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

API 47 - 095 - 02251 County Tyler	District Ellsworth					
	Field/Pool Name Ellsworth					
Farm name Statoil USA Onshore Prop	Well Number Yurigan #1V					
Operator (as registered with the OOG) Alliance Petroleur	m Corporation					
Address 4150 Belden Village Ave. NW Suite 410 City Ca	nton State Ohio Zip 44718-2553					
As Drilled location NAD 83/UTM Attach an as-drill  Top hole Northing  Landing Point of Curve Northing  Bottom Hole Northing	Easting					
Elevation (ft) 1251 GL Type of Well	■New □ Existing Type of Report □Interim ■Final					
Permit Type   Deviated   Horizontal   Horizontal	ntal 6A   Vertical Depth Type   Deep   Shallow					
Type of Operation □ Convert □ Deepen ■ Drill □	□ Plug Back □ Redrilling □ Rework □ Stimulate					
Well Type □ Brine Disposal □ CBM ■ Gas □ Oil □ Se	condary Recovery   Solution Mining   Storage   Other					
Type of Completion	ater Intermediate hole ■ Air □ Mud □ Fresh Water □ Brine					
Mud Type(s) and Additive(s) N/A	Ď.					
	Office REVENTED					
Date permit issued4/7/15 Date drilling com	Date completion activities ceased  Date drilling ceased £ 2015/4/15  Date drilling ceased £ 2015/4/15  Date completion activities ceased  December 1 2015/4/15					
Date completion activities began6/3/15	Date completion activities ceased De Salastof of					
Verbal plugging (Y/N) Date permission grante	ed Granted by Normantal Protection					
Please note: Operator is required to submit a plugging applic						
Freshwater depth(s) ft48'	Open mine(s) (Y/N) depthsN/A					
Salt water depth(s) ft 1713'	Void(s) encountered (Y/N) depthsN/A					
Coal depth(s) ft None Recorded	Cavern(s) encountered (Y/N) depthsN/A					
Is coal being mined in area (Y/N)No	Reviewed by:					

WR-35 Rev. 8/23/13

100. 0/25/15									
API 47- 095	02251	Farm n	<sub>ame</sub> Statoil U	SA Onsho	re Prop	We	ll number_Yu	ırigan #1	<u>V</u>
CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	,	Basket Depth(s)		ent circulate (Y/N) le details below*
Conductor	15"	13-3/8"	32'	New	H-40 36#		N/A		N/A
Surface	12-3/4"	9-5/8"	401'	New	<del></del>	0 26#			Yes
Coal	12 0/4	0 0/0				<u> </u>		1	
Intermediate 1	8/3/4"	7"	1554'	New	1-55	5 17#		_	Yes
Intermediate 2	0/3/4	, , , , , , , , , , , , , , , , , , ,	1004	- 11011	000	5 1111		-	
Intermediate 3		<del></del>	<u>.</u>	-					<u></u>
Production	6-1/2"	4-1/2"	3938'	New	10.5#	/ft J-55			No
Tubing	0-1/2	2-3/8"	3710	Used	<del>                                      </del>	Ft J-55			N/A
Packer type and d	enth set		l	<u></u>			-		
Tucker type and a		Hookwall @ 3052	Set with 30,000	# / 14,000 OV	er Sung v	veignt		<u> </u>	<del></del>
Comment Details	Big Injun/Gordon	- Co-mingled above pac	ker on 4-1/2 Annulus	- Speechley/War	ren/Bayard- P	roduced belov	v packer		
							<u> </u>		
CEMENT	Class/Type	e Numbe	er Slurr	-v '	/ield	Volume	. Cem	ent	WOC
DATA	of Cement			•	³/sks)	(ft <sup>3</sup> )	Top (I		(hrs)
Conductor	N/A								
Surface	Class A	121					СТ	'S	8 hrs.
Coal									
Intermediate I	Class A	204					СТ	S	8 hrs.
Intermediate 2									
Intermediate 3									
Production	50/50 poz	220					1440'	G.L.	
Tubing									·
Deillers TD (A	·) 4042'			Loggers T	T) (A) 4037	7'			
Drillers TD (ft Deepest forma		1 Speechley							·
Plug back pro	=	<u></u>		1 lug buck	10 (11)				<del></del>
riug buck pro			·						
Viole off double	(A) N/A								
Kick off depth	(II) <u>NA</u>			<del></del>					
Check all wire	line logs run	<b>≜</b> caliper	■ density	□ deviat	ed/direction	onal 🗂	induction		
Check thi whe	inio logo ran	■ neutron	•		a ray		temperature	□sonic	;
				Ü	•		1		
Well cored	Yes 🛔 No	Conventi	onal Side	wall	We	ere cutting	s collected I	■ Yes □	No
DESCRIBE T	HE CENTRAI	LIZER PLACEM	ENT USED FC	OR EACH CA	ASING ST	ΓRING <u>⁴</u>			
							0	Mice of	Oil and Gas
	· · ·	·							
								<del>- 001</del>	<b>0 6</b> 2015
WAS WELL (	COMPLETED	AS SHOT HOLI	E □ Yes 🛔	No DI	ETAILS .			Wher	19 rtm - :
	<del></del>						Envir	Onnar Onnar	partment of tal Protection
WAS WELL O	COMPLETED	OPEN HOLE?	□ Yes ■ N	o DET	AILS		,		ndi Protectic
MAD WELL		OI LIT HOLL!	_ 1 V3 = 14						
			#******	D 4 CED (C)					
WERE TRAC	ERS USED	⊐ Yes 📱 No	I YPE OF T	KACER(S)	nzen	<del></del>			



