

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

www.dep.wv.gov

### WELL WORK PERMIT

Re: Permit approval for

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.

Chief

03/16/2018

Operator's Well Number: Farm Name: U.S. WELL NUMBER:

Date Issued:

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. 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.

Pe	orm WW-4 (B) ermit Copy ev 2/01)	OI W		December 1, 2017 8055 (Lucey 2H) 7 051 - 01477 /	7
	STATE OF W	EST VIRGI	NIA		CK ++
	DIVISION OF ENVIRO			l i	23321
	OFFICE OF C	DIL AND GA	AS		\$10000
	APPLICATION FOR A PERM	<b>IIT TO PLU</b>	G AND ABANI	NOC	
4)	Well Type: Oil GasX Liquid	d Injection	Waste	Disposa	
	If Gas, Production X Or Undergroun	d storage	Deep	Shallow	X
5)	Elevation: 1296 Watershed: Bu	urch Run			
	Location: Cameron County:	Marshall	Quadran	gle: Cameron	
6)	District:       EQT Production Company         Well Operator       120 Professional Place         Address:       Bridgeport, WV 26330	7) Desig Addre	ess: 120 Profe	Jason Ranson essional Place rt, WV 26330	
8)	Oil & Gas James Nicholson Name: PO Box 44 Address: Moundsville WV 26041	Name	ing Contractor: HydroCarbo HydroCarbo Buckhannon		

10) Work Order: The work order for the manner of plugging this well is as follows:

See Attachment for details and procedures.

RECEIVED Office of Oil and Gas

FEB 1 5 2018

WV Department of Environmental Protection

OFFICE USE ONLY	
Notification must be given to the district oil and gas inspector 24/hours be	fore permitted work can commence
Accused Mork order approved by inspector	Date <u>1/27/18</u>

Lucey 2H Marshall Co., WV HZ Marcellus well API # 47-051-01477 BY: DATE: 11/3/17

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#### CURRENT STATUS:

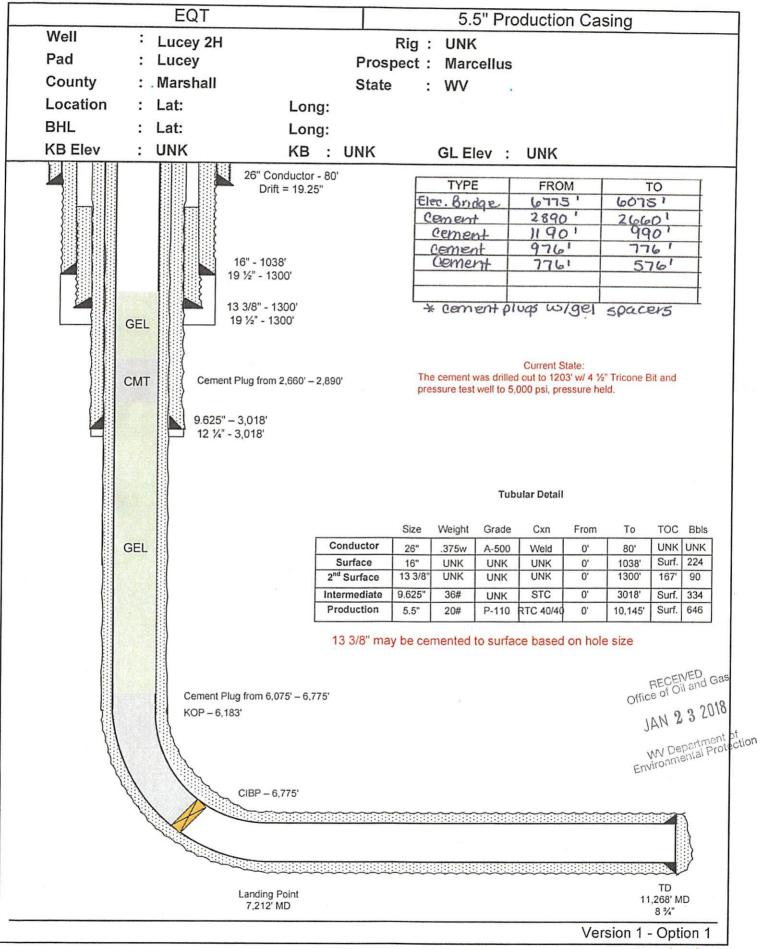
26" conductor @ 80' 16" casing @ 1038' Cemented to Surface 13 3/8" casing @ 1300' Est. TOC @ 167' if use 19 ½" hole size, TOC @ Surface if use 14 ¾" Hole size 9 5/8" casing @ 3018' Cemented to Surface 5 1/2" casing @ 10,145' Measured depth – Cemented to Surface CIBP @ 6,775' Cement Plug from 6775' to 6075' Gel from 6075' to 2890' Cement from 2890' to 2660' Gel from 2660' to 1190' Cement from 1190' to 576' – Drilled out with 4 ½" Bit to 1203'

