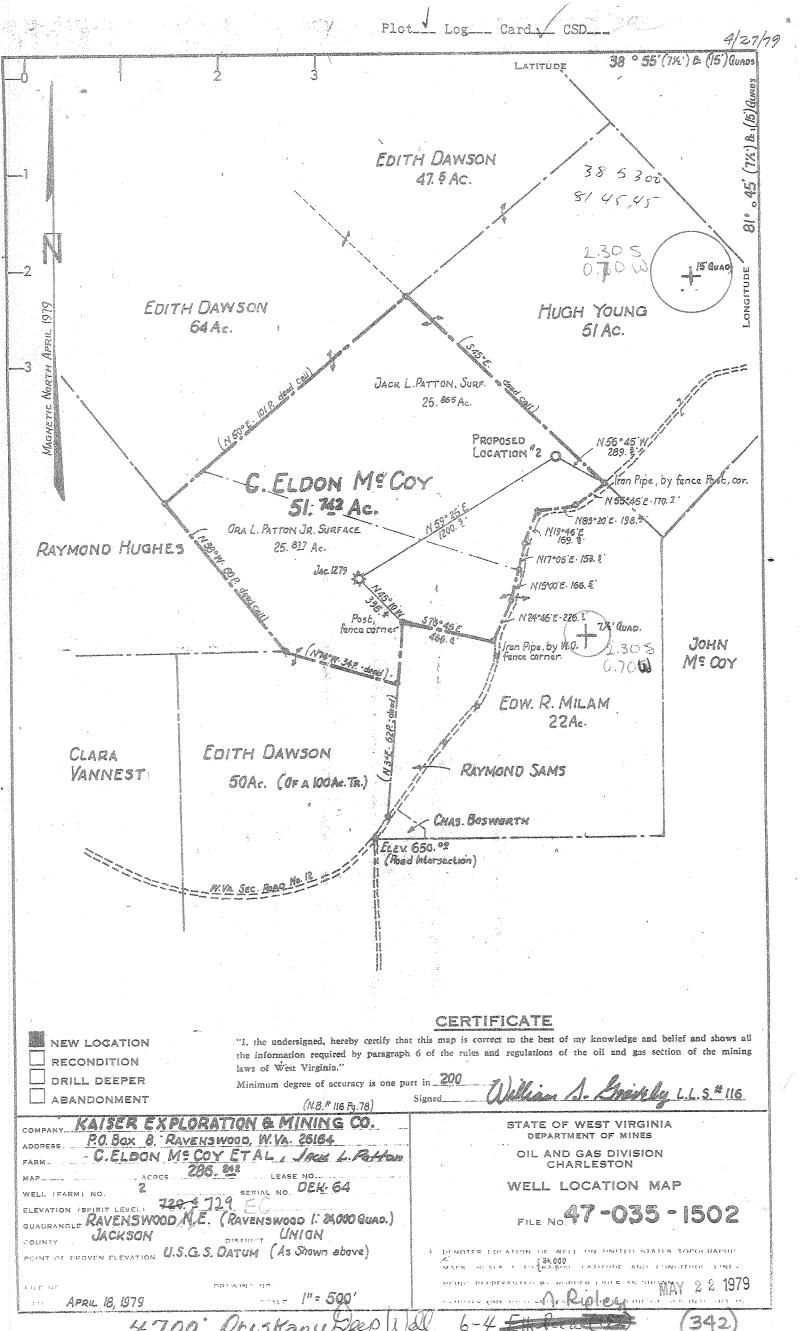


4700 Oriskany

DEER

MAR 23 198



Company.....

Address_



STATE OF WEST VIRGINIA DEPARTMENT OF MINES

FEB 20 1980

No Diavid

Oil and Gas Division WELL RECORDED

OIL & GAS DIVISION DEPT. OF MINES XXXGas XXX Cable___ Recycling_ Comb. Water Flood___ Storage_

Ravenswood Quadrangle_ 47-035-1502 Permit No..

Disposal___ (Kind) KAISER EXPLORATION & MINING CO. Casing and Used in Lest Cement fill up Address PO Box 8, Ravenswood, W. Va. Tubing Drilling in Well Cu. ft. (Sks.) Acres 286.24 Farm C. Eldon McCov Crooked Fork Location (waters) _ Size Elev. 729.4 Well No. DEK 64 20-16 _ County___Jackson District Union Cond. 13-10" 10-3/4 236 236 100 sax=to surf The surface of tract is owned in fee by J. L. Pattor <u>805 Henrietta St.</u> 9 5/8 Ravenswood, WV 8 5/8 2348 2348 165 sax=1400' Mineral rights are owned by C. Eldon McCoy 5 1/2 Rt. 2 Address Bx 108F Ravenswood, WV 4688 225 sax=2600' 4 1/2 Drilling Commenced May 23, 1979 <u>June 1, 1979</u> Drilling Completed____ Initial open flow 1/2 MCFD XXXX bbls. 3892 Liners Used Final production 30 M cu. ft. per day _ _bbls. Well open _____hrs. before test_

Well treatment details: Attach copy of cementing record.

