

west virginia department of environmental protection

Office of Oil and Gas 601 57th Street SE Charleston, WV 25304 (304) 926-0450 (304) 926-0452 fax Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.dep.wv.gov

August 07, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-9501529, issued to HG ENERGY, LLC, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalities being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.

Chief

James Martin

Operator's Well No: THMPSN HRS E-7

Farm Name: WALTERS, CARL E.

API Well Number: 47-9501529

Permit Type: Plugging
Date Issued: 08/07/2015

PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

- 1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
- 2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
- 3. Well work activities shall not constitute a hazard to the safety of persons.
- 4. This well is under a consent order and must be plugged under the terms of that agreement.

WW-4B Rev. 2/01

1) Date	, 20
2) Operator's	
Well No. Thompson He	eirs E-7
3) API Well No. 47-0	005 - 1629

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

	APPLICATION FOR A PERM	MIT TO PLUG AND ABANDON					
4)	Well Type: Oil X / Gas/ Liquid (If "Gas, Production or Und	l injection/ Waste disposal/ lerground storage) Deep/ Shallow X					
5)	Location: Elevation 917' District McElroy	Watershed Stackpole Run County Tyler Quadrangle Centerpoint 7.5'					
6)	Well Operator HG Energy, LLC Address 5260 Dupont Road Parkersburg, WV 26101	7) Designated Agent Diane White Address 5260 Dupont Road Parkersburg, WV 26101					
8)	Oil and Gas Inspector to be notified Name Michael Goff Address P. O. Box 134 Pullman, WV 26421	9) Plugging Contractor Name To Be Determined Upon Approval of Permit Address					
10)	Work Order: The work order for the manner of plugging this well is as follows: "See Attached Sheet"						
		RECEIVED Office of Oil and Gas					
		JUL 2 7 10					
		WV Department of Environmental Protection					
	fication must be given to the district oi can commence.	il and gas inspector 24 hours before permitted					
Work	order approved by inspector Michael	20/ Date 7/14/15					

WW-4B				
Rev.	2/01			

1)	Date:	Tune 23, 2	2015			
2)	Operator's Wel	Number				
	Thomps	on Heirs	E-7			
3)	API Well No:	47	-	095	92	1529
		State		County		Permit

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

		APPLICA	HON FOR A PERM	III TO PLUG A	AND ABAND	ON		
4)	WELL TYPE:	Oil (If "Ga	X Gass", Production	Liquid Injecture Undergroun		Waste Dis	posal Shallow	x
5)	LOCATION:	Elevation:	917'	Watershed:	Stackpole 1	Run		
		District:	McElroy	County:	Tyler	(Quadrangle Centerpo	oint 7.5'
6)	WELL OPERAT Address	5260 I	ergy, LLC Dupont Road Sburg, WV 26101	4.94E+08	7) DESIGNA	TED AGENT_ Address _	Diane White 5260 Dupont Road Parkersburg, WV	
8)	OIL & GAS INS Name Address		BE NOTIFIED ff		9) PLUGGIN Name Address	G CONTRAC To Be Deter		*
10)	WORK ORDER	: The work	order for the manner o	f plugging this w	ell is as follow	s:		
TD-	2,910'						MAG	
Plug	nners of pluggin g #1 2750' - 265	0'					7/14/15	
Free Plug	g #2 - 1700' - 16	d pull 4 1/2" 00'	cion casing at approx. 16	550'				
	ated at 4 1/2" ca g #3 -975' - 750'	asing stub						
Loc	ated at elevatio	n and throu	gh the Pittsburgh Co	al				
	g #4 -300' - 0' ated at 8 5/8" c:	asing shoe	below Fresh Water to	o Surface				
LUC	ateu at 0 5/0 C	33111g 3110c,	below fresh water t	o Surracc				
		ing. If casing	can not be recovered, per	forate for plug pla	cement.	(RECEIVED	Gas
	ument: inimum diameter n	natal nina					JUL 2 7 201	ñ
	above surface	retai pipe						
500	n well below surfac	e					WV Departme	ent of
	ed with cement identification (1/	2") height nu	nmbering			E	nvironmental Pr	otection
6%	Gel between all plu	gs						

