



RECEIVED State of West Virginia

Environmental Protection Section of Oil and Gas AUG 15 1994 Well Operator's Report of Well Work

Permitting SLY HARDWOOD LBR Operator Well No.: HAESSLY #1

LOCATION:

Elevation: 1,197.00 Quadrangle: OXFORD

County: DODDRIDGE District: SOUTHWEST Latitude: 100 Feet South of 39 Deg. 12Min. 30 Sec. Longitude 8010 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: TERM ENERGY CORP.

713 EAST MAIN STREET

HARRISVILLE, WV 26362-0000

Agent: JEAN FREELAND

Inspector: MIKE UNDERWOOD

Permit Issued: 07/28/94
Well work Commenced: 7/28/94

Well work Completed: 7/28/94

Verbal Plugging

Permission granted on:
Rotary Cable Rig
Total Depth (feet) 5347 Acutal Fresh water depths (ft) 60' Damp

Salt water depths (ft) N/A

Is coal being mined in area (Y/N)? N Coal Depths (ft):

Casing	Used in		Cement Fill Up
	Drilling	in Well	
Size			plan excision plants
_16"	15'	0i	
_11_3/4"	25	0	
8.5/8"	 1306-4'	1306.4	401-2
4 1/2"	5287.6'	5287.6'	795.5

OPEN FLOW DATA

Producing formation Alexander, Riley, Bradford Pay zone depth (ft) 3301-5196

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Final open flow 134 MCF/d Final open flow 0 Bbl/d Time of open flow between initial and final tests Hours Static rock Pressure 190 psig (surface pressure) after 24 Hours

Second production Second producing formation Gordon, Weir Pay zone depth (ft) 2204-2633 Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Final open flow 375 MCF/d Final open flow Show Bbl/d Time of open flow between initial and final tests Hours Static rock Pressure 440 psig (surface pressure) after 24 Hours Pay zone depth (ft) 2204-2633

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: TERM ENERGY CORP.

By: Designated Agent
Date: August 12, 1994

AU6 2 6 1994

HAESSLY #1

07-28-94

PERFORATED: GORDON: 2607 - 2633; 8 HOLES .39 WEIR: 2204 - 2302; 18 HOLES .39

SET WIDE MOUTH PLUG AT 2645'

ONE STAGE ENERGIZE WATER FRAC

- GORDON & WEIR:

MAX TR PRESS 3360; AVG RATE 31; AVG PRESS 3180; 33,700# 20/40; MAX CONC 4; TOTAL ACID 750 GAL; ISIP 1800; 10 MIN SIP 1400; TOTAL NITROGEN 90.000 SCF; TOTAL FLUIDS 709 BBLS.

State of West Virginia DEPARTMENT OF ENERGY Division of Oil and Gas

Well Operator's Report of Well Work

HAESSLY HARWOOD LUMBER Operator Well No.: HAESSLY #1

Elevation: 1197.00 Quadrangle: OXFORD

District: SOUTHWEST County: DODDRIDGE Latitude: 100 Feet South of 39 Deg. 12Min. 30 Sec. Longitude 8010 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: TERM ENERGY CORP.

110 N. SPRING ST. HARRISVILLE, WV 26362-0000

Agent: JEAN FREELAND

Inspector: MIKE UNDERWOOD

Permit Issued: 12/26/89 Well work Commenced: 12/29/89

Well work Completed: 6/25/90

Verbal Plugging

Permission granted on:

Rotary X Cable Rig
Total Depth (feet) 5347
Fresh water depths (ft) 60' Damp

Salt water depths (ft) None

Is coal being mined in area (Y/N)? N Coal Depths (ft):

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.	
Size		-		
16"	15'	0	0	
11 3/4"	25 '	0	0	
8 5/8"	1306.4	1306.4	401.2'	
4 1/2"	5287.6'	5287.6'_	795.5'	
		-		

OPEN FLOW DATA

Producing formation Alexander Pay zone depth (ft) 5146-5196

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Final open flow 400 MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours Static rock Pressure 1240 psig (surface pressure) after 63 Hours COMINGLED PRODUCTION Second producing formation see back for zones Pay zone depth (ft) Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d Final open flow 630 MCF/d Final open flow Bbl/d Time of open flow between initial and final tests Hours Static rock Pressure 1080 psig (surface pressure) after 24 Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: TERM ENERGY CORP.