Perforated 45" casing 4629-4631 w/16 shots

Frac Oriskany with 894 bhls water and 35000# sand - No result. Fractured Brown Shale with 15,000# 80/100 sand and 45,000# 20/40 sand; total 340 bb1 540,000 SCF of nitrogen; broke at 2500 psig: treated at 1850 psig at 9 bbl minute

Coal was encountered at ___ Fresh water... Feet _Salt Water_ Feet Producing Sand Brown Shale Depth <u>25 holes(37)91-394]1</u>

Soil 0 16 Shale 16 127 Sand 127 280 Shale 280 340 Sand 340 350 Shale 350 475 Sand 475 500 Shale 500 610 Sand 610 662 Shale 662 1030 Sand 1077 1090 Shale 1077 1090 Sand 1090 1155 Shale 1155 1260 Sand 1260 1285 Shale 1340 1365 Shale 1365 1425 Sand 1425 1465 Shale 150 150 Shale 1550 1570 Sand 1570 1605	Formation	Color Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
	Shale Sand		16 127 280 340 350 475 500 610 662 1030 1077 1090 1155 1260 1285 1340 1365 1425 1465 1520 1550	127 280 340 350 475 500 610 662 1030 1077 1090 1155 1260 1285 1340 1365 1425 1465 1465 150 1570	and make the second was the second	

(over)

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

		A A PROPERTY OF THE PARTY OF TH	
Formation Color Hard or Soft	Top Feet 24	Bottom Feet	Oil, Gas or Water * Kemarks
Shale Maxon Sand Big Lime Shale Injun Sand Shale Coffee Shale Berea Sand Shale Brown Shale Brown Shale Onondaga L. S. Oriskany Sand Helderberg L. S. Log Total Depth	1605 1660 1682 1800 1836 1960 2269 2291 2294 3460 3946 4368 4518 4518 4592 4632 4739	1660 1682 1800 1836 1960 2269 2291 2294 3460 3946 4368 4518 4592 4632 4739	
	continues contin		
	Taylor Control of the		

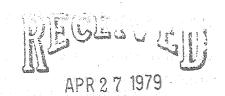
Date Eebruary 20

1980

APPROVED Kaiser Exploration and Mining Gompany

(Into) Operations Manager





Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,	grandskap til grænde for til en skap til ett fra grænde for skap til ett fra grænde for skap til ett fra skap Til en kap til ett fra
Charleston, W. Va.	DATE April 23, 1979
Surface Owner Jack L. Patton Address 805 Henrietta Street, Ravenswood, WV	Company Kaiser Exploration and Mining Compan
Mineral Owner C. Eldon McCoy, et al	Farm C. Eldon McCoy Acres (Unit) 286.2
Address Route 2, Box 108-F, Ravenswood, WV	Location (waters) Crooked Fork
Coal Owner Same as above	Well Na DEK #64 Elevation 729.4
Address Same as above	District Ravenswood County Jackson
Coal Operator None	Quadrangle Ravenswood N. E.
AddressNone	
THIS PERMIT MUST BE POSTED AT THE WELL SIN	
All provisions being in accordance with Chapter 22	
or the vv. va. Code, the location is hereby approprie	PECTOR
for <u>drilling</u> This permit shall expitoi	BE NOTIFIED Richard Morris
operations have not commenced by 1-2-80 ADD	DRESS P. O. Box 372, Grantsville, WV 26147
110 807 A 1010	Year of the second of the seco
Deputy Director - Oil & Gas Division PHO	ONE 354-7259
GENTLEMEN: The second of the second s	The second of the second than the second of
The undersigned well operator is entitled to drill upon the a	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 dat	
	al and recorded on the 28th day of February
19 76 in Jackson County, Book 136	Page 410
XXX NEW WELLDRILL DEEPER	REDRILLFRACTURE OR STIMULATE
OIL AND GAS WELL ORIGINALLY DRILLED 1	
The enclosed plat was prepared by a registered engineer or have been notified as of the above date.	lander og en en en grande for til skalende for året for en en skalende for ekkeldere grande en en en en en en En en
The above named coal owners and/or operator are hereby no to make by Section 3 of the Code, must be received by, or file	tified that any objection they wish to make, or are required d with the Department of Mines within ten (10) days. *
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	R. A. Pryce Operations Manager
WEST VIRGINIA GEOLOGICAL AND	P. O. Box 8
ECONOMIC SURVEY Address	Street Street Street Street
P. O. BOX 879 MODCANTOIN LIEST VIDCINIA 26505 Well Operato	or Ravenswood
MORGANTOWN, WEST VIRGINIA 26505 AC-304 - 292-6331	City or Town
	West Virginia 26164
	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.

