

## west virginia department of environmental protection

Office of Oil and Gas 601 57th Street SE Charleston, WV 25304 (304) 926-0450 (304) 926-0452 fax Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.dep.wv.gov

#### PERMIT MODIFICATION APPROVAL

September 19, 2014

YOST HERITAGE INC. 2656 DAYBROOK ROAD FAIRVIEW, WV 26570

Re: Permit Modification Approval for API Number 6101667, Well #: H1
DRILL HORIZONTAL PRODUCTION SECTION IN FIFTH SAND

## Oil and Gas Operator:

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

Please call James Martin at 304-926-0499, extension 1654 if you have any questions.

Sincerely

Gene Smith

Assistant Chief of Permitting

Office of Oil and Gas

WW - 2B (Rev. 8/10)

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS WELL WORK PERMIT APPLICATION

1) Well Operate	or: YOS	T HERITA	AGE, INC.	988781704	MONONGALIA 6	CLAY 03	BLACKSVILLE 256
	-			Operator ID	County	District	Quadrangle
2) Operator's V	oer: <u>H1</u>			3) Elevation: 1.5040ffice of Oil and Gas			
4) Well Type: (a	a) Oil <u>X</u>	or Ga	as X				
(1)	o) If Gas:	Produ	iction X / Und	derground Sto	rage		SEP 1 7 2014
		Dee	n / S	hallow X		WV I	Department of
5) Proposed Ta 6) Proposed To 7) Approximate 8) Approximate	fresh wa	nation(s) 1: <sup>5922.8</sup> ter strata	: 5TH SAND Feet I a depths: 300'	Formation at F	Proposed Tai Proposed Tot	Environr get Depth: al Depth: 5T	Separment of Separation Protection
9) Approximate	coal sea	m depth	S: 1099'				
10) Approximat	e void de	nths (co	al, Karst, other):	1.099' COAL M	INE		<del>-</del>
10 00 1		n 20070	1771 to distribute \$652				
11) Does land	contain co	al seam	s tributary to act	ive mine? Y	ES - FEDERAL	#2 MINE	
12) Describe pro			nd fracturing meth	ods in detail (a	ttach additiona	al sheets if no	eeded)
days to						i	
13)	PECIFIC	various and a second contract	SING AND TUE			) OFM	-
TYPE S	PECIFIC			FOOTAGE	INTERVALS	ir — — istiniu	
	<u>Size</u>	<u>Grade</u>	Weight per ft	For Drilling	Left in Well	Fill -up (Cu	<u>u. Ft.)</u>
Conductor	16"	J-55	65#	50'	50'	CEMENT TO	SURFACE
Fresh Water							
Coal	11 3/4"	J-55	42#	1206'	1206'	CEMENT TO	SURFACE
Intermediate	8 5/8"	J-55	32#	2618'	2618'	CEMENT TO	SURFACE
Production	4 1/2"	J-55	11.60#	5922.8'	5922.8'	CEMENT BAC	K TO 2700'
Tubing						OR SET PACKER	OR PACKERS
Liners							
Packers: Kind Size Dep							

Daybrook Development Co. 2656 Daybrook Road Fairview, WV 26570 304-798-3136 Phone 304-798-3137 Fax

September 17, 2014

## MODIFICATION REQUEST

### Step #1

1. Cement Test Hole from 4,306' back to 2,700'

Step #2 Drill out Horizontal

- Start kick-off point 2797.8'Elv.
- Start horizontal point 3,514' Elv.
- 3. Total footage of horizontal length 2,050:

