

#### west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, S.E. Charleston, WV 25304 (304) 926-0450 fax: (304) 926-0452

Jim Justice , Governor Austin Caperton , Cabinet Secretary www.dep.wv.gov

Monday, December 04, 2017 WELL WORK PERMIT Horizontal / Plugging

ALLIANCE PETROLEUM CORPORATION 4150 BELDEN VILLAGE AVENUE NW, SUITE 410

CANTON, OH 447182553

Re:

Permit approval for BUMGARDNER 5-2H

47-001-03257-00-00

This well work permit 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 any additional specific 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.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0450.

James A. Martin Chief

Operator's Well Number: BUMGARDNER 5-2H

Farm Name: BUMGARDNER, RUSSELL C. & SANDRAS.

U.S. WELL NUMBER: 47-001-03257-00-00

Horizontal / Plugging

Date Issued: 12/4/2017

Promoting a healthy environment.

### **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. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

#### **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.

WW-4B Rev. 2/01

1) Date October 09 , 20 17	
2)Operator's	
Well No. Bumgardner 5-2H	
3) API Well No. 47-001 - 03257	

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

RECEIVED
Office of Oil and Gas

**NCT 2 3 2017** 

4)	Well Type: Oi	l/ Gas X/ Liquid	WV Department of Environmental Protection/ Waste disposal/ Shallow X
5)		vation 1240' trict Union	Watershed Gnatty Creek County Barbour Quadrangle Century 7.5
6)	Well Operator Address	Alliance Petroleum Corporation 4150 Belden Village Ave. NW, Suite 410 Canton, OH 44718-2553	7) Designated Agent Jeff Sayger  Address 16 Fox Hill Terrace  Parkersburg, WV 26101
8)	Name Kenneth Address 613	Spector to be notified Greynolds Broad Run Road Lew, WV 26378	9) Plugging Contractor Name Taylor Trucking and Dozer Service Address 7147 Hackers Creek Road Buckhannon, WV 26201

Set solid steel bridge plug with wireline at 7854' - Top of Marcellus Formation The 5 1/2" production casing is cemented to surface. Use contract rig to RIH with 2 3/8" tubing, fill to surface with API Class A cement. Install monument and complete reclamation. Thrasher Engineering designing reclamation plan to submit to WVDEP. APC is requesting to plug the well in the spring of 2018 and complete the reclamation in the the summer of 2018.

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector Limst Sloyne Date 10-19-17

WR-35 Rev (9-11)

