

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

API 47 - 033 - 05732 County Harrison District Sardis
Quad Salem Pad Name Goodwin Field/Pool Name Marcellus
Farm name Coastal Forest Resources Well Number Goodwin 3-3H
Operator (as registered with the OOG) Statoil USA Onshore Properties, Inc.
Address 2103 Citywest Blvd., Ste, 800 City Houston State TX Zip 77042

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 318440 Easting 1708432
Landing Point of Curve Northing 317282 Easting 1707309
Bottom Hole Northing 311319 Easting 1709202

Elevation (ft) 1100 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)
Mud type Synthetic Base Mud - sack Barite, ABS Base oil, ABS Mul, CaCl, Fluid Loss, viscosifier, dispersant, lime

Date permit issued 04/25/2013 Date drilling commenced 05/07/2013 Date drilling ceased 06/05/13
Date completion activities began 09/16/2013 Date completion activities ceased 10/14/2013
Verbal plugging (Y/N) _____ Date permission granted _____ Granted by _____

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

Freshwater depth(s) ft 10' - 550' (est) Open mine(s) (Y/N) depths _____
Salt water depth(s) ft 500' - 1500' (est) Void(s) encountered (Y/N) depths _____
Coal depth(s) ft 150' - 550' (est) Cavern(s) encountered (Y/N) depths _____
Is coal being mined in area (Y/N) Y - several miles east

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08/12/2022

API 47-033 - 05732 Farm name Coastal Forest Resources Well number Goodwin 3-3H

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		20"	120'				
Surface		13 3/8"	334'		54.5		
Coal							
Intermediate 1	12 1/4"	9 5/8"	2320'		36		
Intermediate 2							
Intermediate 3							
Production	8 1/2"	5 1/2"	14771'		20		
Tubing		2 3/8"	6628'	NEW	L-80 - 4.7#/ft		
Packer type and depth set		Halliburton Versa-set PLT Retrievable Production Packer set @ 6,623'					

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	Class A				152	Surface	
Surface	Class A	326	15.6	1.18	381	Surface	11
Coal							
Intermediate 1	Class A	852	15.6	1.18	1005	Surface	11.5
Intermediate 2							
Intermediate 3							
Production	Class A	2581	14.5/15.6	1.53	3941	Surface	n/a
Tubing							

Drillers TD (ft) 14,800' Loggers TD (ft) 14,800'
 Deepest formation penetrated Marcellus Plug back to (ft) n/a
 Plug back procedure n/a

Kick off depth (ft) 6,177'

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

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

Surface - (1) Bow Spring attached to shoe joint. (1) Bow Spring attached per joint for 5 joints.
 Intermediate - (1) Bow Spring attached to shoe joint. (1) Bow Spring attached per joint for every 5 joints. (1) Bow Spring every 4th joint up to 200 ft from surface.
 Production - (1) Spiralglide above shoe and above float collar. (1) Spiralglide every other joint up to 5,977' MD. (1) Bow Spring every 4th joint from 7,392' to 100 ft from surface.

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS 8542' - 14,580'

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	09/16/2013	14580	14364	6 SPF	Marcellus
2	09/17/2013	14304	14064	6 SPF	Marcellus
3	09/17/2013	14004	13764	6 SPF	Marcellus
4	09/18/2013	13704	13464	6 SPF	Marcellus
5	09/18/2013	13404	13168	6 SPF	Marcellus
6	09/19/2013	13104	12868	6 SPF	Marcellus
7	09/18/2013	12804	12564	6 SPF	Marcellus
8	09/20/2013	12500	12264	6 SPF	Marcellus
9	09/20/2013	12204	11964	6 SPF	Marcellus
10	09/21/2013	11904	11664	6 SPF	Marcellus
11	09/21/2013	11600	11364	6 SPF	Marcellus
12	09/22/2013	11304	11064	6 SPF	Marcellus
13	09/22/2013	11004	10764	6 SPF	Marcellus
14	09/23/2013	10704	10464	6 SPF	Marcellus
15	09/23/2013	10404	10164	6 SPF	Marcellus
16	09/24/2013	10104	9864	6 SPF	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	09/16/13	79.2	7783	6380	5219	395700	7794	
2	09/17/13	74	7787	7442	6319	402600	7656	
3	09/17/13	80.5	7532	6615	4794	400200	7612	
4	09/18/13	81	7419	6127	5621	400900	7425	
5	09/18/13	81.2	7375	6481	4864	398200	6908	
6	09/19/13	81	7151	5688	4628	396400	6840	
7	09/19/13	80.6	7265	5773	4459	396800	6996	
8	09/20/13	81	7298	7016	4469	396100	6815	
9	09/20/13	81.2	7327	6811	4898	391100	6902	
10	09/21/13	80.7	7610	7843	5088	391600	6833	
11	09/21/13	81.1	7362	6676	5928	402800	6934	
12	09/22/13	80.4	7197	7448	4673	402200	6939	Gas
13	09/22/13	80.6	7173	7370	4693	403900	6944	
14	09/23/13	81.3	7156	6890	4939	413400	6920	
15	09/23/13	81.2	7391	6748	4647	400600	6861	
16	09/24/13	81.3	7289	6850	5226	400500	6930	

