

1)	Date:_	August	26	, 1983

2) Operator's Well No. KEM #480

3) API Well No. 47 - 035 - 1901 State County Permit

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

				_	LICA	HON FOR A WEL	L WORK I ERMI	•	
4) WELL TY								DILICATIONS	
									_/ ShallowX/)
5) LOCATIO						_ Watershed: _			
									Cottageville
6) WELL OF	ERATOR			pratic	on and	Mining Co.	7) DESIGNATE	DAGENT R. A	. Pryce
Addres	s		Box 8		35		Address	Same	
		Ravens	swood,	WV	26164				
8) OIL & GA	S INSPEC	TOR TO	BE NOTII	FIED			9) DRILLING C	CONTRACTOR:	
	omer Do						NameC	lint Hurt & A	
Addres	s Box 3						Address	P. O. Box 3	
	Loone	yville	, WV					Elkview, WV	DE WISTON
10) PROPOSE	ED WELL	WORK:	Drill	X	_/ Drill	deeper	/ Redrill	/ Stimulate	MIL AGO A
			Plug of	f old	formation	/ Perfora	ate new formation	1/	
			Other p	hysical	change in	well (specify)			134 2001 4 1093
11) GEOLOG	ICAL TAR	GET FOR				n Brown Sha	le		SEP 14 1303
12) Estim	ated depth	of complet	ed well,		***	₩ 4948 feet			
13) Appro	oximate trat	a depths:	Fresh.					feet.	OIL & GAS DIVIS
							al being mined in th	e area? Yes	DENT DE M
15) CASING							and a second		DEPT. OF M
CASING OR	11		CIFICATIONS		11	FOOTAGE II	NTERVALS	CEMENT FILL-UP	PACKERS
TUBING TYPE	-		Weight		1		1	OR SACKS	TACKERS
	Size	Grade	per ft.	New	Used	For drilling	Left in well	(Cubic feet)	Vind.
Conductor	10 2/1		99	X		250	250	150 also also	Kinds
Fresh water	10 3/4		1	_ X		250	250		s a to surface
Coal	7		1 3	V		2675	2675		XXXes class A
Intermediate	11			X		2675	2675		pozmix
Production	4 1/2			X		4948	4948	225 SKS 50/	O eposemix
Tubing						A TANKATABARA	ALA IN		
Liners								15.1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	Perforations:
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4									
- 1							9816	3	
		_		(4)(40)	inspect	OFFICE USE O	NII V		Application received
						DRILLING PE			
						DRILLING FE	KIVIII		Vell work started
Permit number_	47-	035-19	901					Sept	ember 20, 1983
								Dat	telling out to nortal and
									nce with the pertinent legal re-
									l and Gas Inspector, (Refer to
No. 8) Prior to	the constructors inspector	r 24 hour	s before ac	ons and	d pits for ermitted w	ork has commenced	in addition, the v	veil operator or his con	tractor shall notify the proper
								u.a.	
The permitted we reverse hereof.	ork is as d	escribed in	the Notic	e and A	Applicatio	n, plat, and reclama	ation plan, subject	to any modifications a	nd conditions specified on the
Permit expires		Septe	ember 2	20, 1	985	unless well	work is commence	d prior to that date and	prosecuted with due diligence.
cimit expires .						uiness well	OI K 13 COMMENCE	a prior to that date and	prosecuted with due diffgence.
		, V			100				A PARTY OF A CONTRACTOR AND A CONTRACTOR
Bond:	Agen	t:U	Plati	Casin	1	Fee	· · ·	1	
The Board	0	1/9	Y	44	7	00	11.11	111	A STATE OF THE PARTY OF THE PAR

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

File

Office of Oll and Gas

Administrator,

OTHER INSPECTIONS

Reason:

Reason: __



FILE COPY

		OFFICE US	TOP SENT	DEPARTMEN				
DEDMIT M	ODJEJCATIONS	TANEAU T MARKET CULTURE	CHO FRICE	A DAIA E COS		,		
	ODIFICATIONS	AND CONDITIONS) TO THE P				4) WELL IX
(t some		noul foll for				noiis		ST LOCATIO
Cottoggeville	u y Quadranule:	n Jackson			ve fot			
sayas .		CO. (7) DESIGNATED Address	guiniù.		o [qx3]	Kaiser P. O.	FRATOR_	6) WELLOP Address
	NTRACTOR	9) DRILLING CO					SINSPEC	8) OIL & GA
sociance	int Burt CLA	Name			X. X	inginer's	of gen	Name_IN
500 B	2. 6. 80x 30				den Kt	dt L.a	C_X08 :	Address
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E801 11 1 411		14)	n well (speci.	ysical change in	Other of			
		Shale v						
1200								
OIL B. GAS DIVISI	feet.		1001;					(13) Appro
DEPT. OF WI		Is coal being mined in the						(4) Appro
PACKERS	COMPACED DE	DTAGE INTERVALS	10°4		EICATIONS		ndor with	OASING OR
	OB SACKS (Cubic feet	llaw ni trad		boeld wow.	Maright	Grade	Size	TURNGTYPE
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	eto eve opo	250		Y.			518.00	ristew, ricon
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Xiston	65 sks 50/50	2675	25975					
Descripty Committee	1985 sts 599	34646	4348	le - I X			14 1/2	gottaution
		OFFICE US	E ONLY					gnidu
This part of Form IV-2(b) is to record th	e dates of certain occu	irrences ar	nd any follow	v-up insp	ections.		
		Date					Date((s)
Application received		v tud ser	Follow-up	inspection(s)			
W-11 - 1 - 1 - 1		G PERMIT	VIII.UM					
Well work started		rimas i o	7 12 231 17 RCA	,,				emil number
Completion of the drilling								
process manifed out dies as								
		cof. Northeadon novel he'gi d work in addition, the we unenced!)	anim,,, uns			ion fo nois	retinado H	
Reclamation completed	any modifications ar	reclametion plan, subject to	n, pla, and	and, poblestio		scribed in	ork is as de	he permitted w everse hereof.
arosconed with due diligence.	orion to that date and	ess well work is commenced;				Deco		complexe finns

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



DATE	August	22,	1983	
	-			

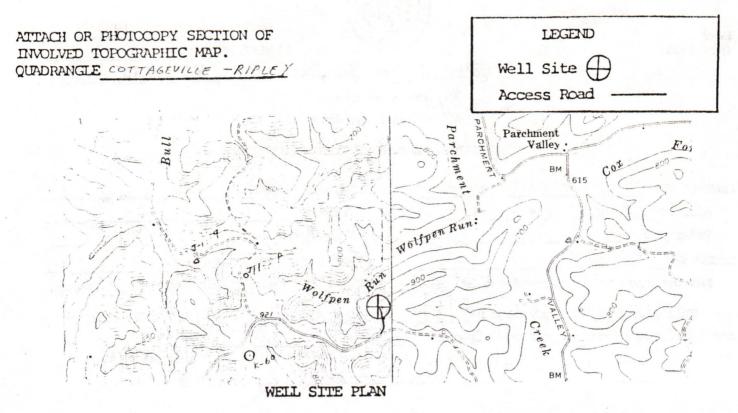
State of Mest Nirginia

API NO. 47-035-1901

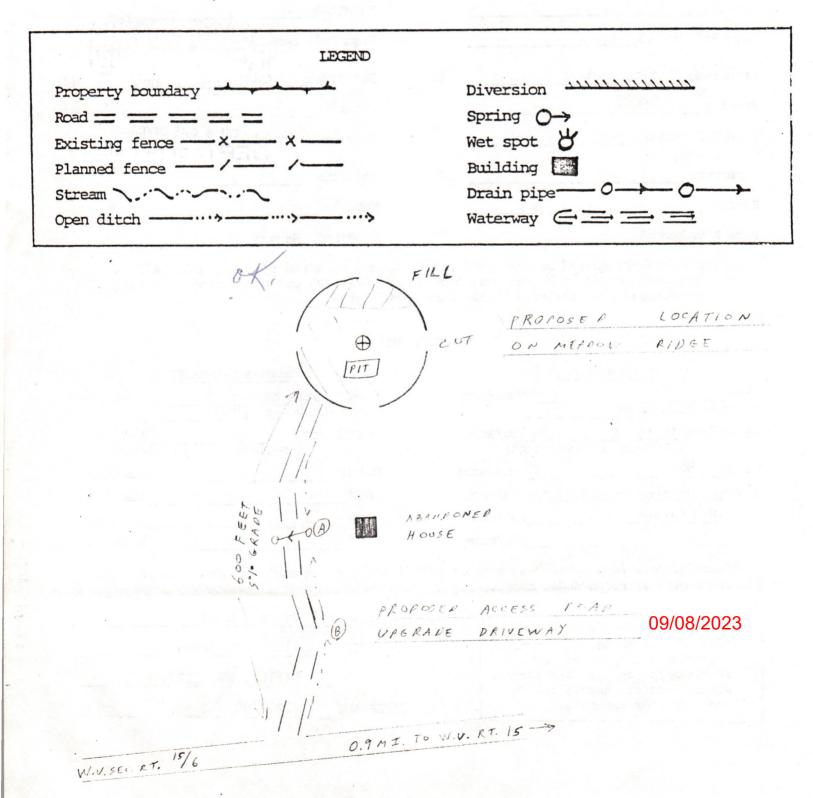
Department of Mines wil und Gas Pivision

