





FEB 20 1980

#### STATE OF WEST VIRGINIA DEPARTMENT OF MINES

### OIL & GAS DIVISION DEPT. OF MINES

# Oil and Gas Division

		VV E. L.	RECORD 4	2-	"	Oil
Quadrangle Elmwood						Gas X Comb.
						od Storage
Permit No. <u>47-053-</u> 01	90				Disposal	TKind
				milit (haran karan da maran ar kandan karan karan Majar maran karan ka		\Kind/
Company Kaiser Ex	<u>ploration and</u>	<u>Mining C</u> omp	any Casing and	Used in	Left	Cement fill up
Address Pa Ua BOX E	<u>L. Kavenswood.</u>	<u> WV 26164</u>	Tubing	Drilling	in Well	Cu. ft. (Sks.)
Farm R. C. livide			ministra colores e ana esta esta esta esta esta esta esta est		The same of the sa	-
Location (waters) <u>Thir</u> Well No. <u>KEM 17</u>			Size			
District Union	Cause BRS	16v	20-16			Control of the state of the sta
The surface of tract is or			Cond. 13-10" 10 3/4"	2511 (40)	F	125 sx class
R. C. Jivi	den		9 5/8	1 231 1 VD1	Dallie	(to surface) (Halliburton)
Address Rt 3, Box	And the second s	The state of the s	8 5/8			
Mineral rights are owned	_		7	2484' (KB)	Same	65 sx pozmix 100 sx class
Address	*		5 1/2			(Halliburton)
Drilling Commenced			4 1/2	47931 (KB)	Samo	225 sx pozmix
Drilling Completed			3	of the State of th	VAIIIV	(Halliburton)
Initial open flow 16.0	<u>00                                   </u>	bbls.	2		47291	·4 ·
Final production 750	M_cu. ft. per day_	ma bhis.	Liners Used		and the second section of the second	1
Well open 20	hrs. before test_	1850 RP	About Auro Managara Aligibir verbu pin sandh airsan igiribar alik and pepubahajian unindan "Amricka salah mil Amricka di pilihari yapimu pin dan amrakkan mendaran kala andara di bangan tahun di disebagai salah salah salah			
Well treatment details:			Attach copy of c	ementing reco	rd.	
Perforated the Or	iskanv S.S. fi	om 4730' - 4		100		/79\.
<u>Halliburton</u> and A	ircowell fract	tured the zor	ne w/30,000# n	of 80/100	mesh sar	id. 30.000#
20/40 mesh sand.	<u>500 gal 28% H</u>	<u>l. 914 BBL v</u>	water, 170,00	O SCF nitr	ogen.	<del>nember selven serve se sessen</del> en se ellen sestimative en se in describer i en se
- cancel excellence or resident and president and personal residence of the properties operate by a properties to restain an extension and personal residence of the personal		2 Sarahamangan and anagangan arabangan kananan and anagan anagan ang anagan anagan ang ang	والأواد والتراج والمراجع والم والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع	order at the later at the state of the state		
	espirat espiratificity of the state of the state of the description of the state of	gran prompter to the cold for the day of significant of the following days are an a prompter constraint and a superior		750	MCF	
	м. Страниций, польтой история выполняющей обеспеченняющей предоставления выполняющей в подативности выполняюще	an international parties and an extending of places of the places of the section	and the annual of the 1 point of the first of the contract of the contract of the second of the seco	tto velitikaan) jarguru sel oji valtijaatigade tuku trijikkljaanse di velikistolomistos.	and the backets of the lands like a fraction of the property of the contract of the first	and the common and an activity and the common and t
Coal was encountered at Fresh water	gerigen werden gerigen vertigen en gebouwert is verwerinde de werden die verberinden der verbeitrieben der verberinden der verberinden der verberinden der verbeitrieben der	erene de la companya	ortiganisastediskum orti unitari sastenno narigani vistenno na istoriali vistrastivina ut ejis queligist en e	Inches		
Producing Sand Inis	k in an a s	The state of the s		ater	· f	Feet
1 1 CONTONIN 29111 producent of production of the second o	Vida Bartan San San San San San San San San San S	gar valanda la manda de em cante a granda (1965) e en esta antique e qua de en la defenda de la mere an grand Here à desta la manda de en esta de la manda de entre de entre de la mere de la mere de granda de la mere de e	Depth			VVIII of a characteristic region of address of the characteristic region of a delicative contractive and a characteristic contractive cont
Formation Color	78 5 6 6-					
Formation Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or	Water	* Remarks
		and the state of t	and the company of the second	etielen er selegie in selem villeste des en tiert este terret en selegies en este este en este este en este es E	Minterface in philosophic control cont	were might common medium son replaced and and an electron makes and all all properties also all properties are
Soil & Shale		0	290	7-	or Pp	manl te
Sand Shale		290	345	700		sensly Frem 3: 747'
Sand		345 402	402		K	S: 747'
Shale		430	430 580		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Sand		580	600			
Shale		600	845			
Sand		845	870			
Shale		870	935			
Sand		935	1020			
Shale	!	1020	1145			
Salt Sand		1145	1335			
Shale						
Sand		1335	1435			
		1435	1485			
Shale		1485	1525			
Sand		1525	1620			
Shale		1620	1645			
Sand	of Dayson	1645	1655	•		
Shale Big Lime		1655	1705			
Big Injun		1705 1895	1895			
Shale	: 124	1910	1910 1940			relati Mari
Injun		1940	2000			

