OIL & GAS DIVISION DEPT. OF MIN STATE OF WEST VIRGINIA MAR 1 9 198

DEPARTMENT OF MINES

OIL & GAS DIVISION Oil and Gas Division DEPT. OF MINES

GAS WELL PERMIT APPLICATION

	4207
TO THE DEPARTMENT OF MINES,	
Charleston, W. Va.	DATE * March 24-1986
Surface Owner Herman Boler	Company L & B Oil Company Inc
Address X ROUTE 39 ST Marys W.Va.	
Mineral Owner Herman Boler	Farm Herman Boley Acres 55
Address Parte 39 ST Marys W.Ve	Location (waters) Broad Run
Coal Owner X N/A	Well No. WeTz # 20 Elevation 831.6
Address	District Washington County Pleasan
Coal Operator N/A	Quadrangia Baren Bock Chio - W.Va.
아이들 가게 있는데 이번 아이들 아름다는데 하는데 아이들이 아이들이 아니는데 아이들이 아니다.	Guadringle //dve 2 //86/1 Onto - Wiva.
Address. IS PERMIT MUST BE POSTED AT THE WELL SITE	-
15 PERMIT MOST BE POSTES AT THE WILL STOP	
provisions being in accordance with Chapter 22,	
the W. Va. Code, the location is hereby approved	INSPECTOR
drilling . This permit shall expire if	TO BE NOTIFIED Phil Tracy
perations have not commenced by 11-26-281	ADDRESS
3 /// FIMO	1992000
Deputy Director - Oil & Gas Division	PHONE 758-4573
그는 사람이 그 사람이 보고 있으면 하는 그 하면 그 보다는 그 사람이 가장 하는 것이 되었다면 모든 가는 모든 것이다.	
GENTLEMEN:	
	he above named farm or tract of land for oil and gas, having fee
	dated Feb 27th 1981 by Herman
Boley made to 58 Bel Compon	and recorded on the Feb 27 day of Feb
1981, in Pleasants County, Book 161	
XX NEW WELLDRILL DEEPER	REDRILL PRACTURE OR STIMULATE
OIL AND GAS WELL ORIGINALLY DRILLE	
The contract of the second of the contract of	
The enclosed plat was prepared by a registered engineer.	or licerued land surveyor and all coal owners and/or operators
have been notified as of the above date.	and the first of the second of
The above named coal owners and/or operator are hereby	notified that any objection they wish to make, or are required
	filed with the Department of Mines within ten (10) days.
Copies of this notice and the enclosed plat were mailed by	y registered muil, or delivered to the above named coal operators
same day with the mailing or delivery of this copy to the De	day before, or on the
PLEASE SUBMIT COPIES OF ALL	Very truly yours,
GEOPHYSICAL LOGS DIRECTLY TO:	(Sign Name) fres & Boyley
	Well Operator
WEST VIRGINIA GEOLOGICAL AND	LAD OIL Company Inc.
P. O. BOX 879	2/1641
MORGANTOWN, WEST VIRGINIA 26505 Well Open	rator 108 Washington ST.
AC-304 - 292-6331	City or Town
and the state of t	ST Marys W. Va. 26176
The state of the s	State 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 approximate. and the well operator authorized to proceed.