API 47- 095 - 02251 Farm name Statoil USA Onshore Prop Well number Yurigan #1V

## PERFORATION RECORD

Stage		Perforated from	Perforated to	Number of	
No.	Perforation date	MD ft.	MD ft	Perforations	Formation(s)
1	8/3/15	3742'	3759'	3	Speechley
1	8/3/15	3631'	3704'	20	Warren
			-		Big Bore Frac Plug @ 3440'
2					
2	8/3/15	3330'	3305'	5	Misc. siltstones
2	8/3/15	3200'	3208'	16	Bayard
					Dia Dara Free Dive
3					Big Bore Frac Plug
3	61/6/15	2991'	3010'	50	Gordon
4			-	<del>-</del>	Big Bore Frac Plug
4	6/30/15	2249'	2259'	40	Big Injun
		-			
					**All Frac Plugs Drilled And Removed

Please insert additional pages as applicable.

# STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

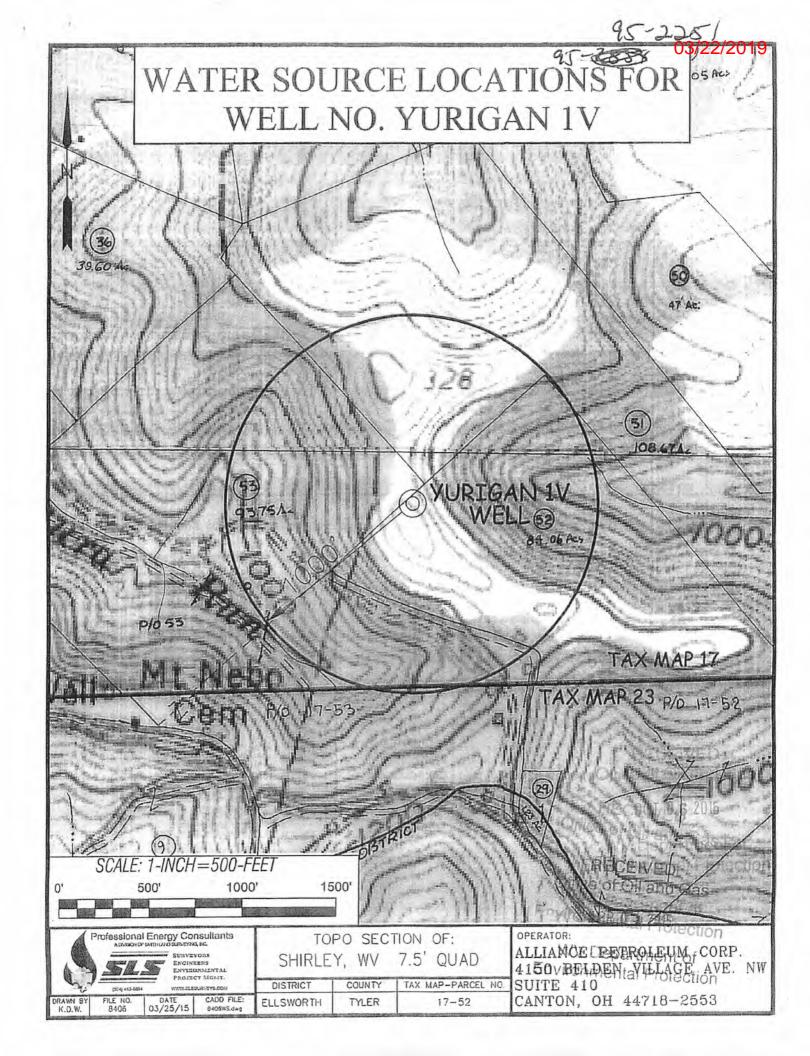
Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
1	9/3/15	22.4	2500	2058	1330	24,700	304	356 MSCF
		_	<u> </u>					
2	8/3/15	21.0	2500	1320	1359	18,500	233	288 MSCF
3	6/17/15	3.0	1070	1700	100	0	0	2000gals.15%
					<u> </u>			
4	7/10/15		1150	2823	600	0	0	2000gals.15%
	-			_	· -			
							-	
_							Office	ECEIVED of Oil and Gas
			-				9 mce	of Oil and C
-		-			<u>-</u>		0.0	Gas
	-				<u> </u>		00	T 0 6 2015
							MAL	
						E	nvironma	partment of
								Mal Protection

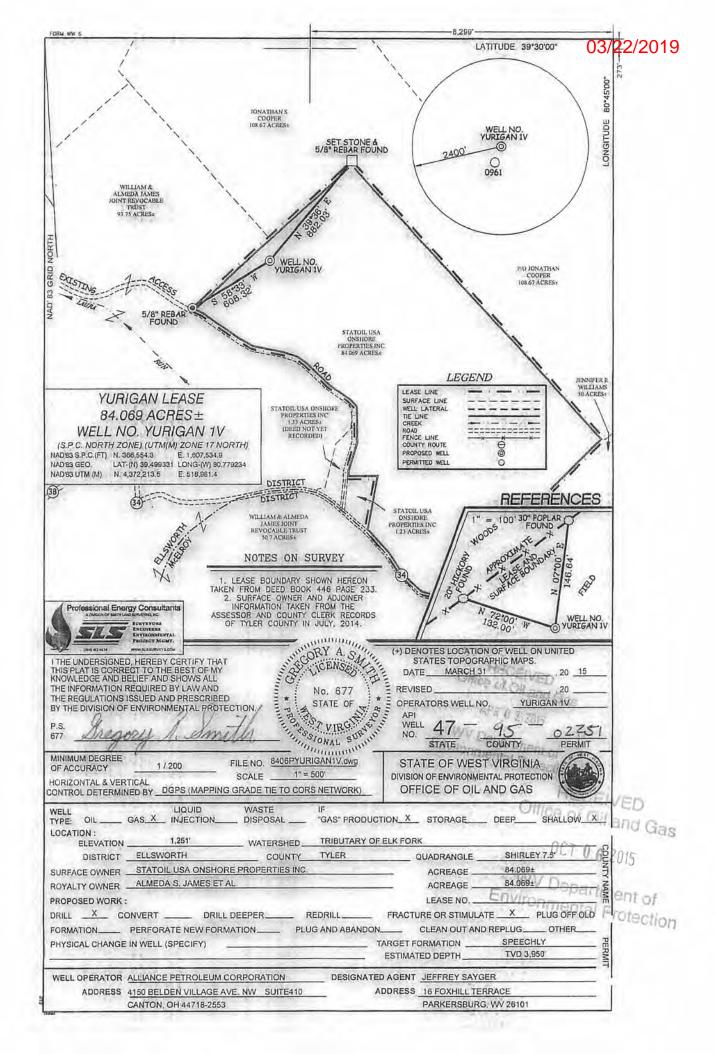
Please insert additional pages as applicable.