# State of West Virginia Department of Environmental Protection

DATE:	3/14/13
API#:	47-001-03257

Office of Oil and Gas
Well Operator's Report of Well Work

·	or a report of w		7.EC	Oil aug Gas EINEL
Farm name: Bumgardner	_ Operator Wel	1 No.: Bumgarar	ier 5-2H 2f (	Mano
LOCATION: Elevation: 1240	Quadrangle: (	Century 7.5'	<u></u>	8///c <del>0 0 0</del>
District: Union	County: Barb	our	1:73	<del>36 3</del> 8;3
	gMin	. 17.4 Sec	. 50	מייים ישות
Longitude 650 Feet West of 80 Dep	g. <u>12</u> Min	<u>39.5</u> Sec	. / 101	enta: "OTECHO!
Company. PetroEdge Energy LLC			EUAILOUI	enta: "oreciion
Company: PetroEdge Energy LLC	Casing &	Used in	Left in well	Cement fill
Address: 4477 Williamstown Pike	Tubing &	drilling	Left in well	up Cu. Ft.
Williamstown, WV 26187				
Agent: Dan Mullins	20"	30'	30'	Sand In
Inspector: Joe McCourt	13 3/8"	464'	436'	Cement to surface
Date Permit Issued: 9/27/11	9 5/8"	2560'	2532'	Cement to surface
Date Well Work Commenced: 12/10/11	5 1/2"	14250'	14195'	Cement to surface
Date Well Work Completed: 3/8/12				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig V				
Total Vertical Depth (ft): 7633				
Total Measured Depth (ft): 14203				
Fresh Water Depth (ft.): 205				
Salt Water Depth (ft.): 2004				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 320,425,586				
Void(s) encountered (N/Y) Depth(s) N				
		<del>-1</del>	<u> </u>	<u></u>
OPEN FLOW DATA (If more than two producing forma	tions please inclu y zone depth (ft)		ita on separate s	heet)
Producing formation Page Gas: Initial open flow MCF/d Oil: Initial open	• • • •			
Final open flow MCF/d Final open flo				
Time of open flow between initial and final tests				RECEIVED
Static rock Pressurepsig (surface pressure)	afterHou	IL2	Office	HECEIVED ∍ of Oil and Gas
Second producing formationPay 2	zone depth (ft)			T 2 3 2017
Gas: Initial open flowMCF/d Oil: Initial open		bl/d		
Final open flow MCF/d Final open flow		bl/d s	Environn	epartment of Tental Protection
Time of open flow between initial and final tests				
· · · · · · · · · · · · · · · · · · ·				
I certify under penalty of law that I have personally examine				
all the attachments and that, based on my inquiry of those in that the information is true, accurate, and complete.	giviquais immed	iaiciy iesponsio	ie ioi onianimă	me imormation i delieve
D. M. 11				
<u> </u>	<u></u>		4/13 Date	
Signature	5		Date	

Were core samples taken? Yes	_ NoX Were cuttings car	ught during drilling? Yes X	No
Were Electrical, Mechanical or Geophy Onil cuttings were collected, analyzed, and disposed of with	vsical logs recorded on this well? If yes, please	e list Mud Log, GR, CBL	
FRACTURING OR STIMULATING DETAILED GEOLOGICAL REC	V PUT THE FOLLOWING: 1). DETA G, PHYSICAL CHANGE, ETC. 2). THE W ORD OF THE TOPS AND BOTTOMS WELLBORE FROM SURFACE TO TOTA	VELL LOG WHICH IS A SYST OF ALL FORMATIONS, INC	<b>TEMATIC</b>
Perforated Intervals, Fracturing, or Stin	nulating:		
Well has not been fractured - waiting	on pipeline - transferring to Statoil USA O	nshore Properties Inc.	
			<del></del>
Plug Back Details Including Plug Type	and Depth(s):		
Formations Encountered: Surface:	Top Depth /	Bottom Dep	<u>th</u>
Coal	320	322	
Coal	425	429	
Coal	586	589	
Benson	4885	4950	
Rhinestreet	6132	7040	
Middlesex	7040	7284	
West River	7284	7506	RECEIVED
Genessee	7506	7535	Office of Oil and C
Tully	7535	7589	OCT 2 3 2017
Hamilton	7589	7854	WV Department o
		B	VII Offmental Dead
Marcellus	7854		- Totec

WW-4A	
Revised	6-07

1) Date: October 09, 2017 2) Operator's Well Number Bumgardner 5 - 2H 3) API Well No.: 47 -03257

#### STATE OF WEST VIRGINIA

RECEIVED

DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GASice of Oil and Gas NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL OCT 2 3 2017

(a) Name	Owner(s) to be served:  Russell C. & Sandra S. Bumgardner	5) (a) Coal Operator Name  Nam	t of
Address	RR 1 Box 64-A	Address Rt. 1, Box 47	reo non
	Volga, WV 26238	Volga, WV 26238	
(b) Name		(b) Coal Owner(s) with Declaration	
Address		Name	
		Address	_
(c) Name		Name	
Address		Address	_
6) Inspector	Kenneth Greynolds ✓	(c) Coal Lessee with Declaration	_
Address	613 Broad Run Road	Name	
	Jane Lew, WV 26378	Address	
Telephone	304-206-6613		
			_

#### TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat 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 Chief.

OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA	Well Operator By: Its:	Alliance Petroleum Corporation  David Dean  VP Production
Hartsel E. McCauley 1997 Old Weston Rd.	Address	4150 Belden Village Ave. NW, Suite 410
Buckhannon, W 26201 My Commission Expires November 12, 2019		Canton, OH 44718-2553
My Commission Expires November 12, 2019	Telephone	304-614-2963
0296111101111111111111111111111111111111		

Subscribed and sworn before me this	day of October	2017	
Souts & McCan	an-	Notary Public	
My Commission Expires Nover	Rer 12, 2019		

Oil and Gas Privacy 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.



WW-9 (5/16)

API Number 47 - 001 \_ 03257
Operator's Well No. Burngardner 5-2H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Alliance Petroleum Corporation	OP Code	494506333		
Watershed (HUC 10) Gnatty Creek	Quadrangle Century 7.5			
Do you anticipate using more than 5,000 bbls of water to complete t	the proposed well work?	Yes _	No ✓	
Will a pit be used? Yes No V 3***				
If so, please describe anticipated pit waste: 198 bbls				
Will a synthetic liner be used in the pit? Yes No	If so, what ml.	.?		
Proposed Disposal Method For Treated Pit Wastes:				
Land Application (if selected provide a co				
Underground Injection (UIC Permit Nur Reuse (at API Number	mber_FEINNECO DIC # 2008	30301	)	
Off Site Disposal (Supply form WW-9 form CExplain Fluids and pit waste will be	or disposal location) collected in tanks		······································	
Will closed loop system be used? If so, describe:				_
Drilling medium anticipated for this well (vertical and horizontal)?	Air, freshwater, oil based	l, etc. No drilli	ng anticipated	
-If oil based, what type? Synthetic, petroleum, etc			RECEIV	and Gas
Additives to be used in drilling medium?			OCT 2 3	2017
Drill cuttings disposal method? Leave in pit, landfill, removed offsi	te, etc.		W/ Departs	ment of
-If left in pit and plan to solidify what medium will be used	1? (cement, lime, sawdus	t)	Environmental	Protection
-Landfill or offsite name/permit number?				
Permittee shall provide written notice to the Office of Oil and Gas o West Virginia solid waste facility. The notice shall be provided with where it was properly disposed.				
I certify that I understand and agree to the terms and condition April 1, 2016, by the Office of Oil and Cas of the West Virginia provisions of the permit are enforceable by law. Violations of any term or regulation can lead to enforcement action.  I certify under penalty of law that I have personally examplication form and all attachments thereto and that, based on my in the information, I believe that the information is true, accurate, and submitting false information, including the possibility of fine or imp	Department of Environment or condition of the gemined and am familiar value of those individual and complete. I am aware	nental Protect neral permit a with the infor s immediately	tion. I understand the and/or other applicab rmation submitted of responsible for obt	nat the le law on this aining
Subscribed and sworn before me this 9/4 day of 00	toper			
Hatel & Mc Car Ou	No	tary Public		
My commission expires November 12, 2019		,	2/0	OFFICIAL SEAL NOTARY PUBLIC ATE OF WEST VIRGINIA Hartsel E Mr. Cauley 1932 Ctd Weston Rd. Buckhannon, WV 26201 ission Expires November 12,

The second secon

. . .

Operator's Well No. Bungardner 5-24

Proposed Revegetation Treatm		Preveg etation pl		_
Lime	Tons/acre or to correct to p	6.5		
Fertilizer type 10-20	-20 or equivalent	_		
Fertilizer amount 600	)	_lbs/acre		
Mulch 2	Tor	ns/acre		
	<u>s</u>	eed Mixtures		
Tem	porary	Permai	nent	
Seed Type	lbs/acre	Seed Type	lbs/acre	
Orchard Grass	12	Orchard Grass	12	_
Birdsfoot Trefoil	10	Birdsfoot Trefoil	10	
Domestic Rye	10	Domestic Rye	10	_
Manala) africad lacation with	nd proposed area for land app	lication (unless engineered plans include	ling this info have been	=
Maps(s) of road, location, pit a provided). If water from the pit (L, W), and area in acres, of the	will be land applied, provide e land application area.	lication (unless engineered plans include water volume, include dimensions (L,	W, D) of the pit, and dime Offic	CT 23
provided). If water from the pir (L, W), and area in acres, of the Photocopied section of involve	will be land applied, provide e land application area.  d 7.5' topographic sheet.	water volume, include dimensions (L,	W, D) of the pit, and dime Offic	CT 23
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W W -9- GPP Rev. 5/16 Page of 3
API Number 47 - 001 - 03257
Operator's Well No. Sungardner 5-3H