47-073-1148 DERMIT NUMBER

ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO		DEEPEN	FRACTURE-STIMULATE
DRILLING CONTRACTOR: (II		RESPONSIBLE AGEN	YT:
NAMEX DONT Know AT	This Time	NAME & horen	& Bagley W
ADDRESS		ADDRESS 108 Wa	shing Ten St. ST Marys
TELEPHONE		TELEPHONE 68	4-9399
ESTIMATED DEPTH OF COMP	LETED WELL: Shis El	we ROTARY AX	CABLE TOOLS
PROPOSED GEOLOGICAL FOR	MATION: 4200		
TYPE OF WELL: OIL		COMB STORAG	GE DISPOSAT
1		LINGWATER F	
		Jane - WATER F	LOOPOTHER
TENTATIVE CASING PROGRA	M:		Some
CASING AND TUBING	USIND FOR	LEFT IN	CEMINT HILL UP
SIZE	DRILLING	WELL	OR SACKS - CUBIC 1/1.
20 - 16		-	
13 - 10		-	
9 - 5/8			
8 - 5/8	250'	The state of the s	Surpace
7	The second secon	378 1 13	
5 ½	- 2/		
4 1/2	to Bule	15-01	5000
2			Perf. Top Perf. Bottom
Liners			Perf. Top
			Perf. Bottom
IS COAL BEING MINED IN THE	E AREA? XM/A	BY WHOM?	
TO DRILL:			
OF PLAT.	OF OG - 1, \$100.00 PERM	MIT FEE, PERFORMANCE	BOND AND PERMANENT COPY
TO DRILL DEEPER OR REDRIL	.Ĺ:		The second second
SUBMIT FIVE (5) COPIES (OF OC . 1 SHOWING ORIG	TINAT PERMIT NUMBER A	ND PERFORMANCE BOND. ON
WELLS DRILLED PRIOR O	O 1999 A PERMANENT	CINA THE BHE TO VOOL	THE ORIGINAL WELL RECORD
. MUST ALSO BE SUBMITTE	D		
TO FRACTURE - STIMULATE:			
OIL AND/OR GAS WELL OF BOND, PERMANENT PLAT	RIGINALLY DRILLED BEFO	ORE JUNE 5, 1929, FIVE (5)	COPIES OCI - 1, PERFORMANCE
	RIGINALLY DRILLED ON A	AND/OR AFTER JUNE 5, 19	29, FIVE COPIES OG - 1, SHOW-
Required forms must be filed			. Inspector to be notified twenton
four (24) hours in advance.			
			eranderen a. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
The following waiver must b	pe completed by the coal on	perator if the permit is to be	issued within ten days of receipt
hereof.			The same of the collection
WAIVER: I the undersigned, Ager this lease have examine	nt for		
We the	Coal Company	have no objections to said y	vell being drilled at this location,
providing operator has ed		guiations in Articles 4, 5, and	7, Chapter 22 of the West Virginia
	73		

For Coal Company

Form	IV-
Form (01-	(0)

De	ate	3-8	2	1	981
Well	No.	WET	Z	# 20	9.
API	No.		-		
		State		County	Permit

STATE	OF	WE	BT	VIRG	INLA
OFFIC	E (T	OTL	AND	CAS

The state of the s	HERMAN BOLE	editioned president observe with The Relationship	Telepi	10 8 WASH ST none 684-93	99
Ravegetatio	n to be carried	out by	OREN EBAG	District Upper	(Agent)
and addition	ma hacoma a past	of this, p	(DATE	181 20mi	Agent)
	Access Road			Location	
Structure C	ULVERTS	(A)	Structure		(1)
Page Ref. Hem	mai		Material Page Ref.	Manual_	
Structure Di	VIRSION	(B)	Structure		(2)
Spacing	100		Material		
Page Ref. Man			Page Ref.		
Structure		(C)	Structure Material		(3)
Page Ref. Man	ual			Manual D	TOBU V
All structu	res should be ins	nected rea	ularly and ren	sinal is said	STATES

Treatment Area I		Treatment Area IDIL & GAS DIVISION
or correct to pH 645	Tons/acre	Lime DEPTONS/ACTE MINES
Fertilizer 500. (10-20-20 or equival	lbs/acre	Fertilizer 500 lbs/acre (10-20-20 or equivalent)
Mulch HAYOR STRAW 2 Seed* KY 31 FESCUE 30	Tons/Acre	Mulch HAY OR STRAW-2 Tons/Acre Seed* KY 31 FESCUE 30 lbs/acre
BURDS FOOT TREFOUL 16	lbs/acre lbs/acre	Seed* KY 31 FESCUE 30 lbs/acre lbs/acre lbs/acre

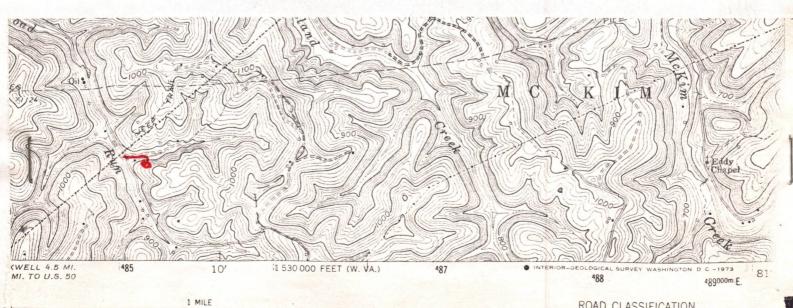
*Inoculate all lagumes such as vetch, trefoil and clovers with the proper bacterium. Inoculate with 3X recommended amount.