CONSTRUCTION AND RECLAMATION PLAN

			•	
COMPANY NAME Kaiser Exploration and	Mining Co.	ESIGNATED	AGENT Same	
Address P. O. Box 8, Ravenswood,				
Telephone 273-5371		Telepha		
LANDOWNER Earl Muck	100	SOIL CO	NS. DISTRICT Wester	arn
Revegetation to be carried out by	Kaiser Ex			
This plan has been reviewed by	/	10/10		
and additions become a part of this p		a 23	19 02	corrections
and an analysis of the part of	//	Date	2) / 4/	0
	har	mel	W. Hugh	93
		(SCD A	gent)	
ACCESS ROAD			LOCATION	
Structure Road Culvert	_ (A)	Struction	e None required	(1)
Spacing . 12" diameter	_	Material		
Page Ref. Marmal 2:7		Page Pof	. Manual E CE	MEIN
	-	rage New	- Parity	-
Structure Drainage Ditch	(B)	Structur	e 44 0501	1002 (2
Spacing Earthen	_	Material	OLI 15	1303
Page Ref. Manual 2:12		Page Ref	. Manual Oil & GA	S DIVISION
Structure	(C)	Structur	e	(3
Spacing		Material		/
	-			
Page Ref. Manual	-		. Manual	
All structures should be inspected commercial timber is to be cut and cut and removed from the site before	stacked and	d all brus	ired if necessary. h and small timber	All to be
and the second				
	REVEGETATIO	201		
Treatment Area I			Treatment Area I	Τ
Lime 4 Tons/ac	re	Lime S	ame as Area I	Tons/acre
or correct to pH			rect to pH	
Fertilizer 14-14 600 lbs/acc (10-20-20 or equivalent)	æ	Fertiliza	(10-20-20 or equ	lbs/acre
Mulch Hay 2 Tons/ac	rre .	Mulch	(10 20 20 01 610	Tons/acre
Seed*81% Orchard Grass/15% Ryelbs/acc		Seed*		lbs/acre
Red Clover 8 lbs/ac				lbs/acre
lbs/acr	æ	-		lbs/acre
*Inoculate all legumes such as veto Inoculate with 3X recommended comount.	h, trefoil	and cloves	es with the proper	
	FIAN PRE	PARED BY	Vincent Wood	09/08/2023
NOTES: Please request landounces!		ADDRESS	116 Pfost Avenu	0010012020
seedling for one growing season.			Ripley, WV 252	
Attach separate sheets as		***************************************		./1
necessary for comments.	25	ONE NO.	372-2709	



ketch to include well location, existing access road, roads to be constructed, wellsite, drilling pits and necessary structures numbered or lettered to correspond with the first part of this plan. Include all natural drainage.



