

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

June 03, 2013

WELL WORK PERMIT

Vertical Well

This permit, API Well Number: 47-2105763, issued to HORIZON ENERGY CORPORATION, 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.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days 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.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-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) 926-0499 ext. 1654.

Operator's Well No: STEELE NO. 3

Farm Name: RADABAUGH, SHARON E., ET A

API Well Number: 47-2105763 Permit Type: Vertical Well

Date Issued: 06/03/2013

Office of Oil and Gas WV Dept. of Environmental 20 403 on

WW - 2B (Rev. 8/10)

Depths Set

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS WELL WORK PERMIT APPLICATION

1) Well Operator	VALUE OF THE OWNER.						CILMER	0.3	365
2) Operator's Well Number: STEELE NO. 3 3) Elevation: 1055' 4) Well Type: (a) Oil or Gasxx	1) Well Operat	tor HORI	ZON ENE	RGY CORPORATIO	ON 30				
(b) If Gas: Production XX / Underground Storage	2) Operator's \	Well Num	ber: STI	EELE NO. 3					- Quadrangle
Deep/ Shallow _xx	4) Well Type: ((a) Oil	or G	as XX					
Proposed Target Formation(s): BIG INJUN, 5TH	(b) If Gas:	Produ	uction <u>xx</u> / Ur	nderground S	torage_		_	
3) Proposed Total Depth: 3200 Feet 300' 7) Approximate fresh water strata depths: 310' 300' 3) Approximate salt water depths: 310' 4) Approximate coal seam depths: 310' 4) Approximate void depths, (coal, Karst, other): NONE 4) Approximate void depths, (coal, Karst, other): NONE 4) Does land contain coal seams tributary to active mine? NO 4) Describe proposed well work in detail DRILL & STIMULATE NEW WELL 4) DRILL & STIMULATE NEW WELL 4) DRILL & STIMULATE NEW WELL 5) CASING AND TUBING PROGRAM TYPE SPECIFICATIONS FOOTAGE INTERVALS CEMENT Conductor 13 3/8 LS 36# 20' NO Fresh Water 7 NS 17.5# 800' 800' TO SURFACE Coal Intermediate Production 4 1/2 ERW 10.5# 3075' 80 SKS			Dee	p/	Shallow XX				
10) Approximate void depths,(coal, Karst, other):	6) Proposed T 7) Approximate	otal Depth e fresh wa	n: <u>3200</u> ater strat	Feet a depths:3	Formation at	Propos	ed Tota	al Depth: _5	TH SAND
10) Approximate void depths,(coal, Karst, other):	9) Approximate	e coal sea	ım depth	s:310'					
11) Does land contain coal seams tributary to active mine?									
2) Describe proposed well work in detail DRILL & STIMULATE NEW WELL 3) CASING AND TUBING PROGRAM TYPE SPECIFICATIONS FOOTAGE INTERVALS CEMENT Size Grade Weight per ft For Drilling Left in Well Fill -up (Cu. Ft.) Conductor 13 3/8 LS 36# 20' N0 Fresh Water 7 NS 17.5# 800' 800' TO SURFACE Coal									
CASING AND TUBING PROGRAM TYPE SPECIFICATIONS FOOTAGE INTERVALS CEMENT	1) Does land	contain c	oal seam	ns tributary to ac	tive mine?	NO			-
CASING AND TUBING PROGRAM TYPE SPECIFICATIONS FOOTAGE INTERVALS CEMENT	12) Describe p	roposed v	well work	in detail					
TYPE SPECIFICATIONS FOOTAGE INTERVALS CEMENT Size Grade Weight per ft For Drilling Left in Well Fill -up (Cu. Ft.) Conductor 13 3/8 LS 36# 20' NO Fresh Water 7 NS 17.5# 800' 800' TO SURFACE Coal Intermediate Intermediate 3075' 80 SKS	DRILL	& STIMU	LATE NEW	V WELL					
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Fresh Water 7 NS 17.5# 800' 800' TO SURFACE Coal Intermediate Production 4 1/2 ERW 10.5# 3075' 80 SKS Tubing		Size	Grade	Weight per ft	For Drilling	Left in	<u> Well</u>	Fill -up (Cu.	<u>. Ft.)</u>
Coal	Conductor	13 3/8	LS	36#	20'	NO			
Coal Intermediate Production 4 1/2 ERW 10.5# 3075' 80 SKS Tubing	Fresh Water	7	NS	17.5#	800'	800	٥,	TO SURFA	CE
Production 4 1/2 ERW 10.5# 3075' 80 SKS Tubing	Coal							a south	.012
Tubing 10.5# 3075 80 SKS	Intermediate								
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	Liners						,	nece	aved
	S	izes			$\sim 1 \mathrm{M}$	1	213	MAY 1	2010

