

1)	Date:	Jur	ne 7		19_	84
2)	Operator's Well No.	L COPY	KEM	577		
3)	API Well No.	47 -	035	- 1976		O DVOA
		State		County		Permit

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

		D	EPT	- cA	PPLIC	ATION FOR A WE	ELL WORK PERMI	<u>T</u>	
4) WELL TY		Oil If "Gas",	Productio	as	X X	/ Underground	d storage	DeepFalolick Run	Shallow X
5) LOCATIO		evation: _		804 ley	3	Watershed:	Buff Jackson	falolick Run ;Quadrangle:	(032 L2) Ripley 577
6) WELL OF Address	ERATOR s P	Kais .O. Bo	er Exp x 8	1. &	Mini	ng Co. 2555	7) DESIGNATE	P.O. Box	r Expl. & Mining Co. R. A. Pryce
8) OIL & GA		avensw			26164		a) Druinic	Ravenswoo	d, WV 26164
	Jerry			FIED			9) DRILLING (Name CT	int Hurt	
Addres	The state of the s	t. 1, ipley,	VANDAMA DE LA CASTA DE LA CASTA	2527	1		Address	P.O. Box 38 Elkview, W	
10) PROPOSI	ED WELL	WORK:	Drill		_/ Dri			/ Stillulate	<u>X</u>
							orate new formation	n/	
11) GEOLOG	ICAL TAR	GET FOR			cnange	in well (specify)	Devonian	Brown Shale	
12) Estim						fee		Brown Share	
13) Appro	oximate tra	ta depths:	Fresh, _			feet; sa	lt, N/A	feet.	
14) Appro				N	/A	Is c	oal being mined in th	ne area? Yes	/ NoX/
15) CASING	AND TUB								
CASING OR TUBING TYPE	Size	Grade	Weight per ft.	New	Used	FOOTAGE For drilling	Left in well	CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
Conductor	10 3/4	111		X		335-250	335 250	150	Kinds
Fresh water Coal	10 3/2			^		393-230	373 200	150 sks	Class A (to surface)
Intermediate	7"			X		2210'	2210'	65 sks 50/50	pozmix, 100 sks Cla
Production	4 1/2	"		X		4370'	4370'	225 sks	Depths set 50/50 pozmix
Tubing						FIRST ONLY	OFFICE		
Liners									Perforations:
		^B anolise	gedi qu	usc lin'	yme	Occurrences 41	dates to sough	a la brossa o servi	Top Bottom
	0.10(1								
	9334344					•	5185	**************************************	
				(0):(0):	ooqua	OFFICE HEE	0)		Application excelled.
						OFFICE USE DRILLING PI			
						DRILLING FI	ERWITT		Well work started
ermit number_	47	7-035-1	976					July 9,	19 84
uirements subje	ect to the co	onditions of	contained	herein a	ind on t	he reverse hereof. N	otification must be	given to the District Oil	ce with the pertinent legal re-
No. 8) Prior to listrict oil and g	he construe as inspecto	ction of roor 24 hours	ads, locat before a	ions and ctual pe	d pits for rmitted	r any permitted wor work has commence	k. In addition, the ved.)	vell operator or his conf	tractor shall notify the proper
ne permitted we everse hereof.	ork is as de	escribed in	the Notic	e and A	ppiicati	on, plat, and reclan	nation plan, subject	to any modifications ar	nd conditions specified on the
ermit expires	Ju	11y 9,	1986			unless we	ll work is commenced		prosecuted with due diligence.
Bond:	Agen	t: I	Plat:	Casin	g 9	Fee 7			Reason
Sumar	1	J ITY	H	mx	15	199	-	01,0	