03/27/90 Perforated: Alexander 5152-5196; 17 holes, .39

03/28/90 Single Stage Energized Water Frac

> Alexander: Max TR Press 3250; Average Rate 25.4; Average Pressure 2863; 60,000# 20/40; 10,000# 80/100; Max. Conc. 4; Total Acid 500 Gal.; Total Nitrogen 166,000 SCF; Total Fluid 770 Bbls; ISIP 1300; 5 Min SIP 1093:

> > 10 Min SIP 1054.

WELL LOG	TOP	BOTTOM	
Sand, Shale & RR	0	1852 DAMP A	ፐ 60 ፣
Little Lime	1852	1866	1 00
Shale	1862	1891	
Big Lime	1891	1953	
Injun	1953	2036	
Sand & Shale	2036	5347	
GEOPHYSICAL LOG	TOP	BOTTOM	
Big Lime	1895	1956	
Big Injun	1956	2036	
Weir	2196	2318	
Berea	2394	2399	
Gordon Group	2618	2778	
Warren	3260	3316	
Speechly	3331	3892	
Balltown	4202	4369	
Bradford	4424	4505	
Riley	4687	4816	
Benson	4878	4885	
Leopold	5008	5088	
Alexander	5127	5216	

6/25/90 PERFORATED RILEY: 4688 - 4715; 5 HOLES .39 BRADFORD 4467 - 4479; 6 HOLES .39 MIDDLE BALLTOWN 4219 - 4250; 6 HOLES .39 3421 - 3425; UPPER SPEECHLY 5 HOLES .39 WARREN

2 STAGE WATER FRAC

- RILEY & BALLTOWN: MAX TR PRESS 2583; AVG RATE 33.6; AVG PRESS 2391; 40,000# 20/40; 10,000# 80/100, MAX CONC 4,

TOTAL ACID 500 GAL; TOTAL FLUID 554 BBLS; ISIP

3301 - 3340;

11 HOLES . 39

1421; 5 MIN SIP 889

- WARREN & SPEECHLY: MAX TR PRESS 2899; AVG RATE 33.5; AVG PRESS 2271;

32,000# 20/40; 10,000# 80/100; MAX CONC 4;

TOTAL ACID 500 GAL; TOTAL FLUIDS 438 BBLS; ISIP

1280; 5 MIN SIP 893

brue 12/27/89 brue 12/27/89

STATE OF WEST VIRGINIA

DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS 4 12/27/91

WELL WORK PERMIT APPLICATION

Q) Well on	•	<	386	- WELFT CHITCH	15)
~ () Well Op	erator:	TERM En	ergy Corpora	ation 49	105	525
						evation: 1197
			or Ga			-
	(b)	If Gas:	Productio Dee	n <u>x</u> / Undergi p <u></u> /	round Storag Shallo	e/
5) Proposed	d Target	Formatio	n(s):Ale	exander 439.		
6) Proposed	d Total D	epth :5	500	feet		
7) Approxim	nate fres	h water :	strata dep	ths: 80'	310, 256,	121'342'
8) Approxim	mate salt	water de	epths:	0 733	35'	
9) Approxim	mate coal	seam de	oths:	0		
10) Does lan	nd contain	n coal se	ams tribu	tary to acti	ve mine? Ye	es/ No_x_/
11) Proposed						
12) *	•	73.01.			1	
TYPE				ING PROGRAM		
	3	PECIFICAT	·IONS	FOOTAGE IN	TERVALS	CEMENT
	Size	Crade	Weight per ft.	For drilling	Left inwell	Fill-up
Conductor	16" 11 3/4"	J-55 J-55	75# 42#	15" 22'	0 C/S	(cu. ft.)
Fresh Water	8 5/8"	J-55	20# .	1297'	1285'	10.K
Coal					R	112
Intermediate					7.	300818-11-32
Production_	4 1/2"	J - 55	11.6# 10.5#	84 5193	5193	250
Tubing					91	38C5P1811.V
Liners					10)	BREITE BE
PACKERS : Kind	The state of the s					Back B
Size	es <u> </u>					DEC 20 1989 2
7	Fo	r Diviso	n of Oil a	nd Gas Use (Only DEP	VISION OF OIL & GAS PARTMENT OF ENERGY
Fee(s) pa	aid: J		ork Permit		mation Fund	WPCP
Plat (WW-9 (H WW-		ond L.	Unifet letter	Agent
7	. 0			OTHER DESIGNATION OF THE PERSON OF THE PERSO	Type)	A Ayent