Notary Public, Jackson

State of West Virginia

County,

1) Date: August 26, ,19 83 2) Operator's

Well No. KEM #480
3) API Well No. 47

State County Permit

STATE OF WEST VIRGINIA DEPARIMENT OF MINES, OFFICE OF OIL & GAS

NOTICE OF APPLICATION	N FOR	A WELL	WORK PERMIT	
SURFACE OWNER(S) OF RECORD TO BE SERVED		5(i)	COAL OPERATOR None	
(i) Name Hildon E. Muck			Address	
Address Rt. 1, Box 256		5(11)	COAL OWNER(S) WITH DE	CTABATTON ON BECODE
Liberty, WV 25124		2 (11)	Name None	CLARATION ON RECOFE:
(ii) Name	•		Address	
Address			11441 635	
(111) W			Name	
(iii) NameAddress	-		Address	
Address				
, ,	•	5(iii)	COAL LESSEE WITH DECL	ARATION ON RECORD:
			Name None	
			Address	A PROPERTY
			1	12050 7
TO THE PERSON(S) NAMED ABOVE: You sho	uld have r	eceived th	is Form and the following document	
(1) The Application for a Well Wo			111	- Const
to be plugged, which sets out	the parti	es involve	in the drilling or other work,	SEP 14 1983
cementing program;			oplicable, the proposed casing an	a
(2) The plat (surveyor's map) sho (3) The Construction and Reclamat	wing the w	ell location	on on Form IV-6; and	OU & GAS DIVISION
plug a well), which sets out	the plan f	or erosion	and sediment control and for	
reclamation for the site and				EPT. OF MINE
THE REASON YOU RECEIVED THESE DOO WHICH ARE SUMMARIZED IN THE "INSTRUCTI	ONS" ON TH	E REVERSE	SIDE OF THE COPY OF THE APPLICATION	ION ON
(FORM IV-2(B) OR FORM 4, DESIGNATED FO	R YOU. HO	WEVER, YOU	ARE NOT REQUIRED TO TAKE ANY	
Take notice that under Chapter 22	of the We	st Virginia	Code, the understored well on-	
erator proposes to file or has filed t	his Notice	and Applia	ration and accompanying documents	
for a Well Work Permit with the Admini Department of Mines, with respect to a	strator of well at t	the Office	e of Oil and Gas, West Virginia n described on attached Application	on.
and depicted on attached Form IV-6. C	opies of t	his Notice	the Application, the plan, and	
Construction and Reclamation Plan have by hand to the person(s) named above (or by publ	ication in	certain circumstances) on or	ered
before the day of mailing or delivery	to the Adm	unistrator.		
6) EXTRACTION RIGHTS				
Check and provide one of the follow	ing:			
☐ Included is the lease or leases of I hold the right to extract o	il or gas.			
The requirement of Code 22-4-1-(c) (1) thro	ugh (4). (S	ee reverse side for specifics.)	
7) ROYALTY PROVISIONS				
Is the right to extract, produce or or other contract or contracts provi	market the	e oil or ga	s based upon a lease or leases	
for compensation to the owner of the	oil or ga	s in place	which is not inherently related	
to the volume of oil or gas so extra	acted, pro	duced or ma	rketed? Yes %	
If the answer above is No,	nothing add	ditional is	needed. If the answer is Yes,	
you may use Affidavit Form IV-60.		111111		
See the reverse side for line :	item instr	uctions, an	d for instructions concerning	
the required copies of the Not: Reclamation Plan.	ice and Apr	plication,	plat, and Construction and	
The truth of the information on the		WELL		
Notice and Application is verified			TOP V-:	
and sworm to and the Notice is		OFER	ATOR Kaiser Exploratio	n and Mining Company
signed on behalf of the Well Operator		By	PAP	
in my County and State by		Its	General Manager	
R. A. Pryce	,		iress P. O. Box 8	
this 30 day of august, 1983			Ravenswood, WV	26164
My commission expires 12/01 , 1985		Tel	ephone 304 273 5371	
Jaith Dan Malhert				
Notary Public lades County	-			09/08/2023

INSTRUCTIONS TO APPLICANT

CONCERNING THE LINE ITEMS:

- -1) Date of Notice.
- 2) Your well name and number.
- 3) To be filled out by the Office of Oil & Gas.
- 4) & 5) Use separate sheet if necessary.
 - 4) Surface owner(s) of record to be served with Notice and Application. However, see also Code § 22-4-lb(b) if "more than three tenants in common or other co-owners of interest described in subsection (a) of this section hold interests in such lands".
 - 5(i) "Coal Operator" means any person, firm, partnership, partnership association or corporation that proposes to or does operate a coal mine.
- 5(ii, iii) See Code § 22-4-20.
 - 6) See Code § 22-4-11(c). However, in lieu of filing the lease(s) or other continuing contract(s), the Applicant may fill out the information in the space provided below.
 - 7) See Code § § 22-4-11(d, e).

CONCERNING THE REQUIRED COPIES FOR FILING AND SERVICE:

Filing. Code § 22-4-lk and Regulation 7.02 provide that the original and required copies of the Notice and Application must be filed with the Administrator, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-lk(d) and the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fees required by Code § 22-4-8a from the owner of any water well on dwelling within 200 feet of the proposed well.

Service. In addition, service must be made on the surface owner(s) and the person(s) with an interest in the coal. See Code § § 22-4-lm, 22-4-2, 22-4-2a, and 22-4-2b.

INFORMATION SUPPLIED UNDER CODE § 22-4-11 (d) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on the obverse side of this Notice, I depose and say that I am the person who signed the Notice for the Applicant, and that—

- the tract of land is the same tract described in the Application to which this Notice applies, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Hildon Much	Grantee, lessee, etc.	Royalty Book Pac	ge_
	Kaiser Exploration and Mining Company		158/16