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

File

Administrator, Office of Oil and Gas





OFFICE USE ONLY

PERMIT MODIFICATIONS AND CONDITIONS (IF ANY) TO THE PROPOSED WELL WORK

Shallow)	Leep Deep	างแก้น รถกละน	Under	Are noticuber 4.14	B (If second		
(03262)					Elevation	LOCATION	
			County				
9 parathly lacks o		COMP. DESIGNATE		10 .1 QX a, 1921		WELL OPER	(8)
					10.9	Address	
		9) DRILLING C NameCT			NSPECTOR T YY TEDIN		
		Address			1 13.9 191612		
			Drill deeper		WELL-WORK	" desogosa	
				Other-physical c			
						OBOLOGICA	
		salt,tlac					
	carea Yes	ili iz beille gelebel ili ili			aate coal segmi O TUBING PA		
PACKERS		STAGE INTERVALS		PECINCATIONS			
		list ni field					
	Che del	335,550	586				
Depths at \$50/00 90 Miles	225 sks	10.464	1070 F		*1/24	100	oubor9
		OFFICE US	E ONLY				unidir?
Performing	->:-4	1-464-:	,	6-11			
This part of Form IV-2(l	o) is to record the	dates of certain occu	rrences and any	follow-up inspect	ions.		
		Date			Da	ite(s)	
Application received		A A NO HS	Follow-up inspec	ction(s)			
Well work started		G PERMIT	MIJ,IIAG	,,			
A8 mars				NEOF.			
Completion of the drilling							
process management of the second		dence of permission grant of Nathbeatin may be	shown below is evi	ator and well location			
Well Record received			Old you was not stig	ro in. Jogathan appl urs before accurat pon			
Reclamation completed			bus ,, alq mottavilq	in the Notice and Ap	is as described	ernitted work a hereal.	
prosecuted with due diligence.		pao myramos a orio villaviar					
OTHER INSPECTIONS							
Reason:			pod /	Plat: Casing	Agenty	La jak	
Reason:	I list		Cation,	MILLEY MILL			

COAL OWNER'S COPY



1)	Date:	Ju	ne 7, 1	9
2)	Operator's Well No.		VCM 677	
3)	API Well No.	47	Polari W. F.	
,		State	County	Permit

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

4) WELL TYP									
				X_				/ Deep	
5) LOCATIO				304				alolick Run (
				ley		unty:	THE RESIDENCE OF THE PARTY OF T	Quadrangle:	
6) WELL OPI				L & 149	ning to.			DAGENTKaise	
Address	_ - P .	.O. Bo	X 8	. 0.03	C A		Address	P.O. Box	
				261	64		O) DRILLING C		0, WV 20104
8) OIL & GA				IED			9) DRILLING C		
Name	Jerry 1	Tephabi	ock					int Hurt	nn.
Address	-R1	t. 1,	30x 10	IA.			Address	P.O. Box 3	
	R	ipley,	WV :	25271				Elkview, W	
10) PROPOSE	D WELL V	WORK:	Drill	/	Drill deep			/ Stimulate	X/
							ate new formation	1/	
					ige in well (s)				
11) GEOLOGI	CAL TAR	GET FOR	MATION,				Devonia n	Brown Shale	
12) Estima	ted depth o	of complet	ed well,4 3	70'		feet			
13) Appro	ximate trat	a depths:	Fresh,	N/A	fe	et; salt	, N/A	feet.	
14) Appro	ximate coa	l seam dep	ths:	N/A		Is co	al being mined in th	e area? Yes	/ No/
15) CASING A	ND TUBI	NG PRO	GRAM						
CASING OR	1	SPEC	IFICATIONS		1	FOOTAGE I	INTERVALS	CEMENT FILL-UP OR SACKS	PACKERS
TUBING TYPE	Size	Grade	Weight per ft.	New Use	d For	drilling	Left in well	(Cubic feet)	
Conductor						- gillaterino	-		Kinds
Fresh water	30 2/1	29		Y	335	250	335-250	1-STT elle	Class A (to surface
Coal	10 3/			^		.00	\$40 M	100 383	Sizes
Intermediate	7 11			V	221)1	2210'	65 ete 50/5	nazmiv 100 sks f
Production	0 5 51	1.11		A V	437	71	43701	295 eVe	Depths set 50/50 maying
Tubing	9 4/1			A				CEO 380	30) 30 pozan
Liners									Perforations:
Liners									Top Bottom
			l operator,	coal owner	(s), and coal	lessee are l		any objection they wish thin fifteen (15) days after	
	of this Ap	plication	by the Dep	artment.					
								coal owner or coal less issued within fifteen (1	
				the Applica		322-4-20, 11	the permit is to be	issued within fifteen (1	3)
		days of th	ic iming or	the ripphe	ation.				
						WAIVER			
The undersign	ed coal one	rator		/ 04	vner		/ lessee	/ of the co	oal under this well location has
examined this pr	oposed well	ll location on to the v	. If a mine work propo	map exists sed to be do	which covers	the area of	the well location, the	he well location has bee	n added to the mine map. The all applicable requirements of
					97				
2 Number		h	141	mit	Kaa				1
		11)		11/1	217		and the latter of the latter o	1011	
Date:			, 19)			Ву	784	

las

IV-9 (Rev 8-81)