WW-2	2A
(Rev.	6-07)

1). Date:			
2.) Operator's Well	Number	STEELE	NO. 3
	State	County	Permit
3.) API Well No.:	47-	021	

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Ow	mer(s) to be served:	5) (a) Coal Operator
(a) Name	SHARON RADABAUGH	A Name
Address	P.O. BOX 143	Address
	SAND FORK, WV 26430	
(b) Name	JEFFERY STEELE	A (b) Coal Owner(s) with Declaration
Address	1779 SLIDING RUN ROAD	Name
	BURNSVILLE, WV 26335	Address
(c) Name	PATRICIA LOWTHER	Name
Address	28 SUN VALLEY LANE	Address
	GLENVILLE, WV 26351	
6) Inspector	JOE MCCOURT	(c) Coal Lessee with Declaration
Address	P.O. BOX 2657	Name
	BUCKHANNON, WV 26201	Address
Telephone	(304) 380-2467	
		AMED ABOVE TAKE NOTICE THAT:
Included is th	ne lease or leases or other continuir	ng contract or contracts by which I hold the right to extract oil and gas
OR		
		22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)
		6 of the West Virginia Code I have served copies of this notice and
		ments pages 1 through on the above named parties by:
	Personal Service (Affidavit att	
-	XX Certified Mail (Postmarked po	
I have re-	Publication (Notice of Publica	nd 35 CSR 4, and I agree to the terms and conditions of any permit
issued under this		nd 35 CSR 4, and 1 agree to the terms and conditions of any permit
		rsonally examined and am familiar with the information submitted on
		based on my inquiry of those individuals immediately responsible for
obtaining the infor	rmation, I believe that the information	on is true, accurate and complete.
I am awa	re that there are significant penaltic	es for submitting false information, including the possibility of fine and
imprisonment.		\wedge
OFI	Well Operator	
STATEO	F WEST VIRGINIA By:	ROBERT R. JONES II
NOT MONA	TARY PUBLIC Its: Address	PRESIDENT
730 CO	LLINS RUN ROAD	_ P.O. BOX 111
GLEN'	ville, WV 26351 on expires May 31, 2020 Telephone	SAND FORK, WV 26430
and the standard and the	THE PROPERTY OF THE PARTY OF TH	(304) 462-5758 of Mau , 2013
Subscribed and st	worn before me this 7+1 day	
Mound	" P Beamer	Notary PubliceCe Ved
My Commission E		2020
Oil and Gas Privacy N	otice	

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 Office as Wy Dept. of Environmental Protection 06/07/2013

	Operator's	Well	Number	STEELE	NO.
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INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6, Section 8(d) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that —

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
J.M. GARRETT	U.S.E.C.	1/8	232/395
U.S.E.C.	CONTINENTAL PETROLEUM	1/8	394/487
CONTINENTAL PETROLEUM	AAA ENERGY	1/8	420/545
AAA ENERGY	CONTINENTAL PETROLEUM	1/8	384/374
CONTINENTAL PETROLEUM	HORIZON ENERGY	1/8	DRILLING AGREEMT NOT RECORDED

Acknowledgement of Possible Permitting/Approval In Addition to the Office of Oil and Gas

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator:	HORIZON ENERGY CORPORATION	
By:	ROBERT R. JONES II MAY 1 2 2012	
Its:	PRESIDENT	

Office of Oil and Gas
WV Dept. of Environmental Protection
06/07/2013



AGREEMENT

Continental Petroleum, LLC hereby authorizes and assigns drilling and operating rights to Horizon Energy Corporation to enter upon the Steele 72 acres lease located in Glenville District, Gilmer County, West Virginia and drill the following wells:

Steele No. 1

Steele No. 2

Steele No. 3

This agreement will terminate with the exploration date of the state drilling permits acquired in 2013.

CONTINENTAL PETROLEUM, LLC

Robert R. Jones

ITS: Member-Manager

Office of Oil and Gas WV Dept. of Environmental Protection

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Well No.	STEELE	NO.	3	
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West Virginia Department of Environmental Protection Office of Oil and Gas

NOTICE TO SURFACE OWNERS

The well operator named below is preparing to file for a permit from the state to drill a new well. Before a well work permit can be filed with the Chief of the Office of Oil and Gas, the well operator is required to have given notice of the right to request water well or spring analytical testing. This notice shall be given to the owners or occupants of land which have a water well or spring being utilized for human consumption, domestic animals, or other general use and which is located within 1000 feet of the proposed well site.