Attach or photocopy section of involved Topographic map. Quadrangle RAVEN BOCK

Legend:

Well Site

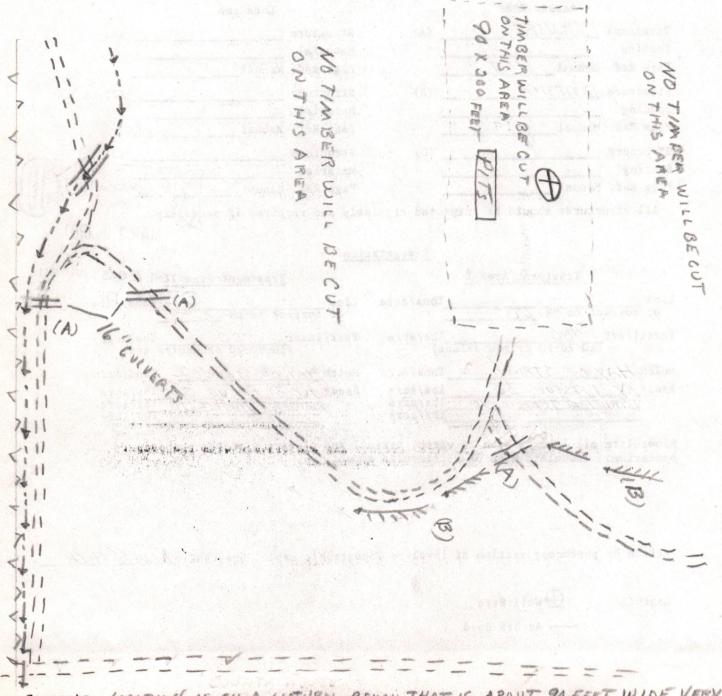
Access Road



ROAD CLASSIFICATION

Diversion
Spring O
Wet Spot
Building
Drain Pipe
Waterway

Sketch to include well location, existing access road, roads to be constructed, wellsite, drilling pits and necessary structures numbered or lettered to correspond with first part of this plan. Include all natural drainage.



Comments: LOCATION IS BY A NATURAL BENCH THAT IS AROUT 90 FEET WIDE VERY,

LITTLE DIRT WILL NEED TO BE MOVED, ACCESS ROAD IS AN ALD OIL FIELD ROAD +

WILL NEED TO BEWINENED OUT, SITE IS IN SECOND GROWTH FIMBER

Signature: PA, 1 11 Mala, IDSWASH ST STMARYS W/A: 684-9399

Please request landowners cooperation to protect new seeding for one growing season.

Agent

Address

Phone Number

(-V. (3207)

