR-35 (Reverse)

Division of Energy

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

MAY 6, 1991:

YOUNG'S WIRELINE SET MECHANICAL PLUG IN 4-1/2" CASING AT 2610. PERFORATED THE BEREA SANDSTONE WITH 16 HOLES FROM 2521 TO 2525 (GL) OR 2510-2514 (KB). NOWSCO FOAM FRACTURED THE BEREA USING 45,000# OF SAND, 562,000SCF OF NITROGEN AND 255 BBL OF FLUID.

BDP=3200 PSIG

ATP=1650 PSIG

ISIP=1100 PSIG

ELL LOG			
FORMATION	TOP	ВОТТОМ	REMARKS
NOTE:  WELL WAS ORIGINALLY DRILLED BY KAISER EXPLORATION & MINING COMPANY IN JUNE OF 1979. NO CHANGE FROM PREVIOUSLY SUBMITTED WELL RECORDD			

12010

400	4.0						
Samo	E. 1 300	20	* *	de de	0	4740	
9.0	OR	La.	1,42	W-	1	3-4	
46	P. 7" F	44	6 0	5.6	dia	السط	

1)

2)

4)

5)

6.)

7:)

8 )

9 )

10)

Ll)

L2)

CYPE

<u>loal</u>

in-ground

Conductor

<u>'resh Water</u>

<u>ntermediate</u>

roduction

ubing

iners

Existing casing

•	~ ~	•				S
M WW-2B	19				_	Expres 3/28/0
	DEPAR	TMENT OF 1	ENERGY, DI	VIRGINIA VISION OF C	ITT. AND CAG	Pageof
			1012	APPLICATIO		
			•	37085)- (2)		
Operato	r's Well	Number:_	DEK 70		3) E	Clevation: 1018.
Well ty			or Ga			
	•		pee	n/ Underg P/	Shall	ge/ ow_x_/
Propose Old Plug-	d Target back	Formation	1(s): Be	erea Sandstone		
<b>LYRAGRAF</b>	M Total I	epth: 427	5	feet Temp	porary plug-ba	ack 2600 ft.
Approxi	mate fres	sh water s	trata dep	ths: none rep	ported when or	riginally drilled
Approxi	mate salt	: water de	pths: 19	10, 2050		
Approxi	mate coal	. seam dep	ths: No	ne	,	
Does la	nd contai	n coal se	ams tribu	tary to act	ive mine?	Yes/ No_x_/
Proposed	d Well Wo	rk: to se	t temporary		ea; stimulate	by fracturing,
		CASIN	G AND TUB	ING PROGRAM	Tant Much	Many KANTER
ing casing		PECIFICAT	IONS	FOOTAGE IN	TERVALS	CEMENT
ound	Size	Grade	Weight per ft.	For drilling	Left in	Fill-up
<i>2/28/9/</i> ictor					well	(cu. ft.)
Water	10 3/4"			203	203	100 sx
					4	38 SA 1911.3
mediate	7"			2616	2616	165 sx
ction	4-1/2"			5033	5033	255 sx
q						38SA14-11-1
5				(57)	Washing.	
RS : Kin	ıd *We	ell original	Ly drilled in	1979	26	

ACKERS : Kind Sizes Depths set

For Divison of Oil and Gas User ARTMENT OF ENERGY Well Work Permit Reclamation Fund

Bond

WPCP

Page	1 of _
Form	WW2-A
(09/8	7)
File	Conv

	DE				_ · · · ·	• • •		
_	13/18	, ~	.4		***		1)	
	(2)	MAR	1	5	المارية والمارية	• ::	2)	

E'VISION OF OIL & GAS

3)