· 高高达 14.4 年

SURFACE OWNER'S COPY



1)	Date:	August	26	, 19	33
2)	Operator's	ven	2000	AL 14	1 454

State County Permit

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

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T KOT OSL	WEEL !		PRODUCTION OF STREET	And the Party of t	The State of the S	/ Perfora	The state of the s	在1. 中国电影·克尔·克尔·克斯·克斯·克斯·克斯·克斯·克斯·克斯·克斯·克斯·克斯·克斯·克斯·克斯·	TE CELLAND
			NEW YORK OF THE PARTY OF THE PA			well (specify)		N.	(10 and 16
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			MATION,	De	vontar	Brown Shal	LETTER APPLY		SEP 1.4. 1983
12) Estima	ated depth of	f complete	MATION,	_ De	vontar	Brown Shall	And the second s	feet.	SEP 1 4 1983
12) Estima 13) Appro	ated depth of ximate trata	f complete depths:	MATION, d well, _ Fresh, _	De	vontar	Brown Shall 4948 feet feet; salt,	e constraint of the constraint	feet.	SEP 14 1983
12) Estima13) Appro14) Appro	ated depth of ximate trata ximate coal	f complete depths: seam dept	MATION, d well, Fresh, hs:	De	vontar	Brown Shall 4948 feet feet; salt,	All Andrews	feet.	SEP 1.4 1983 / No OIL & GAS DIVISIO
12) Estima 13) Appro 14) Appro 1 CASING A	ated depth of ximate trata ximate coal	f complete depths: seam dept NG PROG	MATION, d well, Fresh, hs: RAM FICATIONS	De	vontar	Brown Shall 4948 feet feet; salt,	ll being mined in th	feet. le area? Yes	SEP 14 1983
12) Estima 13) Appro 14) Appro CASING A	ated depth of ximate trata ximate coal	f complete depths: seam dept NG PROG	MATION, d well, _ Fresh, _ hs:	De	vontar	Brown Shall 4948 feet feet; salt, Is coa	ll being mined in th	feet. ne area? Yes	SEP 1.4 1983 / No OIL & GAS DIVISIO
12) Estima 13) Appro 14) Appro CASING A ASING OR UBING TYPE	ated depth of eximate trata eximate coal AND TUBIN	f complete depths: seam dept NG PROG	MATION, d well, Fresh, hs: RAM FICATIONS Weight	0e	voniar 233	Brown Shall A948 feet feet; salt, Is coa	l being mined in th	feet. e area? Yes CEMENT FILL-UP OR SACKS	SEP 1.4 1983 / No OIL & GAS DIVISIO
12) Estima 13) Appro 14) Appro CASING A ASING OR UBING TYPE	ated depth of eximate trata eximate coal AND TUBIN	f complete depths: seam dept NG PROG	MATION, d well, Fresh, hs: RAM FICATIONS Weight	0e	voniar 233	Brown Shall A948 feet feet; salt, Is coa	l being mined in th	feet. e area? Yes CEMENT FILL-UP OR SACKS	SEP 1.4. 1983 / No OIL & GAS DIVISION EP TRACERS MIN
12) Estima 13) Appro 14) Appro CASING A ASING OR UBING TYPE	ated depth of eximate trata eximate coal AND TUBIN	f complete depths: seam dept NG PROG	MATION, d well, _ Fresh, _ hs: RAM FICATIONS Weight per ft.	0e	Used Used	FOOTAGE II	ll being mined in the street of the street o	feet. ie area? Yes CEMENT FILL-UP OR SACKS (Cubic feet)	No OIL & GAS DIVISIO EFTPACKERS MIN Kinds Sizes class A
12) Estima 13) Appro 14) Appro 14) Appro 15 CASING A ASING OR UBING TYPE Inductor I	ated depth of eximate trata eximate coal AND TUBIN	f complete depths: seam dept NG PROG SPECI Grade	MATION, d well, _ Fresh, _ hs: _ RAM FICATIONS Weight per ft.	De New	Used Used	FOOTAGE II	ll being mined in the street of the street o	feet. ce area? Yes CEMENT FILL-UP OR SACKS (Cubic feet) 150 sks class 100 sks 55/5	No OIL & GAS DIVISIO EFT PACKERS MIN Kinds Sizes Class A DOZMIK
12) Estima 13) Appro 14) Appro CASING A	ated depth of eximate trata eximate coal AND TUBIN	f complete depths: seam dept NG PROG SPECI Grade	MATION, d well, _ Fresh, _ hs: _ RAM FICATIONS Weight per ft.	De New	Used	FOOTAGE II	of being mined in the stervals Left in well	feet. ie area? Yes CEMENT FILL-UP OR SACKS (Cubic feet)	No OIL & GAS DIVISIO EFTPACKERS MIN Kinds Sizes class A
12) Estima 13) Appro 14) Appro CASING A ASING OR UBING TYPE sh water al ermediate	ated depth of eximate trata eximate coal AND TUBIN	f complete depths: seam dept NG PROG SPECI Grade	MATION, d well, _ Fresh, _ hs: _ RAM FICATIONS Weight per ft.	De New	Used	FOOTAGE IT For drilling 250	of the state of th	feet. ce area? Yes CEMENT FILL-UP OR SACKS (Cubic feet) 150 sks class 100 sks 55/5	No OIL & GAS DIVISIO E PACKERS MIN Kinds a to surface Sizes class A pozmix (Depths sees 1 x
12) Estima 13) Appro 14) Appro CASING A ASING OR UBING TYPE Inductor Ish water al Induction	ated depth of eximate trata eximate coal AND TUBIN	f complete depths: seam dept NG PROG SPECI Grade	MATION, d well, _ Fresh, _ hs: _ RAM FICATIONS Weight per ft.	De New	Used	FOOTAGE IT For drilling 250	of the state of th	feet. ce area? Yes CEMENT FILL-UP OR SACKS (Cubic feet) 150 sks class 100 sks 55/5	No OIL & GAS DIVISION REPTRACERS MIN
12) Estima 13) Appro 14) Appro CASING A ASING OR UBING TYPE Inductor sh water al ermediate oduction bing	ated depth of eximate trata eximate coal AND TUBIN	f complete depths: seam dept NG PROG SPECI Grade	MATION, d well, _ Fresh, _ hs: _ RAM FICATIONS Weight per ft.	De New	Used	FOOTAGE IT For drilling 250	of the state of th	feet. ce area? Yes CEMENT FILL-UP OR SACKS (Cubic feet) 150 sks class 100 sks 55/5	No OIL & GAS DIVISIO E PACKERS MIN Kinds a to surface Sizes class A pozmix (Depths sees 1 x