Page 1 of Form WW2-A (09/87)File Copy



DEPARTMENT OF LINERGY

Date: December 14, 1989	
Operator's well number	
Haessly #1	

DIVISION OF OLE SAS 3) API Well No: 47 - 017 - 3774 State - County - Permit

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4)	Surface Owner(s) to be served:	5) (a) Coal Operator:
	(a) Name <u>Haessly Hardwood Lumber Sales</u>	Name N/A
	Address R.D. #1	Address
	Marietta, OH	
	(b) Name	(b) Coal Owner(s) with Declaration
	Address	Name N/A
		Address
	(c) Name	
	Address	Name
		Address
6)	Inspector <u>Mike Underwood</u>	(c) Coal Lessee with Declaration
	Address Rt. 2 Box 135	Name N/A
	Salem, WV 26426	Address
	Telephone (304)	
	TO THE PERSON(S) NAMED ABO	OVE TAKE NOTICE THAT:
	Included is the lease or leases or	
	cacts by which I hold the right to	
	Included is the information require	
Sect:	ion 8(d) of the Code of West Virgin	ia (see page 2)
	I certify that as required under C	hapter 22B of the West Virginia Code
I hav	ve served copies of this notice and	
	mpanying documents pages 1 through	
	Personal Service (Affidavit a	
	Certified Mail (Postmarked po	
	Publication (Notice of Public	
	I have read and understand Chapter	22B and 38 CSR 11-18, and I agree
to th	ne terms and conditions of any perm	
60 62		t I have personally examined and am
£-m:	liar with the information submitted	
acta	inments, and that based on my inqui	ry of those individuals immediately
	onsible for obtaining the informati	on, I believe that the information
15 C	rue, accurate, and complete.	
	I am aware that there are signific	
info	rmation, including the possibility	•
	Well Operator	TERM Energy Corporation
	By: Alan	v Meland
	Its:Age	
		North Spring Street
		isville, WV 26362
		4 643-4500
Subs	cribed and sworn before me this 14	day of Tecember , 19 89
		1 HAND
ATTENDED TO THE PERSON OF THE	<u>Call</u>	Notary Public
Мус	ommission expires	3/95 //
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	JUL 1 2 94	Page	_of
FORM	WW-2B Permoder STATE OF WEST VIRGINIA	Exerces.	07/28/96
	OF ENERGY, DIVISION OF OIL AND) GAS	
	WELL WORK PERMIT APPLICATION		
) }	· 886 49105	$(\overline{1})$	526
Į.	Well Operator: Term Energy Corporation 49105	\smile	
	**	_ 3) Elevat	tion: 1197'
	Operator's Well Number: Haessly #1 47-17-03774F	_)) preva	01011
	Well type: (a) Oil/ or Gas_XX/		
	(b) If Gas: Production_XX/ Underground Deep/	Storage Shallow <u>XX</u>	/ /
5)	Proposed Target Formation(s): Weir 387		
5)	Proposed Total Depth: 5287.6 Actual feet		
7)	Approximate fresh water strata depths: 60'		-

8) Approximate salt water depths: N/A
9) Approximate coal seam depths:

12)

10) Does land contain coal seams tributary to active mine? Yes___/ No_ $_{\underline{X}}$ /

11) Proposed Well Work: Set Small mouth plug at 2350'. Frac Weir. Remove plug and Comingle with lower.

