



STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD 5/4

Quadra	ngle	Unio	on D	ist	ri	.ct
Permit	No	Tyle	<u> </u>	177		

 Rotary
 Oil
 X

 Cable
 X
 Gas
 X

 Recycling
 Comb
 Storage

 Disposal
 Disposal
 Comb

(Kind) Company Lauderman Oil & Gas Drilling Casing and Used in Left Cement fill up W. Tubing Address 129 N. 4th Avenue - Paden City, in Well **Drilling** Cu. ft. (Sks.) Farm Brooks, R.C. _ Acres 120 Location (waters) Big Buffalo Size _ Elev. 711 Well No.__ 20-16 District Union __County_Tyler Cond. The surface of tract is owned in fee by R.C. 13-10" 9 5/8 Laura Brooks 8 5/8 Address RFD. Friendly, West Vir. 411 411 Top Surface Mineral rights are owned by Same 5 1/2 __ Address_ Drilling Commenced May 7, 1976 4 1/2 711 711 Approx. 260 Ft Fill Up Drilling Completed June 11, 1976 2½ __cu. ft. __ Initial open flow _____ 698 698 Final production _____cu. ft. per day __20 _bbls. Liners Used hrs. before test RP. Well open _____ Attach copy of cementing record. Well treatment details:

Fractured with 193 bbls Oil & 7,500 lbs Sand--Perforated 688-694

20 BOPD

Coal was encountered at No Coal Feet Inches

Fresh water Feet Salt Water Feet

Producing Sand Cow Run Depth 672 697 688 694

Formation Color Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water * Remarks
Red Rock	0	8	
Lime, Shell	8	14	
Shale	14	25	
Red Rock	25	40	
Sand	40	90	
Shale, Gray	90	105	
Sand	105	1.35	
Shale	135	140	
Lime	1.40	150	
Red Rock	150	1.65	
Lime Shells	165	220	
Red Rock	220	230	
Shale	230	275	
Red Rock	275	280	
Shale, Gray	280	317	
Lime	317	340	
	(o	ver)	

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

Formation Color Hard or Soft	Top Feet2 $arphi$	Bottom Feet	Oil, Gas or Water * Remarks
Shale, Brown	340	360	
Shale, Gray	360	390	
Red Roek	390	400	
Lime	400	425	
Red Rock	425	440	Set 7: at 4118" Cemented
Lime	440	455	to Surface
Shale	455	470	•
Red Rock(Big Red)	470	510	
Shale	510	525	
Red Shale	525	540	
Shale, Gray	540	560	
Red Rock	560	585	
Slate, White	585	620	
Shale	620	640	
Red Rock	640	657	
Slate, White	657	680	
Lime	680	682	
SandCow Run	682	697	
Shale	697	711	TOTAL DEPTH
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and the second of the second of			
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July 30 elles 11/cen Date

APPROVED





OL & GAS OFFICE DEFT. OF WINES

Oil and Gas Division OIL AND GAS WELL PERMIT APPLICATION

Charle	ston, W. Va.		DA'	TE >/or /or	•		
Sunface Owner &) <i>(</i>	man in		316311			
Surface Owner Address RVD		re Brooks Frien a ly, W		npany Laudern		Gas Dri	lling
	*	CALCUMATE A		dress 110 W. Ma			
Mineral Owner	Same			mR.C. Brooks	-	Acres	20
Address				ation (waters)	iffalo Ci	rook	
Coal Owner			Wel	l No		_ Elevation_	711
Address	Same			rict_Union_	77	County	ylor
Coal Operator			———— Qua	drangle	.000	ary	
Address	IST RE POSTED	AT THE WELL S				,	
operations have to	lug. This	r is hereby approximately shall expired by S-2-7 vision II	e if	SE NOTIFIED 1	Donal	L Cor	mer
The undersigne		is entitled to drill	l upon the above	named farm or trac	ct of land for	oil and gas, l	/ & . having fee
The undersigned title thereto, (or Brooks & oth 19, in	as the case may	is entitled to drill be) under grant Ruderman Oi County, Book	l upon the above or lease dated	ramed farm or trace Feb. 19, and recorded on the	et of land for 19_ 76 he Not	oil and gas, l	having fee
The undersigned title thereto, (or Brooks & oth 19, in	as the case may	is entitled to drill be) under grant Uderman Oi County, Book DRILL DEE	l upon the above or lease dated label{lease} label{lease} Pa PER PA	reb. 19, and recorded on the	et of land for 19_ 76 he Not FRACTU	oil and gas, l	having fee
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*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.

BLANKET BOND

Jul-477 47-095

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

	R TO DRILL				
DRILLING CONTRACTOR: (If Known) NAME Lauderman Oil & Gas Drilling		RESPONSIBLE AGENT: NAME Phillip Morgan			
ESTIMATED DEPTH OF C	OMPLETED WELL:900	ROTARY	CABLE TOOLS X		
	FORMATION: Covrun				
TYPE OF WELL:	OIL GAS CO	MB x STORAGE	DISPOSAL		
			OODOTHER		
TENTATIVE CASING PRO					
CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.		
20 - 16					
13 - 10					
9 - 5/8					
8 - 5/8			Surface		
7	-300° 410'	410	Cement top to		
5 ½	700 470		bottom		
4 ½	Run through sand &	perforate			
3			Perf. Top		
2			Perf. Bottom		
Liners			Perf. Top		
			Perf. Bottom		
APPROXIMATE COAL DE	ATER DEPTHSFEET _ PTHSFEET _ N THE AREA?No	· · · · · · · · · · · · · · · · · · ·			
TO DRILL:		•			
OF PLAT. Perfor TO DRILL DEEPER OR R. SUBMIT FIVE (5) CO	PIES OF OG - 1, SHOWING ORIGI LIOR TO 1929, A PERMANENT CO	NAL PERMIT NUMBER AN	ND PERFORMANCE BOND. ON		
TO FRACTURE - STIMULA	ATE:				
OIL AND/OR GAS WI	ELL ORIGINALLY DRILLED BEFORE PLAT AND ORIGINAL WELL REC		COPIES OG - 1, PERFORMANCE		
	ELL ORIGINALLY DRILLED ON A IIT NUMBER, AND PERFORMANCE		29, FIVE COPIES OG - 1, SHOW		
Required forms must four (24) hours in adv	be filed within ninety (90) days of ovance.	completion for bond release.	Inspector to be notified twenty		
thereof.	must be completed by the coal ope				
=	ed, Agent forexamined and place on our mine m				
	Coal Company or has complied with all rules and reg				
			For Coal Company		
			Official Title		