State of Mest Wirginia Well No._ JUL 23 1984

Bepartment of Alines

DEPT. OF MINES

July 17 1984 Date Wetz #20 Operator's Farm Herman Boley API No. 47 - 073 - 1148

WELL OPERATOR'S REPORT

OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

LOCATION: Elevation: 831.6 Watershed	Broad R	ze Disposa ge/ Deeg un		
District: Washington County Pleas	sants	Quadrangl	Raven	Rock OH-WV
COMPANY L & B Oil Company Inc.				<u> </u>
ADDRESS 210 2nd St., St. Marys, WV 26170	Casing	Used in	Left !	Cement fill up
DESIGNATED AGENT Bernard Tice	Tubing	Drilling	in Well	
ADDRESS 210 2nd St., St. Mairys, WV 26170	10756			
SURFACE CWNER Herman Boley	20-16 Cond.			
ADDRESS Rt. 2, St. Marys, WV 26170	13-10"	250'	250'	to surface
MINERAL RIGHTS CHIER Herman Boley	9 5/8		200	
ADDRESS Rt. 2, St. Marys, WV 26170	8 5/8	1874'		
OIL AND GAS INSPECTOR FOR THIS WORK Robert	7			
Lowther ADDRESS Middlebourne WV	5 1/2			
PERMIT ISSUED 3-19-81	4 1/2	4380'	4380'	205 also
DRILLING COMMENCED 4-21-81	3	4380	4380	325 sks
DRILLING COMPLETED 6-27-81	2			
IF APPLICABLE: PLUGGING OF DRY HOLE ON		+		
CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED	Liners			
CN	used		i	
GEOLOGICAL TARGET FORMATION Benson		Den	th 4250	feet
Depth of completed well 4380 feet R	otani			
				MA
		A feet		No
Coal com donthe. N/A		COING MIN	ed in the	area? NO
Coal seam depths: N/A	Is coal	being num		
Coal seam depths: N/A	Is coan	being nur		
			1	354 feet
OPEN FLOW DATA	Pay	zane dep	th ₃₈₆₈₋₄	354feet
OPEN FLOW DATA Producing formation Benson	Pay	zone dep	th ₃₈₆₈₋₄	354 feet Bbl/d
OPEN FLOW DATA Producing formation Benson Gas: Initial open flow 180 Mcf/d	Pay Oil: Ini Fir	zone dep tial open nal open f	th ₃₈₆₈₋₄ flow 0	354 feet Bbl/d Bbl/d
OPEN FLOW DATA Producing formation Benson Gas: Initial open flow 180 Mcf/d Final open flow 180 Mcf/d	Pay Oil: Ini Fir al and fi	zone dep tial open hal open f nal tests	th ₃₈₆₈₋₄ flow 0 low 0 48 ho	354 feet Bbl/d Bbl/d wrs
OPEN FLOW DATA Producing formation Benson Gas: Initial open flow 180 Mcf/d Final open flow 180 Mcf/d Time of open flow between initi	Pay Oil: Ini Fir al and fi	zone dep tial open hal open f nal tests	th ₃₈₆₈₋₄ flow 0 low 0 48 ho	354 feet Bbl/d Bbl/d wrs
Producing formation Benson Gas: Initial open flow 180 Mcf/d Final open flow 180 Mcf/d Time of open flow between initi Static rock pressure 680 psig(surface)	Pay Oil: Ini Fir al and fir measurem	zone deportial open final open final tests pent) after	th3868-4 flow 0 low 0 48 ho	354 feet
Producing formation Benson Gas: Initial open flow 180 Mcf/d Final open flow 180 Mcf/d Time of open flow between initi Static rock pressure 680 psig(surface) (If applicable due to multiple completion-	Pay Oil: Ini Fir al and fir measurem	zone deponitial open final open final tests ment) after	th3868-4 flow 0 low 0 48 hour 48 hour 48 hour 1	354 feet
Producing formation Benson Gas: Initial open flow 180 Mcf/d Final open flow 180 Mcf/d Time of open flow between initi Static rock pressure 680 psig(surface) (If applicable due to multiple completion— Second producing formation Speechley Gas: Initial open flow 180 Mcf/d	Pay Oil: Ini Fir al and fir measurem -) Pay Oil: Ini	zone dep tial open nal open f nal tests rent) after zone dep	th3868-4 flow 0 low 0 48 house th 3354- flow 0	354 feet Bbl/d Bbl/d Wrs rs shut in 3796 feet Bbl/d
Producing formation Benson Gas: Initial open flow 180 Mcf/d Final open flow 180 Mcf/d Time of open flow between initi Static rock pressure 680 psig(surface (If applicable due to multiple completion- Second producing formation Speechley Gas: Initial open flow 180 Mcf/d Final open flow 180 Mcf/d	Pay Oil: Ini Fir al and fir measurem -) Pay Oil: Ini Oil: Fir	zone dep tial open nal open fi nal tests rent) after zone dep tial open nal open f	th3868-4 flow 0 low 0 48 houth 3354- flow 0 low 0	354 feet Bbl/d Bbl/d Wrs rs shut in 3796 feet Bbl/d Bbl/d
Producing formation Benson Gas: Initial open flow 180 Mcf/d Final open flow 180 Mcf/d Time of open flow between initi Static rock pressure 680 psig(surface) (If applicable due to multiple completion— Second producing formation Speechley Gas: Initial open flow 180 Mcf/d	Pay Oil: Ini Fir al and fir measurem -) Pay Oil: Ini Oil: Fir	zone dep tial open nal open f nal tests rent) after zone dep tial open nal open f inal tests	th3868-4 flow 0 low 0 48 houth 3354- flow 0 low 0 10w 0 10w 0 10w 0	354 feet Bbl/d Bbl/d urs rs shut in 3796 feet Bbl/d Bbl/d

