

	-		
LATI	TUDE	39 30	00

7'5	0G15	topo	location
-----	------	------	----------

7.5' loc 1555 15' loc (calc.)

Company ____

Farm _____

Quad CENTER POINT 7/2
County WETZEL

District GREEN

WELL LOCATION MAP

File No. 103 - 0985

(095)

State of West Virginia Division of Environmental Protection Section of Oil and Gas

Well Operator's Report of Well Work

DEC 0 7 93

Farm name: WVA. PUBLIC LANDS CO.

Operator Well No.: F.L. HOGE #8

LOCATION:

Elevation: 1,366.00 Quadrangle: CENTER POINT

District: GREEN

County: WETZEL

Latitude:

7950 Feet South of 39 Deg. 30Min.

600 Feet West of 80 Deg. 40 Min. Longitude

Sec. Sec.

Company: PENNZOIL PRODUCTS COMPANY

P. O. BOX 5519 VIENNA, WV 26105-5519

Agent: JAMES A. CREWS

Inspector: RANDAL MICK

Permit Issued: 05/25/93 Well work Commenced: Well work Completed: 6/17/93 7/23/93

Verbal Plugging

Permission granted on:

Rotary Cable X Total Depth (feet) 3275 Rig Fresh water depths (ft) N/A

Salt water depths (ft) N/A

Is coal being mined in area (Y/N)? N Coal Depths (ft):

Casing	Used in	Left	Cement
Tubing	Drilling	in Well	Fill Up Cu. Ft.
Size	(OLD WELL RE	PORD)	
8 1/4 6 5/8	1585 2512	577 2512	
5 3/16	2765	2765	
NEW	 		
3 1/2	3257.85	3257.85	100 Sks.
1 1/2	3182.90	3182.90	& Parmaco Packer
	65.90' & Sea Total 1 1/2		

OPEN FLOW DATA

Producing formation	Gordon	Pay zone depth	(ft) 3223 - 3258
Gas: Initial open flow *	MCF/d Oi	1: Initial open flow	* Bb1/
rinal open flow *	MCF/d	Final open flore	* Bb1/
Time of open flow betw	een initia	l and final tests	Hour
Static rock Pressure	psig (su	rface pressure) after	Hour
Water Injection Well - Not Tested		_ ,	
Second producing formation		Pay zone depth ((ft)
Gas: Initial open flow	MCF/d Oi	l: Initial open flow	Bbl/
rinal open flow	MCF/d	Final open flore	Bbl/
Time of open flow betw	een initia	l and final tests	Hour
Static rock Pressure	psig (su	rface pressure) after	Hour

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATE INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELLOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: PENNZOIL/PRODUCTS COMPANY

12/6/93

TREATMENT: Not Treated

WELL LOG: Not Logged.

Original Drillers Record:

