



State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: SPURGEON, LAURA (WIDOW) Operator Well No.: SPURGEON #4

LOCATION: Elevation: 1,140.00 Quadrangle: WEST UNION

District: WEST UNION County: DODDRIDGE  
Latitude: 2775 Feet South of 39 Deg. 17Min. 30 Sec.  
Longitude 11600 Feet West of 80 Deg. 45 Min. Sec.

Company: RARE EARTH ENERGY, INC.

P. O. BOX 172  
CLARKSBURG, WV 26301-0000

Agent: SAMUEL S. SPATAFORE

Inspector: MIKE UNDERWOOD  
Permit Issued: 03/15/94

Well work Commenced: 03/24/94

Well work Completed: 03/26/94

Verbal Plugging

Permission granted on: N/A

Rotary X Cable Rig

Total Depth (feet)

Fresh water depths (ft) 115'

Salt water depths (ft) 1487'

Is coal being mined in area (Y/N)? N

Coal Depths (ft): None

OPEN FLOW DATA

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Cu. Ft.
9-5/8	1126'	1126'	CTS 425ft <sup>3</sup>

\*Centered to Surface

Producing formation Maxton  
 Gas: Initial open flow 1,961M MCF/d Oil: Initial open flow None Pay zone depth (ft) 1875-1921  
 Final open flow 1,240M MCF/d Final open flow None Bbl/d  
 Time of open flow between initial and final tests 12 Hours  
 Static rock Pressure psig (surface pressure) after Hours  
 Second producing formation None Pay zone depth (ft)  
 Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d  
 Final open flow MCF/d Final open flow Bbl/d  
 Time of open flow between initial and final tests Hours  
 Static rock Pressure psig (surface pressure) after 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: RARE EARTH ENERGY INC  
 BY: *Sam Spatafore*  
 Date: May 5 1994

\*WELL IS UNSTIMULATED NATURAL FLOW IN OPEN HOLE

DRILLERS LOG

<u>FORMATION</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>REMARKS</u>
SANDY SHALE	0	16'	
RED ROCK, SAND, SHALE	16'	115'	WATER - 1" STREAM @ 115'
SAND & SHALE	115'	147'	
SAND	147'	150'	
RED ROCK	150'	180'	
SAND, SHALE, RED ROCK	180'	740'	
LIMESTONE	740'	754'	
SAND, SHALE, RED ROCK	754'	1875'	
MAXTON	1875'	1921'	WATER DAMP @ 1487'
			GAS - NO SHOW @ 1765'
			GAS - 20/10TH
			WATER IN 7" @ 1919'
			GAS - 16/10TH
			WATER IN 7" @ 1951'
			GAS - 14/10TH
			WATER IN 7" @ 1982'
			GAS - 12/10TH
			WATER IN 7" @ 4:30 AM
			GAS - 8/10TH WATER
			IN 7" @ 5:30 AM
SAND & SHALE	1921'	1982'	
TD	1982'		

18798  
86681

017 4112

Rev 3/19/94

STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS  
 WELL WORK PERMIT APPLICATION  
 740  
 Rare Earth Energy, Inc 40900  
 Operator's Well Number: Spurgeon No. 4  
 Well type: (a) Oil X/ or Gas X/  
 (b) If Gas: Production X/ Undergound Storage     /  
 Deep     / Shallow     /  
 Proposed Target Formation(s): Alexander 439  
 Proposed Total Depth: 5400 feet  
 Approximate fresh water strata depths: 80 120 950'  
 Approximate salt water depths: 1875  
 Approximate coal seam depths: 0  
 Does land contain coal seams tributary to active mine? Yes     / No X/  
 Proposed Well Work: Drill and stimulate new well

Issued 3/15/94  
 Expires 3/15/96  
 8 671

Elevation: 1140

18798

- 1) Well Operator: Rare Earth Energy, Inc 40900
- 2) Operator's Well Number: Spurgeon No. 4
- 3) Elevation: 1140
- 4) Well type: (a) Oil X/ or Gas X/  
 (b) If Gas: Production X/ Undergound Storage     /  
 Deep     / Shallow     /
- 5) Proposed Target Formation(s): Alexander 439
- 6) Proposed Total Depth: 5400 feet
- 7) Approximate fresh water strata depths: 80 120 950'
- 8) Approximate salt water depths: 1875
- 9) Approximate coal seam depths: 0
- 10) Does land contain coal seams tributary to active mine? Yes     / No X/  
 Proposed Well Work: Drill and stimulate new well
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- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor	1 1/4		47	90	90	
Fresh Water						
Coal						
Intermediate	8 5/8		20 lb.	1140 ft.	1140 ft.	cts 15% excess
Production	4 1/2		10.5 lb.	5400 ft.	5400 ft.	cts 15% excess
Tubing						
Liners						

Handwritten notes in table:  
 (CS) 1140'  
 0.1c Mark  
 1140'  
 15% excess

PACKERS : Kind \_\_\_\_\_  
 Sizes \_\_\_\_\_  
 Depths set \_\_\_\_\_

11818  
 Fee(s) paid:      Well Work Permit      Reclamation Fund      WPCP  
 Plat      WW-9      WW-2B      Bond      (Type)  
 Agent

1) Date: March 4, 1994  
2) Operator's well number  
Spurgeon No. 4  
3) API Well No: 47 - 017 - 4112  
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:
- (a) Name Spurgeon, Widow  
Address Rt. 1, Box 38  
West Union, WV 26456
- (b) Name \_\_\_\_\_  
Address \_\_\_\_\_
- (c) Name \_\_\_\_\_  
Address \_\_\_\_\_
- 6) Inspector Mike Underwood  
Address Rt. 2 Box 135  
Salem, WV 26426  
Telephone (304) - 782-1043
- 5) (a) Coal Operator:  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- (b) Coal Owner(s) with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- (c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR  
 Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)  
 I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 7 on the above named parties, by:  
 Personal Service (Affidavit attached)  
 \_\_\_\_\_ Certified Mail (Postmarked postal receipt attached)  
 \_\_\_\_\_ Publication (Notice of publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.  
 I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.  
 I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.



Well Operator Rare Earth Energy, Inc  
 By: Sam S. Spatafore, II  
 Its: Vice-President  
 Address P. O. Box 172  
Clarksburg, WV 26302-0172  
 Telephone (304) 622-4001  
 I subscribed and sworn before me this 4th day of March, 1994

Pete C. Sottrakis \_\_\_\_\_ Notary Public  
 My commission expires May 31, 1999