

Amended

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API 47-103-02931 County WETZEL District CENTER
Quad LITTLETON 7.5' Pad Name JOLLIFFE UNIT 1 Field/Pool Name MARCELLUS SHALE
Farm name JOE JOLLIFFE Well Number JOE JOLLIFFE UNIT 1 5H
Operator (as registered with the OOG) STATOIL USA ONSHORE PROPERTIES INC.
Address 6300 Bridge Point Pky, Suite 500 City Austin State TX Zip 78730

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 419,525 Easting 1,671,174
Landing Point of Curve Northing 418,430 Easting 1,671,073
Bottom Hole Northing 414,695 Easting 1,675,005

Elevation (ft) 1336' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)
Surface - Drill Water; Intermediate - KCl/Polymer; Production - CyberDrill

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Office of Oil and Gas

Date permit issued 11/05/2013 Date drilling commenced 09/28/2014 Date drilling ceased 11/03/2014
Date completion activities began 01/25/2015 Date completion activities ceased 02/04/2015
Verbal plugging (Y/N) N/A Date permission granted _____ Granted by _____

WV Department of
Environmental Protection

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 130' - 320' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 2150' - Void(s) encountered (Y/N) depths N
Coal depth(s) ft 755' - Cavern(s) encountered (Y/N) depths N

Is coal being mined in area (Y/N) N

APPROVED

NAME: Jacquelin Hunter
DATE: 4/4/2016

Reviewed by: _____
06/24/2016
AX 04/06/16
AX 06/24/16

API 47- 103 - 02931

Farm name JOE JOLLIFFE

Well number JOE JOLLIFFE UNIT I 5H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	24	20	120'	NEW			
Surface	17 1/2	13 3/8	640'	NEW	J-55		Yes - 1/2 bbl
Coal							
Intermediate 1	12 1/4	9 5/8	2650'	NEW	J-55		Yes- 12 bbls
Intermediate 2							
Intermediate 3							
Production	8 3/4	5.5	13,616'	NEW	J-55; P-110		Yes - 5 bbls
Tubing	4 5/8	2 3/8	7195'	NEW	L-80; 4.7#		N/A
Packer type and depth set		VersaSet Packer set at 7190'					

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	Class A	250	15.8	2.31	429.51	SURFACE	480
Coal							
Intermediate 1	Class A	460	15.8	2.31	791.65	2650	13.5
Intermediate 2							
Intermediate 3							
Production	Class A	2355	15	1.29	1894.92	1250	
Tubing							

Drillers TD (ft) 13,619' Loggers TD (ft) 13,670'

Deepest formation penetrated Marcellus Plug back to (ft) N/A

Plug back procedure _____

Kick off depth (ft) 6,826'

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall
 Were cuttings collected Yes No

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APR 06 2016
WV Department of Environmental Protection

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

Surface: 1 Centralizer with stop collar 10 ft above floatshoe. One single bow every joint to 100ft below surface.

Intermediate: 1 centralizer with stop collar 10 ft above float shoe. 1 centralizer with stop collar 10 ft above float collar. 1 centralizer every joint for the first 100ft. One centralizer every 3 joints to 100 ft below surface.

Production: 1 centralizer w/ stop collar 10ft above shoe. 1 centralizer 10ft above float collar. 1 centralizer every joint (floating) until KOP. 1 centralizer every 3 joints (floating) until 200ft inside intermediate shoe. 1 centralizer 50ft below mandrel hanger

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

API 47- 103 - 02931

Farm name JOE JOLLIFFE

Well number JOE JOLLIFFE UNIT I 5H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	1/24/15	13,359'	13,239'	48	Marcellus
2	1/25/15	13,139'	12,959'	48	Marcellus
3	1/26/15	12,839'	12,959'	48	Marcellus
4	1/26/15	12,542'	12,359'	48	Marcellus
5	1/27/15	12,244'	12,059'	48	Marcellus
6	1/28/15	11,939'	11,759'	48	Marcellus
7	1/28/15	11,639'	11,459'	48	Marcellus
8	1/29/15	11,344'	11,156'	48	Marcellus
9	1/29/15	11,039'	10,859'	48	Marcellus
10	1/30/15	10,734'	10,559'	48	Marcellus
11	1/30/15	10,442'	10,262'	48	Marcellus
12	1/31/15	10,139'	9,959'	48	Marcellus
13	2/1/15	9,839'	9,659'	48	Marcellus
14	2/1/15	9,539'	9,359'	48	Marcellus
15	2/2/15	9,241'	9,059'	48	Marcellus
16	2/3/15	8,939'	8,759'	48	Marcellus