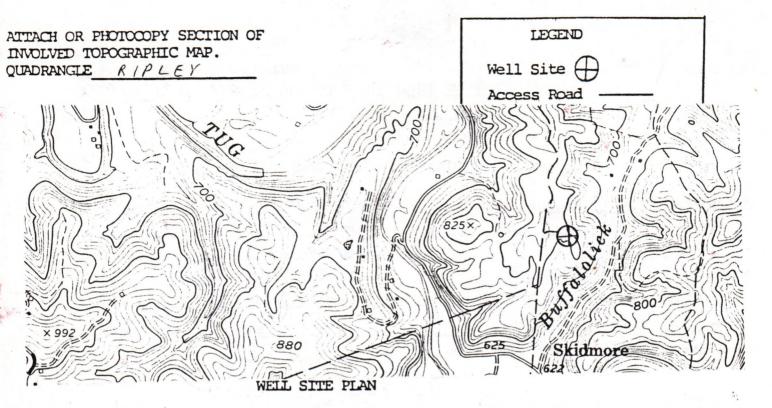
DATE	May	7,	1984	
WEIL	NO.	KEM	#577	15 / 10

State of Mest Mirginia API NO. 47 -035 - 1976

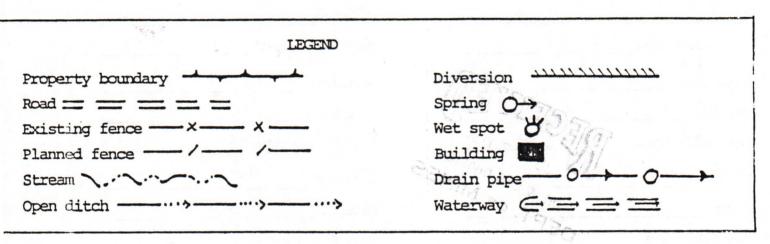
Department of Mines Bil and Gas Bivision

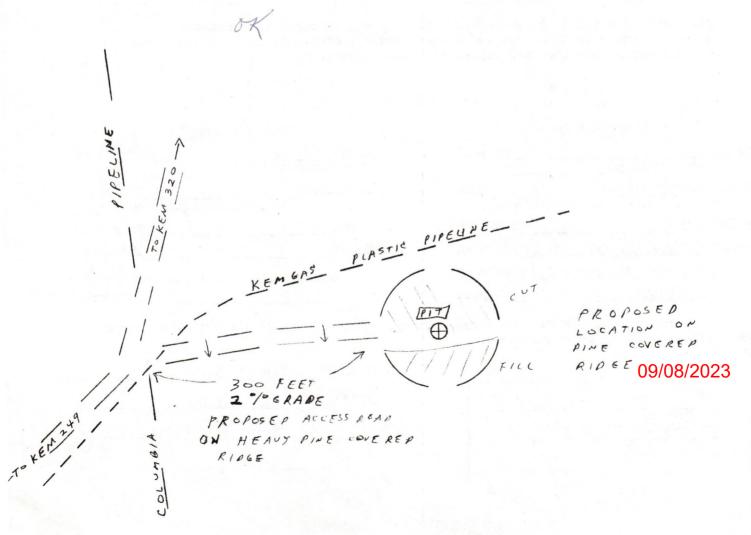
CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME Kaiser Exploration and Mining Co.I	
Address P. O. Box 8, Ravenswood, WV 2616	
Telephone 273-5371	Telephone
LANDOWNER Glenn Thompson	SOIL CONS. DISTRICT Western
Revegetation to be carried out by Kaiser Ex	ploration and Mining Company (Agent)
This plan has been reviewed by	Dalein SCD. All corrections
and additions become a part of this plan:	
. / / / / / / / / / / / / / / / / / / /	(Date)
Mila	(SCD Agent)
ACCESS ROAD	LOCATION
Structure Cross Drains (A)	Structure None Required (1)
Spacing 250'	Material
Page Ref. Manual 2-4	Page Ref. Manual
Structure (B)	Structure (2)
Spacing	Material To
Page Ref. Manual DES	Page Ref. Manual P E C
Structure Spacing Page Ref. Manual OIL SCAS DIVISION OF MINES Page Ref. Manual	Structure (3)
Spacing OIL OF N	Material \$50 80
Page Ref. Manual DEP	Page Ref. Manual
All structures should be inspected regularl commercial timber is to be cut and stacked as cut and removed from the site before dirt work REVEGETATION	nd all brush and small timber to be rk begins.
Treatment Area I	Treatment Area II
Lime 4 Tons/acre or correct to pH	Lime Same as area I Tons/acre or correct to pH
Fertilizer 14-14-14 600 lbs/acre (10-20-20 or equivalent)	Fertilizer lbs/acre (10-20-20 or equivalent)
Mulch Hay 2 Tons/acre	Mulch Tons/acre
Seed* 81% Orchard Grass/15% Ryles acre	Seed* lbs/acre
Kentucky 31 Fescue 16 lbs/acre	lbs/acre
Red Clover 8 lbs/acre	lbs/acre
*Inoculate all legumes such as vetch, trefoil Inoculate with 3% recommended amount.	and clovers with the proper bacterium.
FLAN FE	EFARED BY Vincent Wood 09/08/2023
MOTES: Please request landowners!	AIDRESS 116 Pfost Avenue
seedling for one growing season. Attach separate sheets as	Ripley, WV 25271
	HONE 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.





