

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

November 19, 2014

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-1502462, issued to MURVIN & MEIER OIL CO., 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

James Martin

Chief

Operator's Well No: ELK RIVER 63

Farm Name: PYXIS RESOURCES COMPANY

API Well Number: 47-1502462

Permit Type: Plugging Date Issued: 11/19/2014

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</u> 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.

304+520+U+DE

NW-4B Rev. 2/01

1) Date	10	- 1 .	2014
2)Operal		63	
3) API W	all No.	17-15	2467

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

5) Location: Elevation 1502'	Watershed Lick Run		
District Henry	County Clay Quadrangle Summersville		
Murvin &			
	7)Designated Agent P Nathan Bowles Jr Address P.O.Box 1386		
Olney ILL 62450			
a) Oil and Gas Inspector to be notified	9) Plugging Contractor		
- Miller of the wilder of the second of the company of the first of the contract of the contra	Name Duckworth Well Service		
Address PPO.Box1386	Address P.O.Box 6871		
Charleston WV.	Charleston WV,		
Cement 1002' - 902' Cement 100' - Surface			
Gel between all plugs.			
Pull all free pipe			
Erect nomunet with API numbers			
Notification must be given to the district work can commence.	pil and gas inapactor 24 hours before permitted		
Work order approved by inspector	Date 11 8 dd		

Office of Oil and Gas Office of Oil and Gas Profeedion 11/21/2014

State of West Virginia DEPARTMENT OF ENERGY Division of Oil and Gas

Well Operator's Report of Well Work

Farm name: PYXIS RESOURCES COMPANY Operator Well No.: ELK RIVER 63

LOCATION: Elevation: 1502.00 Quadrangle: BUCKHANNON

District: HENRY County: CLAY
Latitude: 14810 Feet South of 38 Deg. 27Min. 30 Sec.
Longitude 10290 Feet West of 80 Deg. 55 Min. 0 Sec.

Company: MURVIN OIL CORP. P. O. BOX 297 Casing Used in Left Cement OLNEY, IL 62450-0000 Fill Up Drilling Tubing in Well|Cu. Ft. Agent: P. NATHAN BOWLES, JR. Size Inspector: HOMER DOUGHERTY 8 5/8 952 Permit Issued: 04/05/89 952 312.7 Well work Commenced: 8-19-89 Well work Completed: 4-22-50 Verbal Plugging 4 4 2310 2310 153.4 Permission granted on: Rotary X Cable
Total Depth (feet) 7398
Fresh water depths (ft) 60#, 400 Salt water depths (ft) 1202, 1715 Is coal being mined in area (Y/N)? N Coal Depths (ft): See Well Log DIVISION OF DILEGAS DEPARTMENT OF ENERGY

OPEN FLOW DATA

Producing formation Indias: Initial open flow sho	Pay zone depth (ft)	2248 to 50' C
Final open flow Time of open flow be	MCF/d Final open flow tween initial and final tests	Bb1/d
Static rock Pressure	psig (surface pressure) after	Hours
Second producing formatio Gas: Initial open flow sho	n Blue Monday Pay zone depth (ft)	2030 to 20 4
Final open flow 169 Time of open flow be	MCF/d Oil: Initial open flow MCF/d Final open flow tween initial and final tests	Bb1/d Bb1/d
Static rock Pressure 525	psig (surface pressure) after 48	Hours
Commingled		Hours C

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

For: MURVIN OIL CORP.

Gand Date: October 2, 1989

Vice-President

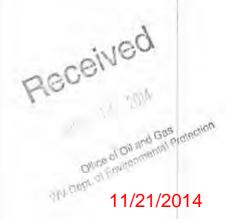
Received all a House who we

100 PSORE C 11/21/2014 8-29-89: Perforated Injun 2248' to 2250' with three holes using hollow steel carrier.

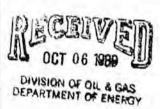
9-19-89: Acidized Injun perforations with 1000 gals. 15% HCL.
Perforated Blue Monday 2030' to 2036' (6holes) and 2040'
to 2045' (5 holes) using strip shot. Foam fractured Blue
Monday with 500 gals. 15% HC., 235 bbls. fluid, 45000 lbs.
20/40 sand, and 420 MSCF N₂.