CARAT ROW

47-035-1502 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 I		RESPONSIBLE AGE	
NAME Not known at this	time	NAME Robert	A. Pryce
ADDRESS		ADDRESS P. O. I	Box 8, Ravenswood, WV 26164
TELEPHONE		TELEPHONE 2	73-5371
ESTIMATED DEPTH OF COMPLE	TED WELL: 4700	ROTARY X	CABLE TOOLS
PROPOSED GEOLOGICAL FORM	ATION: Oriskany		
TYPE OF WELL: OIL	GAS X CO	OMB STOR.	AGE DISPOSAL
			FLOOD OTHER
TENTATIVE CASING PROGRAM:			
CASING AND TUDING	USED FOR		
CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8 10 3/4	250	250	Cement to surface
8 - 5/8	Annual Control of the		- AUGOS
7	2300	2300	125 sks = 570 feet
5 ½	4700	4700	
4 ½	4700	4700	125 sks = 1500 feet
2			Perf. Top
Liners			Perf. Bottom Perf. Top
			Perf. Bottom
APPROXIMATE FRESH WATER I	DEPTHSFEET_	SALT WATI	ERFEET
IS COAL BEING MINED IN THE	AREA? None	DV WHOMA	
	A A A V A A A A A A A A A A A A A A A A	BI WHOM?	
TO DRILL:			
OF PLAT.	OF OG - 1, \$100.00 PERMIT	FEE, PERFORMANCE	E BOND AND PERMANENT COPY
TO DRILL DEEPER OR REDRILL			
SUBMIT FIVE (5) COPIES O	F OG - 1, SHOWING ORIGIN D 1929, A PERMANENT CO	NAL PERMIT NUMBER PY OF THE PLAT AN	AND PERFORMANCE BOND. ON ID THE ORIGINAL WELL RECORD
TO FRACTURE - STIMULATE: OIL AND/OR GAS WELL OR	IGINALLY DRILLED REFOR	F HINE 5 1020 PIVE	(5) COPIES OG -1, PERFORMANCE
BOND, PERMANENT PLAT	AND ORIGINAL WELL RECO	ORD.	(a) COPIES OG - 1, PERFORMANCE
OIL AND/OR GAS WELL OR ING ORIGINAL PERMIT NUM	IGINALLY DRILLED ON AN BER, AND PERFORMANCE	D/OR AFTER JUNE 5, BOND.	1929, FIVE COPIES OG - 1, SHOW-
Required forms must be filed four (24) hours in advance.	within ninety (90) days of co	ompletion for bond relea	ase. Inspector to be notified twenty-
rour (24) nours in advance.			
The following waiver must be thereof.	completed by the coal oper	rator if the permit is to	be issued within ten days of receipt
WAIVER: I the undersigned, Agent	for	Coal Company Ou	vner or Operator of the coal under
this lease have examined	and place on our mine may	ps this proposed well lo	ocation.
			d well being drilled at this location,
providing operator has co	mplied with all rules and regul	lations in Articles 4, 5, a	nd 7, Chapter 22 of the West Virginia
			For Coal Company
			. or Coar Company
			Official Title

STATE OF WEST VIRGINIA DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION



OIL & GAS DIVIS

Permit No. 035-1502

AFFIDAVIT OF PLUGGING AND FILLING WELL . OF M.) AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, ONE COPY TO BE RETAINED BY THE WELL OPERATOR AND THE THIRD COPY (AND EXTRA COPIES IF REQUIRED) SHOULD BE MAILED TO EACH COAL OPERATOR AT THEIR RESPECTIVE

