

#### west virginia department of environmental protection

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

Tuesday, September 13, 2016 WELL WORK PERMIT Vertical / Plugging - 2

EXCO RESOURCES (PA), LLC 260 EXECUTIVE DRIVE

CRANBERRY TOWNSHIP, PA 16066

Re:

Permit approval for 2 47-035-00644-00-00

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: 2 Farm Name: SUCK, E. F.

U.S. WELL NUMBER: 47-035-00644-00-00

Vertical / Plugging - 2

Date Issued: 9/13/2016

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.
- 4. This well is under a consent order and must be plugged within two years of the date of issuance of this permit.

				72.00	064	4 1
1)Date				20_		
2) Operator	's					
Well No.	Siv	12				
3) API Well	No.	47-	035	-	00644	

05/14/2021

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

#### APPLICATION FOR A PERMIT TO PLUG AND ABANDON

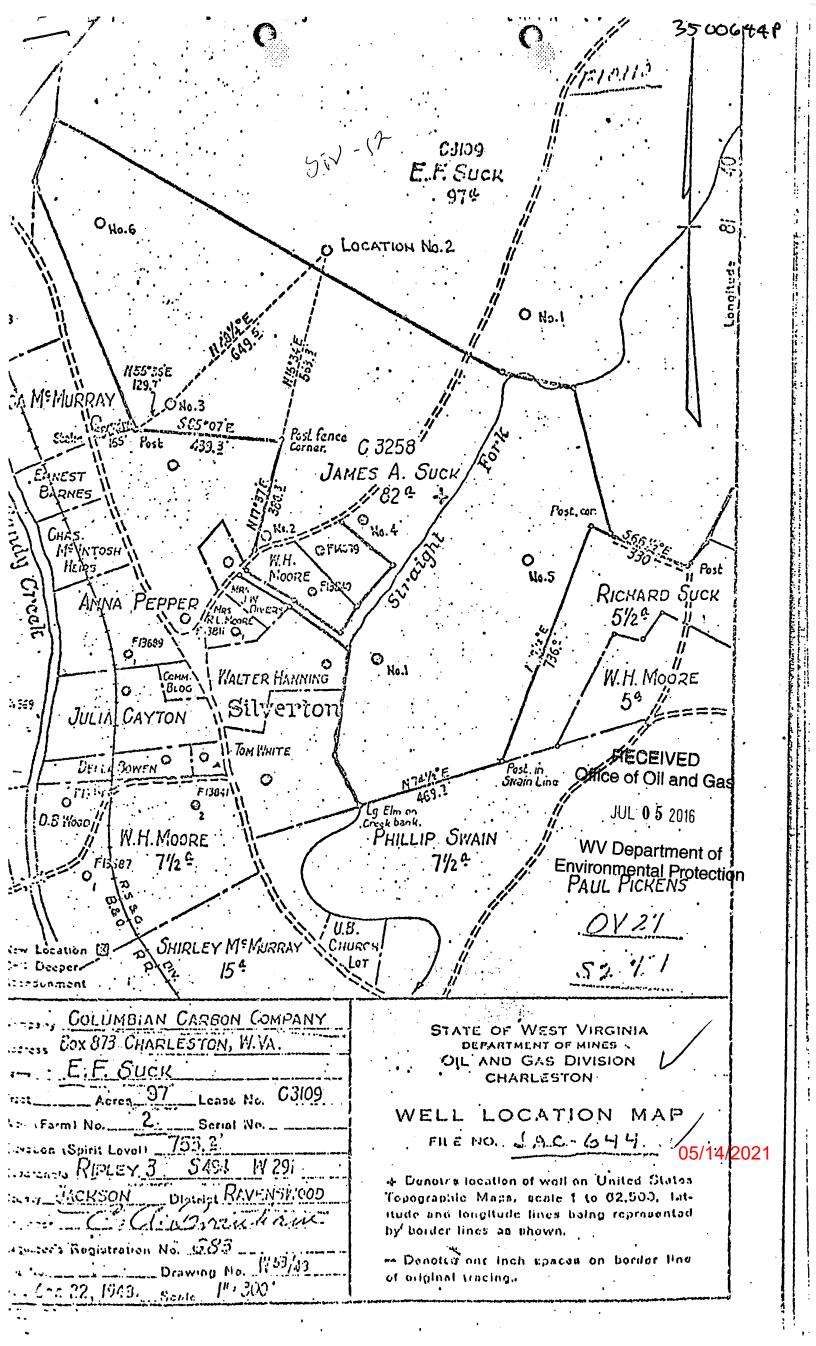
4)	Well Type: Oilx_/ Gas/	Liquid injection/ Waste disposal/
	(If "Gas, Production $\underline{x}$ o	r Underground storage) Deep/ Shallow_x
51	Location: Elevation 755	Watershed Straight Fork
5)	District Ravenswood	County Jackson / Quadrangle Ripley
	District Indventored	/
6)	Well Operator EXCO Resources (PA),L	LC 7)Designate Agent DianaStampler/C.T.Corp.
0 /	Address PO Box 8, Ravenswood	
	26164	Charleston, WV 25301
	Oil and Gas Inspector to bee notified:	9)Plugging Contractor
	Jamie Stevens	Name_R&R Well Service
8)	105 Kentuck Rd.	- Day Rexport
0 /	Kenna WV 25248	Address 42 Lynch Ridge, Walton WV
	Phone 304 290 7775	25286
	Á a	
	10) Work Order: The work order fo	Full all Pipe Assible  Plus Hole on Rep & Det
	manner of plugging this well is as follows:	Neck- Out fille
	Remove all Equipment used in product	cion and Net plus
	Pull 2322' of tubing set on midget part Run Tubing to TD = $/-2317$	acker * I be fulled
	Run Tubing to 1D =/-2317	a har cant of
	Cement with 100' 2317 to 2217	15 Camer C
	Gel 2217 to 2040	Full all Dipo Denello
	Cement 2040 to 1940 across seat 05/6 Gel 1940' to 1440''	1 and post of the
	Cement 1440'to1340 across 81/2 csg	flug fole of Rig 2 Dec 01
	Gel 1340'to 770	Dougs.
	Cement 770 to 540 over coal &101/2 csg	Pulpe
	Cement //0 to 540 over coal &101/2 csg	RECEIVED
	Gel to 540' to 270'	Office of Oil and Gas
		COT & PULL 678
	Set Monument with API	SET 100' PLUG ACROSS CUT. JUL 0 5 2016
	Set Wondinent with Al 1	WV Department of
		Environmental Protection
Nof	tification must be given to the distr	ict oil and gas inspector 24 hours before permitted
WO	rk can commence.	1.
	, , , , , , , , , , , , , , , , , , ,	dimile Sturies Date @/22/2016
Wo:	rk order approved by inspector	

```
Postalit Roy Jes 6-14
                                                                           OLL WOLL
 manual Quade
                                                                      CASING & TUBING
 Company
                              Columbian Carbon Company
                              Box 878, Charleston 23, W.Va.
                                                                          1319
 Addross
                                                                                Sumo
                                                                 1.6 65#
                                                                                  pld. Gove
                              B.F. Suck
                                         Acres 97
 Prerua
                                                                 10% 40% 72016
 Lecation
                              Strojgi.t. Fork.
                                                              8\ 24\ 1387
6 5\8 24\ 1990'4
                                                                                  199014
 Toll live
                              2 G.: 1.1.05
                                           Elev. 753.2 G.
                                              Jackson County 2 3/8
                                                                         232256
 District
                              Raverswood
                                                                                  233216
                              E.F. Suck, R.F.D. if2 , Millwood, W.Va. with 2" tubing
 Surface
 Minoral
                              Samo
                                                                        cano
 Commenced
                              11-19-40
                                                              f. Midgot B.H. Packer
                              1..7-29
 Dotolgmou
                                                                Sign 46 5/8
Sim 2 outh 1976 SIM
                                         Dopth 2274 SLM to 2284 SLM
 Dato shot
                              with 67% golatin
                                                                 Coal 588* 24"
 Oil
                              Approx. 26 bblcs daily
                              220: 2-13" blr. per hr.; 322: 23-13" blr.por hr.
 Fresh Water
                              670' H.F.; 1080' 2-10" blr. por hr. Salt Mator;
                              1275' 5-10" blr. por hr.; 1322' 8-10" blr. per hr.
 Salt Water
 Surfaco
                              0
                                         10
                                             Slato & Sholls