WELL LOG:

WELL LOUI			
FORMATION	TOP	BOTTOM	
Sandy Shale	0	55	
Shale	55	75	CATE INTEREST
Sand	75	119 100 100	TA GIN
Sandy Shale	119	170	0 6 1989
_ Coal	170	171 OCT	06 1989
Sandy Shale	171	205 DIVISION	N OF OIL & GAS
Coal	205	206- DEPARTA	N OF CILL & GAS
Sandy Shale	206	310	
Coal	310	311 —	
Shale	311	347	
Coal	347	348	
Shale	348	415	
Sandy Shale	415	430	
Sand	430	440	
Shaly Sand	440	450	
Shale	450	527	
Coal	527	528-	
Sandy Shale	528	555	
Shale	555	632	
Sand	632	638	
Shale	638	665	
Coal	665	666	
Sand	666	714	
Coal	714	715	
Sand	715	802	
Coal	802	803	
Sand	803	845	



FORMATION	TOP	BOTTOM
Coal	845	846
Shale	846	960
Sandy Shale	960	1000
Shale	1000	1010
Sand	1010	1040
Shale	1040	1184
Salt Sand	1184	1348
Shale	1348	1369
Salt Sand	1369	1433
Slate & Shells	1433	1497
Rosedale S.S.	1497	1599
Slate & Shells	1599	1664
Rosedale S.S.	1664	1795
Shale	1795	1856
Maxon	1856	1934
Shale	1934	1966
Lime	1966	2017
Blue Monday	2017	2052
Pencil Cave	2052	2082
Big Lime	2082	2238
Injun	2238	2298
Shale	2298	2398





FROM : DUCKWORTH WELL SERVICE

PHONE NO. : 384 343 7142 Oct. 22 2814 11:838M P3

WW-4A Bordsed 8-87 10 - 1 - 14 1) Opterant Well Number 2462 E AFT Wall Man 67 . Department of invidential projection office of oil and gas notice of application to plus and standor a will 4) Surface Owner(a) to be entred: 5) (a) Coal Operator (s) Name Hartwood Fores - Lines 999 Peachtree St. Wood Committee Did (9) Name -Alanta GA, 30309 Name AAAyees Alldrens Name Address (a) Mana Address (a) Casi League with Deplementer C Ingrester P.O. Boy 821 Mamo Address TO THE PERSONS NAMED ABOVE ITS MAY S NOW THE TABLE OF THE PERSON AND THE PERSONS ASSESSED. gs. to Fing and Absorber a Mall on Parts WW-LB, which acts out the parties montree in the work and describes the De planguage with orders and super's singly december the well beginned as Form 1991-4 Wall Operation Br. T131 Chosinsten W-2392 Telephone hed and swam to the me this

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Office of Oil and Gas
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For delivery inf		our website at	www.usps.co	m ₀
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NOV 3014

Office of Oil and Gas

Office of Oil and Gas

NOV 0411/21/2014

FROM : DUCKLIGHTH WELL SERVICE

Oct. 22 2014 11:049M P4

Per Sion

AF Meser 47. 15 - 2462 Operati Well No. 53

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION CAPACE OF OR, AND GAS

CONSTRUCTION AND REGLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM.

OBTURNAL PERMIT FOR GIL AND GAS MY WASTE DISCHARGE Murvin Oil Co. Summersville Quadranet Lick Run Weigneight. Henry Clay Courty_ 15021 Blavarion Description of grainipated Fit Wester Will a specially liver be used in the pit? Proposed Disposed Method For Treated Ft Western Underground lajuriton (UIC Persit Namb Return (or API Northe Of the Disposed (Supply form WW-5 for Signal Domine) Other (Begins Proposed Work For Whish Pa & id Be Unit Bunksing. Delilina Plustos Vodene. Oher (Explore I contrib that I conformed and surve to the series and conditions of the CARCELAL WATER POLICITION PREMIT issued on August 1, 2005, by the Office of Did and Gas of the West Virginia Diggs meant of Environmental Protection. I undermosed that the provisions of the permit are conformable by law. Virginian of the series or examined permit and/or scheme applicable into a requisition can be all to informed the law or requisition can be all to informed the law permit and to informed to the permit applicable to the permit of the permitted of the pe Chargesty Official Signment, L. P Nathan Bowles JR Company Official (Typed Name) Agent Company Official Tide____ 20 14 23 wit 1 2 6620 Pictory Pablic 2018 My openission explra Seal



OFFICIAL SEAL
MOTARY PUBLIC
STATE OF WEST VERSMIA
SHERRY GIL BERT
ST. GREENERSER ST.
ST. ALEANN, WV. 22177
OF COMMISSION SPORES Ley 21, 2018