Please insert additional pages as applicable.

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Marcellus</u>	<u>7322' - 7373' (est)</u> TVD	<u>N/A</u>	<u>MD</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3550 psi Bottom Hole _____ psi DURATION OF TEST 99 hrs

OPEN FLOW Gas 7800 mcfpd Oil _____ bpd NGL _____ bpd Water 240 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		
Fresh Water	10' (est)	550' (est)	10' (est)	550' (est)	Fresh Water
Coal	150 (est)	550' (est)	150 (est)	550' (est)	Coal
Salt Water	500' (est)	1500' (est)	500 (est)	1500' (est)	Brine
Benson	5196' (est)	5207' (est)	5196' (est)	5207' (est)	Sandstone
Middlesex	6844'	7159'	6949'	7728'	Black Shale
Genesee	7159'	7192'	7728'	7824'	Black Shale
Tully LS	7192'	7230'	7824'	7939'	Gray Limestone
Hamilton	7230'	7279'	7939'	8106'	Gray Shale
Lower Hamilton	7279'	7322'	8106'	8322'	Gray Shale
Marcellus	7322'	7373' (est)	8322'	N/A	Black Shale

Please insert additional pages as applicable.

Drilling Contractor Pioneer
Address _____ City _____ State _____ Zip _____

Logging Company _____
Address _____ City _____ State _____ Zip _____

Cementing Company Superior Well Services/Nabors Well Services
Address 1650 Hackers Creek Road City Jane Lew State WV Zip 26378

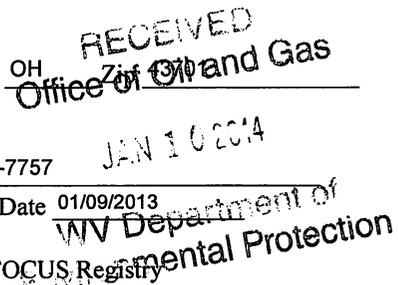
Stimulating Company Producers Service Corp.
Address 109 S. Graham Street City Zanesville State OH Zip 43701