Coal @ N/A Fresh Water @ N/A Salt Water @ N/A Gas Shows @ N/A

- 1. Notify Inspector 24 hrs prior to moving on well.
- 2. Check pressure on all casings.
- 3. Bleed off pressure to tank on 5 1/2" casing and 9 5/8" casing.
- 4. TIH with tubing to tag cement plug @ 2,660'.
- 5. Set 600' Cl. A cement plug from 2,660' to 2,060'.
- 6. TOOH with tubing, WOC to cure. Check cement top, if cement top is at planned depth proceed to next step. If cement top has fallen, reset cement plug to planned depth.
- TIH with tubing to 2,060', set 600' Cl. A cement plug from 2,060' 1,460', TOOH with tubing and let cement cure.
- 8. Check TD of cement top, if cement top is at planned depth proceed to next step. If cement top has fallen, reset cement plug to planned depth.
- 9. TIH with tubing to 1,460', set 600' Cl. A cement plug from 1,460' to 860'. TOOH with tubing and let cement cure.
- 10. Check TD of cement top, if cement top is at planned depth proceed to next step. If cement top has fallen, reset cement plug to planned depth.
- 11. TIH with tubing to 860', set 600' Cl. A cement plug from 860' to 260'. TOOH with tubing and let cement cure.
- 12. TIH with tubing to 260', set 260' Cl. A cement plug from 260' to Surface. TOOH with tubing and let cement cure.
- Erect monument per WV DEP Specifications with API#, date plugged, company name, and company 6-digit ID#.

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## 51-014778



03/16/2018

## Lucey 2H 51-01477P

Perforated Intervals, Fracturing or Stimula	them .		
	south:		
Stage 1) 10,088 to 9,921 88 holes			
Stage 2) 9,892 to 9,706 41 holes			· · · · · · · · · · · · · · · · · · ·
Stage 3) 9,656 to 9,406 41 holes			
Stage 4) 9,446 to 9,276 41 holes			
Stage 5) 9,211 to 9,046 41 holes			
Stage 6) 8,995 to 8,896 41 holes			
Stage 7) 8,771 to 8,611 41 holes		1	
Stage 8) 8,551 to 8,381 41 holes			
Stage 9) 8,311 to 8,121 41 holes			
Stage 10) 8,161 to 7,872 41 holas	•		
Stage 11) 7,818 to 7,572 41 holes	1		
Stege 12) 7,484 to 7,941 26 holes			
FORMATION	тор	BOTTOM	
FORMATION ENCOUNTERED	TOP DEPTH (FT.)	BOTTOM DEPTH (FT.)	NOTE
FORMATION ENCOUNTERED			NOTE 3,01
FORMATION ENCOUNTERED Surface Casing	DEPTH (FT.) Not logged.	DEPTH (FT.)	
FORMATION ENCOUNTERED Surface Casing Sordon	DEPTH (FT.)	DEPTH (FT.) 3,018	
FORMATION ENCOUNTERED Surface Casing 1 Sordon 1 Upper Devonian Shale	DEPTH (FT.) Not logged. Not logged. 6,532	DEPTH (FT.) B,018 Not logged.	
FORMATION ENCOUNTERED Surface Casing 1 Gordon 1 Upper Devonian Shale Middlesex Surfact Shale	DEPTH (FT.) Not logged. Not logged. 6,932 6,605	DEPTH (FT.) 8,018   Not logged. 6,542	
FORMATION ENCOUNTERED Surface Casing 1 Gordon 1 Upper Devonian Shale Middlesox Burket Shale Nully Limestone	DEPTH (FT.) Not logged. 6,532 6,605 6,552	DEPTH (FT.) 8,018   Not logged. 6,542   6,605	
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**Plugging Information:** 

Туре	From	То	Pipe Removed	Left
Bridge	6775'	6075'	0	80' of 26"
Cement	2890'	2660'	0	1038' of 16"
Cement	1190'	990'	0	1300' of 13 3/8"
Cement	976'	776'	0	3018' of 9 5/8"
Cement	776	576	0	10200' of 5 ½"

\*Gel spacers in between plugs.