 Pgh. Coal
 1192

 Big Injun
 2660 - 2780

 Stray
 3223

 Gordon
 3248 - 3258

T.D. 3275

DFT-419

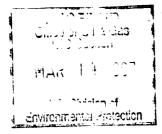
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FORM WW-3(B)	BU	MT_	COPY			7	1) Da	te	Ma	rch 7, 19	97
Obverse			· -		11 8 6	نا	2) We	11 No.	F.I	. Hoge N	No.8
10/91			4	To the said	ection		3) SIC	Code			
			1		14 :	:37	4) AP	I Well No.	47 -	103	- 098
			4	1 1	1 1 13	13/			State	County	Perr
				111/00	ب جماعات	1	5) UI(C Code			
•				STAT		WEST TOPON	T A		Isa	und	(04/07/
NOTICE	OF LIQU	ID INJI	CCTION	OBA		WEST VIRGIN DISPOSAL W			1.57m 4 22 2		
		<u>_</u>		,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	for the	ELLE WOI	KR PER			
	DIVISIO	N OF E	NVIRON	MEN	TAL I	PROTECTION.	OFFICE	OF OII	AND CAR	xpiro	04/07
						MOIDO HON.	OFFICE	OF OIL	AND GAS		
6) WELL TYP	L:	Liqui	d Injection	<u> </u>		Gas Injection			_ Waste I	Disposal	
LOCATION		Elevation	1366	3 /		Wat	ershed	Cale R	un		y
39	Distric	t	Green		<i>]/ (</i>	County Wetze	el		Quadrangle	Ce	enterpoint
O VELL OPE	RATOR:	Pennzoil	l Products	Compa	inv 46	70 9) DE	SIGNATEI	AGENT	- Dh:1:- C	2 0-1	1-
6		P.O. Box	5519				CIGINALE	AGENI		8. Ondru Box 5519	
		Vienna,	WV 26108	5	-					WV 26:	
L & GAS	INSPECT	OR TO BE	NOTIFIE	ED:		11) D	RILLING C	YANTIDA C		20.	100
\$		Mike Ur				11/1	MILLIAN C	ONTRAC Name			
		Route 2,						Address			-
		Salem, V	VV 26426								
2) PROPOSEI	WELL W	ORK:	Drill	1		Drill Deeper	•	Redrill	~ ~	•	
					old Form		Perforate l			mulate	X
						ge in Well (specify)		TOTAL			Convert
3) Geological t	arget form	ation		Gordo		419 Depth	32		F4 (T) 4	2050	
1) Estimated of			-11 /				324		Ft. (Top) tı	3258	Ft. (Botte
				al dept	h of exi	sting well)		3275	Ft.		
5) Approximat	e water str	ata depth	B:	Fresh		NA	Ft.		Salt	3	NA Ft.
6) Approximat	e ∞al seam	depths:				1000	Ft.				
7) Is coal being	mined in t	he area?				Yes	X	No			
8) Virgin reser			et formati			•			_		
	-	_		он.		1400		peig.	Source]	Estimated
9) Estimated r		_				3500		psig.			
0) Maximum p	roposed inj	ection ope	rations:		Volu	me per hour	25 bbl.		Bottom Hole Pr	essure	2470
 Detailed inc 	lentification	of mater	ials to be i	njected	, includ	ing additives:	Free	 ıb water. 1	produced water	- hactori	
other chemi	cals as need	led to mai	intain wat	er qual	ity and	improve oil recover	у.		produced water	, Dacterr	cides and
2) Filters (if ar	y):	Cartridge	e filters ar	id/or co	al bed f	ilters					•
3) Specification	ns for catho							***			·
				uner co.	11091011	control:					
4) CASING AN	ID TUBING	3 PROGR	AM:						····		
ASING OR			FICATION	1S		FOOTAGE II	NTERVALS	;	CEMENT FI	LLIP	PACKERS
UBING TYPE	Size	Grade	Weight	New	Used	For Drilling	Left in	Well	OR SACH	- 1	211011111111111111111111111111111111111
onductor											Ginds
resh Water	8 1/4"					1585	57	7	Existing Casin		Cension
oal	6 5/8"					2512	251	2	Existing Casin		Sizes
termediate roduction	5 3/16"			<u> </u>		2765	276	5	Existing Casin		
	3 1/2"					3258	325	8	Existing Casin	g I	Depths Set
ners	1 1/2"					3249	324	9	Existing Tubin		
TICT D	 									I	Perforations
	 				\vdash					7	op Botton
	 										
A DDI ICAAM	C OPERA	MNG PIC	UTC	<u> </u>	لـــا						
				-				n Unit Ro	yalty Owners		
		Lease		Ot	her Cor	itract X	Dated			0	f record in the
by Deed	`	•		· ~	<u>-</u>						
		Wetzel		Count	y Clerk'	s Office in		B∞k	69A at Pa		123

FORM WW-3(A)
Obverse



1) Date			March 7, 1	997		
2) Well No.	F.L. Hoge No.8					
3) SIC Code						
4) API Well No.	47		103	-	0985	7
-	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)	SUF	RFACE OV	VNER(S) OF RECORD TO BE SERVED	7 (i)	COAL OPE	RATOR:	
					Name	N/A	
	(i)	Name	State of WV		Address		
		Address	Public Land Corp.				
		_	Building 3, Room 646	7 (ii)	COAL OW	NER WITH DECLARATION ON REC	ORD:
	(ii)	Name	1900 Kanawha Blvd. East		Name	N/A	
		Address	Charleston, WV 25305		Address		
	(iii) Name	Dep't. of Natural Resources	7 (iii)	COAL LES	SEE WITH DECLARATION ON REC	ORD:
		Address	1304 Goose Run Road		Name	N/A	
		-	Fairmont, WV 26554		Address		
		-	Attn: Gary Foster		_		
			N(S) NAMED ABOVE: You should have ation for a Liquid Injection or Waste I			•	
			e parties involved in the drilling or oth	-		, ,	
(2) Th	e plat (s	urveyor's map) showing the well locati	ion on Form	WW-6; ar	d	
(3) Th	e Consti	ruction and Reclamation Plan on Form	ww-9 (unl	ess the we	ll work is only to plug a well),	
	$\mathbf{w}\mathbf{h}$	ich sets	out the plan for erosion and sediment	control and	for reclan	ation for the site and access re	oad.
Th	e dat	e propos	sed for the first injection or waste disp	osal is			
TH	E RE	ASON Y	OU RECEIVED THESE DOCUMENTS IS	THAT YOU	HAVE RIC	HTS REGARDING THE APPLIC	CATION
lwr	IICH	ARE SU	MMARIZED IN THE "INSTRUCTIONS"	ON THE REV			
1 ***			MINIMUMED IN THE HADINGOIDING	OIV IIII IUSV	ERSE SID	E OF THE COPY OF THE APPL	ICATION