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
1	1/24/15	81.9	7644	8355	4564	441800	7941	
2	1/24/15	83.6	7933	8425	5848	441800	7702	
3	1/26/15	85.7	7806	8167	5289	441800	7771	
4	1/26/15	85.5	7393	8239	5254	441800	7509	
5	1/27/15	83.4	8086	8154	5385	441800	8098	
6	1/28/15	86.1	7813	8089	5846	441800	7856	
7	1/28/15	85.9	7618	7816	5782	441800	7893	
8	1/29/15	85.2	7695	7941	5892	441775	7594	
9	1/29/15	84.6	7413	8734	5575	441735	7961	
10	1/30/15	81	7695	8307	5316	441735	7244	
11	1/30/15	85.9	7097	7826	5279	441735	7697	
12	1/31/15	85.5	7674	8737	6619	441800	7512	
13	1/31/15	85	7556	8650	5194	441800	7168	
14	2/1/15	85.4	7719	9075	5821	417500	7172	
15	2/2/15	84.7	7426	7850	5334	441800	7470	
16	2/3/15	85.1	7436	8073	5548	441800	7412	

Please insert additional pages as applicable.

API 47- 103 - 02931 Farm name JOE JOLLIFFE Well number JOE JOLLIFFE UNIT I 5H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
Marcellus (shut in-not yet producing)	7466'-7509'	8099' - 13419'
_____	_____	_____
_____	_____	_____
_____	_____	_____

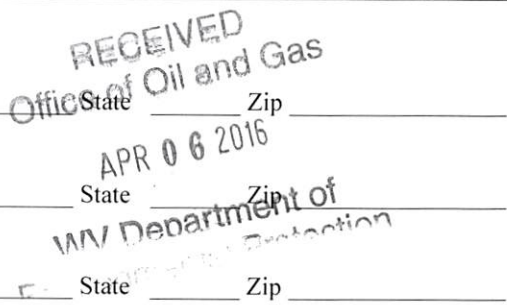
Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump
 SHUT-IN PRESSURE Surface 3603 psi Bottom Hole _____ psi DURATION OF TEST 24 hrs
 OPEN FLOW Gas 4892 mcfpd Oil _____ bpd NGL _____ bpd Water 134 bpd GAS MEASURED BY
 Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	0		0		
Gordon	3145	3201	3155	3212	
Warren	3835	3867	3845	3878	
Alexander	5828	5865	5839	5875	
Middlesex	7185	7224	7224	7274	Gas
Geneseo	7307	7331	7403	7451	Gas
Tully	7331	7355	7451	7507	
Hamilton	7355	7454	7507	8018	
Marcellus	7454	8018	N/A	N/A	Gas

Please insert additional pages as applicable.

Drilling Contractor ORION DRILLING
 Address _____ City _____ State _____ Zip _____
 Logging Company HALLIBURTON
 Address _____ City _____ State _____ Zip _____
 Cementing Company HALLIBURTON
 Address _____ City _____ State _____ Zip _____
 Stimulating Company Producer's Service Corp
 Address 109 S. Graham Street City Zanesville State OH Zip 43701



Please insert additional pages as applicable.

Completed by Bekki Winfree Telephone 713-240-9015
 Signature [Signature] Title Sr. Regulatory Advisor Date 03/31/2016

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

06/24/2016



March 31, 2016

West Virginia Department of Environmental Protection
Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304

Reference: Joe Jolliffe Unit 1 5H, API 47-103-02931
WR-36 – Initial Gas-Oil Ratio
WR-35 – Updated for Production

Gentlemen:

Statoil USA Onshore Properties Inc. herein submits the WR-35 Initial Gas-Oil Ratio and updated WR-35 for Joe Jolliffe Unit 1 5H (API No. 47-103-02931). The well was turned on directly to production on 6/18/15; however, it was only recently discovered that the corresponding paperwork had not been filed.

Should you have any questions or require additional information please contact the undersigned at 713-240-9015 or bekw@statoil.com.

Sincerely,

A handwritten signature in blue ink, appearing to read "Bekki Winfree".