OPERATOR OR OWNER			Company
<u>PC</u>	. Box 8, Ravenswo		26164
ADDRESS	COMPLETE ADD	PRESS	
Apperator or owner	ril 7,		<u> 19 81 </u>
		CATION	
ADDRESS	113NOOU		District
	son		County
		,	County
ADDRESS Well	No. DEK #64		
_C. E	ldon McCoy		Farm
· ·		-	rarm
SUPERVISING PLUGGING RICHARD	<u>vorris</u>	*************	**********
AFFIDAVIT			
VIRGINIA,			
on \{ ss:			
Co+v			
orn according to law depose and say t	Dert A. Pryce	nood in the	
oil and day wolls and were and a	Vaigne Family		
participated in the work of plugging and	d filling the shows w	rall that a	aid man-1-
the 2nd day of April	1987 and that the	no wall was	and work
lowing manner:	-, 10-01, and that th	ite well was	s brugged
FILLING MATERIAL	PLUGS USED		/sing
		{	CSG
	JILL & KIND	PULLED	LEFT IN
	A 7 (0)		<u> </u>
3500'	4 1/2" Permanen		
3500'	4 1/2" Permanen Bridge Plug		
	Bridge Plug		
3500' 3500'-3300' Class A cement 3300'-1900' 6% Gel	Bridge Plug		2896 ' (4½)
3500' 3500'-3300' Class A cement	Bridge Plug		2896 ' (4½)
3500' 3500'-3300' Class A cement 3300'-1900' 6% Gel 1900'-1500' Class A cement 1500'-1100' 6% Gel	Bridge Plug	1800'(4날	
3500' 3500'-3300' Class A cement 3300'-1900' 6% Gel 1900'-1500' Class A cement 1500'-1100' 6% Gel 1110'- 900' Class A cement	Bridge Plug	1800'(4날	2896 ' (4½) 1354 ' (7")
3500' 3500'-3300' Class A cement 3300'-1900' 6% Gel 1900'-1500' Class A cement 1500'-1100' 6% Gel 1110'- 900' Class A cement 900'- 300' 6% Gel	Bridge Plug	1800'(4½	1354'(7")
3500' 3500'-3300' Class A cement 3300'-1900' 6% Gel 1900'-1500' Class A cement 1500'-1100' 6% Gel 1110'- 900' Class A cement	Bridge Plug	1800'(4날	
3500' 3500'-3300' Class A cement 3300'-1900' 6% Gel 1900'-1500' Class A cement 1500'-1100' 6% Gel 1110'- 900' Class A cement 900'- 300' 6% Gel	Bridge Plug	1800'(4½	1354'(7")
3500' 3500'-3300' Class A cement 3300'-1900' 6% Gel 1900'-1500' Class A cement 1500'-1100' 6% Gel 1110'- 900' Class A cement 900'- 300' 6% Gel	Bridge Plug	1800'(4½	1354'(7")
3500' 3500'-3300' Class A cement 3300'-1900' 6% Gel 1900'-1500' Class A cement 1500'-1100' 6% Gel 1110'- 900' Class A cement 900'- 300' 6% Gel	Bridge Plug	1800'(4½	1354'(7")
3500' 3500'-3300' Class A cement 3300'-1900' 6% Gel 1900'-1500' Class A cement 1500'-1100' 6% Gel 1110'- 900' Class A cement 900'- 300' 6% Gel 300' - Surface Class A cement	Bridge Plug	1800'(4½	1354'(7")
3500' 3500'-3300' Class A cement 3300'-1900' 6% Gel 1900'-1500' Class A cement 1500'-1100' 6% Gel 1110'- 900' Class A cement 900'- 300' 6% Gel	Bridge Plug	1800'(4½	1354'(7") 250' (10
3500' 3500'-3300' Class A cement 3300'-1900' 6% Gel 1900'-1500' Class A cement 1500'-1100' 6% Gel 1110'- 900' Class A cement 900'- 300' 6% Gel 300' - Surface Class A cement	Bridge Plug	1800' (4½ 1000' (7"	1354'(7") 250' (10
3500' 3500'-3300' Class A cement 3300'-1900' 6% Gel 1900'-1500' Class A cement 1500'-1100' 6% Gel 1110'- 900' Class A cement 900'- 300' 6% Gel 300' - Surface Class A cement	Bridge Plug	1800'(4½ 1000'(7" 0' of Monume t, proper	1354'(7") 250' (10
	Jack PROPERTY OWNER St., Ravenswood, WV 26164 ADDRESS C. E SUPERVISING PLUGGING Richard VIRGINIA, On Coty Forn according to law depose and say to oil and gas wells and were employed by participated in the work of plugging and the 2nd day of April lowing manner: FILLING MATERIAL	Ravenswood ADDRESS Jackson St., Ravenswood, WV 26164 ADDRESS C. Eldon McCoy SUPERVISING PLUGGING	Ravenswood Comparison Comp