

St Marus

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(77)



IV-35 (Rev 8-81)

State of Mest Birginia

Bepartment of Mines Gil und Cas Division

1. 80F 1 t

Date 10/1	4/81	•	
Operator's			
Well No	Peters #	<u> </u>	
Farm ****	(*****	×××	
API NO.7	- 073	= 108/	क्रम्य

WELL OPERATOR'S REPORT

OF

DRILLING, FRACTURING AND/OR STIMU	LATING, OF	R PHYSICAL	CHANGE	
VEIL TYPE: Oil X / Gas x / Liquid Injection (If "Gas," Production / Undergrou			/ / Sha	llow/)
OCATION: Elevation: 610' Watershed Up	per Ohio			
District: Washington County Pleas	ants (Quadrangle	Raven I	łock
CMPANY RARE EARTH ENERGY, INC.				To
ADDRESS P.O. BOX 172, CLARKSBURG, WV	Caşing	Used in	Left	Cement fill up
DESIGNATED AGENTWilliam R. Spatafore	Tubing	Drilling	in Well	Cu. ft.
ADDRESS 14 Meadow Lane, Bridgeport, WV	Size			
SURFACE OWNER Dorothy Peters	20-16 Cond.			
ADDRESS Second Street, St. Marys, WV	13-10"	70'	all	
MINERAL RIGHTS OWNER same as above	9 5/8			
ADDRESS	8 5/8	7251	all	90 sacks
OIL AND GAS INSPECTOR FOR THIS WORKPhil_	7			
Tracy ADDRESS Rt 23. Alma. WV 26320	5 1/2			
PERMIT ISSUED 9/8/81	4 1/2	4600'	*****	20 sacks
DRILLING COMMENCED 9/23/81	3	1000		TO SACKS
DRILLING COMPLETED 10/3/81	2			
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON	Liners used		·	
GEOLOGICAL TARGET FORMATION Devonian Shale		Dep	oth 1.631.	feet
Depth of completed well <u>1631</u> feet				
Water strata depth: Fresh 241 feet;				
Coal seam depths:				
	•			-
OPEN FLOW DATA UP DU + turo 1	D		-+- 1000	•
Producing formation Devonian Shale				
Gas: Initial open flow 100,000 Mcf/d				
Final open flow ? ? Mcf/d				
Time of open flow between init				
Static rock pressure 325 psig(surface		ment) alt	=rnc	ours snut ir
(If applicable due to multiple completion			_ 1 5	e
Second producing formation_				
Gas: Initial open flow Mcf/d				
Final open flow Mcf/d				
Time of open flow between ini-				
Static rock pressurepsig(surface	e measurei	ent) afte	rh	ours shut i
		(Cont	irue on 1	reverse side

(REVERSE)

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

PERFORATION: 3980' to 1311' Huron # of Shots: 27 holes 2194' to 3488' υρ Ωευ > Huron 33 holes 33 holes

(Bad cement job, jo frac)
FORMATION FRACTURED: Devonian Shale & Bension

BREAK DOWN PRESSURE: Bottom zone 1250#

AVERAGE TREATING PRESSURE: 2300#

AVERAGE RATE: 34bbls/min

5 MIN: 1250#

ISIP: 1500# WATER: 229 bbls

SAND: 15,000 pds. 81/100

45,000 pds 20/40

NITROGEN: 800,000

TYPE OF FRAC: 75% Foam Frac

WELL LOG

•			***		***	
	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of and salt water, coal,	of all fresh oil and gas
Clay Sand, S Sand Sand, S Sand Sand, S Big Lin Sand, S Weir Sand, S Gentz Sand, S Gordon Sand, S Benson Sand, S	Shale Shale Shale Shale Shale Shale		0 13 42 79 241 607 1381 1542 1600 1641 1802 1808 2076 2098 2195 2208 4302 4308	13 42 79 241 607 1381 1542 1600 1641 1802 1808 2076 2098 2195 2208 4302 4308 4634 T.D.	4634 3980	
						usa Bas.

(Attach separate sheets as necessary)

Well	Operator		
Ву:	•	•	
Date:			

Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including that, encountered in the drilling of a well."

