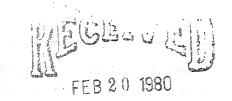




STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division WELL RECORD#

Quadrangle_Elmwood Permit_No._47-053-0189



OIL & GA	S DIVISION IF MINES
Rotary X	Oil
Cable	Gas X
Recycling	Comb.
Water Flood	Storage
Disposal	(Kind)

a VS 44.68 V a VV - management representation of the control of th				Disposal	(Kind)
Company Kaiser Exploration a Address P. O. Box 8, Ravensw	nd Mining Compar ood, WV 26164		Used in	Left	Cement fill up
Farm Cora Sommers Greenlee		Tubing	Drilling	in Well	Cu. ft. (Sks.)
Location (waters) Mud Lick		***			
Well No. KEM 13		Size			
District Union County		20-16 Cond			125 sx class A
		Cond. 13-10" 10 3/4"	251' (K8) Same	(To surface)
The surface of tract is owned in fee by		and the second s	1 231 (NO) Jane	(Dowell)
Leslie R. Henderson		9 5/8	Constitution of the second sec		- ' · · · · · · · · · · · · · · · · · ·
Address P. O. Box 1224, Athen		8.5/8		A 40	65 sx pozmix
Mineral rights are owned by Cora Som		7	<u>2639' (KB</u>	<u> Same</u>	100 sx class A
Address Box 286, Pt.		5 1/2			(Halliburton)
Drilling Commenced 9/5/79		4 1/2	4884' (KB	<u>) Same</u>	225 sx pozmix
Drilling Completed 9/12/79	naanguu sattamaan oo	3			_(Halliburton)
Initial open flow 200,000 cu. ft	. bbls.	2			
Final production 2500 M cu. ft. per		Liners Used			
Well open 24 hrs. before		engeleg pandan seprilimentundin serakanaha meninan serakah bilak arihin/demaksa engelegi/gipa-pap apagamangapa seprilimentungan serakanaha meninan serakah bilak arihin/demaksa			
Well treatment details:	. MA	Attach copy of a	samantina raca	rci	
		* *			77 11
Perforated the Oriskany S.S					
and Aircowell fractured zon				<u>20/40_m</u>	<u>esh sand;</u>
500 gal 28% HCL. 832 BBL wa	ter, and 170,000	<u>) SCF nitroge</u>	<u>:n.</u>	AND THE RESERVE OF THE PARTY OF THE BOTH OF THE PARTY OF	ne sambabb pinnggangasak (m. 1971 - sambabang sa mahab pin ggalang da mahabang k
CONTRACTOR AND THE CONTRACTOR AN		nn sennyanna sasainin yangang warawa masainin nasayana ngalibuga sasannin na paganapan wasan n	enn aanding van er er er er enningt of met adaptil hills like in district on an annil some	labore Militare and facilities seeing become	m at a wife constraint of mingroup and physical confidence complete control on the control on th
			2.5	00 M	CE
			/		
Coal was encountered at		and the state of t	Inche		
	Feet				Feet
Producing Sand Oriskany		1 11 DC	4877	-7 9	enner 1 CC i montreter i manella de la constanta de la constan
Producing Sand Oriskany	ere i mentre de compresso de la compresso de c		l manufacture and	and the same of the same of	to me to produce from a fact to enterprise to the figuration or increases the contemporary and contemporary and the findings
Formation Color Hard or So	ft Ton Post	Battam Cast	Oil, Gas or	Wester	
Formation Color Hard or So	ft Top Feet	Bottom Feet	UII, GAS OF	Walci	* Remarks
Soil		8	Toe	s FRO	m KB = 903
Siltstone	Š	44			
Shale	44	95	Secularities 4		
Sand	95	197	-		
Red Rock	197	452			
Sand	452	464			
Red Rock	464	503			
Shale	503	518	on and a second		
Red Rock	518	612	MILITARE CONTRACTOR CO		
Sand	612	622	and the state of t		
Red Rock	622	790	NILA-ZIPEZIPEZIPEZIPEZIPEZIPEZIPEZIPEZIPEZIPE		
Sand	790	808			
Red Rock	808	1001	Transition and the state of the		
Sand	1001	1018			
Shale	1018	1080	A STATE OF THE STA		
Sand	1080	1721	C.A. Davidos		
Siltstone	1121	1142	Grant Indian		
Sand	1142	1156	and the second s		
Siltstone	1156	1280			
Shale	1280	1310	NA) institution		
Salt Sands	1310	1494	To a second		
Shale	1494	1610	name of the second of the seco		The state of the s
Ciltatone	1610	1758			

(over)

^{*} Indicates Electric Log tops in the remarks section.