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

Formation Color Hard or Soft	Top Feet 42	Bottom Feet	Oil, Gas or Water * Kemarks
Shale Coffee Shale Berea Sand Shale Brown Shale Marcellus Onondaga Lime Oriskany Sand Lime	2000 2385 2408 2422 3608 4400 4626 4706 4742	2385 2408 2422 3608 4400 4626 4706 4742 4814	Total Depth
	Section 1		
	modelletin de verificación de la constantina del constantina del constantina de la constantina de la constantina del c		
	TOTAL ACTIVITIES AND		
	SALEA AND PARTY		
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	BLC/hardeness	The second secon	
	The relation of the control of the c	Service and the service of the servi	
All provides the p	gereje soon ay		1   1   1   1   1   1   1   1   1   1
Parameter in consistence on the			

Date February 20 1780

APPROVED Kaiser Exploration and Mining Company

Operations Maddager





### Oil and Gas Division

OR & GAS DIVISION DEPT. OF MINES

## OIL AND GAS WELL PERMIT APPLICATION

	•
THE DEPARTMENT OF MINES,	
	DATE March 6, 1979
R. C. Jividen	Company Kaiser Exploration and Mining Compan
Poute 3 Box 152 Leon, WV 25123	Address P. O. Box 537, Ripley, WV 25271
R C .lividen	Farm R. C. Jividen Acres 68.53
ral LWher	Location (waters) Thirteen Mile Creek
Union Carhida	Well No. KEM 17 Elevation 734.69
Charleston WV	District Union County Mason
	Quadrangle Elmwood
None	Quadrangie
THIS PERMIT MUST BE POSTED AT THE WELL SITE	
1 P S NOV 1 MAR COLL COLL S C.	
All provisions being in accordance with Chapter 22,	
of the W. Va. Code, the location is hereby approved INSI	Vannath Putahan
for <u>drilling</u> . This permit shall expire if TO	BE NOTIFIED Remeth Butcher
operations have not commenced by 12-5-79 ADD	RESS RFD #1, Barboursville, WV 25504
Thetath ( add)	706 4005
Deputy Director - Oil & Gas Division PHO	NE736-4885
VTLEMEN:	
made to Kaiser Exploration & Mir	May 6, 1978 by R. C. Jividen 1986 recorded on the 12th day of April
78, in Mason County, Book 43	Page104
XXX NEW WELLDRILL DEEPER	REDRILLFRACTURE OR STIMULATE
OIL AND GAS WELL ORIGINALLY DRILLED F	
The enclosed plat was prepared by a registered engineer or 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	tified that any objection they wish to make, or are required
make by Section 3 of the Code, must be received by, or filed	d with the Department of Mines within ten (10) days. *
Copies of this notice and the enclosed plat were mailed by re	egistered mail, or delivered to the above named coal operators
coal owners at their above shown respective address te day with the mailing or delivery of this copy to the Depar	day before, or on the
CONTROL OF ATT	ery truly yours,
OPHYSICAL LOGS DIRECTLY TO: (S	R. A. Pryce Operator
ddress	P. O. Box 537 Street
, VA. OIL & GAS CONSERVATION COMMISSION of	Dinloy
13 WASHINGTON STREET, EAST Operate	Or Ripley City or Town
HARLESTON, WEST VIRGINIA 25311	West Virginia
	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 objection and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting 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 the well operator authorized to proceed.

