



STATE OF WEST VIRGINIA DEPARTMENT OF MINES

Oil and Gas Division

Permit No. 47-033-2232 No.	Quadranda M	ount C	lare	MELL	RECORD	+	Rotary_X Cable	Oil Gas X
Permit No. 47-033-2232 Water Flood	-						Recycling	Comb.
Company Doran & Associates Inc.	Permit No. 4	7-033-	2232				Water Floor	Storage
Address 728 Washington Rd. Pgh. PA 15228 Casing and Tubing Ditling In Well Cu. ft. (Ski.)							Disposal	(Kind)
Tubing Drilling					Casing and	[land in		
Location (waters) Gnatty Creek 1035 Cond. Co					-	1	1 1	
Well No. K-L-224 #1 Elev 1035 20-16 Cond.	Farm W. H	. Jett		Acres 21.7	1 401116	Draining	in Well	Cu. ft. (Sks.)
District Elk Count Harrison Cond	Location (water	rs) <u>G</u>	natty Creek	1005	Size			
The surface of tract is owned in fee by William H. South	Well No. N	-L-224	# 1	Elev. 1035	20-16			
Pauline P. Jett								
Address Rt. 2. Lost Creek, WV 26385 8 5/8 1890 1890 520 Sks. Mineral rights are owned by Same as Above 7 7 7						34	34	
Mineral rights are owned by Same as Above 7 100 1690 320 Sks.								
Drilling Commenced 2-21-80					8 5/8	1890	1890	520 Sks.
Drilling Commenced 2-21-80 3 3 3 3 3 3 3 3 3					7			
Drilling Completed 2-27-80 3 3 3 3 3 3 3 3 3								
Initial open flow						4336	4336	560 Sks.
Final production 1434 Pen. 10 per day — bbls. Well open 4 hrs. before test 1100 RP. Well treatment details: Date:					3			
Well open	initial open flow	w	03 m cu. Tr	bbls.	2			
Mell treatment details: Stimulation Record: Stimulation Record: Date: Interval Perforated: From To Amt. Pluid Amt. Sand 3-10-80 3450 3460 505 bbls 55,000# 2233 2297 542 bbls 50,000#	Final production	n <u>143</u>	mcu. fi per day.	bbls.	Liners Used			
Date: Interval Perforated: From To Amt. Pluid Amt. Sand	well open	4	hrs. before test.	RP.				
Date: Interval Perforated: From To Amt. Fluid Amt. Sand	well treatment	details:			Attach copy of	cementing reco	ord.	
Sand								
3-10-80 4210 4267 510 bb1s 55,000# 3450 3460 505 bb1s 45,000# 2233 2297 542 bb1s 50,000# 2233 2297 542 bb1s 50,000# 2233 2297 542 bb1s 50,000# Coal was encountered at 95', 360', 455', 510' Feet 569', 652', 858' Inches Fresh water 20', 85' Feet	_Date:	Interv	al Perforated	From			the same of the sa	nd
3450 3460 505 5b1s 45,000# 2233 2297 542 5b1s 50,000#	3-10-80			4210 _4	0/5			
Coal was encountered at 95' 360' 455' 510' Feet 569' 652' 858' Inches				3450 3	the same of the sa			
Coal was encountered at 95', 360', 455', 510' Feet 569', 652', 858' Inches Fresh water 20', 85' Feet				2233 2	297 5	42 bbls.		
Producing Sand Benson Bradford Fifth Sand Depth 4208 3398 2236 Producing Sand Benson Bradford Fifth Sand Depth 4208 3398 2236 Producing Sand San								
Producing Sand Benson Bradford Fifth Sand Depth 4208 3398 2236 Producing Sand Benson Bradford Fifth Sand Depth 4208 3398 2236 Producing Sand San	Coal was encoun	tered at.	95', 360', 45	5', 510' Feet	569', 652', 8	358' Inches		
Formation Color Hard or Soft Top Feet Bottom Feet Oil, Gas or Water Remarks Substructure Shale 32 70 Sand 70 95 Coal 97 185 Sandy Shale 285 315 Sandy Shale 285 Sand 360 362 Sandy Shale 362 455 Caol Sandy Shale 362 455 Caol Sandy Shale 362 455 Sandy Shale 362 569 570 Sandy Shale 570 615	Fresh water 20	85	F	et	6	1750!		E
Substructure	Producing Sand	Benso	n, Bradford, F	ifth Sand	Depth	4208, 33	198, 2236	reet
Substructure Shale Sand Coal Sand Sand Shale								
Shale Sand Sand Coal Sand Sand Sand Sand Sand Sand Sand Sand	Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or	Water *	Remarks
Shale Sand Sand Coal Sand Sand Sand Sand Sand Sand Sand Sand	Substructur	e		0	22	T1	<u> </u>	
Sand 70 95 97 185 185 258 258 285				1) 1	F.W. @ 2	0'	
Coal 95 97 185 Sandy Shale 185 258 285 Sandy Shale 285 315 360 APR 1 8 1980 Sandy Shale 362 455 455 OIL & GAS DIVISION Coal 513 569 570 DEPT. OF MINES Sandy Shale 570 615 652				1	1 1			
Sand 97 185 Sandy Shale 258 258 Sandy Shale 285 315 Sand 315 360 Coal 360 362 Sandy Shale 362 455 Caol 455 459 Sandy Shale 459 510 Coal 510 513 Sand 513 569 Coal 569 570 Sandy Shale 570 615 Sand 615 652			•	1	ı	F.W. @ 8	51	
Sandy Shale Sandy Shale Sandy Shale Coal Sandy Shale Caol Sandy Shale Caol Sandy Shale Coal Sand C				97	•	73	Committee Committee	
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Sand 315 360 362 Sandy Shale 362 455 Caol 455 459 OIL & GAS DIVISION Sandy Shale 459 510 DEPT. □F MINES Sand 513 569 570 Sandy Shale 570 615 Sand 615 652					1 1	141%		SIII
Coal 360 362 Sandy Shale 362 455 Caol 455 459 Sandy Shale 459 510 Coal 510 513 Sand 513 569 Coal 569 570 Sandy Shale 570 615 Sand 615 652	-	•			i i	ن د	•	עעבי
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Sand 513 569 Coal 569 570 Sandy Shale 570 615 Sand 615 652				459	1	UE	DT	NAIPION
Coal 569 570 Sandy Shale 570 615 652					1		···UF	MINES
Sandy Shale 570 615 Sand 615 652								
Sand 615 652			, [
Co. 1 015 652	Sand		-					
002 000	Coal	•	· .	652	655			

