

LOCATION:

Bb1/d

Hours

Hours

API # 47-103-00986 s State of West Virginia RECEIVED Division of Environmental Protection Office of Oil & ... Section of Oil and Gas 93 Well Operator's Report of Well Work Farm hamber Divisoublic LANDS Operator Well No.: F.L. HOGE #10 Environmental Protection Elevation: 1189.00 Quadrangle: CENTER POINT

County: WETZEL
Feet South of 39 Deg. 30Min. 0 Sec.
Feet West of 80 Deg. 40 Min. 0 Sec. District: GREEN 9300 Latitude: Longitude 6250 Company: PENNZOIL PRODUCTS COMPANY P. O. BOX 5519 Casing | Used in Left |Cement | VIENNA, WV 26105-5519 |Fill Up Tubing | Drilling | in Well|Cu. Ft. JAMES A. CREWS Agent: SHE ORIGINAL WELL RECORD FOR ORIGINAL Size Inspector: RANDAL MICK PIPE LEFT IN WELL BORE. * PIPE REMOVED: Permit Issued: 11/09/92 __151.' 4"Liner____ Well work Commenced: 12-3-92 Well work Completed: 3½" Tbg. | 2457**'** 1-23-93 Verbal Plugging 2 3/8" Tbg 2465.57' Permission granted on: * NEW PIPE: Rotary Rotary Cable Total Depth (feet) X 3127' $3\frac{1}{2}$ " Csg. 3038.75 3038.75' 75 Sks. Fresh water depths (ft) Tension Pkr. Salt water depths (ft) $1\frac{1}{2}$ " Tbg. 3068.48 13068.48 3002.00 Is coal being mined in area (Y/N)? Coal Depths (ft):_ OPEN FLOW DATA (Conversion to Liquid Injection) Producing formation Gordon Pay zone depth (ft) 3070 - 3082

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Final open flow MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours Static rock Pressure psig (surface pressure) after Hours Second producing formation_ Pay zone depth (ft) MCF/d Oil: Initial open flow

NOTE: ON BACK OF THIS FORM FOLL...
INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). IND WALLED GEOLOGICAL RECORD OF ALL FORMATIONS,

MCF/d

Time of open flow between initial and final tests

Gas: Initial open flow_

Static rock Pressure

Final open flow__

For: PENNZOIL PRODUCTS COMPANY

Final open flow

psig (surface pressure) after

Timothy P. Roush By: Supervisor - Surveying/Mapping Date: 3-1-93 Reviewed Recorded.