Well: Thompson Heirs E-7 Monument to extend 30" above surface. 10' into well. 6" min metal pipe, sealed with Elevation: 917' cement. API i.D. Casing Information \leftarrow 100 sacks cement to surface Size Depth Weight 8 5/8" 229' 20#/ft. Freepoint Cut and Pull Casing 4 1/2" 28801 10.5#/ft. Size Approx. Depth 4 1/2 1650 Cement Plugs NO. Bottom Top 1 2750 2650 2 1700 1600 3 Pittsburgh Coal 798' 975 750 3 4 300 0 MDG 1/11/15 4 7 7/8" Hole Size **Bottom Hole Cement Level Calculations** # Sacks Used Cement Depth 300 1763.925 Hole Size Casing Size Depth 2 7.875 4.5 2880 300 Sks Cement T.O.C. 1765' \leftarrow diameter delta bbls / ft. Conv. Factor 41.765625 0.040573 1.029,4 RECEIVED Office of Oil and Gas cubic ft. per vertical ft. depth JUL 2 7 2015 0.227795902 WV Department of Sacks per vertical ft. depth Environmental Protection 0.268799164 Highest Perforation 2788' **Yield options** 50/50 posmix 6% gel = 1.64 1 Neat w/ salt flakes = 1.19 50/50 w/ 2% gel = 1.27 TD 2910'

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د~-~،
                                                                                   03-May-93
                                                                     API # 47- 95-01529
                                 State of West Virginia
                         Division of Environmental Protection
                                Section of Oil and Gas
                          Well Operator's Report of Well Work
 Farm name: WALTERS, CARL E.
                                      .: Operator Well No.: THMPSN HRS E-7
 LOCATION:
               Elevation: 917'
                                          Quadrangle:
                                                           Centerpoint
                                   Feet South of 39 Deg. 27 Min. 30 Sec.
Feet West of 80 Deg. 40 Min.00 Sec.
               District: MCELROY
               Latitude: 450
               Longitude 9,500
 Company: PENNZOIL PRODUCTS COMPANY
          P. O. BOX 5519
VIENNA, WV 26105-5519
                                                 Casing
                                                             Used in
                                                                           Left
                                                                                    Cement
                                                                                     Fill Up
                                                 Tubing
                                                             Drilling
                                                                           in Well Cu. Ft.
Agent: JAMES A. CREWS
                                                 Size
Inspector: MIKE UNDERWOOD
Permit Issued:
                             05/03/93
5/28/93
Well work Commenced:
Well work Completed:
                              10/8/93
Verbal Plugging
                                                   8 5/8
                                                                229.
                                                                                      50 Sks.
                                                                             229
Permission granted on:
Rotary X Cable
Total Depth (feet)
                                          . . . . .
                               Rig
                             2910
                                                   4 1/2
                                                               2880.5
                                                                            2880.5
                                                                                     300 Sks.
Fresh water depths (ft)
Salt water depths (ft) N/A
Is coal being mined in area (Y/N)?N
Coal Depths (ft):
OPEN FLOW DATA
                                   Gordon
      Producing formation
                                      Gordon Pay zone depth (ft) 2762 - 2800

* MCF/d Oil: Initial open flow * Bb1/d
      Gas: Initial open flow
             Final open flow * MCF/d Final open flow Time of open flow between initial and final tests
                                                                                        Bbl/d
                                                                                        Hours
      Static rock Pressure
                                         psig (surface pressure) after
                                                                                                 RECEIVED
                                                                                      Hours
   * Waterflood Producer - Not Tested
Second producing formation
Gas: Initial open flow
                                          Pay zone depth (ft) MCF/d Oil: Initial open flow
                                                                                           Office of Oil and Gas
                                                                                        Bb1/d
            Final open flow
                                                        Final open flow
                                          MCF/d
                                                                                        Bb1/d
            Time of open flow between initial and final tests
                                                                                                 JUL 27 2015
                                                                                        Hours
      Static rock Pressure
                                        __psig (surface pressure) after
                                                                                        Hours
                                                                                            WV Department of
NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORMED ON THE INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL ON THE LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS,
INCLUDING COAL ENCOUNTERED BY THE WELLBORE.
                               For: PENNZOY
                                     Date:
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State of the second control of

TREATMENT:

Perforated:

2788 - 2798 2 Holes Per Foot, 20 Holes

Treated:

300 Gal. 15% HCL Acid, 278 Bbl. Gelled Water & 1500# 80/100 Sand & 3500# 20/40 Sand

WELL LOG:

•	•
Sand & Shale	0 - 790
Sand:	790 - 820
Sand & Shale	820 - 1355
Sand :	1355 - 1390
Sand & Shale	1390 - 1730
Sand	1730 - 1768
.Sand & Shale .	1768 - 1922
Little Lime	1922 - 1940
Pencil Cave	1940 - 1950
Big Lime	1950 - 1988
Shale'	1988 - 2050
Big Injun	2050 - 2205
Shale	2205 - 2762
Stray .	2762 - 2770
Gordon	2770 - 2800
T.D. ;	2910

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Office of Oil and Gas

JUL 27 (...)