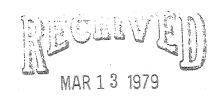
Formation Color Hard or Soft	Top Feet 4/	Bottom Feet	Oil, Gas or Water
Maxton Sand Big Lime Big Injun Sand Shale Sand Siltstone Shale Coffee Shale Berea Shale Brown Shale Brown Shale Shale Onondaga Oriskany Helderberg	1758 1826 1940 2030 2082 2145 2304 2524 2547 2564 3740 4181 4517 4734 4802 4858	1825 1940 2030 2082 2145 2304 2524 2547 2564 3740 4181 4517 4734 4802 4858 4908	
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Date February 20

APPROVED Kaiser Exploration and Mining Company

Operations Manager





Oil and Gas Division

OIL & GAS DIVISION
DEPT, OF MINES

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,	February 10 1070
Charleston, W. Va.	DATE February 19, 1979
Surface Owner Leslie R. Henderson	Company Kaiser Exploration and Mining Compan
P. O. Box 1224, Athens, OH 45701	Address P. O. Box 537, Ripley, WV 25271
Mineral Owner Cora Sommers Greenlee	Farm Cora Sommers Greenlee Acres 86.1
Address Box 286, Point Pleasant, WV 25550	Location (waters) Mud Lick
Coal OwnerSame as above	Well No. KEM #13 Elevation 895
Address Same as above	District Union County Mason
Coal Operator None	Quadrangle Elmwood
AddressNone	
THIS PERMIT MUST BE POSTED AT THE WELL SITE	
All provisions being in accordance with Chapter 22 of the W. Va. Code, the location is hereby approved INS for drilling. This permit shall expire if TO	PECTOR BE NOTIFIED Kenneth Butcher
A STATE OF THE PROPERTY OF THE	ORESS RFD #1, Barboursville, WV 25504
Deputy Director - Oil & Gas Division PHO	ONE 736-4885
GENTLEMEN:	
The undersigned well operator is entitled to drill upon the al	bove named farm or tract of land for oil and gas, having fee
title thereto, (or as the case may be) under grant or lease date	
Greenlee made to Kaiser Exploration & Min	ning Co recorded on the 5th day of February
	Page587
XXX NEW WELLDRILL DEEPER	REDRILLFRACTURE OR STIMULATE
OIL AND GAS WELL ORIGINALLY DRILLED H	
The enclosed plat was prepared by a registered engineer or have been notified as of the above date.	licensed land surveyor and all coal owners and/or operators
The above named coal owners and/or operator are hereby no to make by Section 3 of the Code, must be received by, or filed	
Copies of this notice and the enclosed plat were mailed by re or coal owners at their above shown respective address same day with the mailing or delivery of this copy to the Depar	day before, or on the
	ery truly yours,
PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO: (S	ign Name) K. A. Pryce
GEOTHER DOOD BIRDOIL TO.	R. A. Pryce Operations Manager
	P. O. Box 537
/ VALOIL & GAS CONSERVATION COMMISSION Address	Street
13 WASHINGTON STREET, EAST II Operate	
HARLESTON, WEST VIRGINIA 25311	City or Town
	West Virginia 25271
	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 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.

BLANCT DOND

47-053-0189 PERMIT NUMBER

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

PROPOSED WORK ORDER TO	X DRILL	DEEPEN FRACTURE-STIMULATE RESPONSIBLE AGENT: NAME Robert A. Pryce			
DRILLING CONTRACTOR: (If					
NAME Not known at this	time				
ADDRESS	Production to the contract of	ADDRESS P. O. Box	537, Ripley, WV 25271		
TELEPHONE		TELEPHONE 372-28	27 or 372-2828		
ESTIMATED DEPTH OF COMPL	ETED WELL: 4900		CABLE TOOLS		
PROPOSED GEOLOGICAL FORM					
TYPE OF WELL: OIL_		MR STORAGE	DISPOSAT		
			ODOTHER		
CASING AND TUBING SIZE 20 - 16 13 - 10	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.		
9 - 5/8 10 3/4	250	250	Cement to surface		
8 - 5/8	Or 7r	OF TE	And A		
7	2575	2575	125 sks = 625 feet		
5 ½ 4 ½	4900	4900	125 sks = 1500 feet		
3		1300	Perf. Top		
2			Perf. Bottom		
Liners			Perf. Top		
			Perf. Bottom		
		<u> </u>			
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 NUI	OF OG - 1, \$100.00 PERMIT L: OF OG - 1, SHOWING ORIGIN O 1929, A PERMANENT CO D. RIGINALLY DRILLED BEFOR AND ORIGINAL WELL RECO RIGINALLY DRILLED ON AN MBER, AND PERFORMANCE	FEE, PERFORMANCE BO NAL PERMIT NUMBER ANI PY OF THE PLAT AND TI LE JUNE 5, 1929, FIVE (5) C ORD. D/OR AFTER JUNE 5, 1929 BOND. Ompletion for bond release.	OPERFORMANCE BOND. ON HE ORIGINAL WELL RECORD OPIES OG - 1, PERFORMANCE P, FIVE COPIES OG - 1, SHOW-Inspector to be notified twenty-		
WAIVER: I the undersigned, Ager this lease have examine We the	nt for ed and place on our mine ma Coal Company h	ator if the permit is to be is Coal Company, Owner ps this proposed well location ave no objections to said we	ssued within ten days of receipt or Operator of the coal under		
			V		
		Warmenhammer and the control of the	Pr. 186		
		For	r Coal Company		

Official Title