Date: February 21, 1991
Operator's well number
DEK #70

API Well No: 47 - 035 - 1506 F
State - County - Permit

DEPARTMENT OF ENERGY

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

#### NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4)	Surface Owner(s) to be served:	5) (a) Coal Operator:
	(a) Name Walter J. Lemaster, Jr.	Name
	Address Rt. 2, BOX 114	Address
	Ravenswood, WV 26164	
	(b) Name	(b) Coal Owner(s) with Declaration
	Address	Name
		Address
	(C) Name	
	Address	Name
		Address
6)	Inches Clon D Pobinson	(-) C1 T
0)	Inspector Glen P. Robinson Address Box 1	(c) Coal Lessee with Declaration
	Belleville, WV 26133	Name
	Telephone (304) - 836-8766	Address
	Telephone (304)	
	TO THE PERSON(S) NAMED AB	OVE TAKE MOTTE TUAT.
	TO THE PERSON(S) NAMED AB	OVE TARE NOTICE THAT:
	Included is the lease or leases or	other continuing contract or
contr	acts by which I hold the right to	extract oil and day OP
Y Y	Included is the information requir	ed by Chapter 228 Article 1
Sect	ion 8(d) of the Code of West Virgin	ia (see page 2)
5000.		hapter 22B of the West Virginia Code
T has	e served copies of this notice and	application a location plat and
accor	mpanying documents pages 1 through	on the shows named nartice has
	<u>x</u> Personal Service (Affidavit a	ttached)
	Certified Mail (Postmarked po	
	Publication (Notice of Public	
	I have read and understand Chapter	22B and 38 CSR 11-18, and I agree
to th	ne terms and conditions of any perm	it issued under this application.
	I certify under penalty of law tha	t I have personally examined and am
famil	iar with the information submitted	on this application form and all
attac	chments, and that based on my inqui	ry of those individuals immediately
respo	onsible for obtaining the informati	on. I believe that the information
is tr	ue, accurate, and complete.	
		ant penalties for submitting false
infor	mation, including the possibility	of fine and imprisonment.
	Well Oderator	PEAKE ENERGY, INC.
	By: Kever +	-tix
	Its:	Designated Agent
	Address	P. O. Box 8
		Ravenswood, WV 26164
	Telephone	273-5371
Subsc	cribed and sworn before me this 28	day of <u>Feb</u>
1	toolen Kelly	
My co	ommission expires October 28, 1993	Notary Public
	1330	######################################



MAY 1 5 1979

OIL & GAS DIVISION
DEPT. OF MINES

### Oil and Gas Division

## OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,	
Charleston, W. Va.	DATE May 2, 1979
Surface Owner Walter J. LeMaster, Jr.	Company Kaiser Exploration and Mining Company
Address Rt. 2, Box 63, Ravenswood, WV 261	
Mineral Owner Same as above	
	Location (waters) Straight Fork
Coal Owner Same as above	Well No. <u>DFK-70</u> <u>Elevation 1018.7'</u>
Address Same as above	District Ravenswood County Jackson
Coal Operator None	Quadrangle Sandyville
Address None	
IS PERMIT MUST BE POSTED AT THE WELL SITE	•
•	
provisions being in accordance with Chapter 22, the W. Va. Code, the location is hereby approved	
	INSPECTOR TO BE NOTIFIED Richard Morris
drilling . This permit shall expire if	TO BE NOTIFIED NICHARD POLITS
erations have not commenced by 1-16-80	ADDRESS P. O. Box 372, Grantsville, WV 26147
756-7 2 W	PHONE 354-7259
Debuty Director - 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
itle thereto, (or as the case may be) under grant or lease	e dated July 17 10 78 by Walter 1
<u>emaster, et al</u> made to <u>Devon Corporation, e</u>	et al and recorded on thel day of August
9/8, in Jackson County, Book 149	Page 176
XXX NEW WELLDRILL DEEPER _	REDRILLFRACTURE OR STIMULATE
OIL AND GAS WELL ORIGINALLY DRILL	ED BEFORE JUNE 5, 1969.
	and the control of th
ave been notified as of the above date.	or licensed land surveyor and all coal owners and/or operators
The above named coal owners and/or operator are herebo make by Section 3 of the Code, must be received by, or	y notified that any objection they wish to make, or are required filed with the Department of Mines within ten (10) days. *
	by registered mail, or delivered to the above named coal operators
n com dangle at their spoke shown respective sources	day hotors on a 41.
ame day with the mailing or delivery of this copy to the I	Jepartment of Mines at Charleston, West Virginia.
: LEASE SUBMIT COPIES OF ALL	Very truly yours,
EOPHYSICAL LOGS DIRECTLY TO:	(Sign Name)
is. Sanggi pangganggan dalah ingganggan danggan pangganggan pangganggan sanggan pangganggan pangganggan panggangga	R. A. Pryce
VA. OIL & GAS CONSERVATION COMMISSION Add	P. O. Box 8
13 WASHINGTON STREET, EAST	317 661
HARLESTON, WEST VIRGINIA 25311	Perator Ravenswood
	City or Town
	West Virginia 26164
λ	State