WV Department of Environmental Proceedion

08/07/2015

WW-4A Revised 6-07

(a) Name

Address

4) Surface Owner(s) to be served:

Carl E. Walters

3709 Shady Grove Road



1) Date: June 23, 2015

2) Operator's Well Number Thompson Heirs N-7

Thompson Hells 14-1

3) API Well No.: 47 -

095 - 1529

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL

5) (a) Coal Operator

Name

Address

	Providence, NC 27315		
(b) Name		(b) Coal O	wner(s) with Declaration
Address		Name	NA
		Address	
908 5 #		 192	
(c) Name		Name	NA
Address		Address	
6) Inspector	Michael Goff	(a) CaslI	essee with Declaration
, Address	P. O. Box 134	(c) Coar Le Name	NA
/15 Address	Pullman, WV 26421	Name Address	IVA
Telephone	304-549-9823	Address	
retephone	00.00000		
ימם מעום ספי	DOONG MAMED ADOME		eived this Form and the following documents:
	HOOMS INTIMED TROOVE. 10	u shoulu nave rec	ceived this Form and the following documents:
The reason However, ye Take notice accompany Protection, the Applica	ou are not required to take any action at all. that under Chapter 22-6 of the West Virginia Coding documents for a permit to plug and abandon a virth respect to the well at the location described or	this regarding the application in the undersigned well with the Chief of a national threat the attached Application or certified mail or dery to the Chief.	ication which are summarized in the instructions on the reverses side. Il operator proposes to file or has filed this Notice and Application and the Office of Oil and Gas, West Virginia Department of Environmental tion and depicted on the attached Form WW-6. Copies of this Notice, relivered by hand to the person(s) named above (or by publication in RECEIVED Office of Oil and Gas
	OFFICIAL SEAL BY:	Diane White	Diane White
OF WEST DE	NOTARY PUBLIC Tts:	Agent	JUL 2 7 2015
	STATE OF WEST VIRGINIADORS	5260 Dupont Road	
	5260 Dupont Road	Parkersburg, WV 2	WV Department of
E Trans Life"	Parkersburg, West Virginia 26F@1er hone My Commission Expires Oct. 4, 2016	304-420-1119	Environmental Protection
Lucas			LIMOURION
Subsanibadand	sworn before me this 23rd d	ay of June, 2015	
Subscribed and	Dicum Dulane	ay or	Notary Public
My Commission	201,000	96	
		•	
Oil and Gas Prive	acy Notice		

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our

office will appropriately secure your personal information. If you have any questions about our use of your personal

information, please contact DEP's Chief Privacy Officer at depprivacyoffier@wv.gov.

7.1	U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only				
	For delivery information, visit our webs	site at www.usps.com			
1 9122	Postage \$ 1.42 Certified Fee 3.45	Pastmark			
10 0007	Return Receipt Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required)	Perstmark Here			
06 hE	Total Postage & Fees \$ 7.67	THE-7			
7014	Carl E. Walth Street & Apt. No., or PO Box No. 3709 Shady	Grove Road U			
	PS Form 3800, July 2014	NC 273[5 See Reverse for Instructions			