AFFIDAVIT OF PERSONAL SERVICE ON SURFACE OWNER

ST C0	DUNTY OF JACKSON:
	The undersigned, being first duly sworn, says that the undersigned served a rue and complete copy of all sides of— (1) Notice on Form IV-2(A) x / Form IV-3(A) / Form IV-4(A) / (2) Application on Form IV-2(B) x / Form IV-3(B) / Form IV-4(B) / (3) Plat snowing the well location or 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. x 577 located in County, West Virginia, pon the person or organization named— Cleux Thompson
-	-by delivering the same in <u>Jackson</u> County, State of <u>Wo</u> n the <u>14</u> day of <u>June</u> , 1984 in the manner specified below.
	- [COMPLETE THE APPROPRIATE SECTION]
	or 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 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. or a partnership: partnership or, because the partner refused to take it when I handed it over, by leaving it in the presence of the partner. For a limited partnership: [] Handing it to the general partner, named 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.
SEIT Y	partnership: [] Handing it to [] Bartner of the partner refused to take it when I handed it over, by leaving it in the presence of the partner.
DEPT.	For a limited partnership: [] Handing it to the general partner, named
	For a corporation: [] Handing it to the corporation's employee / officer / director / attorney in fact / named [] Allua K flow (Signature of person executing service)
OiL	& GAS DIVISION Taken, subscribed and sworn before me this 15 day of June 1984. The Diffy commission expires Oct 28, 1993 And Walk-
	(AFFIX SEAL IF NOTARIZED IF OUTSIDE THE STATE) COMMISSIONER FOR OUTSIDE OF WV

Calling and the state of



FORM IV-2(B) (Obverse) 7-83

SURFACE OWNER'S COPY



1)	Date:	74	n= 7		, 1934
2)	Operator's Well No		KEM	577	
3)	API Well No.	47			
-,		State		County	Permit

For Roadway
Thompson

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

				A	PPLICA	TION FOR A WEL	L WORK PERMI	Ī	
4) WELL TY	PE: A	Oil	/ G	as	X				
	В (If "Gas",	Productio	n	X	/ Underground	storage	/ Deep	✓ Shallow — X/)
5) LOCATIO	N: El	evation: _		204		Watershed:	Buff	alolick Run	
	• Di	strict:	Rip	lay		County:	Jackson	Quadrangle:	Ripley
6) WELL OP	ERATOR	Kais	er Exp	1. 4	Mini	ng Co.	7) DESIGNATE	DAGENT Kaise	r Expl. & Mining Co.
Address		.O. Bo	** (Address	P.O. Box	
	_ 2	avansw	ood, W	V	26164			Ravenseoo	d. WV 28164
8) OIL & GA				FIED			9) DRILLING C		
Name	100	A CONTRACTOR OF	Our			-	Name		
Address		44 19	80x 10	124			Address	P.D. Box	
		ipley,	MA	2527	1			Elkview, V	
0) PROPOSE	D WELL	WORK:	Drill		_/ Dril	deeper	/ Redrill	/ Stimulate	X/
						n/ Perfor			
			Other p	hysical	change	n well (specify)			
1) GEOLOGI 12) Estima	CAL TAR	GET FOR	MATION	,	// 2	701	Pavonian	Brown Shale	
							N/A		
13) Appro				N.I	I/A		,	feet.	/ No X
14) Appro-				11	1/ //	Is cos	al being mined in th	e area? Yes	/ No/
CASING OR	וו שטו שאו		JKAM IFICATIONS	,		FOOTAGE I	NET NATE	**	
TUBING TYPE		1	Weight		1		1	OR SACKS	PACKERS
Zandustan	Size	Grade	per ft.	New	Used	For drilling	Left in well	(Cubic feet)	
Conductor Fresh water		,,		.,		250	250	500 5	Kinds
Coal	10 3/			Å		250	230	150 sas	Class A (to surface
Intermediate	7 12		100	¥	813	2210'	2210'	65 sks -50/5	nozmix, 100 sks C1
Production	1 11	3 1 8		· ·	18/	4370	4370	225 sks	Depths set 50/50 DOZINIX
Tubing	+ 4	1		-			184	1 22 363	307 30 00Z941X
iners								1.	Perforations:
									Top Bottom
						OIL & GAS DI	AIZION		
					D	EPT. OF	MINES		
								be issued in less than 1 untary Statement of No	
						the Application.	the following "Vol	untary Statement of No	Objection"
				VO	LUNTAI	RY STATEMENT O	F NO OBJECTIO	N	
I haraby stat	e that I ha	ve rend the	instructio	no to ci	reference ou	mars on the rayance o	ida af thia Amuliant	ion for a Wall Work Da	rmit, and that I have received
opies of (1) a No	tice of Ap	plication f	or a Well V	Work P	ermit on	Form IV-2(A), (2) ar	Application for a	Well Work Permit on F	orm IV-2(B), (3) a survey plat
n Form IV-6, a	nd (4) a C	onstruction	n and Recl	amatio	n Plan o	n Form IV-9, all for	proposed well wor	rk on my surface land	as described therein.
I further stat	e that I ha	ve no obje	ction to th	e plann	ed work	described in these ma	aterials, and I have	no objection to a perm	it being issued based on those
naterials.									
For execution by	corporati	ion, partne	ership, etc.)		(For	execution by natur	ral persons)	
- caccation by	Jo. porati	on, partin	iship, etc.	,		(101	enceution by natur	ai persons)	
NAME:	-								