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JAN 2 3 2018

WV Department of Environmental Protection

Drill Out Ops:

The cement was drilled out to 1203'. PSI tested casing to 5,000 psi and pressure held for 30 minutes. Shut down.

# - 5101477PP

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WR-85		•			· .			DATE 1	1/05/12		
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Distric	t: Cameron			County:	•		Marshall				
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Total Measured Dept		10,1									
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Vold(s) Encountered (	N/Y)7: N	Depth:						ļ			
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	SUPPLEMENTAL DATA
WELL NAME: LUCEY 2H	AP#: 47-051-01477
Were core samples taken? Yes No X	Were cuttings caught during drilling? Yes <u>X</u> No
Were logs recorded on this weil? Y/N N	Electrical Mechanical Geophysical
NOTE: IN THE AREA BELOW PUT THE FOLLOWING 1.) DETAILS OF PERFORATED INTERVALS, FRACTUR 2.) THE WELL LOG WHICH IS A SYSTEMATIC DETAIL INCLUDING COAL ENCOUNTERED BY THE WELLBOIL	UNG OR STIMULATING, PHYSICAL CHANGE, ETC. LED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF A
Perforated Intervals, Fracturing or Stimulating:	
Store 11 10 099 to 0 011 20 holes	

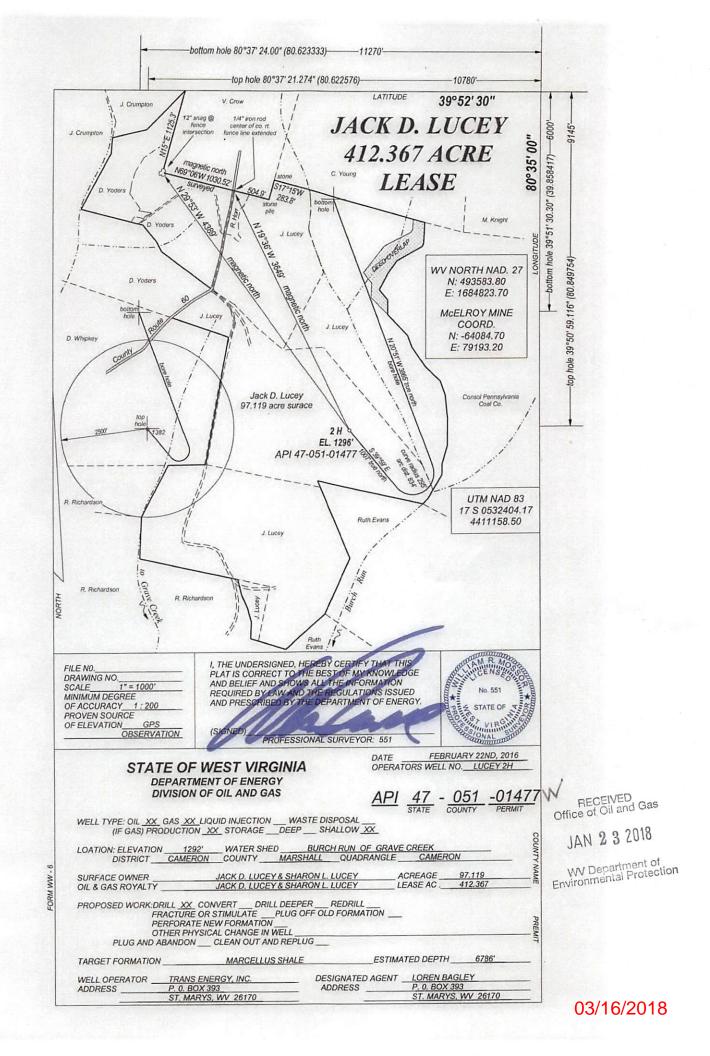
artific vi solodo to place op more?		•
Stage 2) 9,882 to 9,706 41 holes		
Stage 3) 9,656 to 9,406 41 holes		
