



STATE OF WEST VIRGINIA DEPARTMENT OF MINES

PEGEIVED DEC - 6 1978

CIL & GAS LIVISION

Oil and Gas Division

WELL RECORD 18

Quadrangle Sandyville

Permit No JAC -1461 (47-035-1461)

Permit No. UAC -1401		,	Disposal	(Kind)
Company KAISER EXPLORATION & MINING CO. Address PO Box 537, Ripley, WV Farm Enid Rankin Acres 46	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Location (waters) Shockey Run Well No. DEK #56 Elev. 870 KB	Size 20-16	A control of the cont		
District Ravenswood County Jackson The surface of tract is owned in fee by Marjorie E. Allen	Cond. 13-10" 9 5/8	243	243	110 Sax
Address Rt. 2, Ravenswood, WV Mineral rights are owned by Enid Rankin Address 3377 Shell Rd, Ft. Myers, F	8 5/8 7 1&.1/2	2413	2413	75 Sax
Drilling Commenced 9/6/78 Drilling Completed 9/13/78 Initial open flow 47 MCFD Scarsfox bbls.	4 1/2		4898	200 Sax
Final production 248 MCFD: Well openhrs. before test 1500 RP. Well treatment details:	Liners Used	A 5		
Perforated 45" casing at 4759-4761 in Oris 685 bbls water and 45,000# sand	many or the second of the seco	h 16 shots	. Water	
	BROUBER, 1992/Milliotherma (2005-1994) en banker Statumanapanapanapanapanapatikatikatikatikatikatikatikatikati		alaterialista errottungajakulannan, metapalpulpulpulpulpul Districtus (Indianat agametanna districtus districtus districtus districtus districtus districtus districtus Committee (Indianat agametan municipal districtus di	
Coal was encountered atFeet Fresh waterFeet Producing SandOriskany Sand	Salt V	Inche	Parameteri dan kepangan ang kanangan ang kepang	Feet
	Bottom Feet	Oil, Gas o	r Water	* Remarks

Formation (Color	Hard or Soft	Top Feet	Battom Feet	Oil, Gas or Water * Remarks
Surface Shale			0	12	Accordance to the second and the sec
Broken Sand			162	220	
Sand			220	250	
Shale			250	305	Tables
Sand			305	340	
Shale			340	623	
Sand			623	685	
Shale			685	710	
Red Rock			710	758	-
Sand			758	838	
Red Rock			838	905	escription of the second of th
Shale			905	1030	
Red Rock			1030	1040	
Shale		•	1040	1112	
Red Rock			1112	1130	
Sand			1130	1270	
Shale		•	1270	1400	
Broken Sand			1400	7495	
Shale		;	1495	1670	
Broken Sand			1670	1760	
Big Lime			1760	1905	
Shale			1905	1987	
Injun Sand	en no estado		1987	2014	

(over)

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

Formation Color Hard or Soft	Top Feet 18	Bottom Feet	Oil, Gas or Water * Remarks
Shale Coffee Shale Berea Sand Shale Brown Shale Shale Marcellus Shale Onondaga L. S. Oriskany Sand Helderberg L. S.	2014 2326 2357 2360 3514 4041 4501 4653 4748 4764	2326 2357 2360 3514 4041 4501 4653 4748 4764 4926	
Total Depth	4926		
	werkerd chammagestick-patients		
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political control of the state	Biogeometry, electric set de notacionement		

Date December 1 1978

APPROVED Kaiser Exploration & Mining Co; Owner

By (Title)