Rev. 8/23/13

Q3/22/2P19

API 47- 095	_ 02251	Farm	<sub>name</sub> Statoil U	ISA Onsh	ore Prop	Well 1	numbei	Yurigan #1V
PRODUCING	FORMATION(	S)	DEPTHS					
Warren/Speech			3754	TVD		MD		
Bayard		<del></del>	3305					
Gordon		<del></del>	3010			<del></del>		
Big Injun		<del></del>	2259					
	dditional pages a	s applicable.		<del></del>		<del></del>		
GAS TEST	■ Build up □	Drawdown	□ Open Flow		OIL TEST	Flow [	Pump	•
SHUT-IN PRE	SSURE Surf	ace 350	psi Botto	m Hole	psi	DURAT	ΓΙΟΝ (	OF TEST 24 hrs
OPEN FLOW	Gas 5.0 mcf	Oil pd 0.0	NGL bpd 0.0	bpd <u>(</u>	Water D bpd	GAS M		JRED BY □ Orifice □ Pilot
LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN MD	FT DESCRIBE			RECORD QUANTITYAND FER, BRINE, OIL, GAS, H2S, ETC)
	0		0			_		O-GEOLOGIST REPORT
	_		<u> </u>					
	<u> </u>							
<u></u>						<del></del>		
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							_	
	<u> </u>		<u>                                 </u>		-	_		
			<u> </u>			·		
Please insert ac	dditional pages a	s applicable.						
Drilling Contra	actor Nexus Drilli	ng						
Address P.O. B	ox 903		City	Jane Lew		State	wv	Zip <u>26378</u>
Logging Comr	any Weatherford	i						
Address 6 Gart	on Plaza		City	Weston		State	wv	Zip 26452
	mpany Universal	Well Services						RECEIVED
Address P.O. B	ox 2437		City	Buckhanno	on	State	wv	RECEIVED Office261 Oil and Gas
		ers Service Co						OCT <b>0 6</b> 2015
Stimulating Co Address 109 S.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ers dervice Co	City	Zanesville	_	State	ОН	7in 43702
	dditional pages a	s applicable.						WV Department of
O1	, Martin L. Miller	Allance	leum Corn		Telephone	. 7 <u>4</u> 0-373	-8771	nvironmental Protection
Signature by	Manth	LANUA	Title Sr	. VP of Oper	_ reteptions			Oct. 1, 2015
	110011	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					_	





12956 Claylick Roa<mark>03/22/2019</mark>
Newark, Ohio 43056-9146
Office 740-763-2758
Home 740-763-2758
Mobile 330-763-0479

# National Minerals Corporation

# ALLIANCE PETROLEUM CORPORATION YURIGAN #1V ELLSWORTH DISTRICT TYLER COUNTY, WEST VIRGINIA

RECEIVED
Office of Oil and Gas

OCT 0 6 2015

WV Department of

Oil, Gas & Mineral Exploration WELL: Alliance Petroleum Corporation #1V Yurigan.

LOCATION: Ellsworth District, Tyler County, West Virginia.

PERMIT NUMBER: 47-095-02251.

ELEVATION: 1251' Ground 1259'KB.

STATUS: Preparing to complete as a gas producer.

CASING: 7" (20 #) @ 1552'.

TOTAL DEPTH: 4050' Driller 4037' Logger.

CONTRACTOR: Nexus Drilling Co.

TOOLS: Rotary.

COMPLETED DRILLING: 5/4/2015.

FORMATION AT TOTAL DEPTH: Devonian shale.