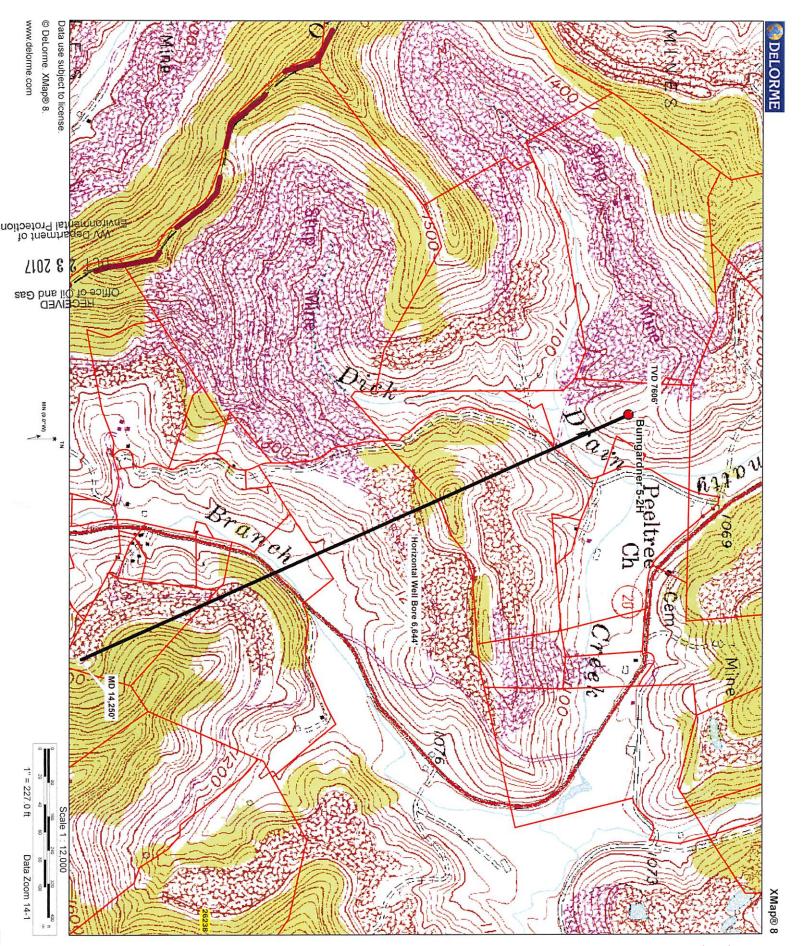
## STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