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

Stage 1 - 22 perfs from 3874 to 4354 Fraced with 800,000 SCF frac rate 40,000 SCF/min.

Stage 2 - 27 perfs from 3356 to 3796 Fraced with 800,000 SCF frac rate 40,000 SCF/min.

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all free and salt water, coal, oil and o
		The Control of the Co	and sait water, coar, our and
Shale	0	80	
Sand	80	120	4
Shale	120	290	
Red Shale	290	540	
Brown Shale	540	1025	
Sand	1025	1350	
Shale	1350	1460	
Lime	1460	1648	AND AND ALERTA TOTAL
Injun	1648	1706	Gas
Berea	1986	1992	ADD EXTRACT CONTROL TO
Gordon	2486	2498	Gas & Oil
Ohio Shale	2498	4250	BELLE GRUNN TO POT
Benson	4260	4312	16 P. OEMSTED FULLION
Shale	4312	4380T.D.	THE STATE OF STATES
			Translation - Modres in
		0.5%	Plants Tentus to particl
		1 38 25 25	
		of the	
	and the second second		The state of the s
			YORK MATERIAL
		noarri	Lephanical published .

(Attach separate sheets as necessary)

L &	B Oil Company, Inc.	
Well	operator	
By: (1)	erwand The President	
Date:	July 17, 1984	

Note: Regulation 2.02(i) provides as follows:

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





DATE

State of West Virginia

Department of Mines Gil and Gas Bivision

Charleston 25305

FINAL INSPECTION REPORT INSPECTORS COMPLIANCE REPORT September 18, 1984

	September 18,	1984	
COMPANY	L & B Oil Company, Inc.	PERMIT NO	073-1148
P. O.	Box C	FARM & WELL N	O <u>Herman Boley, Wetz</u> #20
St. Ma	rys, West Virginia 26170	DIST. & COUNT	Y <u>Washington/Pleasan</u> ts
		.	N. COMPLEANOR
RULE	DESCRIPTION		N COMPLIANCE ES NO
23.06	Notification Prior to Starting Work		V
25.04	Prepared before Drilling to Prevent Wa	aste	1/
25.03	High-Pressure Drilling		1/1
16.01	Required Permits at Wellsite	- Amortina	V.
15.03	Adequate Fresh Water Casing		
15.02	Adequate Coal Casing		
15.01	Adequate Production Casing		V.
15.04	Adequate Cement Strenght		V.
15.05	Cement Type		V,
23.02	Maintained Access Roads		V.
25.01	Necessary Equipment to Prevent Waste		V.
23.04	Reclaimed Drilling Pits		V.
23.05	No Surface or Underground Pollution		
23.07	Requirements for Production & Gatherin	ng Pipelines	V.
16.01	Well Records on Site		V,
16.02	Well Records Filed		V,
7.05	Identification Markings		
I HAVE I	NSPECTED THE ABOVE CAPTIONED WELL AND R	RECOMMEND THAT	IT BE RELEASED:
		SIGNED A	1. Lowlhee
		DATE SO A	121. 1984
		DAIL MED	2 dept 1
Your well	l record was received and reclamation r	equirements app	proved. In accordance
with Char	pter 22, Article 4, Section 2, the abov	ve well will ren	main under bond
coverage	for the life of the well.	7-1	
		Administrator-	-Oil & Gas Division
		December 10,	, 1984

H. T. HALL