DANKT DOND

Acrosy

7-053-0190 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			
DRILLING CONTRACTOR: (If	Known)	RESPONSIBLE AGENT:  NAME Robert A. Pryce  ADDRESS P. O. Box 537, Ripley, WV 25271			
NAME Not known at this	time				
ADDRESS					
TELEPHONE			828 or 372-2827		
ESTIMATED DEPTH OF COMPLE			CABLE TOOLS		
PROPOSED GEOLOGICAL FORM					
TYPE OF WELL: OIL_			AGE DISPOSAL		
	RECYCL.	ING WATER	FLOODOTHER		
TENTATIVE CASING PROGRAM	;				
CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.		
20 - 16		***************************************	control at the		
13 - 10					
9 - 5/8 10 3/4	225	225	Cement to surface		
8 - 5/8	0450	0450	105		
7 5 ½	2450	2450	125 sks = 570 feet		
4 ½	4800	4800	125 sks = 1500 feet		
3			Perf. Top		
2 -			Perf. Bottom		
Liners			Perf. Top		
			Perf. Bottom		
ADDONINAME DEGIL WAMED	D.D.D.D.T.				
			ERFEET		
IS COAL BEING MINED IN THE	CAREA? None	DV WUOM2	<u> </u>		
	A S.A. D. Lad. L	BI WITOW!			
TO DRILL:		: 5			
OF PLAT.	OF OG - 1, \$100.00 PERM	HT FEE, PERFORMANC	E BOND AND PERMANENT COPY.		
TO DRILL DEEPER OR REDRIL	т.				
		INAT DEDMIN NITIMOED	AND PERFORMANCE BOND. ON		
WELLS DRILLED PRIOR T	O 1929, A PERMANENT O	COPY OF THE PLAT AN	ND THE ORIGINAL WELL RECORD		
MUST ALSO BE SUBMITTE					
TO FRACTURE - STIMULATE:					
OIL AND/OR GAS WELL OF	RIGINALLY DRILLED BEFO	ORE JUNE 5, 1929, FIVE	(5) COPIES OG - 1, PERFORMANCE		
BOND, PERMANENT PLAT					
OIL AND/OR GAS WELL OF ING ORIGINAL PERMIT NUI	RIGINALLY DRILLED ON A	ND/OR AFTER JUNE 5,	1929, FIVE COPIES OG - 1, SHOW-		
Required forms must be filed four (24) hours in advance.	within ninety (90) days of	completion for bond rele	ase. Inspector to be notified twenty-		
( · , · · · · · · · · · · · · · · · ·					
The following waiver must be thereof.	pe completed by the coal op	perator if the permit is to	be issued within ten days of receipt		
	nt for	6.16	wner or Operator of the coal under		
	ed and place on our mine n				
			id well being drilled at this location,		
			and 7, Chapter 22 of the West Virginia		
Code.		Ty Uy			
e e e			en e		
			For Coal Company		
			· Or Coar Company		
		4	Official Title		

FORM	WW-	.2p
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	DEPART	WELL WO	NERGY, DIV	VISION OF O APPLICATION	IL AND GAS	114192
1) Well Ope	rator:	Durst	Bil and	Gas 146	80 (9)	338
2) Operator	's Well	Number:	KEMI-17		3) Ele	evation: 734
4) Well typ	e: (a)	0i1_/	or Gas	$ \underline{\forall} $		
	(b)	If Gas:	Production Deep		round Storage Shallov	
5) Proposed	Target 1	Formation	(s): <u>De</u>	vonian 51	nate	
6) Proposed	Total D	epth: <u>415</u>	O' Plug Back	<u>ID</u> eet		
7) Approxim	ate fres	h water s	trata dept	hs: 208	o' RE	CEIVED
8) Approxim	ate salt	water de	pths:		AUG	ED
9) Approxim	ate coal	seam dep	ths:	450	OFPT. OF	<sup>3</sup> 1990
					TAC WITHE V TO	
11) Proposed Well Work: Det permanent cast iron bridge plug@4150, Place a dump bailer of calseal on top. @ Perforate csg 4065 1 to 3600 1 w/20 holes @ Frac Dewnium St. 12) with 750 foam and 45,000 lbs 20/40 sand, (Submit 4FFIDAVIT OF PLUGGING CASING AND TUBING PROGRAM FOR PLUG BACK, GS)						
TYPE	3.	PECIFICAT		FOOTAGE II		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor			Sent metros de la Companya de la Co			
Fresh Water	10 3/4"	Н	32,75	251	251'	1255Ksclass
Coal						
Intermediate	7"	K	20.°°	2484'	2484	655K 702 1005K ClassA
Production	41/2"	N	11,60	4793	4793'	225 sk Class A
Tubing					Proposed 41/2" PBTD 4150	
Liners						
PACKERS : Kind						
Sizes Depths set						
Depths set  For Divison of Oil and Gas Use Only						
Fee(s) F	`   Fee(s) paid:   _V  Well Work Permit   _  Reclamation Fund   _V  WPCP					
Plat       WW-9       WW-2B     Bond   C       Agent						