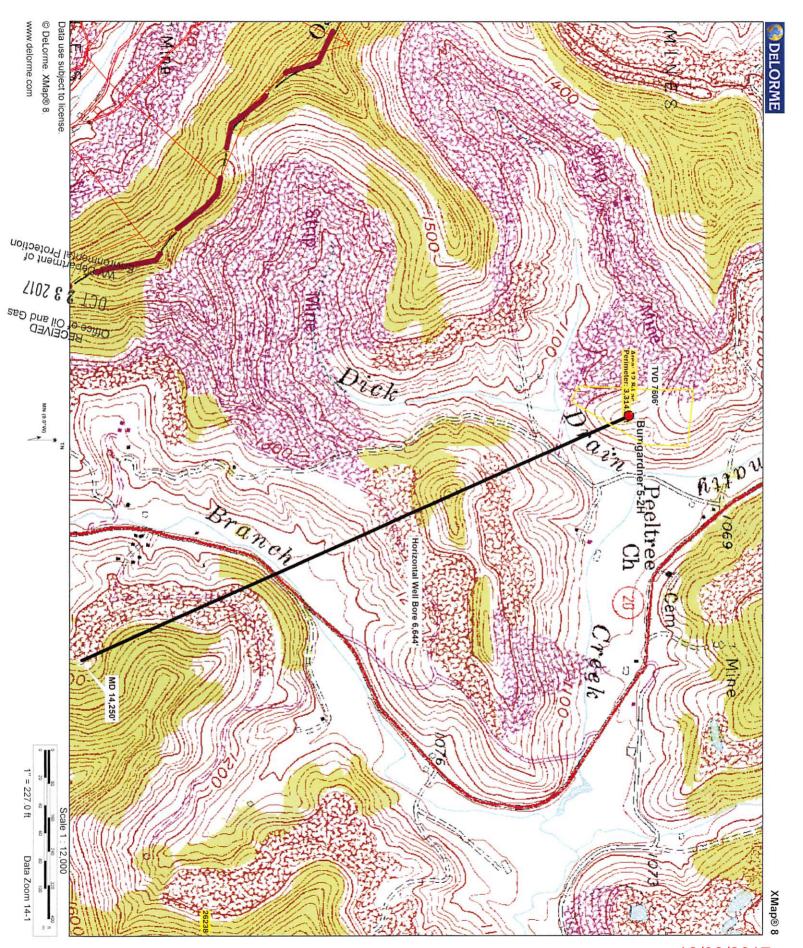
GROUNDWATER PROTECTION PLAN

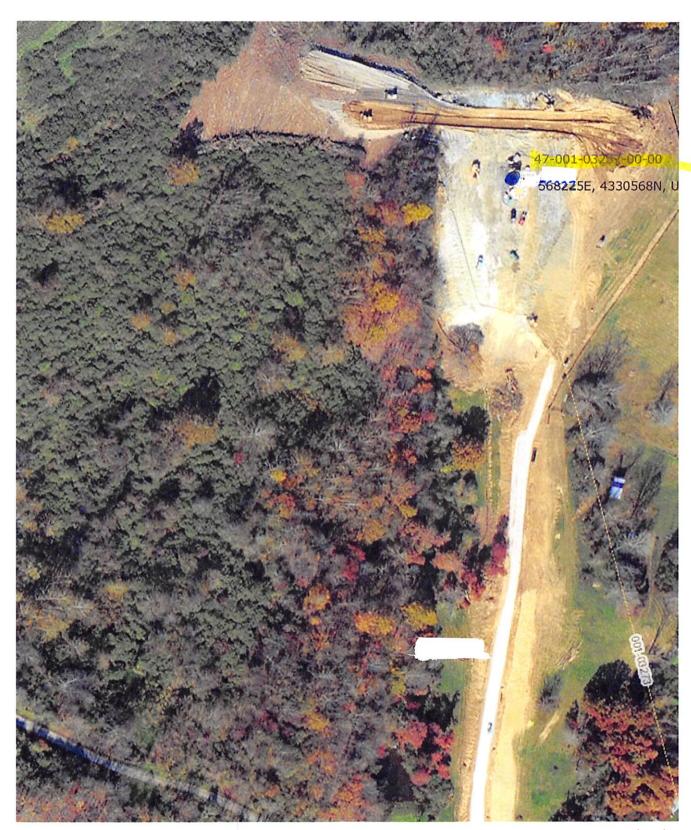
Pperator Name: Alliance Petroleum Corporation	
Vatershed (HUC 10): Gnatty Creek	Quad: Century 7.5
arm Name: Russell C. + Sundra S. Bus	mgardner
. List the procedures used for the treatment and discharge groundwater.	e of fluids. Include a list of all operations that could contaminate the
. Describe procedures and equipment used to protect ground	ndwater quality from the list of potential contaminant sources above.
<ul> <li>List the closest water body, distance to closest water b discharge area.</li> </ul>	body, and distance from closest Well Head Protection Area to the
	RECEIVED Office of Oil and Ga
	OCT <b>2 3</b> 2017
a	WV Department o
	Environmental Protect
. Summarize all activities at your facility that are already r	regulated for groundwater protection.