Stage 4) 9,446 to 9,276 41 holes		
Stage 5) 9,211 to 9,046 41 holes	!	
Stage 5) 8,995 to 8,836 41 holes	!	
Stage 7) 8,771 to 8,611 41 holes		
Stage 8) 8,551 to 8,381 41 holes		
Stage 9) 8,311 to 8,121 41 holes		
Stage 10) 8,161 to 7,872 41 holes	1 •	
Stage 11) 7,818 to 7,572 41 holes		 
Stage 12) 7,484 to 7,941 26 holes		
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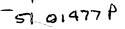
FORMATION	TOP	BOTTOM	
ENCOUNTERED	DEPTH (FT.)	DEPTH (FT.)	NOT
Surface Casing		3,018	3,01
Gordon	Not logged.	Not logged.	
Upper Devonian Shale	Not logged,	6,542	
Middlesex	6,532	6,605	
Burket Shale	6,605	6,652	
Tully Limestone	6,552	6,680	
Upper Hamilton Group -		6,779	
Marcellus Shale	6,779	6,830	
Onondaga Limestone	6,830		
		<u> </u>	HIGENED Gas
KOP 6,20	0'	i	High Oil and Ca
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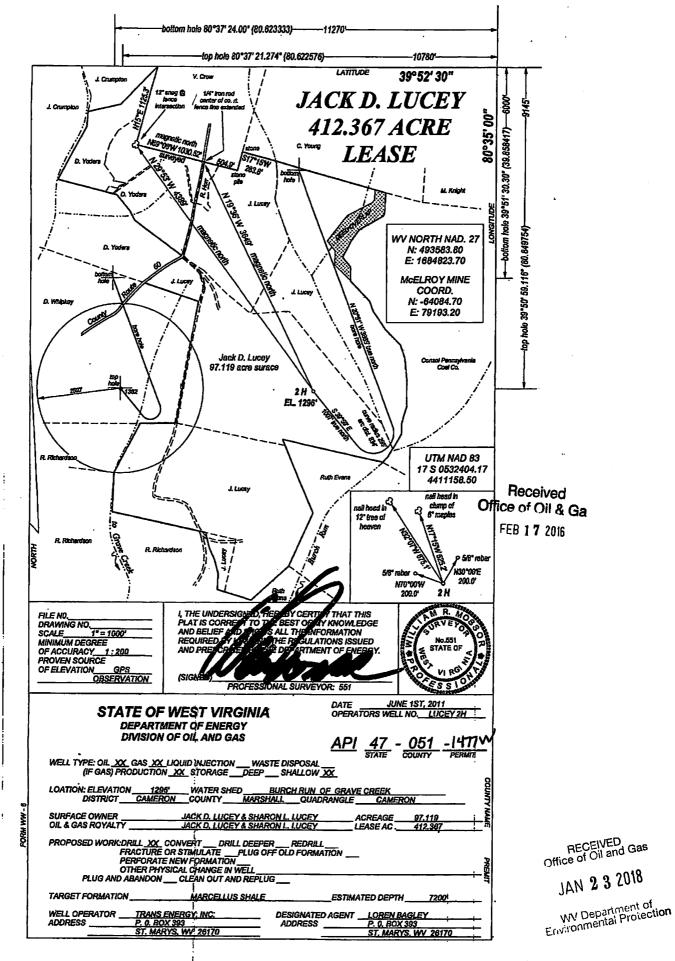
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-03/16/2018

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Rev (8-50)			_		est Virginia			Resubratita	cf 4/17/12 rep	ort.
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ate Well W	Vork Com	leted:	10/25/2011		ŀ		<u> </u>	<u>† </u> ∤	<b>†</b>	{
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#### SUPPLEMENTAL DATA

#### WELL NAME: LUCEY 2H

Were core samples taken? Yes No X

AP#: 47-051-01477

X Were cuttings caught during drilling? Yes X No

Were logs recorded on this well?