The law requires a comment period for surface owners. However, the permit can be issued in less than 15 days from the filing of the Application if the surface owner(s) of record sign(s) the following "Voluntary Statement of No Objection" on a facsimile of this surface owner's copy of the Application.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners on the reverse side of this Application for a Well Work Permit, and that I have received copies of (1) a Notice of Application for a Well Work Permit on Form IV-2(B), (3) a survey plat on Form IV-6, and (4) a Construction and Reclamation Plan on Form IV-9, all for proposed well work on my surface land as described therein.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued based on those materials.

(For execution by corporation, partnership, etc.)	(For execution by natural persons)	
NAME:	Earl muck (Signature)	Date: 9-12-83
	(Signature)	
Ву		Date:
ItsDate	(Signature)	

AFFIDAVIT OF PERSONAL SERVICE ON SURFACE OWNER

COUNTY OF TALKSON:
The undersigned, being first duly sworn, says that the undersigned served a true and complete copy of all sides of (1) Notice on Form IV-2(A) / Form IV-3(A) / Form IV-4(A) / (2) Application on Form IV-2(B) / Form IV-3(B) / Form IV-4(B) / (3) Plat showing the well location on Form IV-6, and (4) Construction and Reclamation Plan on Form IV-9 (unless the application is to plug a well) all with respect to operator's Well No. Kem 480 located in Ripley District, Jackson County, West Virginia, upon the person or organization named
EARL MUCK DIECEIVI
by delivering the same in Rutman County, State of West Le. on the 12 day of Sept , 1983 in the manner specified below EP 14 1983
For an individual: [] Handing it to him x / her / or, because he / she / refused to take it when I offered it, by leaving it in his / her / presence.
[] Handing it to a member of his or her family above the age of 16 years named who resides at the usual place of abode of the person to be served, and asking the family member to give it to the person to be served as soon as possible.
For a partnership: [] Handing it to
For a limited partnership: [] Handing it to the general partner, named, or, because the general partner refused to take it when I tried to hand it over, by leaving it in the presence of the general partner.
For a corporation: [] Handing it to the corporation's employee / officer / director attorney in fact / named
Signature of person executing service
Taken, subscribed and sworn before me this 13 day of Sept , 1983. My commission expires Sept 18+6 1988
Notary Public
(AFFIX SEAL IF NOTARIZED IF OUTSIDE THE STATE) 09/08/2023

Bbl/d

hours

(Continue on reverse side)

hours shut in



IV-35 (Rev 8-81)

State of Mest Mirginia

Department of Mines Oil und Vas Bivision

Date	1/11	/84		
Opera	tor's			
Well 1	No	KEM	#480	
Farm	Muck			
API N	o. 47	- 0:	35 -	1901

