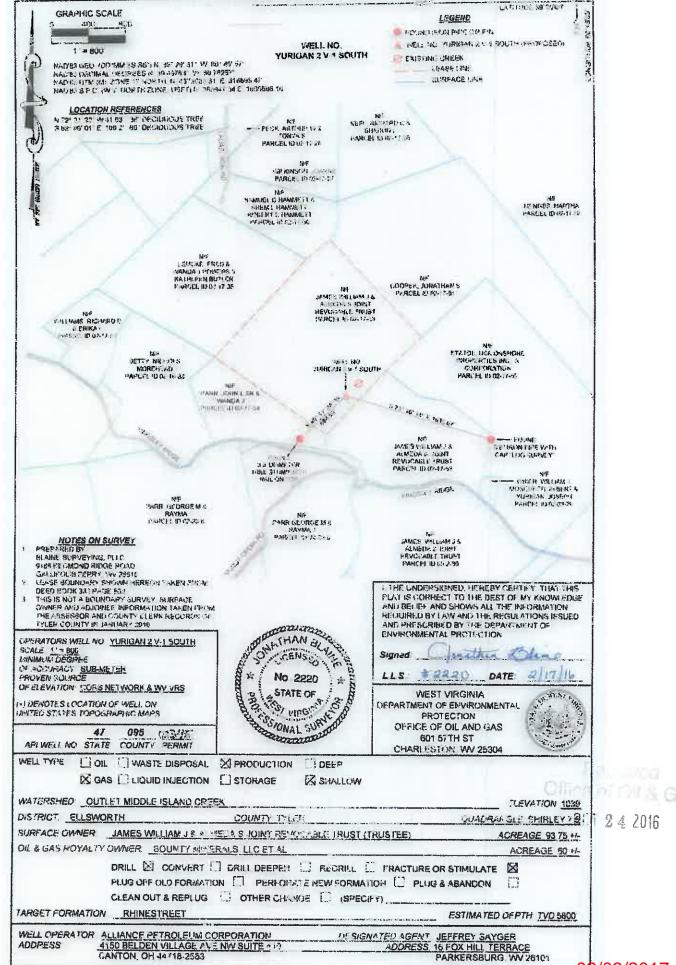
State of West Virginia Department of Environmental Protection - Office of Oil and Gas Well Operator's Report of Well Work

API <u>47</u> - 095	02345	County Tyler		District	Ellsworth			
Quad Pad Name								
Farm name James, V	/illiam & Almeda	ı			_{nber} Yuri	gan #2V-1	South	
Operator (as registered w	ith the OOG) Alli	ance Petroleur	n Corporation					
Address 4150 Belden Vi	lage Ave. NW Suit	e 410 City C	anton	State	Ohio	Zip <u>_</u>	44718-2553	
To Landing Point o	p hole North f Curve North	Attach an as-drille ing ng		Easting				
Elevation (ft) 1039'	GL	Type of Well	■New □ Existing	Туре	of Report	□Interim	■Final	
Permit Type Devia	ted Horizor	ıtal 🗆 Horizon	ntal 6A 📱 Vertic	al Dep	th Type	□ Deep	■ Shallow	
Type of Operation □ Co	nvert 🗆 Deeper	n 🖪 Drill 🏻 🗈	□ Plug Back □ R	edrilling [Rework	■ Stimula	te	
Well Type 🗆 Brine Disp	osal □ CBM ■ C	Bas ∎Oil ⊓See	condary Recovery	□ Solution Mi	ning □ Sto	orage □O	ther	
Drilling Media Surface Production hole Air Mud Type(s) and Additi N/A	□ Mud □ Fres	Mud □Fresh Wε h Water □ Brin		ate hole ■ A	ir 🗆 Mud	□ Fresh V	Vater □ Brine	
Date permit issued	3/8/16 _D	Date drilling com	nenced 5/6/1	6 Da	te drilling o	ceased	5/12/16	
Date completion activitie	s began	5/18/16	_ Date completion	activities ceas	ed	5/26/16		
Verbal plugging (Y/N) _	Date p	ermission grante	d	Grante	d by		<u> </u>	
Please note: Operator is			ation within 5 days	of verbal pern	nission to p		T 24 2016	
Freshwater depth(s) ft	4000).	Open mine(s) (Y/l	N) depths		N		
Salt water depth(s) ft			Void(s) encounter			N		
Coal depth(s) ft	682'-684'		Cavern(s) encount	ered (Y/N) de	pths	N		
Is coal being mined in are	a (Y/N)	N				Dist		