Date_

Date:

Date:

(Signature)

(Signature)

FORM IV-2(A) Obverse [8-83]

	Date:	June 7	,19 84
2)	Operator's	s w	
	Well No.	KEM 5	77
3)	API Well No.	47-03	5-1976
		State Cou	nty Permit

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

	NOTICE OF APPLICATION F	OR A WELL	WORK PERMIT							
	VER(S) OF RECORD TO BE SERVED	5(i)	COAL OPERATOR							
(1) Name Gl	len Thompson		Address							
Address_	Tug Fork Road									
	Ripley, WV 25271	5(ii)	COAL OWNER(S) WITH	DECLARATION ON RECOR						
(ii) Name			Name							
Address			Address							
(iii) Name			Name							
Address	4		Address							
	· ·									
_		5(iii)	COAL LESSEE WITH DE	CLARATION ON RECORD:						
			Name	CIPITATION ON RECORD:						
			Address							
	TO THE PERSON(S) NAMED ABOVE: You should he	ave received th	is Form and the following documents	ments.						
•	(1) The Application for a Well Work Per to be plugged, which sets out the p and describes the well and its loca cementing program; (2) The plat (surveyor's map) showing t (3) The Construction and Reclamation Pl plug a well), which sets out the pl	mait on Form IV- parties involved ation and, if ap the well location lan on Form IV-9	-2(B) (or Form IV-4 if the well d in the drilling or other work explicable, the proposed casing on on Form IV-6; and	lis k, and						
	The same access	road.								
	THE REASON YOU RECEIVED THESE DOCUMENTS WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS" OF FORM IV-2(B) OR FORM 4, DESIGNATED FOR YOU. ACTION AT ALL.	N THE REVERSE S HOWEVER, YOU	VE RIGHTS RECARDING THE APPLICATION OF THE COPY OF THE APPLICATION OF THE APPLICATION OF TAKE ANY	ATION UTION						
	Department of Mines, with respect to a well and depicted on attached Form IV-6. Copies of Construction and Reclamation Plan have been by hard to the person(s) named above (or by before the day of mailing or delivery to the	mailed by regis	the Application, the plat, an tered or certified mail or del	tion d the ivered						
	Check and provide one of the following: Thoughd is the lease or leases or other I hold the right to extract oil or go The requirement of Code 22-4-1-(c) (1) to	er continuing co	entract or contracts by which	JUN 27 1984						
	ROYALTY PROVISIONS Is the right to extract, produce or market the oil or gas based upon a lease or leases OIL & GAS DIVISION OF other contract or contracts providing for California based upon a lease or leases.									
	for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes No If the answer above is No, nothing additional is needed. If the answer is Yes,									
	See the reverse side for line item in- the required copies of the Notice and Reclamation Plan.	structions, and Application, pl	for instructions concerning lat, and Construction and							
The truth of t	the information on the	WEIL								
Notice and App	plication is verified		OR Kaison Funlanti							
and sworn to a	and the Notice is		OR Kaiser Explorati	on and Mining Co.						
signed on beha	alf of the Well Operator	By 7	$< \land P$							
in my County a	and State by	Its	Conquest							
Robert	A Pruce	The second secon	General Manager							
this I day of	June 1984	FALLE								
My commissi	ion expires August 30 1993.	Tele	Phone (304) 273-53	26164 71						
Notani Dali	nese Carney									
Notary Publ State of	lic, <u>Jackson</u> County, West Virginia			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 spims 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-lb 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-

- (1) 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:

Rolla Skidmore

Rolla Skidmore

Kaiser Expl. & Mining Co. 1/8 of 159/249

prevailing field price.

Rolla Skidmore

Rolla Skidmore

Kaiser Expl. & Mining Co. 1/8 of 159/249

prevailing field price.