* Indicates Electric Las tons in the

Sand

Coa1

Sandy Shale

Sandy Shale

(over)

735

858

860

910

655

735

858

860

ormation Color Hard or Soft	Top Feet 4	Bottom Feet	Oil, Gas or Water	* Remarks
Sand	910	956		
Sandy Shale	956	1012		
Sand	1012	1035	1	
Shale - Red Rock	1035	1125		
Sand	1125	1200		
Shale - Red Rock	1200	1275	1	
Lime	1275	1305	!	
Sha1e	1305	1325	•	
Lime	1325	1410	!	
Sand	1410	1502	1	
Sandy Shale Sand	1502	1745		
Sendy Shale	1745	1815	S.W. @ 1750'	
Scal	1815	1845		
Sandy Shale	1845	1872	•	
Sand	1872 1915	1915		
Saray Shale	1925	1925 2280	0 00401	
Saga	2280	2305	Gas @ 2240'	
Suncy Shale		3425		
Simd	3425	3480	Gas @ 3454'	
Sandy Shale	3480	4208	Gas @ 3434	
Sand BENSON	4208	4222	Gas @ 4216	
Sendy Shale	4222	4375	343 (4210	
Driller's T.D.		4375		
Fifth Sand	2236	2310		
Bradford	3398	3468		
Benson	4208	4218	*	
Logger's T.D.		4372		
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APPROVED.

Donald R. Laughlin

By Vice President Operations

(Talg)

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code § 22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.

Copies of this Permit Application and the enclosed plat and reclamation plan have been mailer: by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal leads on or before the day of the mailing or delivery of this Permit Application to the Department of Mines or

Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION
1615 WASHINGTON STREET EAST CHARLESTON, WV 25311

OLANKET BUND



By Donald Q. Laughli

PROPOSED WORK ORDER

	ACTU	L INFORM	T CUM MOITA	HIG IS AN ESTI T BE SUBMITTED	MATE ONLY: ON FORM IV-3	F UPON COMPLET	7.7011
DRILLING CON	ੂੰ NTRACTOR 4:	(F KNOWN)					
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GEOLOGICAL T	ARGET FOR	MATION.	Ressa	0			
					feet	Potany /	Cable tools/
				Fresh, 20 //0			
							rea: Yes/ No_X_1
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CASING AND T	••	RAM PECIFICATI	ONG	II DOOMA AD	Tumpput		- H
TUBING TYPE	1 1	Weight	1 1	ed For drilling	INTERVALS	CEMENT FILL- OR SACKS	i i
Conductor	113/4	1.40 50.1 1.0	x x	30'	3-	i (Cubic !eet	
resh water					1		Kinds
Coal							Sizes
Intermediate	85/8	24/41	y.	1050	1050	250	21262
Production	4450 30	9.5	×	4450	4450	300	Depths set
ubing							
iners							Perforations;
							Top Botton.
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	Deputy Direc	tor - Oil & C	Gas Division				
Th or is	e followin coal less to be iss	g waiver ee who ha ued withi	must be c s recorde n fifteer	completed by the ed a declaration (15) days of $\frac{\mathbb{W}}{\mathbb{W}} \stackrel{\triangle}{=} \frac{\mathbb{V}}{\mathbb{W}} \stackrel{\triangle}{=} \frac{\mathbb{V}}{\mathbb{W}}$	n under Code receipt there $\frac{R}{}$	\$ 22-4-20, if eof:	the permit
location has well location the work proj	examined n, the wel posed to b	this prop l locatio e done at	osed well n has bee this loc	en added to the	a mine map e mine map. T d. the well o	exists which c The undersigne operator has c	e coal under this well overs the area of the d has no objection to omplied with all
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