



DIVISION OF OIL & GAS

IV-39 PEPARTMENT OF ENERGY
(Rev 8-81)



State of West Wirginiu

Department of Mines Oil und Gas Division

Date July 10, 1960)
Operator's	
Well No. KEM 652	
Farm Kerchum	
API No. 47 - 107	- 1372

WELL OPERATOR'S REPORT OF

DRILLING, FRACTURING AND/OR S	STIMULATING, C	R PHYSICAL	CHANGE	
WELL TYPE: Oil / Gas / Liquid Injection / Under	ction/Wast	ce Disposa ge/ Deep	L/ p/ Sha	llow/)
LOCATION: Elevation: 800' Watershed				
District: Harris County W	nod	Quadrangle	Lubeck	•
	:			
COMPANY Kaiser Exploration and Mining Compa	n V			
ADDRESS P. O. Box 8 Ravenswood, WV 26164		Used in	I of t	Cerrent
DESIGNATED AGENT R. A. Pryce	- Tubing	Drilling		fill up Cu. ft.
ADDRESS same	- Size	DITTI	DI WELL	- Cu. IC.
SURFACE OWNER David Steele	20-16			
ADDRESS Rt. 1 Box 185 Belleville, WV 26133	Cond.			
MINERAL RIGHTS OWNER same	- 13-10" - 9 5/8			
ADDRESS_	8 5/8			
OIL AND GAS INSPECTOR FOR THIS WORK Glen	- 7			100sx Class
Robinson ADDRESS Mineral Wells, WV	- 5 1/2		263'	3% CaCl. ⅓ Flocele
PERMIT ISSUED			21251	175sx 50/50
DRILLING COMMENCED January 15, 1986	- 4 1/2 - 3		2135'	10% salt
DRILLING COMPLETED January 19, 1986		-		12½#/sk Gilsonite
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON	Liners used			
GEOLOGICAL TARGET FORMATION Berea		Depi	Lh 2073	feet
Depth of completed well 2150 fee	et Rotary x			
Water strata depth: Fresh NA fe				
Coal seam depths: NA				area? _{No}
OPEN FLOW DATA	·			, <u></u>
· Producing formation Berea	Pay	, zone depi	Lh 2073	feet
	/d Oil: In			8
	/d Fir	_		Bb1/d
Time of open flow between				· · · · · · · · · · · · · · · · · · ·
Static rock pressure 450 psig(su		_		
(If applicable due to multiple comple				
Second producing formation		zone dept	<u>-</u> h	feet
	/d Oil: In	_	•	Bbl/d
	/d Oil: Fir	- .		Bb1/d

Time of open flow between initial and final tests

_psig(surface measurement) after

Static rock pressure

(Continue on reverse side)

hours

DETAILS OF PERFORMIED INTERVALS, FRACTURING OR STIPULATING, PHYSICAL CHANGE, EIC.

4/10/86 Berea SS perforated with 12 holes, 0.39" from 2091'-2094'.

4/22/86 Fracture Berea SS with 75% foam frac. Breakdown at 3200 psig treated with 75 quality foam at 1700 psig. Sand Concentration: 4-10 ppg. 45,000# 20/40 sand Total nitrogen: 619,500 scf; 228 bbl sand laden fluid; 306 bbl total fluid. ISIP=1000 psi; 5 MIN SIP=1000 psi. Flow back through. % choke into tank.

WELL LOG

•						
ORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all and salt water, coal, oil and	fresh d gas		
Shale and Siltstone Sand Shale and Siltstone Sand Shale and Siltstone Sand Shale and Siltstone Sand Shale and Siltstone Big Dunkard Sand Shale Salt Sands Shale Coffee Shale (Sunbury) Berea Sandstone Shale Total Depth	0 230 270 308 320 575 646 1035 1068 1100 1118 1374 1556 1586 1720 2070 2091 2095 2150	230 270 308 320 575 646 1035 1068 1100 1118 1374 1556 1586 1720 2070 2091 2095 2150	Slt. S/oil			
μ						
				•.		