Electrical Mechanical Geophysical

#### NOTE: IN THE AREA BELOW PUT THE FOLLOWING:

1.) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2.) THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF A INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Y/N N

Perforated Intervals, Fracturing or Stimulating:

FORMATION	TOP DEPTH (FT.)	BOTTOM DEPTH (FT.)	NOT
Surface Casing		3,018	3,01
Gordon	Not logged.	Not logged.	
Upper Devonian Shale	Not logged,	6,542	
Middlesex	6,532	6,605	
Burket Shale	6,605	6,652	
Tully Limestone	6,552	6,680	
Upper Hamilton Group	5,680	6,779	
Marcellus Shale	6,779	6,830	
Onondaga Limestone	6,830		
KOP 6,2001		i	
			Rec
			RECEIVED Office of Oil and Oas
			JAN 232018
uns energy inc.			WV Department of Environmental FM

WW-4-A				
Revised 6/07		<ol> <li>Date:</li> <li>Operator's</li> <li>518055 (Lu</li> </ol>	December 1, 2017 Well Number ucey 2H)	
		3) API Well N	Io.: <u>47</u> 051 - 01477 State County Permit	
STATE OF	WEST VIRGINIA - BUR	REAU OF ENVIR	,	
DIVISION OF EN	VIRONMENTAL PROT	ECTION. OFFIC	E OF OIL & GAS	
	ND APPLICATION TO F			
4) Surface Owner(s) to be serve		5) (a) Coal		
(a) Name Jack and Sh		Name		
Address 838 Glen Ea	,	Address		
Glen Easton	WV 26039	_		
(b) Name Donald and	Mary Yoder	(b) Coal Ov	wner(s) with Declaration	
Address 309 Hoopin		- Name	Murray Energy Corp	
Glen Easton		-	46226 National Road W	
		Address	St. Clairsville OH 43950	
(c) Name		Name		i
Address	2	Address	55)	
		-		
6) Inspector James Nich	olson	(c) Coal Le	ssee with Declaration	
Address PO Box 44		Name		
Moundsville	WV 26041	Address		
Telephone 304-552-	3874	-		

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

(2) 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 Division 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.

Well Operator:	EQT Production Company	
By:	Todd Klaner	BECEIVED
Its:	Regional Land Manager	Office of Oil and Gas
Address:	24oo Ansys Drive	
	Canonsburg PA 15317	JAN 2 3 2018
Telephone:	724-746-9023	
Subscribed and sworn before me this 22	day of January 2018 Notary Public	WV Department of Environmental Protection
My Commission Expires: 4-7-20	120	

The Office of Oil & Gas processes your personal information, such as name, address and phone number, as 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 NOTARY PUBLIC NOT

WW-9		Page of	2	
Revised 5/16	2) Operator's Well Number		ell Number	
		518055 (Lucey	2H)	
		3) API Well No.:	47 051 - 01477	
	STATE OF WEST	VIRGINIA		
	DEPARTMENT OF ENVIRON			
	FLUIDS / CUTTINGS DISPOSAL			
Operator Name:	EQT PRODUCTION COMPANY	OP CODE:	306686	
Watershed (HUC 10):		Quadrangle:	Cameron	
Do you anticipate using more Will a pit be used? Yes_	than 5,000 bbls of water to complete t	he proposed well work?	Yes No <u>_X</u>	
If so, please describe anticipa		Formation Fluids		
Will a synthetic liner be used i	in the pit? Yes _ Nox_	ls so, what ml.?	2000 - 10 10	
Proposed Disposal Method fo		WILL USE TANK T	O CONTAIN WELL EFF	FLUENT,
	Land Application (if selected provide Underground Injection (UIC Permit		`	Jam
X	Reuse (at API Number Various	Number	)	
<u> </u>	Off Site Disposal Permit (Supply for	m WW-9 for disposal location See	attachment)	
	and the second sec			
· · · · · · · · · · · · · · · · · · ·				
Will closed loop system be us				
	or this well? (vertical and horizontal)? A			
	ype? Synthetic, petroleum, etc.			
Additives to be used in drilling		•		
Drill cuttings disposal method	? Leave in pit, landfill, remove offsite,	etc		
Landfill or offsite nam	to solidify what medium will be used? (cem ne/permit number?	ient, Lime, sawdus <u>t)</u>		
	otice to the Office of the Oil and Gas of any			
West Virginia solid waste facility.	The notice shall be provided within 24 hou	urs of rejection and the permittee shall a	lso disclose	
where it was properly disposed.			content to the second second	
	and agree to the terms and conditions o			
	Oil and Gas of the West Virginia Divisi			
	nforceable by law. Violations of any ter an lead to enforcement action.	rm or condition of the general permi	t and/or other	
	ments thereto and that, based on my i	inquiry of those individuals immedia	tely responsible for	
obtaining the information, I be	lieve that the information is true, accur	ate and complete. I am aware that		
penalties for submitting false i	information, including the possibility of	fine or imprisonment.		
Company Official Signat	ture <u>Alst</u>	5/-		
Company Official (Typed	d Name)	HN ZAVATCHAN		
Company Official Title	LANDINAN-PERMETE			
Subscribed and sworn before	ore me this 5th	day of March	, 2018	
My Contribution of the star		Motary Publi	c	
EOT PHODUCTION C	NGTREET		ATOD'S WELL NO .	
BRIDGEPORT, WY My commission explore A	28330 pril 07, 2020		03/16/	/2010