Bekki Winfree
Sr. Regulatory Advisor – Marcellus Asset

Enclosure

RECEIVED
Office of Oil and Gas
APR 06 2016
WV Department of
Environmental Protection

06/24/2016

LATITUDE 39°40'00" 4,017'

130' TO BOTTOM HOLE
LATITUDE 39°40'00"

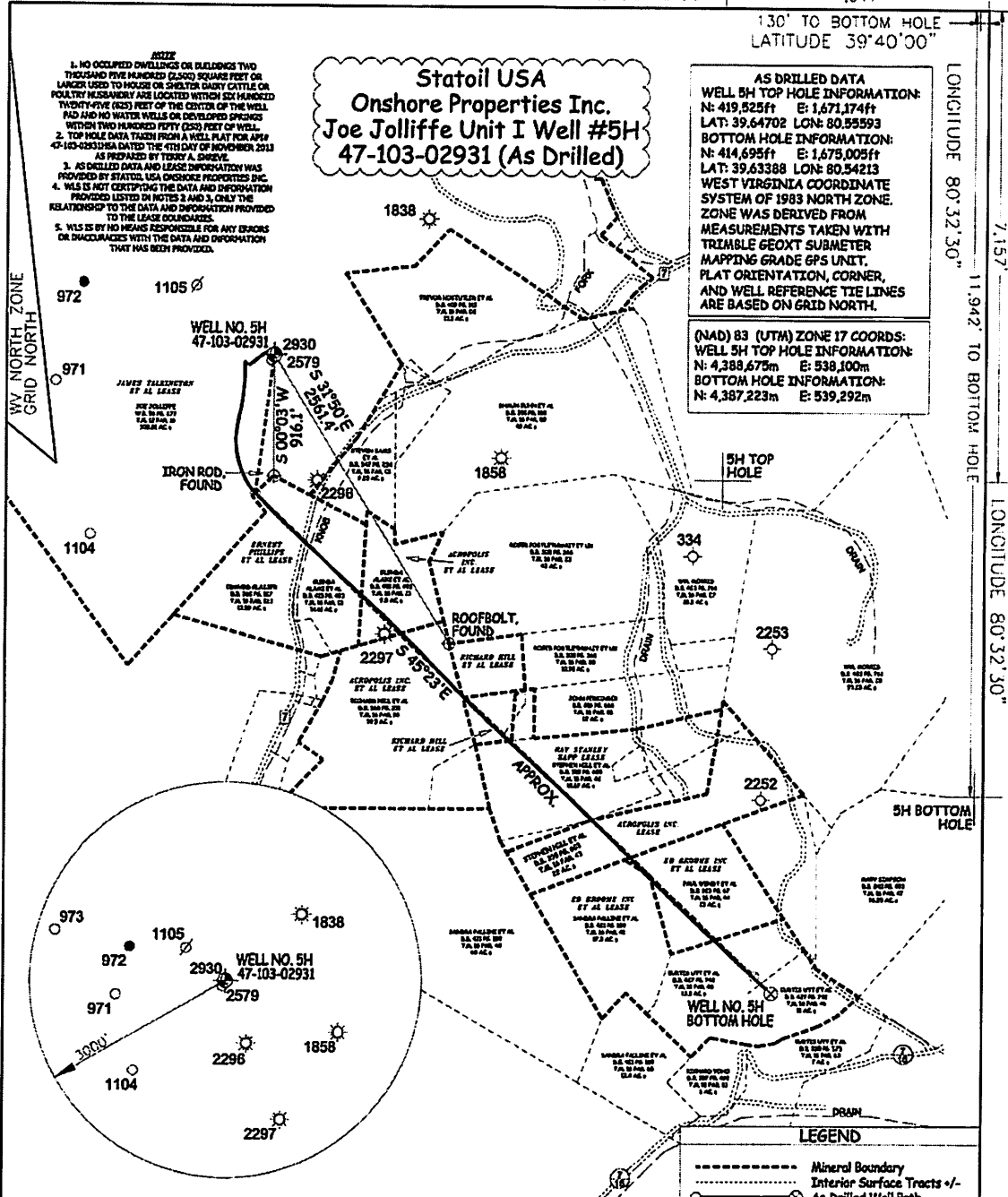
LONGITUDE 80°32'30" 7,157'
11,942' TO BOTTOM HOLE
LONGITUDE 80°32'30"

Statoil USA
Onshore Properties Inc.
Joe Jolliffe Unit I Well #5H
47-103-02931 (As Drilled)