WELL OPERATOR'S REPORT

OF DRILLING, FRACTURING AND/OR STIM	ITATING. (OR PHYSICAL	L CHANGE			
Didining, Therefore the for the first the firs						
WEIL TYPE: Oil / Gas X / Liquid Injection (If "Gas," Production X / Undergro	n_/Wast und Storag	te Disposa ge/ Deep	1/ p/ Sha	illow/)		
LOCATION: Elevation: 908' Watershed W						
District: Ripley County Jac	<son< td=""><td>Quadrangle</td><td>e Cotta</td><td>ageville</td><td></td></son<>	Quadrangle	e Cotta	ageville		
COMPANY Kaiser Exploration and Mining Company				IComont		
ADDRESS P. O. Box 8, Ravenswood, WV 26164	Casing	Used in	Left	Cement fill up		
DESIGNATED AGENT Robert A. Pryce	Tubing	Drilling	in Well	Cu. ft.		
ADDRESS P. O. Box 8, Ravenswood, WV 26164	Size					
SURFACE OWNER Earl Muck Et Al	20-16 Cond.					
ADDRESS Rt. 1, Box 256, Liberty, WV 25124	13-10"	10 3/4"	250.75	175 sks Cla 3% Cacl. 1 flocele	ss A 4#/sk	
MINERAL RIGHTS OWNER Earl Muck	9 5/8	1		flocele	-	
ADDRESS Rt. 1, Box 256, Liverty, WV 25124	8 5/8					
OIL AND GAS INSPECTOR FOR THIS WORK Homer	7	7"	2325	200 sks cer	nent	
Doughtery ADDRESS	5 1/2					
PERMIT ISSUED 9/20/83	4 1/2	41311 -	4361'	225 sks 50/50 pozm	Y	
DRILLING COMMENCED 11/9/83	3	72	1001	30730 POZIII		
DRILLING COMPLETED 11/15/83	2					
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON	Liners used					
GEOLOGICAL TARGET FORMATION Devonian Brown Sha	е	Dep	th 4948	feet		
Depth of completed well 4390 feet Rotary X / Cable Tools						
Water strata depth: Fresh feet; Salt feet						
Coal seam depths: N/A	Is coal	being min	ed in the	area? No		
D : 11 . I . C1 . I . I						
OPEN FLOW DATA Producing formation Brown Shale Pay zone depth 4094'-4313' feet						
Gas: Initial open flow N/A Mcf/d Oil: Initial open flow Bbl/d 7						
Final open flow 264 Combined Mcf/d Final open flow Bbl/d						
Time of open flow between initial and final tests 4 hours						
Static rock pressure Combined psig(surface measurement) after hours shut in						
(If applicable due to multiple completion) 09/08/2023						
Second producing formation Gray Shale Pay zone depth 3290-3570 feet						
Cace Initial open flow was Mof/d	Oil. To	itial open	flow	Rh1 /d		

Time of open flow between initial and final tests 4

Static rock pressure 950 psig(surface measurement) after_

Oil: Final open flow_

Final open flow 264 CombineMcf/d

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

BROWN SHALE: Perforated from 4094' to 4313'. Foam frac. Breakdown w/foam at 1700 psig. Treated w/75% quality foam at 2810 psig. Used 60,000#, 20/40 sand at 4-10 ppg. Water rate was 10 bbl/min, N2 rate was 25 MSCF/min, foam rate was 40 bbl/min, total N2 was 685 MSCF, total sand laden fluid was 259 bbls, total fluid was 327 bbls. ISIP: 1620 psig, 5 min SIP: 1320 psig.

GRAY SHALE: Perforated from 3570'-3290'. Foam frac. Breakdown w/foam at 2680 psig. Treated 2/75% quality foam at 2541 psig. Used 60,000#, 20/40 sand at 4-10 ppg. H $_2$ 0 rate was 10 bbl/min, N $_2$ rate was 25 MSCF/min, foam rate was 40 bbl/min, total N $_2$ was 685 MSCF, total fluid was 327 bbls. ISIP: 1220 psig, 5 min SIP: 1000 psig.

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fres and salt water, coal, oil and ga
Soil and Shale Sand Shale Sand Shale and Siltstone Sand Shale and Siltstone Little Dunkard Sand Shale and Siltstone Big Dunkard Sand Shale Salt Sands Big Lime (Greenbrier) Shale Big Injun Sand Shale Coffee Shale Berea Sand Shale Brown Shale Brown Shale Shale Total Depth	0 150 250 354 392 772 802 1247 1326 1411 1506 1774 1970 2096 2139 2243 2568 2594 2602 3806 4316 4390	150 250 354 392 772 802 1247 1326 1411 1506 1774 1970 2096 2139 2243 2568 2594 2602 3806 4316 4390	Salt water S/g @ 2390,3510 S/g @ 3935,4102

(Attach separate sheets as necessary)

Kaiser Exploration and Min	ning Company
By: \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	09/08/2023
Date: January 16, 1984	

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 and, encountered in the drilling of a well."

OIL & GAS DIVISION DEPT. OF MINES OIL AND GAS WELLS DIVISION

DEPARTMENT OF MINES

INSPECTOR'S WELL REPORT

Permit No. 035	1901	. Challery				r Gas Well	
Company Kai	ser Explor.	. TION	CASING AND TUBING	USED IN DRILLING	LEFT IN	PAC	KERS
Address		Security of the second	Size				P
Farm_ Munc	c K.		16			Kind of Pac	eker
Well No. Kr			13			Size of	
District	County	ACKSON	81/4		- 10 11		
Drilling commenced	11 983		65/8			_ Depth set_	
Drilling completed	Total depth		5 3/16			Perf. top	
Date shot	Depth of shot		2			Perf. bottor	
Initial open flow	/10ths Water	inInch	Liners Used			Perf. top	
Open flow after tubing_	/10ths Merc.	inInch				Perf. bottor	n
Volume		Cu. Ft.	CASING CEME	NTED	SIZE	No. FT	Date
Rock pressure	lbs	hrs.	NAME OF SER	RVICE COMPA	NY		
Oil	bbla	., 1st 24 hrs.	COAL WAS EN	COUNTERED	AT	_FEET	INCHES
Fresh water	feet	feet	FEET_	INCE	IES	_FEET	INCHES
Salt water	feet	feet	FEET_	INCE	IES	_FEET	INCHES
Drillers' Names							
Remarks: [1 9 8	3 movin	b Rig	Today	6 N TO	Loca	7.02	