FORM IV-2 (Obverse) (08-78)



	State		County	Permit	_
API Well No.	47	•	073	- 1084-RE	N.
Operator's Well No.	Pet.er	#	1		_
Date: Septem	iber	4.	, 1 ¹	9 81	

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

OIL AND GAS WELL PERMIT

WELL TYPE:	Oil <u>XXXX</u> / Gas <u>XXXX</u>	_			
	(If "Gas", Production	/ Undergroun	d storage/	Deep/ Shall	low <u>XXXX</u> /)
LOCATION:	Elevation: 610	Watershed	Upper Ohio		
	District: Wash.				n Rock
WELL OPERAT	OR Rare Earth Energy, I	nc.	DESIGNATED AGE	ENT William R. Spa	atafore
Address	PO Box 172,		Address 14	Meadow Lane	
• •	Clarksburg, West Vi	rginia	Br	idgeport, West Vij	rginia
OIL & GAS		•			
ROYALTY OW	NER D.V. Peter				
Address	Second Street	-	Address		
	St. Mary's, West Vi	rginia_			
Acreage	1		COAL OWNER(S)	WITH DECLARATION	ON RECORD:
SURFACE OWN	NER Dorothy V. Peter		Name		
Address	Second Street				
	St. Mary's, West Vi				
Acreage	1		Name	RECEIV	A (E)D)
-	IF MADE) TO:			SEP 8 ~ 1	
	***************************************		· · · · · · · · · · · · · · · · · · ·	•	
71441033		*****	COAL LESSEE WI	OIL AND GAS T TH DECLY/RAPHONEON	コマラロハ PR性ともRD:
OIL & CAS IN	SPECTOR TO BE NOTIFIED		Name		* .
					· ·
Address	racy				
					
			•		
_	ned well operator is entitled to operate				_/ lease
other contract	/ dated	_, 19, to	the undersigned well	operator from	
(IF said deed, le	ease, or other contract has been re	ecorded:)			
Recorded on	, 19, in the	office of the Clerk	of the County Commis	sion of	County, West
Virginia in	Book at pa	age A	permit is requested a	as follows:	
	VORK: Drill/ Drill deeper		,		
- INGIGED	Plug off old formation				
	_				
	Other physical change in v	/ell (specify)			
	—planned as shown on the	work order on t	he reverse side hereo	f.	
The changes					
	med coal operator, coal owner(s), and 22-4-3 must be filed with the Department			•	•
Department.	122-4-3 must be med with the Depar	timent of Mines w	tillii iliteeli (13) days	after the receipt of this	Application by the
•	Permit Application and the enclosed	nlat and reclamati	on plan have heen mail	ed by registered mail or d	elivered by hand to
-	d coal operator, coal owner(s), and coal operator		_		_
	of Mines at Charleston, West Vir		·		
	IT COPIES OF ALL LOGS DIRECTLY			ARTH CHEROL	4
	IA OIL AND GAS			Well Operator	7
CONSERVA		•	By falle	on Action	
1615 WASHING			Its Mes	'den	
CHARLESTON,	VV V 20011		/		

BLANKET BUND

TELEPHONE: (304) 348-3092

FORM IV-2 (Reverse) (08-78)

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY: ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CO	ONTRAC	TOR (IF	KNOW	N)					
				Ado	dress	····			
GEOLOGICAL	. TARGE	ET FOR	MATION	, <u>Oh</u>	io S	hale		·	
Estimate	d depth	of comp	leted we	¥,_ 5	5000	5' fee	et Rotary	<u>XXXX</u> / Cab	le tools/
Approxi	mate wat	er strata	depths:	Fresh	1,	feet	salt,	feet.	
Approxi	mate coa	l seam d	epths:			Is coal	being mined	in the area? Yes	/ No/
CASING AND	TUBING	G PROG	RAM						
	 						·		
CASING OR TUBING TYPE	SPE Size	CIFICAT Grade	IONS Welght per ft	New	Used		NTERVALS	CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
Conductor	10'			XXX		001	001	<u> </u>	Viode
Fresh Water	8 5/8		20	XXX		201	20'	to surface	Kinds
Coal	8 5/8		20	XXX		7001	7001	to cumface	Sizes
Intermediate	0 3/8		20			700	700	to surface	
Production	᠘ 호		555	xxx		5000	5000 ¹		Depths set
Tubing	4 2		355			3000	30,00		
Liners									Perforations:
									Top Bottom
									John Bottom
				1					
"Rec previ Code	susly paid \$22-4-8a eparate F rt of the v MUST E being in a. Code, g rener	Plan", a lon the sa from the form Iv-2 work for value of the local weed. T	pplicable ame well ne owner shall not which a p ED AT Idance wition is here this perm	to the ference of any be requered in the Charles of	e recla e required for sough	mation require ired by Code § real or dwell or fracturing or ht and is noted	d by Code \$ 2 22-4-12a, and (ling within 200 stimulating a	wed by Code § 22-4-2 (2-4-12b and Regulativ) if applicable, the confect of the proposed well where fracturing a Form IV-2 filed in confect.	on 23, (iv) unless consent required by l well.
Deputy Dir	ector - O	ub il & Gas	Division	2				Junio	0
						-			
The decla	tollowing tration ur	waiver m ider Cod	lust be co le 22-4	mplete -20, if	d by th	rmit is to be i	and by any coassued within i	l owner or coal lessee lifteen (15) days of re	who has recorded a eceipt thereof.
						WAIV	ER		
The undersigned coal operator/ owner/ lessee/ of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.									
Date:			, 19				Ву		·
					•				