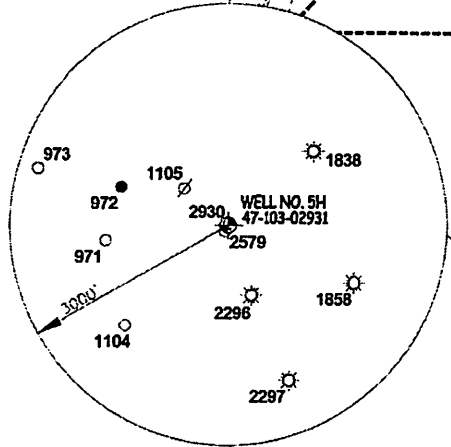
1. NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHEPHERD CATTLE OR OTHER LIVESTOCK ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD AND NO WATER WELLS OR DEVELOPED SPRINGS WITHIN TWO HUNDRED FIFTY (250) FEET OF WELL.
2. TOP HOLE DATA TAKEN FROM A WELL PAD FOR API# 47-103-02931 DATED THE 4TH DAY OF NOVEMBER 2011 AS PREPARED BY TERRY A. OSWY.
3. AS DRILLED DATA AND LEASE INFORMATION WAS PROVIDED BY STATOIL USA ONSHORE PROPERTIES INC.
4. WLS IS NOT CERTIFYING THE DATA AND INFORMATION PROVIDED LISTED ON NOTES 2 AND 3, ONLY THE RELATIONSHIP TO THE DATA AND INFORMATION PROVIDED TO THE LEASE COUBRAGES.
5. WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR DISCREPANCIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.

AS DRILLED DATA
WELL 5H TOP HOLE INFORMATION:
 N: 419,525ft E: 1,671,174ft
 LAT: 39.64702 LON: 80.55593
BOTTOM HOLE INFORMATION:
 N: 414,695ft E: 1,675,005ft
 LAT: 39.63388 LON: 80.54213
 WEST VIRGINIA COORDINATE SYSTEM OF 1983 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIANGLE GEOMX SUBMETER MAPPING GRADE GPS UNIT. PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

(NAD) 83 (UTM) ZONE 17 COORDS:
WELL 5H TOP HOLE INFORMATION:
 N: 4,388,675m E: 538,100m
BOTTOM HOLE INFORMATION:
 N: 4,387,223m E: 539,292m



As Drilled
Landing Pt
NAD(83)
N: 419,430.568
E: 1,671,073.99



LEGEND

-----	Mineral Boundary
- - - - -	Interior Surface Tracts +/-
○	As-Drilled Well Path
○	Proposed Well Path
○	Landing Point
⊗	Bottom Hole
⊕	Found monument, as noted

JOB # **15-007WS**
 DRAWING # **JOEJOLLIFFER/AD**
 SCALE **1" = 1000'**
 MINIMUM DEGREE OF ACCURACY **SUBMETER**
 PROVEN SOURCE OF ELEV. **SUBMETER MAPPING GRADE GPS**



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

WILLOW LAND SURVEYING PLLC
 P.O. BOX 17
 PENNSBORO, WV 26415

DATE **03/24/15**
 OPERATOR'S WELL # **JOE JOLLIFFE UNIT I WELL 5H**
 API WELL # **47 - 103 - 02931**
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION **1,336'** WATERSHED **WEST VIRGINIA FORK FISH CREEK**
 QUADRANGLE **LITTLETON 7.5** DISTRICT **CENTER** COUNTY **WETZEL**

SURFACE OWNER **JOE B. JOLLIFFE** ACREAGE **308.81 ACRES +/-**
 OIL & GAS ROYALTY OWNER **JAMES TALKINGTON ET AL; STEVEN SAMS ET AL; SHAWN KUHRI ET AL; ROGER POSTLETHWAIT ET UX; ROGER POSTLETHWAIT ET UX; JOSEPHINE WOLFE ET AL; RAY STANLEY SAPP; ACROPOLIS INC.; PAUL WENDT ET UX; ACROPOLIS INC. ET AL** LEASE ACREAGE **287 ACRES +/-; 9.25 ACRES +/-; 48 ACRES +/-; 10.95 ACRES +/-; 12 ACRES +/-; 19.63 ACRES +/-; 22 ACRES +/-; 22 ACRES +/-; 38.75 ACRES +/-**

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL
 (SPECIFY) **(X) AS DRILLED** PLUG & ABANDON CLEAN OUT & REPLUG
 TARGET FORMATION **MARCELLUS** ESTIMATED DEPTH **7,521' TVD 13,870' MD**

WELL OPERATOR **STATOIL USA ONSHORE PROPERTIES INC.** DESIGNATED AGENT **WILLIAM T. FAHEY**
 ADDRESS **2103 CITYWEST BLVD. SUITE 800** ADDRESS **2116 PENNSYLVANIA AVE.**
HOUSTON, TX 77042 **WEIRTON, WV 26062**

06/24/2016