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JUL 27

WV Department or Environmental Pro-

	Page		of	
API Number	47 - 095		1529	
Operator's We	ell No. Thomps	on Heirs	s E-7	

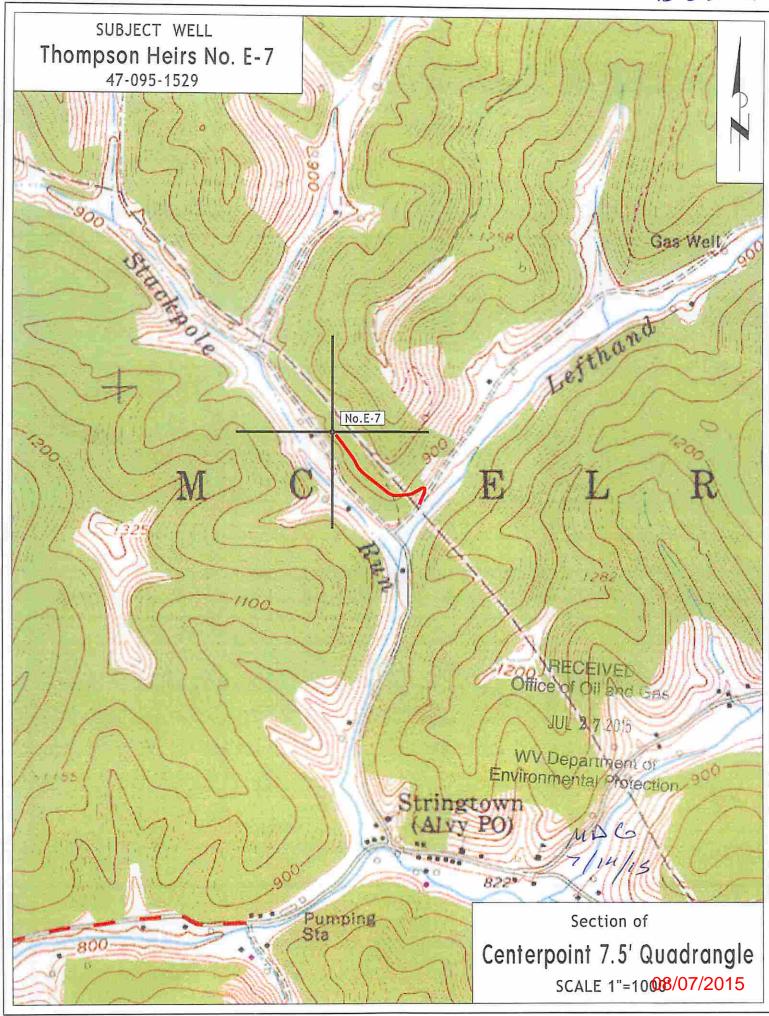
STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

GENERAL PERMIT FOR OIL AND GAS PIT WASTE	DISCHARGE
Operator Name_HG Energy, LLC OP	Code 494497948
Watershed Stackpole Run Quadrangle Center	erpoint 7.5'
Elevation 917' County Tyler	
Description of anticipated Pit Waste: Fluids encountered while pluggi	ng subject well
Will a synthetic liner be used in the pit? Yes 20 MIL.	MDG
Proposed Disposal Method For Treated Pit Wastes: X	n)
Proposed Work For Which Pit Will Be Used: Drilling Workover Other (Explain	
I certify that I understand and agree to the terms and conditions of the GENET on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Enprovisions of the permit are enforceable by law. Violations of any term or condition law or regulation can lead to enforcement action. I certify under penalty of law that I have personally examined and am fair application form and all attachments thereto and that, based on my inquiry of the obtaining the information, I believe that the information is true, accurate, and compenalties for submitting false information, including the possibility of fine or imprisonn	avironmental Protection. I understand that the of the general permit and/or other applicable niliar with the information submitted on this ose individuals immediately responsible for plete. I am aware that there are significant
Company Official Signature Diane Whik	RECEIVED
Company Official (Typed Name) Diane White	Office of Oil and Gas
Company Official Title Agent	JUL 2 7 2015
Subscribed and sworn before me this 23 day of June	WV Department of 20 15nvironmental Protection
Subscribed and sworn before the this day of	Notory Public OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA S. DIANNE DULANEY 5260 Dupont Road Parkersburg, West Virginia 26101 My Commission Expires Oct. 4, 2016