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Office of Oil and Gas

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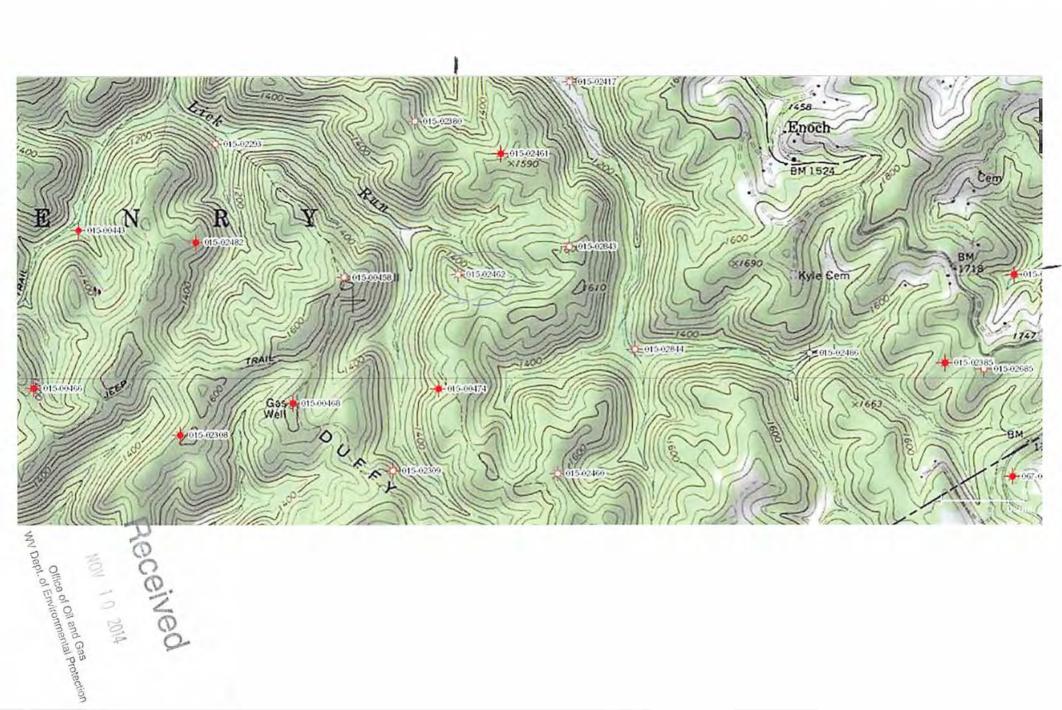
Field Reviewed?

Operator's 1	Well No	6	3	
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Nerta N	Artificial Piles durin Tomas Pro- Per compensed for mante Acta for Land Application of Paris
Proposed Revegenment Treatment: Acres Disturbed 1 Lines 3 Tors/sers or to correct to pill	Provegatation pH
Fertilizer (10-20-20 or equivalent) 502 (bara Marko) 2 Tous'est	are (500 lbs minimum)
Seed	Mirrare
Seed Type Durane Contractors Mik	Seed Type Iba/acre
Attach: Drawing(s) of road, location, pit said proposed was for land applic Photocopied section of involved 7.5' topographic sheer	
Plan Approved by:	
	1

LEGENG

Off 11/21/2014





West Virginia Department of Environmental Protection Office of Oil and Gas WELL LOCATION FORM: GPS

API: 47-15-2462	WELL NO.: 63
FARM NAME: Elk Coal & Lumber	
RESPONSIBLE PARTY NAME: P Natha	n Bowles Jr.
COUNTY:D	ISTRICT: Henry
QUADRANGLE: Summersville	
SURFACE OWNER: Elk River Coal	7 Lumber Co.
ROYALTYOWNER: Elk Coal 7 Lumber	er Co.
UTM GPS NORTHING: 4252173	
UTM GPS EASTING: 504167	GPS ELEVATION: 1502'
The Responsible Party named above has chosen to spreparing a new well location plat for a plugging perabove well. The Office of Oil and Gas will not accept the following requirements: 1. Datum: NAD 1983, Zone: 17 North, Conheight above mean sea level (MSL) — med 2. Accuracy to Datum — 3.05 meters 3. Data Collection Method: Survey grade GPS: Post Processed Different control of the contro	mmit or assigned API number on the pt GPS coordinates that do not meet ordinate Units: meters, Altitude: eters.
Real-Time Differentia Mapping Grade GPS: Post Processed Differentia	
Real Time Differen	
4. Letter size copy of the topography ma I the undersigned, hereby certify this data is correct belief and shows all the information required by law prescribed by the Office of Oil and Gas. Signature To	p showing the well location. to the best of my knowledge and wand the regulations issued and