                                                                      2284
                                                                                 2317
 Sand
                              10
                                         39
                                             Total donth
                                                                                 2317
 Rod Rock
                              39
                                         80
 Slate
                              80
                                        116 Gas 2274 SLM show
 Red Rock
                              116
                                        180 (il pay 2274' SLM
 Slate
                              180
                                        195
 Rod Rock
                              195
                                        235/CEMENT RECORD:
 Slate
                              235
                                        254
                                            12-2-48 102" casing ran 11 sacks of
Red Rock
                              254
                                            aquagol. Circulation and roturns.
 Sand
                              265
                                        360
 Slato & Shells
                              360
                                        38$ 12-9-48 8 5/8" casing ran 16 sacks of
Red Rock
                              38.3
                                        400 aquagel. Circulation and returns.
                              400
                                        425
Slate & Shells
Red Rock
                              425
                                        445 12-23-48 6 5/8" casing ran 16 sacks
Slate & Shells
                              445
                                        477 of aquagel; Circulation and returns.
Red Rock
                              477
                                        500
Slate
                              500
                                        515 C.C.Co. Crow
Rod Rock
                              515
                                        550
Sand
                              550
                                        585
                                        588
Slato
                              585
Coal
                              588
                                        590
Slato
                              590
                                        664
Sand
                              664
                                        705
Slate
                              705
                                        725
Red Rock 708DLM-712 SLM
                              725
                                        756
                                                        41-035-00 644
W Aluggias
Slate
                              756
                                        785
Red Rock
                              785
                                        823
Slato
                              823
                                        1028
Sand
                             1028
                                        1115
Sluto
                             1115
                                        11.45
gand .
                             1145
                                        1163
Slato
                                        1240
                             1163
Sand
                             1240
                                        1283
Black Slato
                             1783
                                        1290
Slato & Shells
                             1290
                                        1308
Sand
                             1,308
                                        1340
Slato & Shells 1363 DLM#1374 SLM 1340 1445
Black Slato
                             1445
                                        1455
Slato & Shells
                             1455
Sand
                             1495
                                        1512
Shate
                             1513
                                        1554
Sand
                             1554
                                        1575
                                                                                 05/14/2021
Slato
                             1575
                                        1622
Sand
                             1633
                                        1.653
Pysicia
                             1653
                                        1,659
                                                                                RÉCEIVED
Bir Idno 😁
                             1659
                                                                           Office of Oil and Gas
                                        1805
Mit Injun Sand
                             1805
                                        1920
Glato & Shells 1965 DLM-1976 SLE 1920 3344
                                                                                 JUL 0 5 2016
                                                      Was
Brown Shalo
                             2344
                                        2260 DIM
                                       2274 SLH
Boron Sand
```