Operator's Well No. Thompson Heirs E-7

		L	EGEND	
Property Boundary			Diversion (1/1/1/1/1/1/	
Road = = = = = =	=====		Spring O	
Existing Fence — X -	- × - × -		Wet Spot	
Planned Fence / _	_/_/_		Drain Pipe with size in inch	es @
Stream	`	Ħ		$\rightarrow \hookrightarrow \hookrightarrow \hookrightarrow$
Open Ditch			Cross Drain	
Rock & See 88	-		Artificial Filter Strip	XXXXXXXXXXXXXX
North N			Pit: cut walls	→
Buildings			Pit: compacted fill walls	muric.
Water wells			Area for Land Application	of Pit Waste
Drill site			(=	
		700.700		
Proposed Revegetation Treatr	nent: Acres Disturbed	0.8	Prevegetation	рН
, ima 3	Tons/acre or to correct	to nII		
	500	to pri _		
Fertilizer (10-20-20	or equivalent)500	lbs/ac	ere (500 lbs minimum)	
_{Mulch} Straw	2 ,	Tons/acre	e	
and a state of the	N			
	8	Seed N	Mixtures	
Are	a I			Area II
Seed Type	lbs/acre		Seed Type	lbs/acre
Tall Fescue	40		Tall Fescue	40
Ladino Clover	5	-	Ladino Clover	5
****			III C. shek	
Sediment control	should be in place	e at al	II times	
Attach: Drawing(s) of road, location,	pit and proposed area for la	nd applic	ation.	
Photocopied section of involv	red 7.51 tonographic shoot			RECEIVED
Photocopied section of involv	ed 7.5 topographic sheet.			Office of Oil and Gas
				JUL 27 7.3
Plan Approved by: Ruch	al Doll			301 2 .
Comments: Preseed	4 Molch d	istor	-bed areas,	WV Department of Environmental Protection
Oil d C	T		Day 2/14/	
Title: 4 Gas	Inspector		Date: 7/14/1_	د
Field Reviewed?) Yes (V) No	



WW-7 5-02



West Virginia Department of Environmental Protection Office of Oil & Gas

WELL LOCATION FORM: GPS

API: 47-	- 095 - 1529	WELL NO:	E-7
FARM NAME:	Thompson Heirs No.E-7	·	
RESPONSIBLE PARTY N	NAME: H.G. Energy	, LLC	
COUNTY:	Tyler	DISTRICT:	McElroy
QUADRANGLE:	Centerpoint 7.5'		
SURFACE OWNER:	Carl E. Walters		·
ROYALTY OWNER:	American Energy Part	eners, LLC et al.	
UTM GPS NORTHING:	4,367,559 (N	VAD 83)_	
UTM GPS EASTING:	525,787 (N	AD 83) GPS ELEVATION:	280 m. (918')
preparing a new well locat	med above has chosen to submit tion plat for a plugging permit or GPS coordinates that do not me	n the above well. The Office	
height above 2. Accuracy to	AD 1983, Zone:17 North, Coorve mean sea level (MSL) - meter o Datum - 3.05 meters ction Method:		e:
Survey Grade C		. —	RECEIVED Office of Oil and Gas
Mapping Grade	GPS X Post Processed Differentia	-	JUL 2 7 2015
I the undersigned, hereby of belief and shows all the in prescribed by the Office of	certify this data is correct to the formation required by law and t	best of my knowledge and	WV Department of nvironmental Protection
	Diane C. White	Designated Ag	ent
Signature		Title	
June 3	, 2015	4	



HG Energy, LLC 5260 Dupont Road Parkersburg, WV 26101 (304) 420-1100 - Office (304) 863-3172 - Fax

June 23, 2015

Ck#3075

Jeff McLaughlin WVDEP Division of Oil & Gas 601 57th Street Charleston, West Virginia 25304

RE:

Thompson Heirs No. E-7 (47-095-01529)

McElroy District, Tyler County

West Virginia

Dear Mr. McLaughlin:

Enclosed are Forms WW-4(A), WW-4(B), WW-9, and WW-7, topo map, well record, copy of certified mailing receipt and a check in the amount of \$100.00 to cover the permit fee to plug and abandon the above-captioned well.

Very truly yours,

Diane White

Diane C. White

Enclosures

cc:

Carl E. Walters – Certified Michael Goff - Inspector

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No Department of Environmental Profession Low

Operator:	HG ENERGY, LLC		
API:	9501529		
WELL No:	THMPSN HRS E-7		
Reviewed by:	gwm Date:	8107/15	
45 Day End o	f Comment: 8/3/15		

CHECKLIST FOR FILING A PERMIT

	Plugging	Ck# 3075
VW-4B		Ch# 3075
Inspector signature on WW-4B		
Completion / Well Records of Prev	ious Work	*
WW-4A (Notarized)		
Certified Mail Receipts, Waivers, or Affidavits of Personal Service		
Surface Owner Waiver		
Coal Owner / Lessee /Operator Waiver		
WW-9 (Page 1) (Notarized)		
Inspector Signature on WW-9 (Optional)		
✓ Topographic Map of location of we	ell	
√ WW-7		
OR		
Mylar Plat (Surface owner on plat	matches WW-4A)	
√ Bond		
✓ Company is Registered with the SC	OS	
Worker's Compensation / Unemplo	syment Insurance account is OK	
\$100.00 check (\$0.00 if no nit)		