	_
Page 1 of <u>2</u> AUG 29 1990 1)	Date: 6-17-90
Form WW2-A  (09/87)  DEPT. OF ENERGY  2)	
(03/01/	KEM 17 Jividen
File Copy 3)	API Well No: 47 - 053 - 0190-FR
	State - County - Permit
STATE OF WEST DEPARTMENT OF ENERGY, DI	
NOTICE AND APPLICATION F	OR A WELL WORK PERMIT
4) Surface Owner(s) to be served:	5) (a) Coal Operator:
(a) Name R.L. Jividen	Name Appalachian Land Co
Address Rt 3 Box 319-B	Address
Hurricane, WV 25526	Ashland, Ky 41101
(b) Name	(b) Coal Owner(s) with Declaration
Address	Name
	Address
(c) Name	
Address	Name
	Address
6) Inspector Terry Tephabock	(c) Coal Lessee with Declaration
6) Inspector <u>Jerry Tephahock</u> Address Rt Box 101-A	Name
Ripley, WV 25271	
Telephone (304)-372-6805	
TO THE PERSON(S) NAMED AB	OVE TAKE NOTICE THAT:
	8
Included is the lease or leases or	
contracts by which I hold the right to	
Included is the information requir	
Section 8(d) of the Code of West Virgin	
	Chapter 22B of the West Virginia Code
I have served copies of this notice and	
accompanying documents pages 1 through 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 the terms and conditions of any perm	nit issued under this application.
I certify under penalty of law tha	t I have personally examined and am
familiar with the information submitted	
attachments, and that based on my inqui	ry of those individuals immediately
responsible for obtaining the informati	on, I believe that the information
is true, accurate, and complete.	
	cant penalties for submitting false
information, including the possibility Well Operator	
	U. Durst JR
Its: Owner	
Address Rt Z	2 Box 538
Poin	t Pleasant, WV 25550
	304) 675 - 3064
Subscribed and sworn before me this 37	day of July , 1990

\_Notary Public

State of West Virginia DEPARTMENT OF ENERGY

Division of Oil and Gas

Division of Energy

Well Operator's Report of Well Work Operator Well No.: KEM 17 JAN 0 9 91 Farm name: JIVIDEN, R. L. LOCATION: Elevation: 734.00 Quadrangle: ELMWOOD District: UNION County: MASON ' Latitude: 5300 Feet South of 38 Deg. 42Min. 30 Sec. Longitude 10300 Feet West of 81 Deg. 47 Min. 30 Sec. Company:DURST OIL & GAS CO., INC. -----ROUTE 2, BOX 538 | Casing | Used in | Left | Cement | | Tubing | Drilling | in Well|Cu. Ft.| Agent: RONALD W. DURST, JR. Size Inspector: JERRY TEPHABOCK Permit Issued: 09/14/90 9-17-90 Well work Commenced: Well work Completed: 9-17-90 Verbal Plugging 251 251 Permission granted on:
Rotary Cable x Rig
Total Depth (feet) 4150 to Surface 1655KP02 1 2484 100 skchool Fresh water depths (ft) 200 122551 Salt water depths (ft) \_\_\_\_\_\_\_\_\_ 14793 | 4793 | Class A Is coal being mined in area (Y/N)? N Coal Depths (ft): OPEN FLOW DATA Producing formation Brown Shelo Pay zone depth (ft) 3500-406.

Gas: Initial open flow 150 MCF/d Oil: Initial open flow 6 Bbl/d Final open flow 100 MCF/d Final open flow 0 Bbl/d Time of open flow between initial and final tests 4 Hours Static rock Pressure 900 psig (surface pressure) after 94 Hours Static rock Pressure \_\_\_\_psig (surface pressure) after Hours NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS,

For: DURST OIL & GAS CO., INC.

INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

By: Konold W. Durst JR Date: Nos 29,1990

JAN 1 1 1001

- 1. 1.) Set Permanent Cast Iron plug @ 4150'
  Cover w/Calseal
  - 2.) Perf 3800' to 4065' w/20 holes
  - 3.) Fram Frac w/ 75 Q Nz 45000 lbs Sand
  - 2. Geological Record previously submitted (existing well)