92/03/2017

API 47- 095	02345	Farm name	_e James,	William &	Almeda	_Well number_	Yurigan #2	V-1 South
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#			Driven
Surface	12-1/4"	9-5/8"	320'	New	H-40 26#			Υ
Coal	Ţ							
Intermediate !	8-3/4"	7"	2211'	New	J-55 17#			Υ
Intermediate 2								
Intermediate 3	İ							
Production	6-1/2"	4-1/2"	5789'	New	J-55 10.5#	:		N
Tubing		1-1/2"	5300'	Used	J-55 2.75#	:		N/A
Packer type and de	ptn set							
Comment Details								
CEMENT	Class/Type	Number	Slurry	, ,			Cement	woc
DATA Conductor	of Cement None	of Sacks Driven	wt (ppg	g) (H	³ /sks) (<u>ft³)</u> T	op (MD)	(hrs)
Surface	Class A	117					-	8 Hrs.
Coal	Class A	117						0 FII\$.
Intermediate 1	Class A	307						O Lieo
Intermediate 2	Class A	307						8 Hrs.
Intermediate 3								
Production	50/50 Poz.	133						N/A
Tubing	50/50 P0Z.	133						N/A
Plug back proc	ion penetrated _	Rhinestreet			D (ft)5852' to (ft)			
Kick off depth Check all wirel	ine logs run		density resistivity		ed/directional a ray	induction temperatu	re ≣sonic	
Well cored	Yes 🖪 No	Conventiona	l Sidew	vall	Were cu	ttings collected	i ∎Yes □	No
6 Total on 4-1/2" string -	Every 100' off Bottom	ZER PLACEMEN					£ .	
							OCT	2 4 2016
WAS WELL C	OMPLETED A	S SHOT HOLE	□ Yes ■	No DE	ETAILS			
WAS WELL C	OMPLETED O	PEN HOLE?	Yes ■ No) DETA	AILS			
WERE TRACE	RS USED 🙃	Yes A No	TYPE OF TR	RACER(S) U	JSED			

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	3		4
Page		ot	

API 47- 095 - 02345 Farm name James, William & Almeda Well number Yurigan #2V-1 South

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	5/18/16	5374'	5366'	7	Alexander
		5336'	5340'	2	
		5120'	5113'	7	Benson
		5036'	5038'	2	
		<u> </u>			
	- 23				
				1	

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	5/19/16	9BPM	2798	2873	2553	261 Sks.	277	300 MSCF
		_						
		-						
						-		
							Z	
							the second	(E) E I II II Ger
		<u> </u>					nd	T 2 4 2016
								7 2 4 2016

Please insert additional pages as applicable.

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API 47- <u>095</u>	_ 02345		Farm	name_	James	s, Williar	n & Alm	neda	Well 1	number _.	Yuriga	ın #2V-	-1 South
PRODUCING	<u>FORMAT</u>	ION(S)		DEPT	<u>'HS</u>								
Alexander			_	5334		_ TVD			MD				
Benson		•		5112'									
			_										
Please insert ac	lditional pa	ges as a	— pplicable.										
GAS TEST	■ Build up	D₁	rawdown	□Ор	en Flow		OIL T	EST 🖪	Flow [2 Pump			
SHUT-IN PRE	SSURE	Surface	350	psi	Botto	m Hole_		psi	DURAT	TION O	F TEST	24	hrs
OPEN FLOW	Gas 15	mcfpd	Oil 0	bpd .	NGL		Water 0				RED B		Pilot
LITHOLOGY/ FORMATION	TOP DEPTH IN NAME T	FT D	BOTTOM EPTH IN FT	DEP	TOP FH IN FT MD	BOTTO DEPTH II	N FT DE	PE OF FI	ROCK TYI LUID (FRE	SHWATI	ER, BRIN	E, OIL, G	GAS, H ₂ S, ETC)
	0				0				SEE AT	IACHEL	GEOLO	GIST RE	PORT
										<u></u>	<u> </u>		
											-		
								- - -					
													_
Please insert ad	 ditional pa	ges as a	pplicable.										
Drilling Contra Address P.O.	ctor Nexu				City	Jane Lo	ew		State	Ohio	Zip	26378	
Logging Comp		lachian V	Vell Survey	s	,								
Address 10291	Ohio Avenu	e			City	Cambrid	dge		State	Ohio	Zip _	43725	
Cementing Con	n pany Ur	niversal \	Nell Service	es								٠.	
Address P.O. E		,			City	Buckhani	non		State	Ohio	Zip _	26201	OCT 24 20
Stimulating Co			sal Ser	vices		Buckha	 annon		State	ΤÀ	Zip <u>2</u>	26201	
Please insert ad			pplicable.	^	_ = 5.69					***	4		
Completed by	Martin L.	Miller	101)		Те	elephone	740-373	-8771			
J			4-1	- 11 1	<u> </u>	Sr. VP Of C							

12956 Claylick Road Newark, Ohio 43056-9146 Office 740-763-2758 Home 740-763-2758 Mobile 330-763-0479

National Minerals Corporation

ALLIANCE PETROLEUM CORPORATION

YURIGAN 2 V-1 SOUTH

ELLSWORTH DISTRICT

TYLER COUNTY, WEST VIRGINIA

OCT 2 4 2016

Oil, Gas & Mineral Exploration WELL: Alliance Petroleum Corporation 2 V-1 South Yurigan

LOCATION: Ellsworth District, Tyler County, West Virginia.