IV-35 (Rev 8-81)

State of West Wirginia

Bepartment of Mines Bil und Gas Bivision

Date	11/0	8/84			
Opera					
Well	No	KEM	577		
Farm	Ski	dmore	9		
API N	6. 47	- (035	-	1976

(Continue on reverse side)

WELL OPERATOR'S REPORT

OF FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

LOCATION: Elevation: 804 Watershed Br	uffalolick	Run		
District: Ripley County Jack	kson	Quadrangl	e Ripley	
	Y			
COMPANY Kaiser Exploration and Mining Co.				
ADDRESS P. O. Box 8 Ravenswood, WV 26164		T	T	Cement
DESIGNATED AGENT R. A. Pryce	Casing	Used in	Left	fill up
ADDRESS Same	Tubing	Drilling	in Well	Cu. ft.
SURFACE OWNER Glen Thompson	Size 20-16			
ADDRESS Tug Fork Road Ripley, WV 25271	Cond.			300 sks
MINERAL RIGHTS OWNER Rolla Skidmore	13-1013/	694	694	class A
ADDRESS 309 Oakview Terrace, Ripley, WV 25271	9 5/8	ļ		ļ
OIL AND GAS INSPECTOR FOR THIS WORK Jerry	8 5/8	-		775 7 50
Tephabock ADDRESS Ripley, WV 25271	7	2202	2202	175 sks 50, 100 sks cl
PERMIT ISSUED	5 1/2			000
DRILLING COMMENCED 9/12/84	4 1/2	4319	4319	225 sks 50/50 poz
DRILLING COMPLETED 9/18/84	3			-
IF APPLICABLE: PLUGGING OF DRY HOLE ON	. 2			
CONTINUOUS PROGRESSION FROM DRILLING OR	Liners			
REWORKING. VERBAL PERMISSION OBTAINED ON	used			
FOLOGICAL TARGET FORMATION Devonian Brown Sha	le	Den	th 4064-4	296 feet
Depth of completed well 4319 feet			The second secon	-
	Salt N/A	feet		
Coal seam depths: N/A	-		ed in the	area? NO
OPEN FLOW DATA		Drilled o		terms acceptantly
			1 4064 4	206
Producing formation Devonian Brown Shale Gas: Initial open flow 0 Mcf/d		zone dept		THE PERSON NAMED AND POST OF THE PERSON NAMED
Gas: Initial open flow 0 Mcf/d *Final open flow 1384 Mcf/d	5 4 4	tial open	-	Bbl/d
		al open fi	Charles of the last of the las	Bbl/d
Time of open flow between init		_		
Static rock pressure 675 psig(surface		ent) arter	hou_	rs shut in
(If annliaghle due to multiple completion		none dend	L 2456_2	09/08/2023 feet
(If applicable due to multiple completion.	10 D	ZUDE GEOT	11 2430-2	reet
Second producing formation Berea Sandston		_		mb 7 / 3
Second producing formation Berea Sandston Gas: Initial open flow 0 Mcf/d	Oil: Ini	tial open	flow 0	Bb1/d
Second producing formation Berea Sandston	Oil: Ini	tial open al open fl	flow 0	Bbl/d Bbl/d

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

10/15/84 Youngs Perk Lower Brown Shale 20 holes (0.39" DIA) from 4064-4296

10/15/84 Youngs Perk Berea 20 holes (0.39" DIA) from 2456-2461

10/17/84 Halliburton (fluid) and Nowsco (N2) Foam Proc. Lower Brown Shale:
Used: 60,000 Bs 20/40 sand; 66D mscie total N2; and 200 BBl total fluid

10/17/84 Halliburton (fluid) and Nowsco (N_2) Foam Prac Berea used: 60,000 lbs 20/40 sand; 682 mscie total N_2 ; 289 BBl's total fluid; 500 gal. 15% HCl.

WELL LOG

	3-		REMARKS
FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	
DRILLERS DEPTHS: (top hole not logget)	CHARLES AND	A STATE OF THE STA	
Sand and Shale	0	1890	
Big Lime	1890	1956	
Big Injun	1956	2065	
Shale	2065	2200	
LOGGERS DEPTH:			
Shale	2200	2436	
Coffee Shale	2436	2459	
Berea Sandstone	2459	2465	5/G
Shale	2465	3710	
Brown Shale	3710	4300	
Shale	4300	4366	5/G @ 4300
Total Depth	4366		
Market and the second s			
Market 1 - Market (1), Strong and the second		no native	
		The Charles of the	
		7.77	
3)(1)	1400		
200	The state of	433	
taro with a least print to		and the second	
			Programme and the second secon
ask displaying yet			

(Attach separate sheets as necessary)

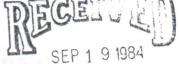
Well Operator

By: KAISER EXPLORATION AND MINING COMPANY/08/2023

Date: November 12, 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 coal, encountered in the drilling of a well."