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
Telephone (304) 422-6565

Pennzoil Products Company

Well Operator

M WW-3(B) verse)	PERMIT COPY				
verse)	.· . · · ·				. 5
		OFFICE U	SE ONLY		
			PERMIT		
	e Company				
Permit number	47-103-0985-F		e the same year or <u>as the</u>	April 7	th. 19 9
Marian arabanian arabani	ing the well operator and well locatio		The same of the sa	Date	
			•2	l reclamation plan, subject (o any modifications .
Permit expires	4-7-99	unle	ss well work is commenced	prior to that date and prose	cuted with due diligen
Bond:	Agent: Plat: Casin	Fee CK#		() () ()	
			" (11,		•
	LV BS A		Malle	w Wind	eurs
NOTE: Keep on	te copy of this permit posted at the di	0301589442		CE OF OIL AND GA	eurs s
NOTE: Keep on	te copy of this permit posted at the di	0301589442		CE OF OIL AND GA	ews s
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		0361589442 rilling location. S AND CONDITION	CHIEF, OFFI	OPOSED WELL WORK	ews s

FECEIVED ca of Oil & Gas UIC Section APR 2 1 93 Division of Environmental Protection



1) Date:	April	19,	_, 19 <u>93</u>
2) Operator's Well No.	F.L. HO	GE NO.	8
3) SIC Code			
4 API Well NO.	47 State	- 103 County	- 0985-LI Permit
5. UIC Permit No.		125/9	3

STATE OF WEST VIRGINIA

NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION for the DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

7) LOCATION: Elevation: 1365 Gas injection (not storage) ∠ Waste disposal_ Watershed: Cale Run 286 Wetzel Quadrangle: Centerpoint WELL OPERATOR Pennzoil Products Co. 374 County: ___ 9) DESIGNATED AGENT J.A. Crews
Address P.O. Box 5519 <u>374</u>50 Address P.O. Box 5519 Vienna, WV 26105 Vienna, WV 26105 10) OIL & GAS INSPECTOR TO BE NOTIFIED Name <u>Mike Underwood</u> 11) DRILLING CONTRACTOR: Rt. #2, Box 135 Name Address Salem, WV 26426 Address _ __/ Stimulate_ 12) PROPOSED WELL WORK: _/ Drill deeper___ Plug off old formation__/ Perforate new formation__/ Convert_X Other physical change in well (specify)___ 415 Depth 3248 feet(top) to 3258 feet(bottom) 13) GEOLOGICAL TARGET FORMATION, Gordon 14) Estimated depth of completed well, (or actual depth of existing well) 3275 ft. 15) Approximate water strata depths; Fresh, N/A feet; salt, N/A ____feet. 1192 16) Approximate coal seam depths: _ 17) Is coal being mined in the area? Yes___/ No_X/ 18) Virgin reservoir pressure in target formation 1260 psig. Source <u>ESTIMATED</u> <u>3500</u> _psig (BHFP) 19) Estimated reservoir fracture pressure___ 20) MAXIMUM PROPOSED INJECTION OPERATIONS: Volume per hour: 25 Bottom hole pressure <u>2380</u> 21) DETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED, INCLUDING ADDITIVES: Fresh water and/or produced water from waterflood operations 22) FILTERS (IF ANY): ____ Cartridge Filter_ 23) SPECIFICATIONS FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL: 24) CASING AND TUBING PROGRAM CEMENT FILLUP OR SACKS (Cubic feet) PACKERS POOTAGE INTERVALS CASING OR TUBING TYPE Kinds Conductor 570 Existing 10 Fresh water 577 Sizes 1585 Coal 2512 2512 6 5/ Intermediate 2765 2765 Depths set 3/1 Production 32 Run TOP OF SHOT Tubing Perforations: CEMENT AND PER CL Bottom 25) APPLICANT'S OPERATING RIGHTS were acquired from Richard A. Hoge , 19<u>85</u> January 30. , of record in the

Book

Deed

306

at page 415

County Clerk's office in

X / lease / other contract / dated _

FORM	WW-3(A)
Obver	se

6)

	C 01	(i)	31.6	k Gas	1
	APR	2	1	93	
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SURFACE OWNER(S) OF RECORD TO BE SERVED , 7 (i) COAL OPERATOR

1)	Date_	April	19,	1993
	Operat			

2) Well No. F.L. HOGE

3) SIC Code

4) API Well No. 47 103 0985 -

N/A

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

				Address		
	(i) Name_ Addres	WV Public Lands Corp. ss_Bldg. 3 Room 643 1900 Kanawha Blvd East	7 (ii)	COAL OWNER(S)	WITH DECLARATION	ON RECORD
(ii) Name_ Addrea	Charleston. WV 25305		Address		
(i	ii) Name		g (iii)	Name	ITH DECLARATION OF	N RECORD:
		Fairmont, WV 26554		Address		
TO T	HE PERSON	(S) NAMED ABOVE: You should have	receiv	ed this Form a	nd the following o	documents:
		Application for a Liquid Injection (B), which sets out the parties in				
		plat (surveyor's map) showing the				
	(3) The (Construction and Reclamation Plan lug a well), which sets out the paramation for the site and access a	on For olan for	m WW-9 (unless	the well work is	•
	The date p	proposed for the first injection	or wast	e disposal is	······································	19
THE	REASON YOU	U RECEIVED THESE DOCUMENTS IS THA	T YOU H	AVE RIGHTS REG	ARDING THE APPLICA	ATION

WHICH 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 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.

Pennzoil Products Company
Well Operator
Ву
Paul E. King, Jr.
Its Petroleum Engineering Advisor
Telephone (304) 422-6565