

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



Well Operator's Re	eport of V	Well Work	AUG	(Glor
Farm name: JAMES, FRED ETUX.	Operator	Well No.: 3	JAMES #2 P.	4,91
LOCATION: Elevation: 1052.00 Quadr	cangle: W	EST UNION	• and	•
District: CENTRAL Latitude: 1620 Feet Sout Longitude 9625 Feet West	th of 39	ounty: DODDI Deg. 20Min. Deg. 47 Mir	. 0 Sec.	
Company:RARE EARTH ENERGY, INC. P. O. BOX 172 CLARKSBURG, WV 26301-0000	Casing	Used in	Left	Cement
Agent: ROBERT G. HALL		Drilling	in Well	Cu. Ft.
	Size			
Inspector: MIKE UNDERWOOD Permit Issued: 12/03/90 Well work Commenced: 12/06/90	_11_3/4"	201.45	201.45	136 CF
Well work Completed: 12/14/90 Verbal Plugging Permission granted on:	8 5/8"	1575.20'	1575.20	383 CF
Rotary X Cable Rig Total Depth (feet) 5346' Fresh water depths (ft) 20, 240'	4_1/2"		5319.35	445 CF
Salt water depths (ft) None				
Is coal being mined in area (Y/N)? N Coal Depths (ft): 403, 670'			 	
OPEN FLOW DATA				
Riley, 2nd	ander /d Oil: In /d F: nitial and	nitial open inal open f.	flow low ts	See Back Bbl/6 Bbl/6 Hours
Second producing formation Gas: Initial open flow MCF, Final open flow between in Static rock Pressure psign	/d Oil: In /d Fi nitial and	inal open fi d final test	flow low ts	Bbl/d Bbl/d Hours
NOTE: ON BACK OF THIS FORM PUT THE INTERVALS, FRACTURING OR STIMULATING, LOG WHICH IS A SYSTEMATIC DETAILED INCLUDING COAL ENCOUNTERED BY THE WELL	FOLLOWING PHYSICA GEOLOGICA	G: 1). DETA	AILS OF PI	ERFORATEI
For: RARE EAR	RTH ENERG	Y, INC.		

AUG 1 6 1991

STIMULATION SUMMARY

1st Stage- Alexander 5200-5251'
(15 holes) 65 Quality foam frac;
50,000 lbs. 20/40, 500 gal 15%
HCL, 334 Bbls TWTR, 512 Mscf N2,
BKDN-2410 psi, ATP-3050 psi,
AIR-26 BRM, ISI-4000 psi
(Screened out halfway thru
flush)

2nd Stage-2nd Riley, Benson 4757-4933' (16: holes) 65 Quality foam frac; 5,000 lbs 80/100, 26,400 lbs 20/40, 500 gal 15% HCl, 378 Bbls TWTR, 544 Mscf N2, BKDN-1770 psi, ATP-3510 psi, AIR-22 BPM ISI-2500

3rd Stage-Riley 4499-4547'
(15 holes) 65 Quality foam frac,
5,000 lbs 80/100, 48,700 lbs
20/40, 500 gal 15% HCl, 318 Bbls
ATP-2990 psi, AIR-26 BPM,
ISI-2200 psi

Formation depths, 0-1480'. taken from driller's log book, depths, 1480-TD, taken from gamma ray log.

KB-GL	0-10'	Damp at 20'	Shale & Silt	2345-2433'	
Clay	10-20'	(appr 1/4"	Berea	2433-2441'	
Sand & Shale	20-60'	stream)	Shale	2441-2547'	
Sand	60-100'		Gordon	2647-2688'	
Sd, Sh & RR	100-125'		Shale	2688-2853 '	
Sand	125-185'		5th Sand	2853-2864'	
Sand & Shale	185-288'	Hole damp	Shale	2864-3345'	
Shale	288-310'	at 240'	Warren	3345-33821	
Sand & Shale	310-403'	•	Shale	3382-3446'	
Coal	403-405'		Speechley	3446-3514'	
Sand & Shale	405-520'		Shale	3514-3715'	
Sh & Red Rock	520-670'	Soap pump	Balltown	3715-3949'	
Coal	670-672'	on hole	Shale & Silt	3949-4066'	
Sand & Shale	672-1594'	at 606'	Bradford	4066-4287'	
Shale	1594-1644'	•	Shale	4287-4481'	
Sand	1644-1716'		Riley	4481-4551'	
Shale	1716-1726'		Shale & Silt	4551-4708'	
Sand	1726-1754'		2nd Riley	4708-4902'	
Shale	1754-1870'		Shale & Silt	4902-4922'	
Little Lime	1870-1894'		Benson	4922-4983'	
Shale	1894-1923'		Shale	.4983-5196'	
Big Lime	1923 - 1980'		Alexander	5196-5265'	
Big Injun	1980-2090'		Shale	5265-	TD-
Sand & Shale	2090-2235'		LTD-	5344'	26 Mcf/
Weir	2235-2345'		DTD-	· 5346'	