5. Discuss any existing groundwater quality data for your facility or an adjacent property.

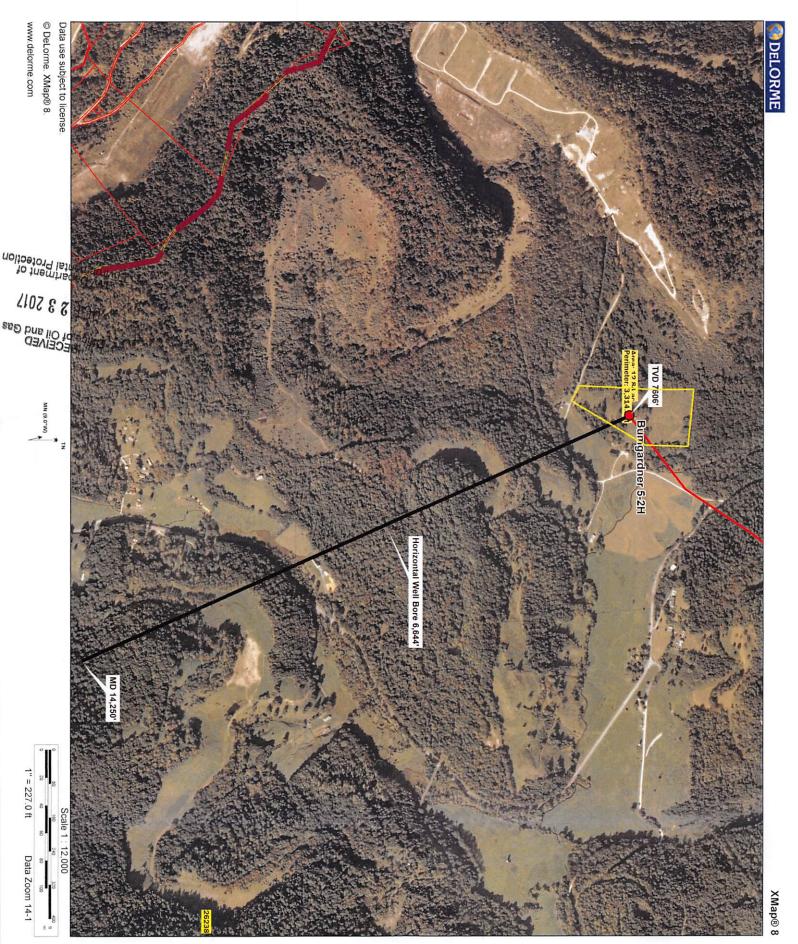
W W -9- Rev. 5/		PageAPI Number 47 - 001 Operator's Well No.	9 of 9 - 03257 gardner 5-24
6. Pro	ovide a statement that no waste material will be used for deicing	or fill material on the property.	
7. De	escribe the groundwater protection instruction and training to bovide direction on how to prevent groundwater contamination.	be provided to the employees. Job pr	rocedures shall
			RECEIVED Office of Oil and Gas
8. Pro	ovide provisions and frequency for inspections of all GPP elemen	nts and equipment.	OCT 2 3 2017
			WV Department of Environmental Protection
Signat	ture: Devid Dear		
Date:	10/09/2017		