2:169 DIM

23741 8524 0264

WV Department of Environmental Protection



WW-4A Revised 6-07 1) Date: <u>6/20/16</u>
2) Operator's Well Number
Siv 12

3) API Well No.: 47 - 035 -00644

## STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF APPLICATION TO PLUG AND APARTMENT AND APPLICATION TO PLUG AND APPLICATION TO P

Di			ON TO PLUG AND APARICAL VIEW
4) Surface Own (a) Name Address	ner(s) to be served:  James Suck, Jr.  468 Wilding RD., Ra		5) (a) Coal Operator Name None
(b) Name Address			(b) Coal Owner(s) with Declaration Name Address
(c) Name Address	-		Address
			(c) Coal Lessee with Declaration Name Address ou should have received this Form and the following documents:
The reason However, y Take notic accompany Protection, the Applic	its and the plugging work plat (surveyor's map) show you received these documer you are not required to take an e that under Chapter 22-6 of ring documents for a permit the	torder; and wing the well location at sis that you have rig by action at all.  the West Virginia Cod oo plug and abandon a virginia described on mailed by registered	ights regarding the application which are summarized in the instructions on the reverses side.  In the undersigned well operator proposes to file or has filed this Notice and Application and a well with the Chief of the Office of Oil and Can, West Virginia Department of Environmental on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, do or certified mail or delivered by hand to the person(s) named above (or by publication in
		Well Operator By: Its: Address	EXCO Resources (PA): LLC  Randall Sheets Xandall D Slav  Supervisor  POBox 8, Ravenswood WV 26164
Subscribed and My Commission	sworn before me thin Expires		BT 1 AOK 101A

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 conficultion of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information 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.

JUL 0 5 2016

WV D0541442021f

Environmental Protection

WW-9
(5/13)

	Page of
API Number 47 - 03	- 00644
Operator's We	ll No. Siv - 12

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN	
Operator Name EXCO Resources (Pa), LLC OP Code 307860	
Watershed (HUC 10) Straight Fork Quadrangle Ripley	
Elevation 755 County Jackson District Ravenswood	
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No _x	
Will a pit be used for drill cuttings? Yes No _x	
If so, please describe anticipated pit waste;	
Will a synthetic liner be used in the pit? Yes No _x If so, what ml.?	
Proposed Disposal Method For Treated Pit Wastes:	
Land Application Underground Injection (UIC Permit Number) Reuse (at API Number) Off Site Disposal (Supply form WW-9 for disposal location) Other (Explain All waste will be capured and Disposed	TE
Will closed loop system be used?	9
Drilling medium anticipated for this well? Air, freshwater, oil based, etc. Salt Water	
-If oil based, what type? Synthetic, petroleum, etc	
Additives to be used in drilling medium? none	
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. properly Disposed	
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) no pit	
-Landfill or offsite name/permit number?	
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.  I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto 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. Law official Signature Official Sig	
Subscribed and sworn before me this 127h day of Sophi , 20 / Q RECEIVED  Notary Public Office of Oil and Go	SC
My commission expires 4/11/18  Notary Public Office of Oil and Go SEP 1 2 2016	