Operations Manager

Grenators: Well No. DEK - 56 REVISED WELL OPERATOR'S REPORT APT We: 1. 47 - 035 -1461 [08-75] OF API WE DEILLING, TABUTELLING AND FOR STIMULATING, IN SHYLOGI CHANGE WELL TYPE: Cil / Gas X / Liquid Injection / Washa Dichosal (If "Gas", Production X / Unierground storage / Teep / Challew _____ Watershed: Shockey Run LOCATION: Elevation: ____870 District: Ravenswood WELL OPERATOR Kaiser Exploration and Mining DESIGNATED ADMIT SAME Address P. O. Box 8 Audreso Ravenswood, WV 26164 PERMITTED WORK: Drill __/ Convert __/ Drill deeper ___ Bearill __/ Practure or stimulate ___ Plug off old formation X / Perforate new formation X / RECEIVED Other physical change in well (specify) FEB 9 - 1982 OIL & TAS INCRESTOR FOR THIS WORKARTMENT OF MINES PERMIT ISCUED ON September 6 , . 78 Name Richard Morris (IF APPLICABLE: PLUGGING OF DRY HOLE AN CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMICCION OUTAINED Address P. O. Box 372 Grantsville, W _____, 19__ GEOLOGICAL TARGET FORMATION: Plugged Oriskany; Fractured Br. Shale Old Depth 4926 See NEW Depth of completed well, 4100(KB) feet Rotary___/ Cable Tools ____ Water strata depth: Fresh,____feet; salt,____feet. Coal seam depths: NONE Is coal being mined in the area? NO PLUG BACK Work was commenced August 27 , 19 80 , and completed August 28 , 19 80 CASING AND TUBING PROGRAM: See previous well record filed upon Oriskany completion. SPECIFICATIONS FOOTAGE INTERVALS PACKERS Weight | Grade per ft New | Usea | For drilling Left in well <u>Cinquet</u>or Kinds Fresh water Ccal Intermediate Production Depths set Tuting Perforations: Br. Shale Liners 3819Top 4040 Bottom OPEN FLOW DATA OLD Producing formation Devonian Oriskany Sandstone Fay zone depth 4759-4761 Gas: Initial open flow, 47 Mcf/d Oil: Initial open flow, 0 Et1/1 Final open flow, 248 Mef/d Final open flow, 0 Hbl/d Time of open flow between initial and final tests, $\frac{N/A}{A}$ hours Static rock pressure, 1500 psig (surface measurement) after N/A hours shut in [If applicable due to multiple completion --] Second producing formation Devonian Brown Shale Pay zone depth 3819-4040 Gas: Initial open flow, N/A Mcf/d Oil: Initial open flow, 0 in /i **

Final open flow, 50 Mcf/d Final open flow, 0 mbl/i Time of open flow between initial and final tears, N/A hours MAR 0 1 1982 Static rook pressure, 420 psig (surface measurement) after N/A hours shut in

DEPARTMENT OF MINES, OIL AND GAS DIVISION

-ORM IV-35 .Reverse)

[08-78]

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

8/27/80 Set permanent bridge plug in 4 1/2" casing at 4100'(KB). Perforated Brown Shale with 18 holes (.50" diameter, 2 1/8" glass jets) from 3819'-4040'(KB).

8/28/80 Foam fractured Brown Shale interval with 30,000 lbs of 20/40 sand, 30,000 lbs of 80/100 sand, 341 BBL of water, 520,000 SCF of nitrogen, 500 gal. of 15% HCL Acid with a controlled rate of 11 BPM and a maximum pressure of 2100 psig.

WELL LOG

FORMATION		Color	Mard or Coft	Top Feet	Bottom Feet	Remarks Including indication of all free and salt water, coal, cil and p
NOTE:	See prev	ious well	record fil	ed upon c	ompletion o	F Oriskany Sandstone.
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(Attach separate sheets to complete as necessary;

KAISER EXPLORATION AND MINING COMPANY Well Operator

Its Operation Manager

Regulation 2.05(i) provides as follows:

"The teme tiest or twell lost shall mean a appreciation, detailed appropriate protections, including early encountered in the drilling of a well."







Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,		
Charleston, W. Va.	DATE	September 5, 1978
Surface Owner Marjorie E. Allen	Company	KAISER EXPLORATION & MINING CO.
Address Rt. 2, Ravenswood, W. Va. 26164	Address	PO Box 537, Ripley, W. Va.
Mineral Owner Enid Rankin	Farm	Enid Rankin Acres 46 ac
Address 3377 Shell Road, Ft. Myers Beach, Fl	-Accation (w	vaters) Shockey Run of Straight Fork
Coal Owner Same as above 33931	Well No	DEK 56 Elevation 862.48
Address	District	Ravenswood County Jackson
Coal Operator Not Operated	Quadrangle_	Sandyville 7½"
Address		
IS PERMIT MUST BE POSTED AT THE WELL SITE		
provisions being in accordance with Chapter 22,		
The second of the leading is parent coolinged	SPECTOR	
	BE NOTIF	IED Richard J. Morris
1-6-79	DRESS P.	0. Box 372, Grantsville, WV
Deputy Director - Oil & Gas Division PH	ONE 354-	7259
GENTLEMEN:		
The undersigned well operator is entitled to drill upon the		
title thereto, (or as the case may be) under grant or lease da		
Rankin made to Commonwealth Gas Corp.		
19_70 inJackson County, Book114	Page _59	
XXX NEW WELLDRILL DEEPER	REDR	ILLFRACTURE OR STIMULATE
OIL AND GAS WELL ORIGINALLY DRILLED	BEFORE JU	NE 5, 1969.
The enclosed plat was prepared by a registered engineer or have been notified as of the above date.	licensed land	d surveyor and all coal owners and/or operators
The above named coal owners and/or operator are hereby n to make by Section 3 of the Code, must be received by, or file	otified that a ed with the I	ny objection they wish to make, or are required Department of Mines within ten (10) days. *
Copies of this notice and the enclosed plat were mailed by a or coal owners at their above shown respective address same day with the mailing or delivery of this copy to the Dep.		day before, or on the
		urs, KAISER_EXPLORATION AND MINING CO
PLEASE SUBMIT COPIES OF ALL		DAP
GEOPHYSICAL LOGS DIRECTLY TO:	Sign Name)_	R. A. Pryce, Operations Manager
VA. OIL & GAS CONSERVATION COMMISSION Address		118 McGraw St.
	•	
WASHINGTON STREET, EAST of		Street
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WASHINGTON STREET, EAST of Well Opera	tor	Street Ripley City or Town
WASHINGTON STREET, EAST of Well Opera	tor	Street Ripley City or Town West Virginia 25271

