DATE: 6-24-09

API #:047-105-01356

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

Farm name:STRONG HEIRS#1#1				
LOCATION: Elevation:960'	Quadrangle: _BURNING SPRINGS 7.5'			
District: BURNING SPRINGS	District: BURNING SPRINGS County: _ WIRT			
Latitude:_1750'Feet South of39	Deg 00	Min 00	Sec	
Longitude_1800' Feet West of _81	Deg 17	Min 30	Sec.	
201g.tade_1000100t (1 _01_01_				
Company: _PETRO HOLDINGS INC	_			
	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: P. O. BOX 987				
SPENCER, WV 25276				
Agent: KEITH CRIHFIELD	9 5/8"	290'	290'	112
Inspector: ED GAINER				
Date Permit Issued: 11-30-07	7"	1704'	1704'	349
Date Well Work Commenced: 01-28-08				
Date Well Work Completed: 02-08-08	4 1/2"	4811	4811	328
Verbal Plugging: N/A				
Date Permission granted on:				
Rotary Cable Rig			RECE	
Total Depth (feet): 4822'			Office of (il & Gas
Fresh Water Depth (ft.): 35'			AUG C	2009
			1 700	1
Salt Water Depth (ft.): 916'			Wy Depar	
			Environment	Manual Care and
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.):				
	•	'	'	'
OPEN FLOW DATA				
Producing formation_DEVONIAN SHALL	E Pay zo	ne depth (ft)	2417' – 4775'	
Gas: Initial open flow_SHOW MCF/d Oi				
Final open flow626_MCF/d Fi	•		_	
Time of open flow between initial and f				
Static rock Pressure620psig (surface				
paig (surface	c pressure) ar	ter2+0_110	uis	
Second producing formation	Day 70	no donth (ft)		
Gas: Initial open flowMCF/d Oil:				
Final open flowMCF/d F				
Time of open flow between initial and i				
Static rock Pressurepsig (surface	e pressure) at	terHo	urs	
NOTE, ON DACK OF THIS FORM DUT THE		1) PETAMO	OF PERFOR A	r.n.
NOTE: ON BACK OF THIS FORM PUT THE I	FOLLOWING:	1). DETAILS	OF PERFORAT	ED
INTERVALS, FRACTURING OR STIMULATIN				
LOG WHICH IS A SYSTEMATIC DETAILED		L KECOKD O	FALL FORMA	IONS,
INCLUDING COAL ENCOUNTERED BY THE	WELLBUKE.			
Signed:		4		
By:C. I. ,McKOWN, II, PRI	ESIDENT TEN	ADEST ENERG	EV CORD OWN	JED
Date: 06-24-09	ESIDENI, IEN	WEDI ENEK(JI CORF., OWI	YER

Perforations and Frac Detail:

1 st stage	4099' – 4775' (24 holes)	90 quality foam frac using 500 gal. 15% HCL; 757 MSCF N2; 30,000# 20/40 sand.
2 nd stage	3056' – 3893' (26 holes)	90 quality foam frac using 500 gal. 15% HCL; 735 MSCF N ₂ ; 30,000# 20/40 sand.
3 rd stage	2417' – 2944' (24 holes)	90 quality foam frac using 500 gal. 15% HCL: 704 MSCF No: 30 000# 20/40 sand

WELL LOG:

SAND	0	105
RED ROCK	105	150
SAND/SLATE	150	170
SAND	170	215
RED ROCK	215	225
SAND	225	245
RED ROCK	245	302
SAND	302	350
RED ROCK	350	375
SAND	375	505
SHALE/SAND	505	650
SHALE	650	725
SHALE/SAND	725	932
SAND	932	1154
SAND/SHALE	1154	1435
SAND	1435	1470
SHALE	1470	1495
LIME	1495	1600
SAND	1600	1670
SAND/SHALE	1670	1740
SLATE	1740	1845
SAND/SLATE	1845	1972
SAND	1972	2067
SHALE/SAND	2067	2289
SHALE	2289	2383
SHALE/SAND	2383	2490
SLATE/SHALE	2490	2575
SHALE	2575	2666
SAND/SHALE	2666	2850
SAND	2850	2930
SAND/SHALE	2930	3045
SHALE	3045	3129
SHALE/SAND	3129	3266

CONT.

SHALE	3266	3420
SLATE/SAND	3420	3520
SAND/SHALE	3520	3613
SHALE	3613	3739
SAND/SHALE	3739	3833
SAND	3833	3930
SHALE	3930	4010
SAND/SHALE	4010	4150
SAND	4150	4200
SHALE	4200	4300
SAND/SHALE	4300	4400
SAND	4400	4500
SHALE	4500	4592
SAND/SHALE	4592	4822



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 Joe Manchin III, Governor Stephanie R. Timmermeyer, Cabinet Secretary www.wvdep.org

November 30, 2007

WELL WORK PERMIT

New Well

This permit, API Well Number: 47-10501356, issued to PETRO HOLDINGS, INC., is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Please be advised that form WR-35, well operators report of well work, is to be submitted to this office within 90 days of completion of drilling, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.

Jamés Martin

Chief

Operator's Well No: STRONG HEIRS 1

Farm Name: MENEFEE, LARRY

API Well Number: 47-10501356

Permit Type: New Well Date Issued: 11/30/2007

Promoting a healthy environment.

STATE OF WEST VIRGINIA

105-01356

-----WV Department of -----Environmental Protection

DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS WELL WORK PERMIT APPLICATION

		_				- 10	1	271
1) Well Operate	or PETF	RO HOLE	DINGS INC.		7079	WIRT	Burn. Spring	Burning Springs 7.5'
				Оре	erator ID	County	District	Quadrangle
2) Operator⊡s \	Well Num	ber:_Str	ong Heirs #1	;	3) E	levation:	960'	_
4) Well Type: (a	a) Oil o) If Gas:	or Ga Produ Deep	asx_ lction_x/ U / S :Devonian S	Inderground Shallow	Storage x		C	2 \
5) Proposed Ta	arget Forn	nation(s)	:Devonian \$	Shalel a	1 mo	re +	ron 20 1	nts the
7) Approximate 8) Approximate	fresh wate	i:5500 iter strata er depths	depths:	+/- 150'_ +/- 1000'_				
9) Approximate	coal sea	m depth	s:	N/A				
10) Does land	contain co	oal seam	s tributary to ac	tive mine?	No			
11) Describe pr	roposed v	vell work	Drill and stin	nulate new w	ell.			
121	2/11/9	OT	ASING AND TUI	BING PROGI	RAM			
THE S	PECIFIC	ATIONS				RVALS	CEME	NT
	<u>Size</u>	<u>Grade</u>	Weight per ft	For Drilling	Left in	n Well	Fill -up (Cu.	Ft.)
Conductor								
Fresh Water	9 5/8"	LS	32#	300'	300'		Cement to Surface	
Coal								
Intermediate	7"	LS	17#	1700'	1700	,	Cement to	300'
Production	4 ½"	J-55	10.5/11.6	5500'	55	1	Cement to 1850'	+/-
Tubing								
Liners							OF Oil & Gas	
	ind izes							
	epths Se	t				NU)	V 1 4 2007	