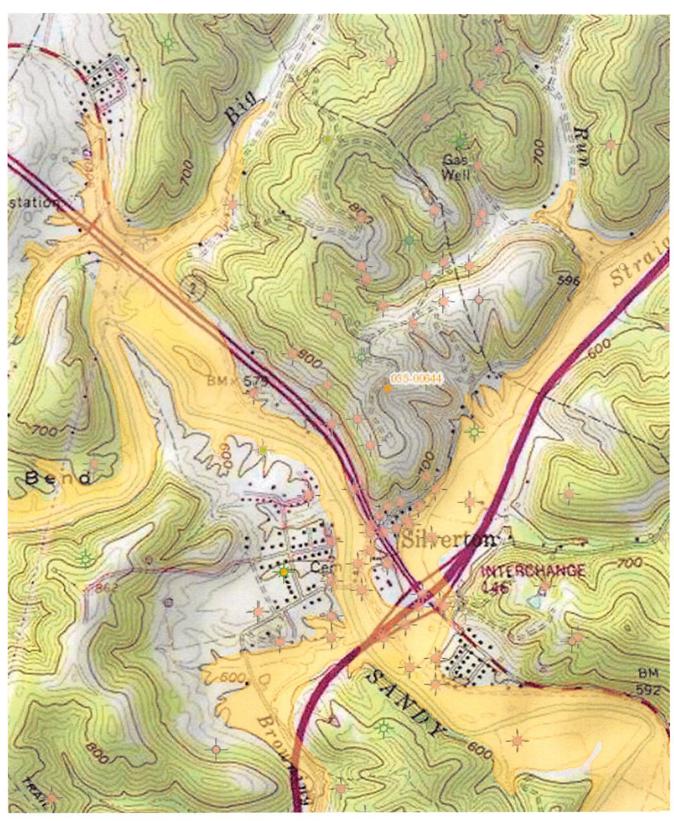
47-035-00644-7.

Operator's Well No.Siv 12 Jack 644\_\_\_\_\_

D	Treatment: Acres Disturbed		Prevegetation pl	160
1.0	reatment: Acres Disturbed		Frevegetation pr	
Lime	Tons/acre or to corre	ct to pH 6,5		
Fertilizer (10-2 500	0-20 or equivalent)	lbs/acre (500	0 lbs minimum)	
		_Tons/acre		
2.0		Seed Mixture	es	
	Area I			ea II
Seed Type	lbs/acre		Seed Type	lbs/acre
Sescue 40				
Alsike 5				
Annual Rye 16			Same	
Plan Approved by:  Comments:	7/		ivens, J.	
Title:	outer Yes	Date	e: 6/22/	/ 2016 RECEIVED Office of Oil and G

JUL 0 5 2016

WV Department of Environmental/Protection



WW-7 8-30-06



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

WELL LOCA	TION FORM: GPS	
<sub>API:</sub> 47 035 0644 🗠	WELL NO.: Siv	v 12
FARM NAME: Suck		
RESPONSIBLE PARTY NAME: EX	(CO Resources (P	A)LLC
county: Jackson	BISTRICT: Rave	enswood
QUADRANGLE: Ripley		
SURFACE OWNER: James Su	ck	
ROYALTY OWNER: James Su	ıck	
UTM GPS NORTHING: 4309475	4309319.6	
UTM GPS NORTHING: 430947550	437442 GPS ELEVATIO	<sub>ON:</sub> 742
height above mean sea level ( 2. Accuracy to Datum – 3.05 m 3. Data Collection Method: Survey grade GPS: Post Proces	olugging permit or assigned Alvill not accept GPS coordinates North, Coordinate Units: meta (MSL) – meters. eters	rest number on the that do not meet ers, Altitude:  RECEIVED Office of Oil and Gas  JUL 0 5 2016
Mapping Grade GPS X : Post Pro		WV Department of Environmental Protection
	me Differential	
4. Letter size copy of the topo I the undersigned, hereby certify this dat belief and shows all the information requirescribed by the Office of Oil and Gas.	uired by law and the regulation	nowledge and as issued and
Signature Signature	Title	6/22/16 Date