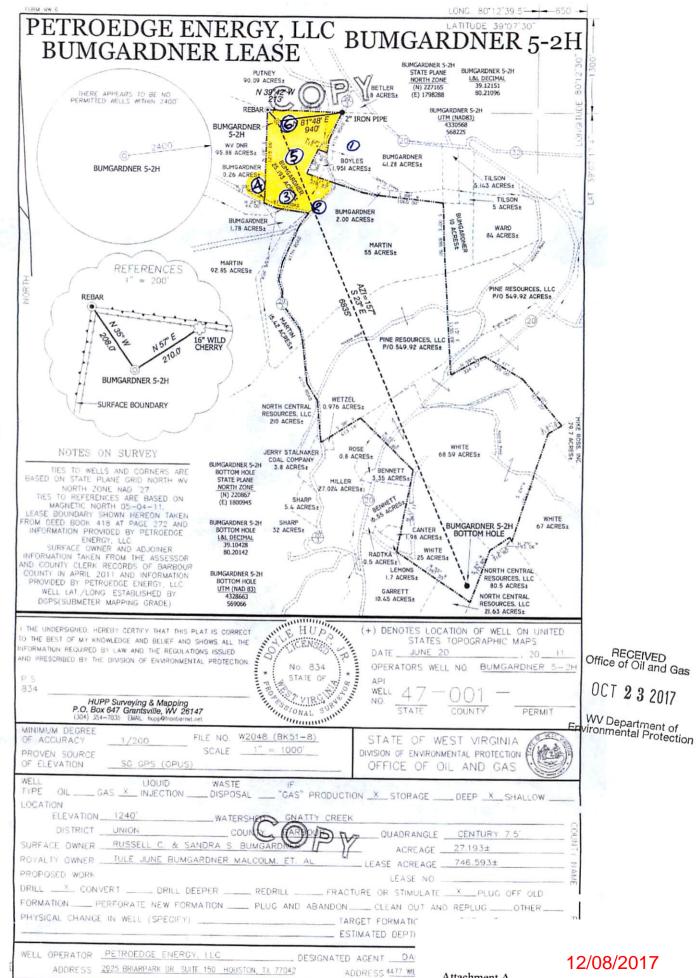


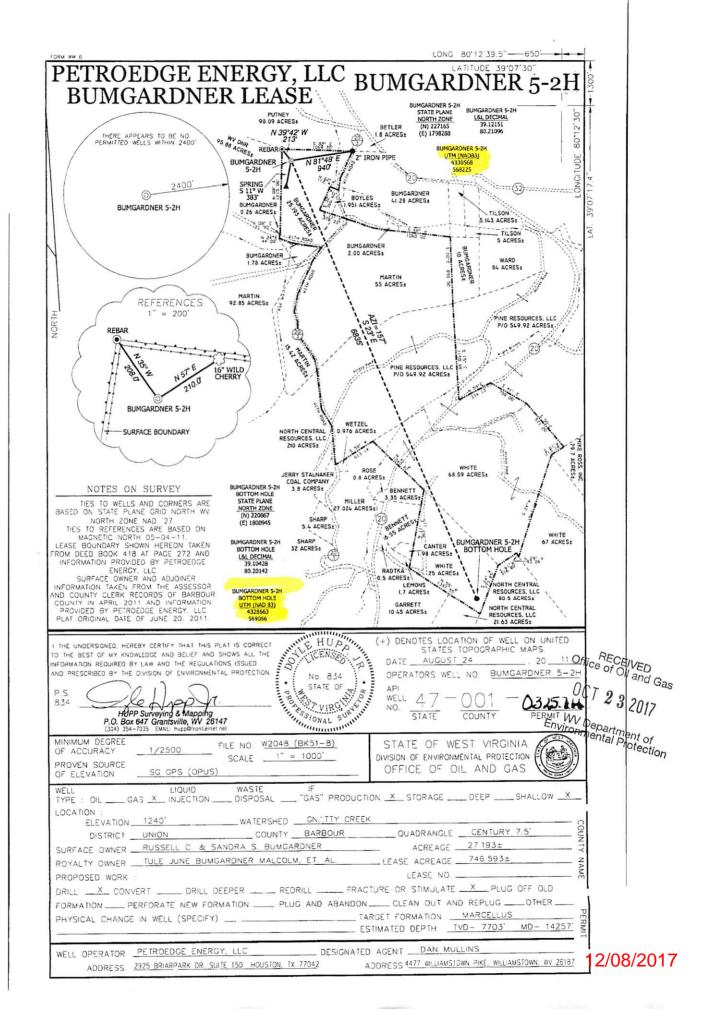


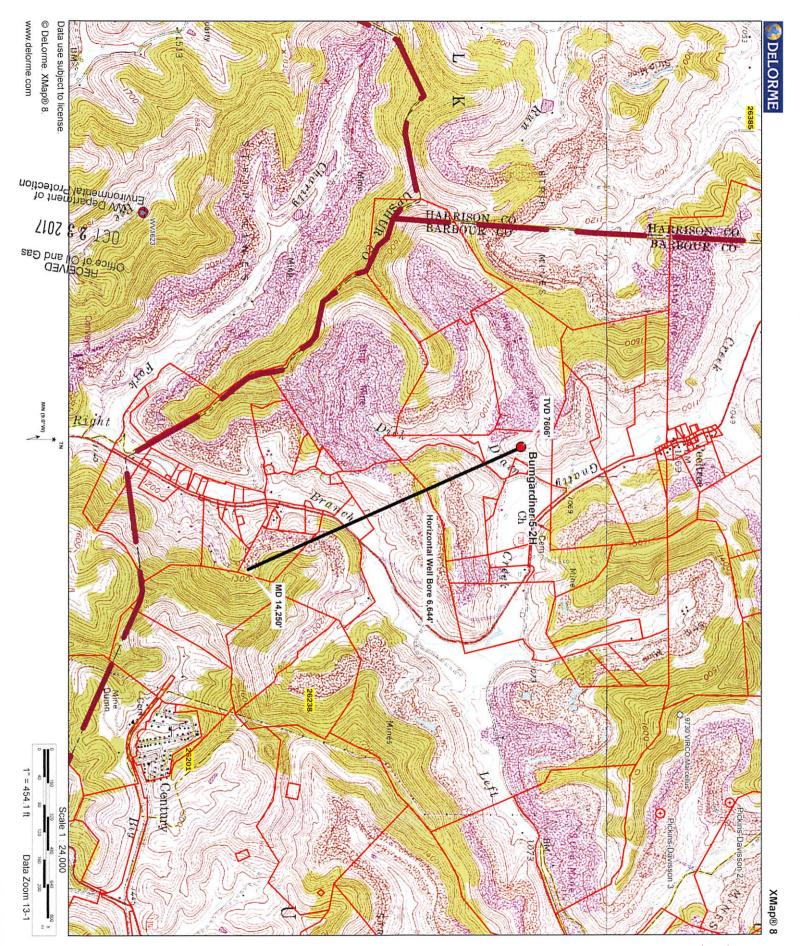


12/08/2017











## West Virginia Department of Environmental Protection Office of Oil and Gas

### WELL LOCATION FORM: GPS

API: 47-001-03257 WELL NO.: 5-2H				
FARM NAME: Bumgardner, Russell C. & Sandra S.				
RESPONSIBLE PARTY NAME: Alliance Petroleum Corporation				
COUNTY: Barbour DISTRICT: Union				
QUADRANGLE: Century 7.5				
SURFACE OWNER: Bumgardner, Russell C. & Sandra S.				
ROYALTY OWNER:				
UTM GPS NORTHING: 4330349.603 4330568 N 9 NM  UTM GPS EASTING: 568209.747 GPS ELEVATION: 1240'				
The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:  1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude:  1. height above mean sea level (MSL) – meters.  2. Accuracy to Datum – 3.05 meters  3. Data Collection Method:  Survey grade GPS: Post Processed Differential				
Real-Time Differential				
Mapping Grade GPS X: Post Processed Differential  Real-Time Differential X				
4. Letter size copy of the topography map showing the well location.  I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.  Signature  We Production  Title  Date				