STIMULATION

PERFORATIONS: None

No Treatment

WELL LOG

See Original Well Record

FOR	M WW-3(B)	FIU	E	COPY			Section	1) Date		o	ctober 7,	1996	
Obve				•	, () O I	1 0 1996	2) Well N	lo.		.L. Hoge		
10/91	L) SIC C					
					1	ם אמני	ivision of	4) API W	ell No.		103		0986 -
						م وداده داده و از داده داده داده داده داده داده داده د	eratection .	5) UIC C	ode	State	County	•	Permit
i					. i				,			Issa		10(30)
)							WEST VIRGI							101301
)	NOTICE O	F LIQUI	ID INJE	CTION	OR W		DISPOSAL	WELL	WORK	PER	MIT APPI	ICATIO	ON	
i	Ι	DIVISIO	N OF EN	VIRON	MENT		or the ROTECTION	l OFF	ICE O	F OII	AND GAS	Exp	res	10/30/98
	WELL TYPE			l Injection			Gas Injecti					Disposal	l	
	LOCATION:		Elevation	1189)		w	atershe	a	Cale F	— Հու			28
		District		Green			ounty We	tzel		-	Quadrangle		enterp	
	WELL OPER	RATOR-	Pennzoil	Products	Compar	467	0	TESICN	ATED A	CENT				
			P.O. Box		Compar	ه.	5 9)1	JEGIGIA	AIED A	CENI		S. Ondr D. Box 55		
				WV 26105	;	31 ·	- 1 					a, WV 26		
10)	OIL & GAS I	NSPECTO	OR TO BE	NOTIFIE	D:		11)	DRILL	NG CO	JTR A (***************************************	,		
,			Mike Un				/	214110	210 00	Nam				
		Address	Route 2,	Box 135					I	ddres	***	 		
			Salem, W	V 26426								-		······
12)	PROPOSED	WELL WO	ORK:	Drill			Drill Deep	er		Redril	1 8	Stimulate	х	
					g Off O				rate Ne	v Forn			Conve	rt
				Other :	Physical	_	ge in Well (speci	fy)					-	
13)	Geological ta	rget forms	tion		Gordon	<u> </u>	719 De	pth_	3070		Ft. (Top) t	3082		Ft. (Bottom)
14)	Estimated de	epth of com	pleted we	ll (or actu	al depth	of exis	sting well)			312	- <u>-</u> 7 F	t.		
15)	Approximate	water str	ata deptha	3:	Fresh		NA	Ft.			Salt		NA	Ft.
16)	Approximate	coal seam	depths:		•		1000	— Ft.						_
17)	Is coal being	mined in t	he area?				Yes		x	No				
18)	Virgin reserv	oir pressu	re in targe	et formati	on:		14	00		psig.	Source		Estim	ated
19)	Estimated re	servoir fra	cture pre	sure:	•		35	00		psig.	_			
20)	Maximum pr	oposed inj	ection ope	rations:	,	Volu	me per hour	25 bb	ıl.	-	Bottom Hole	Pressure	247	0
21)	Detailed inde	entification	of materi	ials to be i	njected.	includ	ing additives:		Fresh	water.	produced was	ter, hacte		and
							improve oil reco	very.			produced wa	ci, bacce	raues	anu
22)	Filters (if any	y):	Cartridge	e filters ar	nd/or cos	al bed f	ilters							
23)	Specification	s for catho	dic protec	tion and o	ther cor	rosion	control:							
	-		•											
24)	CASING AN	D TUBING	G PROGR	AM:										·
	ING OR		1	FICATION		,	FOOTAG		WALS		CEMENT	FILLUP	PA	CKERS
	ING TYPE	Size	Grade	Weight	New	Used	For Drilling	I	eft in W	ell	OR SA	CKS		
	luctor	5 0108											Kinds	
Coal	h Water	5 316"	-				2430	+	2430		Existing Ca	sing	Tensio	on.
	mediate	 	 										Sizes	
-	uction	3 1/2"	<u> </u>				3039		3039		Existing Ca	ging	Depth	c Set
Tubir	ng	1 1/2"					3068		3068		Existing Tu		3002'	s Set
Liner	rs													ations
													Тор	Bottom
	-													

Stringtown Unit Royalty Owners

Book

of record in the

123

at Page

Dated

25) APPLICANTS OPERATING RIGHTS were acquired from

Lease

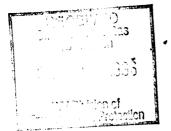
Wetzel

Other Contract

County Clerk's Office in

by Deed ___

FORM WW-3(A) Obverse



1) Date October 7, 1996 2) Well No. F.L. Hoge No.10 3) SIC Code

0986

4) API Well No. 47 103 State County Permit

STATE OF WEST VIRGINIA

NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION for the

DIVISION OF OIL AND GAS, DEPARTMENT OF ENERGY

6)	SURFACE OWN	VER(S) OF RECORD TO BE SERVED	7 (i)	COAL OPER	RATOR:
				Name	N/A
	(i) Name	State of WV		Address	
	Address	Public Land Corp.			
		Building 3, Room 646	7 (ii)	COAL OWN	NER WITH DECLARATION ON RECORD:
	(ii) Name	1900 Kanawha Blvd. East		Name	
	Address	Charleston, WV 25305		Address	
	(iii) Name		7 (iii)	COAL LES	SEE WITH DECLARATION ON RECORD:
	Address			Name	N/A
				Address	
(1 (2 (3	o) The Applicat sets out the p) The plat (sur) The Constru- which sets or	s) NAMED ABOVE: You should have ion for a Liquid Injection or Waste I parties involved in the drilling or oth veyor's map) showing the well locat ction and Reclamation Plan on Form at the plan for erosion and sediment d for the first injection or waste disp	Disposal Wellner work, and ion on Form www.9 (unle control and	Work Per l WW-6; and ess the wel	mit on Form WW-3(B), which d l work is only to plug a well).
WH	IICH ARE SUM	U RECEIVED THESE DOCUMENTS IS MARIZED IN THE "INSTRUCTIONS" DESIGNATED FOR YOU. HOWEVER,	ON THE REV	ERSE SIDE	HTS REGARDING THE APPLICATION E OF THE COPY OF THE APPLICATION ED TO TAKE ANY ACTION AT ALL.
	ጥል	also motion that under Chanter COD afth	- TT7 - 4 T7* - * *	~ 1 11	

Take notice that under Chapter 22B of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a Well Work Permit with the Director of the Division of Oil and Gas, West Virginia Department of Energy, with respect to a well at the location described on the attached Application and depicted on attached Form WW-6. Copies of this Notice, the Application, the plat, and the Construction and Reclamation Plan have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Director.