1162

FORM WW-2B

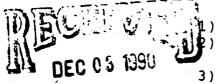
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STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS WELL WORK PERMIT APPLICATION

1) Well o	perator:	Rare Ear	740 rth Energy,	Inc.	4090	00 /	
_			James No.	2			
			or G			Elevation: 105	0
			Producti		ground Stora	ge/ ow_x/	
5) Propos	ed Target	Formation		lexander 439	SHELL		
					7	A Car	
Approximate fresh water strata depths: 100, 350, 460 Approximate salt water depths: (1540)							
Approximate fresh water strata depths: 100, 350, 460 Approximate salt water depths: 1540 Approximate coal seam depths: None							
Approximate coal seam depths: None (71-672'							
					2		
Does land contain coal seams tributary to active mine? Yes/ No_x_/ Proposed Well Work: drill and stimulate new well							
2)			- and Scimar	ace new well			
		CASI	NG AND TUB	ING PROGRAM			
YPE	s	PECIFICAT	TIONS	FOOTAGE IN	ITERVALS	CEMENT	
·	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up	
onductor	11-3/4			200	200	C. T.S as needed	
esh Water						MIL	
al						30CSR18-11.	3
termediate	8-5/8		20/23	1540	1540	511 c.f.	Vo
oduction	4-1/2	J - 55	10.5		5380	78CSRIQ I	/
bing						309.117	
ners			Ø.				
CKERS : Kind					,		
Sizes							
For Divison of Oil and Gas Use Only							

Reclamation Fund

Page 1 of 7 Form WW2-A (09/87) File Copy



D'VISION OF OIL & GAS

lo: 47 - <u>017 - **3865**</u> State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

	Surface Owner(s) to be served: a) Name Fred James	5) (a) Coal Operator: Name None
	Address Rt. 1, Box 278	Address
	West Union, WV 26456	Address
7	b) Name	(b) Coal Owner(s) with Declaration
À	Address	Name None
		Address
7	c) Name	Addless
À	Address	Name
		Name Address
		Address
6) I	nspector <u>Mike Underwood</u>	(c) Coal Lessee with Declaration
	Address Rt. 2, Box 135	Name Name
-	Salem, WV 26426	Address
<u> </u>	elephone (304) - 782-1043	Address
•	crephone (304) = 702=1043	
	TO THE PERSON(S) NAMED AR	SOVE TAKE NOTICE THAT:
I	ncluded is the lease or leases or	other continuing contract or
contra	cts by which I hold the right to	extract oil and gas OR
<u>X</u> I	ncluded is the information requir	ed by Chapter 22B. Article 1.
Sectio	n 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 have	served copies of this notice and	application, a location plat, and
accomp	anying documents pages 1 through	7 on the above named parties, by:
_	X Personal Service (Affidavit a	ttached)
_	Certified Mail (Postmarked po	stal receipt attached)
-	Publication (Notice of Public	ation attached)
I	have read and understand Chapter	22B and 38 CSR 11-18, and I agree
to the	terms and conditions of any perm	it issued under this application.
. I	certify under penalty of law tha	t I have personally examined and am
famili	ar with the information submitted	on this application form and all
attach	ments, and that based on my inqui	ry of those individuals immediately
respon	sible for obtaining the informati	on, I believe that the information
is tru	e, accurate, and complete.	on, I believe that the information
T	am aware that there are signific	ant manufactor for submitting 5 3
inform.	ation including the possibility	ant penalties for submitting false
111101111	ation, including the possibility	or rine and imprisonment.
	Well Operator	Rare Earth Epergy, Inc.
	By: Robert Gary	
	Its: Designated	
). Box 72
		sburg, WV 26302-0172
Subser	Telephone (30)	J4) 022-4001
Sansci	ibed and sworn before me this $30th$	n day of November, 1990
	1) Tool Alama	· · · · · · · · · · · · · · · · · · ·
My com	mission expires June 13, 1994	Notary Public