03/16/2018

# 51-01477P

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Property Boundary Road Planned Fence Listing Fence X X X Open Ditch North	Drain Pipe	GEND Diversion Spring → with size in inches - 12 - 12 - 12 	Wet Spot	<u>Lucey 2H)</u>
Road Planned Fence Planned Fence Existing Fence X X X X Open Ditch	Street Street	Spring O→→ with size in inches - 12	Wet Spot 	_/ /
Planned Fence	Street Street	with size in inches	-&- Water Way	
Planned Fence	Street Street	- 12	Water Way	
/ /	Street Street	- 12	-	
Existing Fence 	(` <b>\</b>	<b>U</b>	<b>€→                                    </b>	
<u>-x x x x x</u> Open Ditch ►►►►	(` <b>\</b>			
	Artificia		Cross Drain	<u> </u>
North		al Filter Strip	Rock	
NOTUT	Building	Water well	Drill site	
N		W	$\oplus$	
Pit with Cut Walls	Pit with Corr	npacted Walls Area of	Land Application of I	Pit Waste
Cump	- Lui			>
rtilizer (10-20-20) or equiva	Tons/acre or to correct to p alent Tons/acre or hydroseed.	pH <u>6.5</u> 1/3 ton	_ lbs/acre (500 lbs	minimum
	SEED MIXT	URES		
Area I			Area II	
Seed Type	lbs/acre	Seed Type		lbs/acre
d Fescue	40	Red Fescue		15
ike Clover nual Rye	<u>5</u> 15	Alsike Clover		5
TACH:				RECEIVED Office of Oil an
awing(s) of road, location, pit a ptocopies section of involved		ppication.		JAN 232
a annual and here			-	14111 Downandowa
n approved by:				WV Departme Environmental P

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# EQT Production Water plan Offsite disposals

#### Waste Management - Meadowfill Landfill

Rt. 2, Box 68 Dawson Drive Bridgeport, WV 26330 304-326-6027 Permit #SWF-1032-98 Approval #100785WV

#### **Waste Management - Northwestern Landfill**

.

512 E. Dry Road Parkersburg, WV 26104 304-428-0602 Permit #SWF-1025 WV-0109400 Approval #100833WV

> RECEIVED Office of Oil and Gas

JAN 2 3 2018

WV Department of Environmental Protection

03/16/2018



#### POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: <u>EQT PRODUCTION COMPANY</u> LEASE NAME AND WELL No. <u>Lucey #2H WV 518055 47-051-01477</u>

#### POTENTIAL SAMPLE LOCATIONS

Site: <u>1</u>	Spacing:	927	+/- Owne	er: Jack D. Lucey, et	ux.		
Address:	838 Glen	Easton Ro	ad, Glen Ea	ston, WV 26039	<u>.</u>	Phone No	
Comment	s:						