The person signing this document shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Its Supervisor, Surveying/Mapping (304) 422-6565 Telephone

Pennzoil Products Company

Well Operator

					CE USE							
				DRIL	LING P	ERMIT						
Permit number	47-10	3-0986-F	· »			_			October	30	19	9(
This permit cover quirements subject No. 8) Prior to the district oil and ga	ct to the conditi he construction (ons contained of roads, loca	I herein and o itions and pits	on the reverse for any per	e hereol. I mitted wo	Votification rk. In additi	must be gi	ven to the	District Oil	and Car In	/D	
The permitted wo conditions specifi	ork is as describe ied below.	d in the Notic	ce and Applica	ation, plat, a	ind (if requ	uired) constr	uction and	l reclamatio	n plan, subj	ect to any i	nodification	ns and
Permit expires	10-	30-98			_unless w	ell work is co	mmenced	prior to tha	it date and p	rosecuted v	ith due dili	gence.
Bond:	Agent:	Plat:	Casing	Fec Ck#								
L		<u> </u>	1,00	030144	_ 9996_	:						
NOTE: Keep o	one copy of this	permit postec	d at the drillin	g location.	·	CHIE	F, OFF	ICE OF	OIL AND	GAS		
	DED.	//T 1/05/F1	CATIONS AI		710110 (1							
		N										
This are a C Francisco					CE USE							
This part of For	ım 14-3(8) is to	record the da	ites of certain	occurrences	and any	follow-up in	spections.					
Application rece	eived		Date			E	allaw i				ale(s)	 -
Well work starte						r	ollow-up 1	nspection(s ,,)			
Total depth read							"	,,				
Well Record rec							"	**				
Reclamation cor	·						••	11				
OTHER INSPE	·											
JIIILK MOFE												
Reason:_									****			
Reason:_												

FORM WW-3 (B Obverse) 7/85 UIC Secti OC. 2 7 WV Divisio Environmental	92	d€ те́віжплус∦ F LIQUID INJE	CTION	STATE OF WEST VOR WASTE DISPO	3) SIGNA SAL WELL WOR	PI Well NO. 47. C Code PI Well NO. 47. State C Permit No. 42. LI-0860-801- EK PERMIT APPLI	2 11/09/92
6) WELL TY	PE: Liquid injec	ction_X_/ Gas		(not storage)	∠ Waste disposal		¥ .
7) LOCATIO		XXXXXXXXXX	1189'	Water			286
8) WELL OP	District: _	Green nzoil Produc	rts Co	Count mpany 37450	-		e: Centerpoint
		Box 5519		46780		TED AGENT	lox 5519
		na, WV 26		<u> </u>			. WV 26105
	S INSPECTOR'I Like Underw	OBE NOTIFIED			W. W		
	Route #2,		<u>-</u>			Acont Kerok O	IL & GAS INSPECTOR:
	Salem, WV				Address	111 51 1 1	ere Drive
						Mannington,	
12) PROPOSE	D WELL WORK		/ Dri		/ Redrill	/ Stimulate	X
				ion_/ Perforate n	ew formation/	Convert_X/	
13) GEOLOGI	CAL TARGET F	Other physic ORMATION,		in well (specify)	19	Depth 3070 fee	2092
		ed well, (or actual			***************************************	Depth 3070 ree	t(top) to 3082 feet(bottom)
	ite water strata de		N/A	feet: salt N			
	ite coal seam depti	•	000				
17) Is coal bein	ng mined in the a	rea? Yes/ 1					
	=	arget formation		psig. Source	ESTIMATED		
		pressure		3500	psig (BHFP)		
				Volume per hour: _	25	Bottom hole press	sure2470
bacteri	cides. and	other chem	ALS IOE	e injected, incl	UDING ADDITIVI	s: <u>Fresh wat</u>	er, produced water, ty and improve oil
22) PILTERS (IFANY): Car	tridge Filt	ers ar	nd/or Coal Be	d Filters	water quari	-
				ND OTHER CORRO			recovery.
	•						
34 04 51310 4							
24) CASING A	ND TUBING P	ROGRAM				•	
CASING A CASING OR TUBING TYPE	s	PECIFICATIONS	Umad	FOOTAGE IN	1	CEMENT FILLUP OR SACKS	PACKERS
CASING OR	s	PECIFICATIONS	Used	FOOTAGE IP	Left in well		PACKERS Kinds
CASING OR TUBING TYPE	Stare Great	PECIFICATIONS	Used	1	1	OR SACKS	
CASING OR TUBING TYPE Conductor Fresh water	Size Great 10 8 1/4	PECIFICATIONS	Used	540 1385	1	OR SACKS	
CASING OR TUBING TYPE Conductor Fresh water Coal Intermediate	Sim Grad 10 8 1/4 6 5/8	PECIFICATIONS	Used	540 1385 1964	Left in well	OR SACKS	Kinds
CASING OR TUBING TYPE Conductor Fresh water Coal Intermediate Production	Size Great 10 8 1/4 6 5/8 5 3/16	PECIFICATIONS	Used	540 1385 1964 2430	1	OR SACKS	Kinds
CASING OR TUBING TYPE Conductor Fresh water Coal Intermediate Production Tubing	Size Great 10 8 1/4 6 5/8 5 3/16 3 1/2	PECIFICATIONS Weight New Paper Rt. New Pap	v Used	540 1385 1964	Left in well	OR SACKS	Kinds Sizes Depths set
CASING OR TUBING TYPE Conductor Fresh water Coal Intermediate Production	Size Great 10 8 1/4 6 5/8 5 3/16 3 1/2	PECIFICATIONS Weight New Paper Rt. New Pap	Used	540 1385 1964 2430	Left in well	OR SACKS	Kinds Sizes