CASING AND TUBING PROGRAM

מטטמ	SF	PECIFICAT	IONS	FOOTAGE I	VTERVALS	CEREKI
TYPE	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	16 " 11 3/4"	J-55 J-55	75# 42#	15 ' 25 '		0
Fresh Water	8 5/8"	J - 55	20#	1306.4"	1306.4"	401.27
Coal					/ 	CALOUD INDE
Intermediate		J-55	11.6#	84"	84"	from well fall
Production	4 1/2"	1	10.5#	5203.6"	5203.6	795.5
Tubing	·					
Liners						
	nd zes oths set					

5× 4	For	Divison of	f Oil and	Gas	Ose Only	
Fee(s) paid:	-	Well Work	Permit	11	Reclamation Fund	I WPCP
Plat _ WW-		. r.r.r. 2.D	Ron	d	LC	1Agen
_ Plat _ WW-	9 1	WW-2D		. 4.0	(Type)	

Dago	1 of	1)	Dato: 1 3 3	1007	
Form	1 of &	2)	Operator's we	1994 ell number	
	1) ML 1	21	Hancely #1	II HUMBEL	
(1 0 2		3)	ADT Well No.	47 - 17 - 0	377/8
	Office -			ite - County - I	
	Ones or oil				
		STATE OF WEST	VTRGTNTA		
	DIVISION OF ENVIRON			OF OIL AND GAS	
	NOTICE AND A	APPLICATION FO	OR A WELL WORK	PERMIT	
4)	Surface Owner(s) to be	served:	5) (a) Coal C	perator:	
•	(a) Name <u>Haessly Hardwo</u>				
	Address Rt. 1 Newport		Address		
	Marietta, OH		***************************************		-
	(h) Name	73730	(b) Coal Owne	er(s) with Decla	aration
	(b) Name		• • •	, ,	
	Address		Address		
	(c) Namo				
	(c) Name				
	Address		Name		
			Address		
C 3	T.,	_	(a) Coal Logs	roo with Doglar	ation
6)	Inspector Mike Underwoo	<u>d</u>	(C) Coar Less	see with petials	acion
	Address Rt. 2 Box 135		Name		
	Salem. WV 26	426	Address		
	Telephone (304)- 782-1	043	· .		
	Included is the lease acts by which I hold t	or leases or		 ling contract o	r
CONT	acts by which I hold t	ine right to	extract orr ar	ac gas <u>ok</u>	
	Included is the inform				P
Sect:	on 8(d) of the Code of	. west virgin	ia (see page 4	4) 	
accor	I certify that as require served copies of this panying documents page	is notice and es 1 through	application, on the abo	a location pla	t, and
	Certified Mail (AIIIUAVIC a	ctalled;	attached)	
	Publication (Noti				
to t	I have read and unders	s of any perm	it issued unde	er this applica	tion.
	I certify under penalt	ty of law tha	t I have perso	oustria examined	and am
iami	iar with the informati	ion submitted	on this appi:	ication form an	d all
atta	chments, and that based	d on my inqui	ry of those 11	ndividuals imme	diately
	onsible for obtaining t		on, I believe	that the inform	mation
is t	rue, accurate, and comp				
	I am aware that there				false
info	mation, including the	possibility	of fine and in	mprisonment.	
	We	ell Operator	Term Energy Con		
	B	y: Dean	Truland	Jean Freelan	d
	-	ts: Designated			
	Ac	/	E. Main St.		
			isville, WV 2636	62	
	$\overline{\mathrm{Te}}$		4) 643-4500		
Subs	cribed and sworn before			CFFICH	u sea 1994
		1 .1 4 1	- 1	NOTARY OTATE OF W	PUBLIC EST VIRGINIA.
		Luduth	- When I	THE ELALIS	MSMERblid
My c	ommission expires 🧲	ect 15	2003	Re I	Box 60 W 26337