With this form, the operator is giving you notice of your right to request analytical testing. The operator is required to sample and analyze the water wells or springs of all owners or occupants who request it. Therefore, if you wish to have your water well or spring tested, contact the operator named below.

All sampling shall be completed prior to drilling. Within thirty (30) days of the receipt of such sample analyses the operator shall submit the results to the Chief of the Office of Oil and Gas and to the owners or occupants who may have requested them.

If no water well or spring is located within 1000 feet, the Chief may require the operator to sample and analyze water from a water well or spring within 2000 feet of the proposed well site.

Be advised, you have the right to sample and analyze any water supply at your own expense.

The laboratory used by the operator to analyze the samples will be approved by the Chief. The operator named below has decided to use the following laboratory to analyze the water samples:

xx Contractor Name		STURM ENIVRONMENTAL	
Well operator's pri	vate laboratory		
Well Operator	HORIZON ENERGY	CORPORATION	
Address	P.O. BOX 111		
	SAND FORK, WV	26430	
Telephone	304-462-5758		

FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underling which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site please indicate such.

THERE ARE NO WATER WELLS WITHIN 1000' OF THE PROPOSED WELL LOCATION MAY 1 3 2013

	Page		of	
API Number 47	- 021	1.80		
Operator's Well	No. Ste	ele	No	3

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

	At corb.	OP Code3069	949
Watershed Sliding Rur	Qua	adrangle <u>Gilmer 7.5'</u>	
Elevation1055'	County Gilmer	District Glen	ville
Description of anticipated Pit Waste:	Water Encountered Dur	ring Drilling	
Do you anticipate using more than 5,	000 bbls of water to complete the	proposed well work? Yes	No X
Will a synthetic liner be used in the p	oit? Yes	hat mil.?_4 20 mil.	
Proposed Disposal Method For Treat			
X_ Land Appl			1
	API Number	er	
	isposal (Supply form WW-9 for c		
Dalitha a madhana and atao a 100 and 1	mallo Air factories at the state	to Nim	
Drilling medium anticipated for this v	nthetic petroleum etc. N/A	tc. Alr	
Additives to be used? N/A			
Drill cuttings disposal method? Leav	e in pit, landfill, removed offsite,	etc. Leave in Pit	
-If left in pit and plan to solid	dify what medium will be used? (Cement, lime, sawdust N/A	
-Landfill or offsite name/per	mit number?		
on August 1, 2005, by the Office of C provisions of the permit are enforcea law or regulation can lead to enforcen	ble by law. Violations of any tennent action.	rm or condition of the general permed and am familiar with the info	nit and/or other applicab
application form and all attachment obtaining the information, I believe penalties for submitting false information. Company Official Signature	that the information is true, acciding the possibility of fi	urate, and complete. I am aware	mediately responsible fo
application form and all attachment obtaining the information, I believe penalties for submitting false information. Company Official Signature Company Official (Typed Name)	that the information is true, acciding the possibility of fi	urate, and complete. I am aware	mediately responsible fo
application form and all attachment obtaining the information, I believe penalties for submitting false informa- Company Official Signature Company Official (Typed Name) Company Official Title	that the information is true, acc that the information is true, acc tron, including the possibility of fine Robert R. Jones, II	urate, and complete. I am aware ine or imprisonment.	mediately responsible fo
application form and all attachment obtaining the information, I believe penalties for submitting false information. Company Official Signature Company Official (Typed Name) Company Official Title Subscribed and sworn before me this	that the information is true, acc that the information is true, acc tron, including the possibility of fine Robert R. Jones, II Designated Agent.	urate, and complete. I am aware ine or imprisonment.	Receive MAY 1 3 2013
application form and all attachment obtaining the information, I believe penalties for submitting false information. Company Official Signature Company Official (Typed Name) Company Official Title Subscribed and sworn before me this	that the information is true, acc the informat	nurate, and complete. I am aware ine or imprisonment. 20	MAY 1 3 2013 Office of Oil and Gas Dept of Facination
application form and all attachment obtaining the information, I believe benalties for submitting false information false fals	that the information is true, acc the informat	nurate, and complete. I am aware ine or imprisonment. 20	MAY 1 3 2013 Office of Oil and Gas OFFICIAL SEAL STATE OF WEST VIRGI NOTARY PUBLIC
application form and all attachment obtaining the information, I believe benalties for submitting false information of the company Official Signature Company Official (Typed Name) Company Official Title Subscribed and sworn before me this	that the information is true, acc the informat	nurate, and complete. I am aware ine or imprisonment. 20	MAY 1 3 2013 Office of Oil and Gast Open of Sauth Property of Sau