RECEIVED Office of Oil and Gas

JAN 2 3 2018

WV Department of Environmental Protection

03/16/2018

BIRCH RIVER OFFICE

237 Birch River Road Birch River, WV 26610 *phone:* 304-649-8606 *fax:* 304-649-8608 BRIDGEPORT OFFICE

172 Thompson Drive Bridgeport, WV 26330 *phone:* 304-848-5035 *fax:* 304-848-5037 ALUM CREEK OFFICE PO. Box 108 • 1413 Childress Rd Alum Creek, WV 25003 *phone:* 304-756-2949 *fax:* 304-756-2948 MARTINSBURG OFFICE 25 Lights Addition Drive Martinsburg, WV 25404 phone: 304-901-2162 fax: 304-901-2182

ALLEGHENYSURVEYS.COM

					51-014776
Topo Quad:	Cameron 7.5"		Scale:	1'' = 2000'	1000 (D100 (D100)) 
County:	Marshall		Date:	November 17, 2	2017
District:	Cameron		Project No:	296-44-00-17	
Water	47-051-0	1477 WV 5	18055 /	/ ucov #2	
	47 001-0		10000 (	Lucey #2	
1100		tential Water S	ource withi	n 1000'	1200
SIU	BRUSHY RIDGE	(a)	A	FORK RIDGE	H N
3 Ce	HSUNA 1200	1300 1400 8		FORK IN 1400	
Brushy Ridge Cem	2	AY/14	2	Mas	
	$(n^{\circ})$	1420 1100	100	Phil	
	rushy	60 1400	MCNINCH LN	IN MA	R (a)
	die	CO HWY 60	MCMI	100	0
AUL	J Par S S		1109 128 188 Si	te 1	1200
120	Glen Easto Ridge			De Color	342011
7/3/1		10 CO		Hubbs Cem	
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and the second	2 Cont	101840	50	CO HWY IZ	JAN 2 3 2018
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Glen Easton	OUDENVIL, 1000	1 an		18 70	E:1684821.03
100	OUDENNILF B	3720	355		WGS 84
O'ENERSTON B	and the second s	U/A -	C 1400	910	LAT:39.849844 LONG:-80.622388
CIENE	C C C C C C C C C C C C C C C C C C C	130 BT	SUN	1100-	ELEV:1286.65
LEGHE					
		00-482-8606		P.0	tion Company
UPVEYS.	Birch R PH: (3	ch River Road iver, WV 26610 804) 649-8606		Bridgep	ort, WV 26330
		304) 649-8608			03/16/2018

# 51-01477P

Topo Quad:	Cameron 7.5"	Scale:	1'' = 2000'	
County:	Marshall	Date:	November 17, 201	7
District:	Cameron	Project No:	296-44-00-17	
	47-051-01477 WV	518055 (	(Lucey #2H	
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	Glen Easton	1100 100	S / A	-100
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CO HWY 20	Man H			IAD 27, North Zone 1:493588.10
Glen Easton	OUDENVILLE B	VS	108 E	E:1684821.03
RE-HALLSOO	and the second	140	S	AT:39.849844 ONG:-80.622388 ELEV:1286
EGH& HY O	SURVEYING AND MAPPING SERVICES PERFO <b>ALLEGHENY SURVEY</b> 1-800-482-8606 237 Birch River Road Birch River, WV 26610 PH: (304) 649-8606		ARED FOR:	on Company wy Department pf
	FAX: (304) 649-8608			03/16/2018

**WW-7** 8-30-06



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

**API:** 47-051-01477 **WELL NO.:** WV 518055 (Lucey #2H)

FARM NAME: Jack D. Lucey

**RESPONSIBLE PARTY NAME:** EQT Production Company

COUNTY: Marshall DISTRICT: Cameron

**OUADRANGLE:** Cameron 7.5'

SURFACE OWNER: Jack and Sharon Lucey

**ROYALTY OWNER:** Jack and Sharon Lucey

UTM GPS NORTHING: 4411160

UTM GPS EASTING: <u>532303</u> GPS ELEVATION: 392 m (1287 ft)

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:

- 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:

\_\_\_\_\_: Post Processed Differential\_\_\_\_\_ Survey grade GPS Real-Time Differential Mapping Grade GPS X : Post Processed Differential X

Letter size copy of the topography map showing the well location. Office of Oil and Gas signed, hereby certify this data is corrected ut 4. I the undersigned, hereby certify this data is correct to the best of my knowledge and IAN 2 3 2018 belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.

95#2180 an Signature

WV Department of Environmental Protection