KIANKET BOND

*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.

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

PROPOSED WORK ORDER TO	O XXX DRILL	DEEPENFR	ACTURE-STIMULATE		
DRILLING CONTRACTOR: (I	f Known)	RESPONSIBLE AGENT: NAMERobert A. Pryce ADDRESS Box 537, Ripley, W. Va.			
NAME FWA Drilling C	o., Inc				
ADDRESS Box 448, Elkvi	ew, W. Va.				
TELEPHONE		TELEPHONE 372-282	27		
ESTIMATED DEPTH OF COM		ROTARY XXX	CABLE TOOLS		
PROPOSED GEOLOGICAL FOR	RMATION: Oriskany				
TYPE OF WELL: OIL	GAS XXX CO	MBSTORAGE	DISPOSAL		
	RECYCLIN	G WATER FLOO	ODOTHER		
·					
TENTATIVE CASING PROGRA	AM:				
CACING AND TUDING	USED FOR		CATANA NEW TARK TOO		
CASING AND TUBING SIZE	DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.		
20 - 16					
13 - 10					
9 - 5/8	250	250	110 sax=to surface		
8 - 5/8					
7	2425	2425	75 sax=625'		
5 1/2		4005	000		
4 1/2		4925	200 sax=2400'		
2	-		Perf. Top Perf. Bottom		
Liners			Perf. Top		
			Perf. Bottom		
APPROXIMATE FRESH WATE	R DEPTHSFEET_	SALTWATER	բբբո		
APPROXIMATE COAL DEPTH	s None anticipated	DALI WATING	r BB1		
IC COAL DRING MINED IN T	HE AREA? NO	DV WHOM2			
	HE AREA: 1.0	BI WHOM:			
TO DRILL:	440°	· (%)			
	S OF OG - 1, \$100.00 PERMIT	r fee, performance bo	OND AND PERMANENT COPY		
OF PLAT.					
TO DRILL DEEPER OR REDR	ILL:				
	S OF OG - 1, SHOWING ORIGIN				
WELLS DRILLED PRIOR MUST ALSO BE SUBMIT	TO 1929, A PERMANENT CO	PY OF THE PLAT AND T	THE ORIGINAL WELL RECORD		
TO FRACTURE - STIMULATE:					
BOND, PERMANENT PLA	ORIGINALLY DRILLED BEFOR AT AND ORIGINAL WELL REC	ORD.			
	ORIGINALLY DRILLED ON AN NUMBER, AND PERFORMANCE		9, FIVE COPIES OG - 1, SHOW-		
Required forms must be fi	led within ninety (90) days of co	ompletion for bond release	Inspector to be notified twenty-		
four (24) hours in advance			impector to be notified entity		
			The second section of the second seco		
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	A Starte Starter				
	t be completed by the coal open	rator if the permit is to be	issued within ten days of receipt		
thereof.			A BARAKAN ALMI SILIK IZI SA		
WAIVER: I the undersigned, A	igent for	Coal Company, Owner	or Operator of the coal under		
this lease have exam	nined and place on our mine ma	ps this proposed well locat	ion.		
We the	Coal Company h	nave no objections to said w	ell being drilled at this location,		
providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia					
Code.					
•			and the second s		
		Į:	or Coal Company		
		en e	en e		
			Official Title		