\*SECTION 3... If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting 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.

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

PROPOSED WORK ORD	ER TO X DRILL	DEEPEN FRACTURE-STIMULATE RESPONSIBLE AGENT:			
DRILLING CONTRACTO					
NAME Not known at	this time.	NAME Robert A. P	ryce		
ADDRESS	· · · · · · · · · · · · · · · · · · ·	ADDRESS P. O. Box 8, Ravenswood, WV 2616			
TELEPHONE		TELEPHONE 273-5371			
ESTIMATED DEPTH OF	COMPLETED WELL: 5020	ROTARY X	CABLE TOOLS		
PROPOSED GEOLOGICA	L FORMATION: Oriskany				
TYPE OF WELL:	OILGAS_X	COMB STORAGE	E DISPOSAL		
	RECYCL	ING WATER FLO	OODOTHER		
•					
TENTATIVE CASING PR	OGRAM:				
CASING AND TUBING	USED FOR	LEFT IN	A 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
SIZE	DRILLING	WELL	OR SACKS - CUBIC FT		
- 16					
3 - 10					
9 - 5/8 10 3/4	200	200	Cement to surface		
8 - 5/8					
7	2575	2575	125 sk = 570 ft.		
5 1/2	5020	5020	125 sk = 1500 ft.		
4 1/2	5020	3020			
2			Perf. Top Perf. Bottom		
Liners			Perf. Top		
terrenen de la companya de la compa			Perf. Bottom		
			<u> </u>		
APPROXIMATE FRESH	WATER DEPTHSFEET	SALT WATER	FEET -		
APPROXIMATE COAL D	EPTHS	· · · · · · · · · · · · · · · · · · ·	<u> </u>		
IS COAL BEING MINED	IN THE AREA? None	BY WHOM?			
TO DRILL:	e de la companya del companya de la companya del companya de la c				
SUBMIT FIVE (5) (OF PLAT.	COPIES OF OG - 1, \$100.00 PERM		OND AND PERMANENT COPY		
O DRILL DEEPER OR	REDRILL:		grantana sa		
SUBMIT FIVE (5) C	OPIES OF OG - 1, SHOWING ORIGINATION TO 1929, A PERMANENT (	INAL PERMIT NUMBER AND TOPY OF THE PLAT AND	ND PERFORMANCE BOND. ON THE ORIGINAL WELL RECORD		
MUSI ALOU DE OU	DMITTED.		والراجع والمراكبة المتراكب والمنطور		
TO FRACTURE - STIMU					
BOND, PERMANEN	YELL ORIGINALLY DRILLED BEFO F PLAT AND ORIGINAL WELL RE	CORD.			
OIL AND/OR GAS V ING ORIGINAL PER	VELL ORIGINALLY DRILLED ON A MIT NUMBER, AND PERFORMANCE	ND/OR AFTER JUNE 5, 192 E BOND.	9, FIVE COPIES OG - 1, SHOW-		
Required forms must	be filed within ninety (90) days of	completion for bond release.	Inspector to be notified twenty-		
four (24) hours in a	ivance.				
	-	- · · · · · · · · · · · · · · · · · · ·			
		And the second s			
·					
FFF1 - 4"- 11			· · · · · · · · · · · · · · · · · · ·		
thereof.	must be completed by the coal op				
	ed, Agent forexamined and place on our mine n				
We the	Coal Company	have no objections to said w	ell being drilled at this location		
	tor has complied with all rules and re				
₹					
		Ŀ	or Coal Company		
		-	Official Title		