ELECTRICAL SURVEYS: Gamma Ray- Compensated Density- Neutron-Caliper- Temperature- Induction- Gas Detector by Weatherford

SHOWS: The mud log detected small shows of gas in the Speechley, 4<sup>th</sup>, Gordon, Thirty-foot, Weir, Big Lime, 3<sup>rd</sup> Salt and 2<sup>nd</sup> Salt. Fair shows of gas were noted in the Warren, Bayard and Gantz. A good show of gas was noted in the Big Injun. Very little fluorescence was noted in any of the samples.

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1 <sup>st</sup> Salt Sand	1690'	- 431
2 <sup>nd</sup> Salt Sand	1820'	- 561
3 <sup>rd</sup> Salt Sand	1998'	- 739
Maxon Sandstone	2068'	- 809
Big Lime	2098'	- 839
Keener Sandstone	2166'	- 907
Big Injun Sandstone	2177'	- 918
Weir Sandstone	2503'	-1244
Gantz Sandstone	2750'	RE149 VED
Thirty-foot Sandstone	2850'	Office 159 and Gas
Gordon Sandstone	2978'	-1719 <sub></sub>
4 <sup>th</sup> Sand	3058'	0C1799 2015
5 <sup>th</sup> Sand	3096'	-1837, mont of
Bayard Sandstone	3154'	W/V Dassistment of
Warren Sandstone	3680'	Environa24241 Protection

Yurigan #1V Page 2

Speechley Sandstone 3820' -2561

# STRUCTURAL COMPARISON:

	Alliance Petroleum	Triad Resources
	Yurigan #1V	Baker #1-906
Big Lime	- 839	- 862
Gordon Sandstone	-1719	-1749
Warren Sandstone	-2421	-2435

### **GEOLOGY:**

This well lies in an area that was heavily drilled to the Gordon Sandstone beginning in the late 1800's. It is within a few hundred feet of one of the old wells. Therefore, nearly all of the formations from the Gordon up will be somewhat depleted. However, because of the high porosities and thick sections, considerable gas may remain.

I would first recommend completion of the Warren and Bayard Sandstones. These zones both had fair shows of gas indicated on the mud log. The Warren from 3680 to 3774' has fair porosity and good gas response on the neutron and induction logs. The Bayard from 3154 to 3212' also has fair porosity and good neutron and induction response. These zones have the potential for gas production. Since there is no recent production from these zones, in the immediate area, production rates and reserves are unknown. Further drilling and testing will be needed to quantify those numbers.

After depletion of these zones, completion of the Gordon and Big Injun should be attempted. The Gordon from 2978 to 3028' has excellent porosity and a good response on the temperature log. During the drilling operation a considerable amount of fluid was lost into this zone. Therefore, the neutron and induction responses indicate water, probably from invasion. Completion of this zone should only involve perforation and using a small amount of acid for cleanup. Since this well is only a few hundred feet from one of the old Gordon wells, no fracturing should be attempted. Several zones in the Big Injun also appear to be favorable for gas production. The zone from 2300 to 2310' has good porosity and good neutron density crossover. A show of gas was hoted in this zone on the mud, temperature and gas detector logs. A second zone in the Gas Big Injun from 2246 to 2258' has excellent porosity and excellent neutron-density crossover. A show of gas was recorded in this zone on the mud and @as 6 2015 detector logs. This zone is immediately above a zone containing considerable water. Therefore, perforations should be kept near the top of the gas interval entrol third zone in the Big Injun from 2200 to 2213' also has excellent porosity and Protection excellent neutron-density crossover. A show of gas was noted on the mud log in this interval. Although none of the gas shows recorded by the mud log in the Big Injun were large, it appears to have been making considerable gas. Connection gas at 2235' was 111 units, while connection gas at 2268' was 1515 units. This decreased to 300 to 500 units, but maintained that until the Gordon was drilled and the well started taking fluid. Since, before completion, we have no idea of the extent of depletion in the Gordon and Big Injun, production rates and reserves are also unknown.

Respectfully submitted,

NATIONAL MINERALS CORPORATION

By: Douglas L. Core, President

John L. Core

May 12, 2015