OIL AND GAS WELLS DIVISION

OIL & GAS DIVISION INSPECTOR'S WELL REPORTEDT. OF MINES

Permit No. 035 197	<u>76</u>	and was argumentated a		Oil of	Gas Well
Company Kaiser	r Exploration	CASING AND TUBING	USED IN DRILLING	LEFT IN	PACKERS
Address		Size			
Farm		16			Kind of Packer
Well No	Kem 577	13			Size of
District	County_Jackson	81/4			Size of
Drilling commenced	9 13 84	6%			Depth set
Drilling completed	Total depth	5 3/16			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. FTDat
Rock pressure	lbshrs.	NAME OF SER	VICE COMPAI	YY	
Dil	bbls., 1st 24 hrs.	COAL WAS EN	COUNTERED	AT	FEETINCHE
Fresh water	feetfeet	FEET_	INCHI	es	FEETINCHES
Salt water	feetfeet	FEET_	INCHI	ES	FEETINCHES
Orillers' Names					
Hurt Rig #	4 Archer				
lemarks:					

Td 744 set 16 jts 103/4 csg 704 set714 Kb Cement Noscoe 306 ks neat 3% cacl 1/4 lb per sk flocele plug down 12:30 pm 9 13 84,

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

INSPECTOR'S PLUGGING REPORT

UMPAN I			ADDRESS					
ARM	DISTRICTCOUNTY							
lling Material Used								
iner Lo	cation	Amount	Packer	Location	l			
PLUGS USED A	ND DEPTH PLACED	PLACED BRIDGES	BRIDGES	CASIN	G AND TU	BING		
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE	LOST		
				1	2 1 4 3 (3 4			
· · · · · · · · · · · · · · · · · · ·								
			The state of the s					
rillers' Names								
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marks:				anterior militarish riggett in quarterior medicine dispersion and design and				

035 1976

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



OIL & GAS DIVISION

Oil or Gas Well

INSPECTOR'S WELL REPORT DEPT. OF MINES

Company Kais	er Exploration		CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACK	ERS
Address			Size			P	
Farm			16			Kind of Pac	ker
Well No. K	em 577		13			Size of	
District	County	Jackson	81/4			5120 02	
Drilling commenced			6%			Depth set_	
	Total depth		5 3/16				
Date shot	Depth of shot		2	1.		Perf. top Perf. botton	
Initial open flow	/10ths Water	inInch	Liners Used			Perf. top	
Open flow after tubing.	/10ths Merc. i	inInch				Perf. bottom	
Volume		Cu. Ft.	CASING CEMEN	NTED	SIZE	No. FT	Date
Rock pressure	lbs	hrs.	NAME OF SER	VICE COMPA	NY		
Oil	bbls.	, 1st 24 hrs.	COAL WAS EN	COUNTERED	AT	FEET	_INCHES
Fresh water	feet	feet	FEET_	INCH	ES	FEET	_INCHES
Salt water	feet	feet	FEET_	INCH	ES	FEET	_INCHES
Orillers' Names	HurtRig #4 A	rcher					
Remarks:							
Td 91/2 hol	e at 4.00am 9	16 84 22	35 Ran 53 j	ts 7'' cs	sg set 22	212 Nosco	e cemen
	60 poz 10 % sal						
	ele plug down 1						., -

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

INSPECTOR'S PLUGGING REPORT

COMPANY			ADDRESS			
FARM			T			
			(1)	COUNTY		
Filling Material Used						
Liner I.o.						
	cation	Amount	Packer	Location		
	ND DEPTH PLACED	11.	BRIDGES	CASIN	G AND TU	BING
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE	-
						LOS
				24 70 44 10 10 10 10 10		
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				-		
illers' Names						
Tiers Traines						
marks:		3.3.				
	herehu mentidu T min	ited the show	well on this date.			

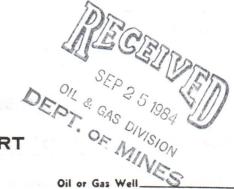
Address_

Well No.____

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION



(KIND)

INSPECTOR'S WELL REPORT

Permit No. 035 1976

Company Kaiser Exploration

Kem 577

Drilling completed 9 18 84 Total depth 4350

Date shot_____Depth of shot____

Initial open flow_____/10ths Water in____Inch

Open flow after tubing /10ths Merc. in ____Inch

Farm Skidmore

Drilling commenced____

CASING AND TUBING	DRILLING	LEFT IN WELL	PACKERS		
Size					
16			Kind of Packer		
13					
10	No.		Size of		
81/4					
65/8			Depth set		
5 3/16					
3	e de la companya de l		Perf. top		
2			Perf. bottom		
iners Used			Perf. top		
			Perf. bottom		
8 1					
ASING CEMEN	NTED	_SIZE	No. FTDat		
NAME OF SER	VICE COMPA	NY			

INCHES

Drillers' Names_

Hurt Rig #4

Rock pressure_____lbs_

Remarks:

Volume_

Oil

Ran 108 Jts 41/2 csg set 4329 KB. Cement Noscoe 250 sks 50/50 Poz plug K Down 9:30 pm 9 18 84

FEET_

feet

9 19 84 moved off to J Kem 309 1812.