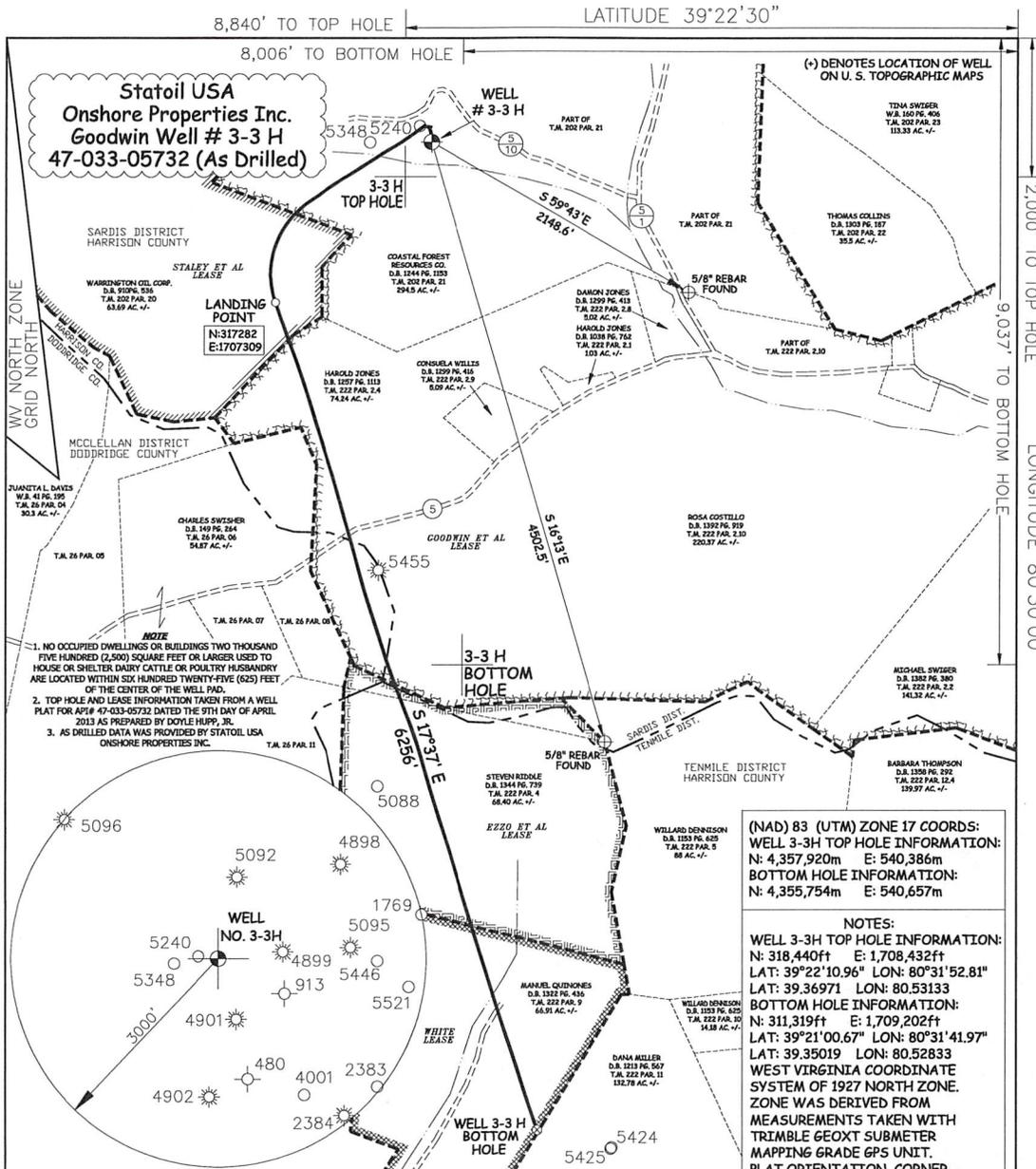
Please insert additional pages as applicable.

Completed by Beth Davidson Telephone 281-797-7757
Signature Beth Davidson Title Regulatory Advisor Date 01/09/2013

Submittal of Hydraulic Fracturing Chemical Disclosure Information

Attach copy of FRACFOCUS Registry





JOB # 11-039
DRAWING # GOODWIN3-3HASDRILLED
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS
STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WILLOW LAND SURVEYING PLLC
P.O. BOX 17
PENNINSBORO, WV 26415

LEGEND
--- Surface Owner Boundary Lines +/-
- - - Interior Surface Tracts +/-
⊕ Found monument, as noted

DATE 01/08/14
OPERATOR'S WELL # Goodwin 3-3 H
API WELL # 47 - 033 - 05732
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
LOCATION: ELEVATION 1096' WATERSHED LOST RUN OF ROCKCAMP RUN
DISTRICT SARDIS COUNTY HARRISON
QUADRANGLE SALEM

SURFACE OWNER COASTAL FOREST RESOURCES COMPANY ACREAGE 294.5 ACRES +/-
OIL & GAS ROYALTY OWNER JANE STALEY ET AL, LEASE ACREAGE 64.74 AC±
WILMA R. GOODWIN ET AL, MARY E. EZZO ET AL, AND MURMA JEAN WHITE 1280 AC±, 69.95 AC±, 66.91 AC ±
PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
OTHER PHYSICAL CHANGE IN WELL (SPECIFY)
PLUG & ABANDON CLEAN OUT & REPLUG ACTUAL DEPTH 7,387' TVD 14,800' MD
TARGET FORMATION MARCELLUS
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

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