Stringtown Unit Royalty Owners

Book

69A

at page

, of record in the

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

/ other contract X / dated _

County Clerk's office in

25) APPLICANT'S OPERATING RIGHTS were acquired from.

Wetzel

,	
FORH WW-3(A	
Opacise	U.O. (O.)
	OC; 2 7 52
	WV Division of
	Environmental Protection

1)	Date_	October	26,	1992	
		• _			

Operator's
2) Well No. F.L. HOGE NO. 10

3) SIC Code

4) API Well No. 47 - 103 - 0986 -

State County Permit

STATE OF WEST VIRGINIA

NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION for the

DIVISION OF OIL AND GAS, DEPARTMENT OF ENERGY
6) SURFACE OWNER(S) OF RECORD TO BE SERVED 7 (1) COAL OPERATOR N/A Address
(i) Name State of WV - Public Land Corp. Address Bldg. #3 Room 643 7 (ii) COAL OWNER(S) WITH DECLARATION ON RECORT 1900 Kanawha Blvd., E. Name
(ii) Name Charleston, WV 25305 Address Address 7 (iii) COAL LESSEE WITE DECLARATION ON RECORD:
(111) Name Name Address Address
TO THE PERSON(S) NAMED ABOVE: You should have received this Form and the following documents
WW-3(B), which sets out the parties involved in the drilling or other work, and (2) The plat (surveyor's map) showing the well location on Form WW-6; and (3) The Construction and Reclamation Plan on Form WW-5 (unless the well work is only to plug a well), which sets out the plan for erosion and sediment control and for reclamation for the site and access road.
The date proposed for the first injection or waste disposal is, 19
THE REASON YOU RECEIVED THESE DOCUMENTS IS THAT YOU HAVE RIGHTS REGARDING THE APPLICATION WHICE ARE SUMMARIZED IN THE "INSTRUCTIONS" ON THE REVERSE SIDE OF THE COPY OF THE APPLICATION (FORM WW-3(B)) DESIGNATED FOR YOU." HOWEVER, YOU ARE NOT REQUIRED TO TAKE ANY ACTION AT ALL.
Take notice that under Chapter 22B of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a Well Work Permit with the Director of the Division of Oil and Gas, West Virginia Department of Energy, with respect to a well at the location described on the attached Application and depicted on attached Form WW-6. Copies of this Notice, the Application, the plat, and the Construction and Reclamation Plan have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Director.
The person signing this document shall make the PENNZOIL PRODUCTS COMPANY following certification: "I certify under penalty of law that I have
personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of by Timothy P. Roush those individuals immediately responsible for obtaining the information, I believe that the list Supervisor - Surveying/Mapping information is true, accurate, and complete. I at aware that there are significant penalties for Telephone (304) 422-6565 submitting false information, including the possibility of fine and imprisonment.