### Step #3

1. Run  $4\frac{1}{2}$ " production string approximately 5,918' which is total depth.

Step #4 Three options projected

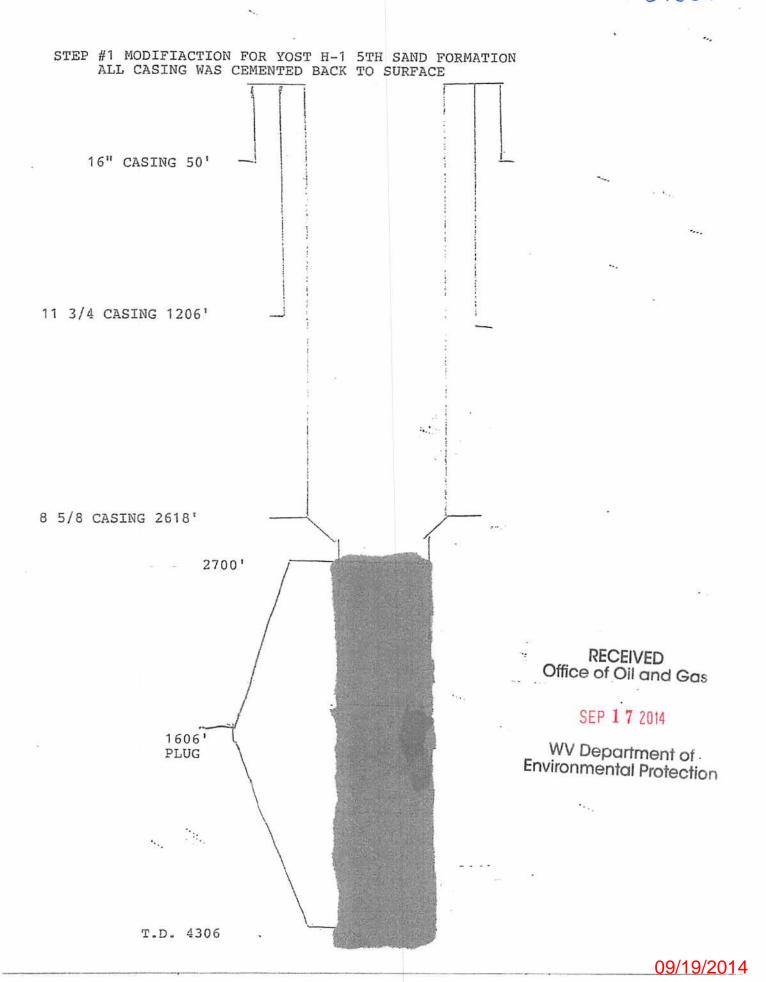
- 1. Set a packer or packers
- 2. Cement back to 2,700'

RECEIVED Office of Oil and Gas

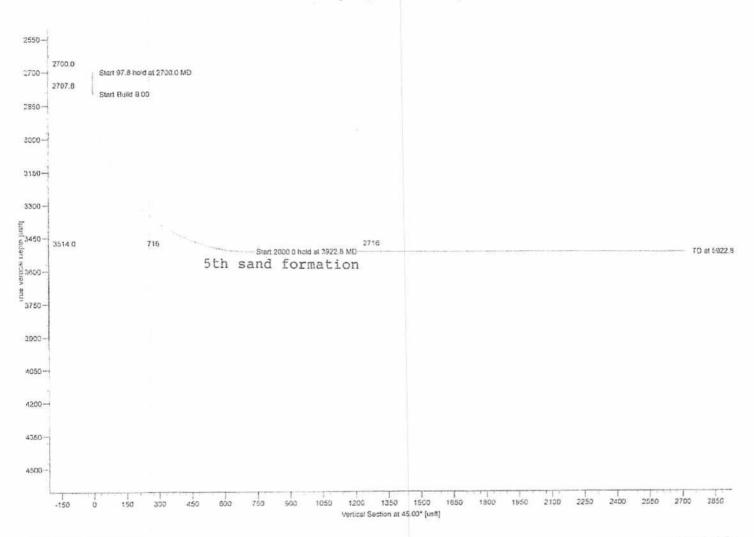
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Step #5 Foam & Nitrogen FRAC



Plan: Design #1 (Well #1/Wellbore #1)



COMPASS 5000.1 Build 65

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