____bbls., 1st 24 hrs.

9 19 84

Jes 7 n. Typa 108 12023

INCHES FEET INCHES

FEET_

_INCHES

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

INSPECTOR'S PLUGGING REPORT

OMPANY			ADDRESS					
ARM								
illing Material Used								
iner Lo	cation	Amount	Packer	Location				
	ND DEPTH PLACED		BRIDGES	CASIN	G AND TU			
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE	LOS		
-								
	•							
						-		
		.2						
illers' Names								
marks:		A		1 (1 to 1				
	I hereby certify I	visited the abo	ve well on this date.					
DATE								

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION



OIL & GAS DIVISION

DEPT. OF MINES

INSPECTOR'S WELL REPORT

035 1976 Oil or Gas Well____ Permit No ... USED IN CASING AND WELL PACKERS Kaiser Exploration Company_ Size Address_ Kind of Packer____ Thompson Farm_ Kem 577 Well No.____ Size of____ District County Jackson Depth set___ 65/8___ Drilling commenced____ 5 3/16____ Drilling completed_____Total depth__ Perf. top____ _____Depth of shot__ Perf. bottom____ Date shot____ Perf. top____ Liners Used Initial open flow_____/10ths Water in___Inch Perf. bottom_ Open flow after tubing_____/10ths Merc. in___Inch CASING CEMENTED_____SIZE____No. FT.____Date ____Cu. Ft. NAME OF SERVICE COMPANY Rock pressure____ lbs_ COAL WAS ENCOUNTERED AT_____FEET____INCHES _____bbls., 1st 24 hrs. Oil INCHES FEET INCHES FEET___ Fresh water____ _feet__ feet INCHES FEET_ INCHES__ FEET_ _feet_ feet Salt water_ Drillers' Names_

Needs reclaimed

Remarks:

12 26 84

Form 26
2/16/82

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

INSPECTOR'S PLUGGING REPORT

COMPANY	5 10 <u>0</u>		_ ADDRESS			
		C				
illing Material Used						
iner Loc	cation	Amount	Packer	Loc	cation	
PLUGS USED A	ND DEPTH PLACED		BRIDGES	CASIN	G AND TU	JBING
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE	LOST
In a street in the street in t						
						No. 12
recognise of the control of the cont						
			THE AMERICAN STREET	*	17	
	o write the execution of the language of the l		The second secon			
	-					
			A Batta			
	Y 344 327 C			and same	a disense same	
177,482	7.3.7788197		10. 10.10.00			
Orillers' Names	2278076	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Nais t			and the second
Marail veis			105	8327		
Remarks:						
	I hereby certify I vis	ited the above well	on this date.			
DATE						

Chverse DECEIVED
JUN 1 7 1985

OIL & GAS DIVISION
DEPT. OF MINES

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

OFFICE OF OIL AND GAS

CHARLESTON 20305

FINAL INSPECTION REPORT

INSPECTORS COMPLIANCE REPORT

Company: KAISER EXP & MIN. CD

Farm: THOMPSON, GLEN

Well: KEM 577

Permit No. 47- 35-1976

27-Dec-84

County: JACKSON

Rule	Description	In Comrl Yes	ianec No	
25.04 25.03 16.01 15.03 15.04 15.05 23.02 25.01 23.04 23.07 16.01 16.02 7.05	Notification prior to starting work Prepred before drilling to prevent waste High pressure drilling Required permits at wellsite Adequate Fresh Water Casing Adequate Coal Casing Adequate Production Casing Adequate Cement Strength Cement Type Maintained Access Roads Necessary Equipment to Prevent Waste Reclaimed Drilling Pits No Surface or Underground Pollution Requirements for Production & Gathering Pipelines Well Records on Site Well Records Filed Identification Markings E INSPECTED THE AROVE CAPTIONED WELL AND RECOMMEND	NED Jung	2 Teplabol	7
with	well record was received and reclamation requirements. Chapter 22; Article 4, Section 2, the above well wase for the life of the well.	Admini	under bond	e •
		June 19,	1985	