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

INSPECTOR'S PLUGGING REPORT

COMPANY			ADDRESS			
ARM		DISTRICT	C	OUNTY		
illing Material Used	and the same of th					
iner Loc	eation	Amount	Packer	Location	1/2	
PLUGS USED A	ND DEPTH PLACED		BRIDGES	CASIN	G AND TU	BING
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LUCATION	RECOVERED	SIZE	Los
			E			No. 1
				-		
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	resonant and finished and					
				-		
	A STATE OF THE STATE OF THE STATE OF		ny good die ook Oessensoonse beer			
			the state of the s			Minimum purity for the region of the control of
			-			
rillers' Names						
		a Argenta				
emarks:			and the second s		THE CHES AND ADDRESS OF THE PARTY OF THE PAR	
					1	Χ.

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES OIL AND GAS WELLS DIVISION



OIL & GAS DIVISION

INSPECTOR'S WELL REPORTDEPT. OF MINES

Permit No	<u>o/</u>	Oil or Gas Well				
Company Kaiser	Explora TON	CASING AND TUBING	USED IN DRILLING	LEFT IN	PA	CKERS
Address		Size				
Farm muck		16			Kind of Pa	acker
Well No. Kam	480	13			G:	
District	County_JACKSON	81/4			Size of	
Drilling commenced		6%			Depth set.	
		5 3/16				
Drilling completed	Total depth	3			Perf. top_	
Date shot	Depth of shot	2			Perf. botto	on
Initial open flow	/10ths Water inInch	Liners Used			Perf. top_	
Open flow after tubing	/10ths Merc. inInch				Perf. botto	om
	Cu. Ft.					
orume	Cu. Ft.				No. FT	Dat
lock pressure	lbshrs.	NAME OF SER	VICE COMPAI	NY		
Dil	bbls., 1st 24 hrs.	COAL WAS EN	COUNTERED	AT	_FEET	INCHES
resh water	feetfeet	FEET_	INCHI	ES	_FEET	INCHES
alt water	feetfeet	FEET_	INCHI	ES	_FEET	INCHES
rillers' Names						
emarks: // 983	13/4" HOL- TD 2	88' at 4:0	opm, R.	AN Eg	275 10	3/4"(59
	5 st at 260.75 /	tb, C	ement of	Vallib	inton 17.	155Ks
	Class A play					







OIL & GAS DIVISION
DEPT. OF MINES

State of West Virginia

Bepartment of Mines Gil and Gas Bivision

Charleston 25305
FINAL INSPECTION REPORT

INSPECTORS COMPLIANCE REPORT February 8, 1984

COMPANY	Kaiser Exploration & Mining Co.	PERMIT NO	035-1901 (9-20-83)					
P. O. Bo	x 8	FARM & WELL NO	Earl Muck, KEM #480					
Ravenswo	od, West Virginia 26164	DIST. & COUNTY	Ripley/Jackson*					
DILLE	DECCR TREE ON		COMPLIANCE					
RULE	DESCRIPTION	YES	S NO					
23.06	Notification Prior to Starting Work	•						
25.04	Prepared before Drilling to Prevent Wa	aste						
25.03	High-Pressure Drilling							
16.01	Required Permits at Wellsite							
15.03	Adequate Fresh Water Casing							
15.02	Adequate Coal Casing							
15.01	Adequate Production Casing							
15.04	Adequate Cement Strenght							
15.05	Cement Type							
23.02	Maintained Access Roads							
25.01	Necessary Equipment to Prevent Waste							
23.04								
23.05	No Surface or Underground Pollution	·						
23.07	Requirements for Production & Gatherin	og Pinelines						
16.01	Well Records on Site							
16.02	Well Records Filed	-						
7.05	Identification Markings							
7.05	Identification Markings							
I HAVE I	NSPECTED THE ABOVE CAPTIONED WELL AND F	RECOMMEND THAT I	T BE RELEASED:					
		SIGNED June	Dr. Tuphaloch					
			2611					
		DATE 63	001					
	l record was received and reclamation i							
	pter 22, Article 4, Section 2, the above	ve well will rema	ain under bond					
coverage	for the life of the well.		. 11					
		7-4	110					
		Administrator-	Oil & Gas Division					
		July 18, 19	84					
		DATI	E					