FORM IV-2 OFFICE OF OIL AND G	GAS - DEPARTMENT OF MINES Date: 12-12-80
	Farm Name: D. U Pin
OIL AND GAS WELI	PERMIT APPLICATION API No. 47 - 073 1084
VELL TYPE: 0il \ / Gas \ / (If "Gas", Production / Under	State County Permi
OCATION: Elevation: 6/0 Water	1:
	cy: Pls Quadrangle: PAVIN ROCK
VELL OPERATOR RAFE FARTH FAIRTY	
Address 14 Mercan Lanz	Address Strat
Bridgfect was.	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z
Dr. of feet word.	
DIL & GAS ROYALTY OWNER	COAL OPERATOR (/
Address	Address
SAME BELOW	Address
	COAL OWER (C) WITH REGIARATION ON RECORD
Acreage	COAL OWNER(S) WITH DECLARATION ON RECORD:
SURFACE OWNER Facility Patie	Name
Address 2nd St	Address
St MARY WIA.	
Acreage	Name
FIELD SALE (IF MADE) TO:	Address
Name	
Address	_ COAL LESSEE WITH DECLARATION ON RECORD:
	Name
OIL AND GAS INSPECTOR TO BE NOTIFIED:	Address
Name PTRACY	
The undersigned well operator is entitle	ed to operate for oil or gas purposes at the above
ocation under a deed/ lease/ othe	er contract/ dated, 19, to the
indersigned well operator from	and the second of the second
If said deed, lease or other contract has be	the safety of the same of the
•	e of the Clerk of the County Commission of
County, West Virginia, in Book	, at page A permit is requested as follows
PROPOSED WORK: Drill/ Drill Deeper_	/ Redrill/ Fracture or stimulate/
Plug off old formation	/ Perforate new formation/
Other physical change in	well (specify)
The above named coal operator, coal owner objection they wish to make or are required to partment of Mines within fifteen (15) days af Copies of this Permit Application and the by registered mail or delivered by hand to the lessees on or before the day of the maililg of the mailing of the mailing of the Mines at Charleston, West Virginia.	ne work order on the reverse side hereof. (s), and coal lessee are hereby notified that any to make by Code § 22-4-3 must be filed with the Defer the receipt of this Application by Department. It enclosed plat and reclamation plan have been mailed the above named coal operator, coal owner(s), and coal or delivery of this Permit Application to the Depart
GEOPHYSICAL LOGS DIRECTLY TO: BLANKET BUND OFFICE: OF OIL AND GAS	P. O. Try -y Well Operator
1615 Washington Street Fast	well operator

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY: ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CON	TRACTO	R (IF	-				•	
				Address		•	· ·	
			•	•				
					ohio Shal			
Estimat	ed dep	th of	complet	ed well	, 4500	feet	Rotary/	Cable tools/
Approxi	mate wa	ater s	trata d	epths:	Fresh,	feet; sa	alt, feet.	
Approxi	mate co	oal sea	am dept	hs:	Is	coal being	mined in the area	? Yes/ No/
CASING AND T	UBING :	PROGRAI	М					
CASING OR TUBING TYPE	Size	1	IFICATI Weight	1 1		INTERVALS	CEMENT FILL-UP OR SACKS rell (Cubic feet)	
Conductor	16			-	20			Kinds
Fresh water	85/2		20	/				2
Coal	84/8		20	-	700		TO SULCALL	Sizes
Intermediate							11/2000	
Production	4/2		1050	~	4500		TO 300 Above	Depths set
Tubing							for as reg	
Liners							sul 15:01	Perforations:
								Top Bottom
			<u> </u>					
appling previous the control of the	permissions with the contract of the contract	to the paid of require the present of such of such of the present	reclamenthe seed by cooposed at a Formula the interior that is not a second to be a second to b	ation rame well. Sode \$ 2 well. IN IV-2 walating Form IV- Cordance location This penced by	equired by Code l, the fee requ 22-4-8a from the shall not be rec	\$ 22-4-12tired by Cook owner of the work section the	any water well or o fracturing or stim for which a permi	, (iv) unless (v) if applicable, iwelling within
The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code § 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof: WAIVER The undersigned coal operator / owner / lessee / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations. Date:								
					•			
			•			Ву		
						Its		