(Attach separate sheets as necessary)

KAISER EXPLORATION AND MINING COMPANY	
Well Operator	
By: A P	
Date: July 18, 1986	
Date: July 16, 1900	

Note: Regulation 2.02(i) provides as follows:

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

7/85



i)	Date: Aug	ust	7,	 9	85	
2)	Operator's Well No	KEM	#652			

3) API Well No. 47 -107-1372 County Permit

AUG 1 2 1985 STATE OF WEST VIRGINIA

DIVISION OF SHERAPPLICATION FOR A WELL WORK PERMIT

	DEPA	ARTMEN	ii or e	NERGA		TOM IN WELL	WORK I ERWI	-		
4) WELL TY	PE: A C	oil <u>X</u>	/ G	as X						
	B (If "Gas",	Productio	n <u>X</u>	/ t	J <mark>nderground</mark> sto	rage	/ Deep	/ Shallow _	X a
5) LOCATIO		evation: _				Watershed:	Middle N	ork of Lee Cr	eek	,
	Di	erzige: H	arris			County: WO	od	Quadrangle:	Lubeck	
6) WELL OF	PERATOR	Minin	a Comp	anv	CODE:	2533-0 7	DESIGNATE	Quadrangle:Quadrangle:	Prvce	
Addres	s P. (O. Box	38 3	<u> </u>	40	25	Address	Same		
•	Rav	enswoo	d. WV	26164		_				
8) OIL & GA	AS INSPEC	TOR TO	BE NOTI	FIED		9)	DRILLING (CONTRACTOR:		
Name	Glen P	Robi	nson				Name	lint Hurt		
Addres	s <u>Rt</u>	. 1. #	6				Address	P. O. Box 38	8	_
	Mi	neralw	ells.	WV 2	6150			Elkview, WV		
) PROPOSI			Drill	v	-	eeper	/ Padrill	/ Stimulate	X ,	
, rkoros.	CD LLL	WOILL.				-	new formation		//	
					ange in well		e new tormano			
n GEOLOG	ICAT TAR	CET FOR					395	V.		· · · · · · · · · · · · · · · · · · ·
	ated depth				2125'	feet				
•	oximate tra	-	-		\$200			feet.		
,	oximate tra	-	•		20,44			he area? Yes	/ 31-	X /
) CASING		•					being inined in t	ne area? I es	/ No	
CASING OR	AIVO TODI			ie.		FOOTAGE INT	TRI LLC			
TUBING TYPE	1.	ı	CIFICATION Weight	1 .		1	ERVALS	CEMENT FILL-UP OR SACKS	PACKE	ERS
-	Size	Grade	per ft.	New 1	Used !	For drilling	Left in well	(Cubic feet)	 	
Conductor	 	 	 	-					Kinds	
resh water	7"	 		X		250	250	100 sks cla	s A to si	<u>urface</u>
ioal .	- 	 	 	+-+					Sizes	
stermediate	1 1 1	 	 	 				<u> </u>		
roduction	4 1/	<u> </u>	 	X	2	125	2125	180 sks 50/	\$0po-amix	
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iners	<u></u>	<u> </u>		 					Perforations:	
	 	 							Тор	Bottom
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· · · · · · · · · · · · · · · · · · ·										
					OFF	ICE USE OF	NLY			
					DRI	LLING PER	MIT			
ieb	47-	107-1	272						1	. 10 01
rmit number	4/-	107-1.	21.2					Da	August 1	L4 19 85
hie nermit cov	ering the w	ell operat	or and we	Il location	chown below	u is avidense of		nted to drill in accordar		
airements subj	ect to the c	onditions	contained	herein and	on the reve	rse hereof Natifi	permission gran	ned to drin in accordan	ice with the pert	inent legal re-
. 8) Prior to ti	e construc	tion of roa	ds, locati	ons and pit	s for any per	mitted work.	In addition, the	given to the District Oil well operator or his cor	and Gas Hispect itractor shall not	lor, thefer to tify the prope
strict oil and	gas inspecto	or 24 hour	s before a	ctual perm	itted work h	as commenced.)		e a	
he permitted v	vork is as d	escribed in	the Notic	ce and App	olication, pla	t, and reclamati	on plan, subject	to any modifications a	ind conditions sr	pecified on the
verse hereof.	Δ 11 0	gust 14	108	7						
ermit expires	Aug	sust 1	+, 170	'		unless well w	ork is commend	ed prior to that date and	prosecuted with	due diligence
						-				
Bond:	Agent	. 1	lat:	Casing	Ree Pee	WPCP	S&B	Other		· 4
	7 "	ما ا	24/	المحاد	96898	9 30		OCHEL		
L	1-0	17	77	MA	196899	4		لــــــــ		w., 1
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							$\mathcal{A} \subseteq \mathcal{A}$	Janu	-	×
OTE: Keep	one copy of	f this perm	nit posted	at the drill	ing location.	Dir	ector. Di	vision of Oil	and Gas	
							Di		and ago	' File

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