PERMIT NUMBER: 47-095-02345.

ELEVATION: 1039' Ground 1049'KB.

STATUS: Preparing to complete as a gas producer.

CASING: 7" @ 2222'.

TOTAL DEPTH: 5841' Driller 5852' Logger.

CONTRACTOR: Nexus Drilling Co.

TOOLS: Rotary.

COMPLETED DRILLING: 5/12/2016.

FORMATION AT TOTAL DEPTH: Devonian shale.

ELECTRICAL SURVEYS: Gamma Ray-Compensated Density-Neutron-Caliper-Induction by Appalachian Well Surveys.

SHOWS: Fair shows of gas were noted in the Alexander, Benson, Bayard & 3rd Salt Sand. Small shows of gas were noted on the mud log in the Riley, Bradford, Balltown, Speechley, Warren, Gantz & Gordon.

FORMATION TOPS:	1 st Salt Sand	1520'	- 4 71
	2 nd Salt Sand	1608'	- 559
	3 rd Salt Sand	1781'	- 732
	Maxon Sandstone	1866'	<i>=</i> 817
	Big Lime	1913'	- 864
	Keener Sandstone	1960'	- 911
	Big Injun Sandstone	1976'	- 927
	Weir Sandstone	2302'	-1253
	Gantz Sandstone	2554'	-1505
	Thirty-foot Sandstone	2650'	-1601
	Gordon Stray Sandstone	2740'	-169ACT 2 4 2016
	Gordon Sandstone	2782'	-1733
	4 th Sand	2842'	-1793
	5 th Sand	2900'	-1851
	Bayard Sandstone	2998'	-1949
	Warren Sandstone	3481'	-2432
	Speechley Sandstone	3645'	-2596

Balltown Sandstone	3906'	-2857
Bradford Sandstone	4260'	-3211
Riley Sandstone	4669'	-3620
Benson Sandstone	5112'	-4063
Alexander Sandstone	5334'	-4285
Rhinestreet Shale	5454'	-4405

STRUCTURAL COMPARISON:

	Alliance Petroleum	Alliance Petroleum
	Yurigan 2 V-1 South	Parr 1V North
Big Lime	- 864	- 854
Gordon Sandstone	-1733	-1726
Warren Sandstone	-2432	-2426
Benson Sandstone	-4063	-4058

GEOLOGY:

I would first recommend completion of the Alexander & Benson Sandstones. The Rhinestreet Shale recorded some small gas shows on the mud log, but did not have the porosity development seen in the Parr 1 V North. The Alexander (5334 to 5394') is not as well developed as in the Parr 1 V North. It has fair to poor porosities and low water saturations. The mud log recorded a fair show of gas (background of 150 units to a maximum of 433 units) in this zone. The Benson development (5112 to 5118') is also poorer that seen in the Parr 1 V North, with fair porosities and low water saturations. A fair show of gas (background of 180 units to a maximum of 385 units) was also noted in this zone.

If a second stage is needed, I would recommend the Riley (4669 to 4698'), Bradford (4398 to 4429') and Warren (3481 to 3567'). The Riley, which is not as well developed as in the Parr 1 V North, has fair to poor porosities and low water saturations. The mud log indicated a small show of gas (background of 250 units to a maximum of 379 units). The Bradford has fair to poor porosities and low water saturations. The mud log indicated small shows of gas in this zone (background of 260 units to a maximum of 384 units). The Warren has fair to good porosities and low water saturations. The mud log indicated small shows of gas in this zone (background of 300 units to a maximum of 364 units).

After depletion of the lower zones, additional production may be obtained from the Bayard, Gordon, Gantz, Weir & 3rd Salt Sand. The Bayard, 2998 to 3012', has good porosities and low water saturations. The mud log indicated a fair show of gas in this zone. The Gordon, 2782 to 2813', has excellent porosity and excellent gas effect on the neutron log. The mud log indicated a small show of gas in this zone. Connection gas increased dramatically after this zone was drilled, indicating severe pressure depletion. The Gantz, 2554 to 2572', has

OCT 8 4 2016

good to very good porosities and low water saturations. However, only a small show of gas was noted on the mud log. This zone may also be severely depleted. The Weir, 2302 to 2428', has fair to good porosities and low to moderate water saturations. Several small shows of gas were noted on the mud log. A fair show of gas (background of 10 units to a maximum of 286 units) was noted in the 3rd Salt Sand at 1810'. Since this is behind the 7" casing, the only logs we have are the gamma ray and neutron. Based upon these logs, there appears to be a zone with high gas saturations from 1814 to 1833'. No porosity or water saturation data are available.

Respectfully submitted,

NATIONAL MINERALS CORPORATION

By: Douglas L. Core, President

Dylas L. Core

May 17, 2016

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