	LEGEND
Property Boundary	Diversion 222222222222222222222222222222222222
Road = = = = = = = = = = = = = = = = = = =	Spring -
Existing Fence — X — X — X —	Wet Spot
Planned Fence///	Drain Pipe with size in inches (1)
Stream	Waterway \longleftrightarrow
Open Ditch	Cross Drain
Rock 485482	Artificial Filter Strip XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
North N	Pit: cut walis
Buildings	Pir: compacted fill walls
Water weils	Area for Land Application of Pit Weste
Drill site	
The state of the s	
Proposed Revegetation Treatment: Acres Disturbed 1±	Prevegetation nH 5.5
Toposed Revegetation Treatment. Acres Distarced	11010g0tation p11
Lime 2 Tons/acre or to correct to pH	6.5
Fertilizer (10-20-20 or equivalent) 500 lbs/	acre (500 lbs minimum)
<u> </u>	
Mulch 2 Tons/a	cre
Seed	Mixtures
Area I	Агеа П
Seed Type lbs/acre "Wildelife Mix"	Seed Type lbs/acre
Various Clovers 30%	Same
White Millet 20%	•
Yellow Blossum 10% Birdsfoot Trefoil 10%	
Rye 15%	
Orchard Grass 15%	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;
Attach:	ination
Drawing(s) of road, location,pit and proposed area for land appl	ication.
Photocopied section of involved 7.5' topographic sheet.	
MMCC +	
Plan Approved by:	
Comments: Ed5 controls at all times a	nd before rig arrives.
	Received
Transta	MAY 1 3 2013
Title: LNSPECIO	Date: 5-8-13 MAY 1 3 2013
Field Reviewed? () Yes (\ \ •
Field Reviewed? () Yes () No Office of Oil and Gas

•	
Horizon Energy Corp.	Note: Topsoil to be stockpiled
Steele Lease 72 Ac. No. 3	for use later in reclaiming
Surface Owner: Sharon E. Radabaugh, et al	location site!
Her year of Miles	location site! (onstruction)
Joil ye ded to leave the leave of the leave	436
steele wo. 1: Erond	1 AMCCout N 11 5-8-13
Road Grades OF197 for 125' D-12% " 300' D+6% " 400'	X- Orain Fuery 70' " 125' W. J. Sec P. 40
	MAY 1 3 2013
	Office of Oil and Gas WV Dept. of Environmental Frotection
./ //	06/07/2013

06/07/2013

Horizon Energy Corp. Note: Topsoil to be stockpiled for use later in reclaiming Burke Lease 160.2 Ac. No. 6 Surface Owner: Linda Cott location site! McCourt 5-8-13 Existing Will Road and Cross Prains 7 600' 5000 u 400' 150 225 10 Stone 60' 300 / 250' 000 MAY 1 3 2013 Office of Oil and Pas MV Dept of Environme tection

wV. Seg

This will be attached to the permit and becomes a part of the permitted activity.

- 1. Percent (%) of slope and distance of the road must be shown on the plan on all sections of the road from the location to the county road with the county road designation shown as. E.g.
- 2. Temporary seeding and mulching will be applied to all slopes and cuts on road and location upon construction.
- 3. All trees 6" and above will be cut and stacked away from any fill before dirt work begins or as construction progresses.
- 4. Cut and windrow all brush, stumps, and tree tops below fill areas on road and location for sediment control.
- 5. Ditchlines or diversion ditches will be established where ever water is to be coming from the cut areas on road and location.
- 6. Culverts will be used upon construction to get rid of all ditchline water and any other running water coming into the roadway. (Spacing to be as per Sediment and Eroision Control Manuel). Headwalls will be established and maintained at the culvert entrance. Sediment control will be established at the outlets by using hay bales or brush or any other method approved by the Inspector.
- 7. Natural and/or man made filter strips will be maintained based on the distance and slope from construction to the stream as per Sediment and Erosion Control Manuel.
- 8. Upon Reclamation use cross ditches or water bars for road surface water control only (not for ditchline water). All outlets will have sediment control by using staked hay bales or brush. Spacing will be as follows based on the slope of the sections of road:

% of slope	Spacing Cross Ditches.	% of slope	Spacing Broad Based Dips	
1 `	400 ft.	•	2	300 ft.
2	250 ft.		3	235 ft.
5	135 ft.		4	200 ft.
10	80 ft.		5	180 ft.
15	60 ft.		6	165 ft.
20	45 ft.		7	155 ft.
			8	150 ft.
			9	145 ft.
			10	140 ft

- 9. The minimum amount of materials to be used for reclamation will be as shown on the plan. The Ph of the soil is to be determined prior to construction and shown on the plan.
- 10 A liner will be used for the Pit.

MAY 1 3 2013

Office of Oll and Gas
WV Dept. of Environmental Protection



