





## STATE OF WEST VIRGINIA DEPARTMENT OF MINES

# Oil and Gas Division

#### WELL RECORD

Quadrangle Keyser

Partie No. 47-057-0064

New Creek Lm.

Keyser Lm.

T.D.

Rotary XXX	Oil
Cable	Gas_XXX
Recycling	
Water Flood	Storage

Permit No. 47-057-0064 Disposal\_ (Kind) Company Upland Resources Casing and Used in Left NY, NY 10013 Tubing Cement fill up Address c/o Westvaco 200 Park Ave Drilling in Well Cu. ft. (Sks.) Farm Spencer ... Acres Location (waters) Patterson Creek Size Elev. 772 Well No. 1 20-16 District Cabin Run County Mineral Cond. 13-10" The surface of tract is owned in fee by\_ 9 5/8 Ray Spencer Address Rt. 2, Box 240, Keyser, WV 8 5/8 1088 8801 Cement to Surfac Mineral rights are owned by Same as above 5 1/2 \_\_ Address\_\_ Drilling Commenced July 13, 1981 4 1/2 45501 230 sks Drilling Completed July 29, 1981 Initial open flow \_\_\_\_\_ 0 \_\_\_ cu. ft. \_ 0 bbls. Liners Used Final production 30MCFAF cu. ft. per day \_\_\_ 0 bbls. Well open \_\_\_\_hrs. before test \_\_\_\_ RP. Well treatment details: Attach copy of cementing record. 30 MCF Perforated at 4158-64, 4 shots; 4178-84, 4 shots Fractured by Halliburton & B.J. Hughes Water Foam Frac, 330bbls. Tophole fluid 240 sks 20/40 sand Coal was encountered at No Coal \_Feet\_ \_ Inches 30' Fresh water\_\_\_\_ Feet \_ \_Salt Water. \_ Feet \_ Depth 4158-4184 Producing Sand Shriver Chert HOBG Furmation Color Hard or Soft Top Feet Bottom Feet Oil, Gas or Water \* Remarks Sandstone & Shale 0 23001 Marcellus Shale 23001 2660' Purcell Member of the 26601 28901 Marcellus Shale Lower Marcellus Shale RECEIVED 28901 30401 Tioga Bentonite 30401 30681 Needmore Shale 30681 32401 AUG 2 8 1981 Overturned Sequence 32401 33941 Tioga Bentonite OIL AND GAS DIVISION WY DEPARTMENT OF MINES 33941 3517' Upright Sequence Marcellus Shale 3517' 3610' Tioga Bentonite 3610' 37141 Needmore Shale 3714' 40441 Oriskany Sandstone 4044 4162' 3714 4044 Shriver Chert 4162' 43481 Mandara Shale 4378' 43801 Corriganville Lm. 4380' 4472'

44721

45081

45081

4640

4640' HOBE

Formulion	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water Remarks
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					August 18,   81

Upland Resources

Geological Consultants, Agent

Augusta



Well	No.	1	_	. *
Farm_			Spencer	
API #	47 -0	)57 <b>-</b>	0064	
Date	Jun	e 3,	1981	

STATE OF WEST VIRGINIA

OFFICE OF OIL AND GAS - DEPARTMENT OF MINES

## OFFICE OF OIL AND GAS - DEPARTMENT OF MINES

OIL AND GAS WELL	PERMIT APPLICATION
WELL TYPE: 0il/ Gas_X_/	
(If "Gas", Production/ Und	derground storage/ Deep_X / Shallow/
LOCATION: Elevation: 772.48 Watersh	ned: Patterson Creek
District: Cabin Run County:	Mineral Quadrangle: Keyser
WELL OPERATOR Upland Resources, Inc.	DESIGNATED AGENT Talkington-Brady, Inc.
Address p.O. Box 429	Address P.O. Box 1016
Keyser, W 26726	Keyser, WV 26726
ROYALTY OWNER I. Ray Spencer & Marvin Spence	
Address Rt. 2, Box 240  Keyser, WV 26726	Address
Acreage 369	
SURFACE OWNER I. Ray Spencer	COAL OWNER(S) WITH DECLARATION ON RECORD: NAME NO COAL
Address Rt. 2, Box 240	Address
Keyser, W 26726 Acreage 267	NAME
Acres 201	NAMEAddress
FIELD SALE (IF MADE) TO:	
Address	COAL LESSEE WITH DECLARATION ON RECORD:
Control of the contro	NAME No coal To
OIL AND GAS INSPECTOR TO BE NOTIFIED:	Address
NAME Robert S. Stewart	JUN - 3 1981
Address D.O. Der 245	• • • • • • • • • • • • • • • • • • • •
Address P.O. Box 345	on a cas pivision
Address P.O. Box 345  Jane Lew, WV 26378  Telephone (304) 884-7782	OIL & GAS DIVISION
Address P.O. Box 345  Jane Lew, WV 26378  Telephone (304) 884-7782	DEPT. OF MINES
Address P.O. Box 345  Jane Lew, WV 26378  Telephone (304) 884-7782  The undersigned well operator is entity above location under a deed / leases to the undersigned well operator from I.Ray  (If said deed, lease, or other contract has Recorded on 10/20/76 & 12/201979, in the of Mineral County, West Virginia, in 2 requested as follows:  PROPOSED WORK: Drill X / Drill Deeper Plug off old formation Other physical change inplanned as shown on the contract as shown on t	led to operate for oil or gas purposes at the K/ other contract / dated , 19 , and Bertha J. Spencer and Marvin & Elizabeth .  Spencer.  been recorded:)  fice of the Clerk of County Commission of 207 & 219 Book at page 580 & 1,23 A permit is  / Redrill / Fracture or stimulate X / Perforate new formation / well (specify)  e work order on the reverse side hereof.
Address P.O. Box 345  Jane Lew, WV 26378  Telephone (304) 884-7782  The undersigned well operator is entited by the undersigned well operator from I.Ray to the undersigned well operator from I.Ray (If said deed, lease, or other contract has Recorded on 10/20/76 & 12/201979, in the of Mineral County, West Virginia, in PROPOSED WORK: Drill X / Drill Deeper Plug off old formation Other physical change in Other physical change in Planned as shown on the physical change in Other physical change i	led to operate for oil or gas purposes at the X / other contract / dated , 19, and Bertha J. Spencer and Marvin & Elizabeth Spencer.  been recorded:)  fice of the Clerk of County Commission of 207 & 219 Book at page 580 & 123 A permit is  / Redrill / Fracture or stimulate X / Perforate new formation / well (specify)  e work order on the reverse side hereof. ), and coal lessee are hereby notified that any to make by Code \$22-4-3 must be filed with the safter receipt of this Application by the Dept. Inclosed plat and reclamation plan have been and to the above named coal operator, coal ownly of the mailing or delivery of this Application est Virginia.  Upland Resources, Inc.  Well Operator  Y: Michael A. Parting
Address P.O. Box 345  Jane Lew, WV 26378  Telephone (304) 884-7782  The undersigned well operator is entited by the undersigned well operator from I.Ray to the undersigned well operator from I.Ray (If said deed, lease, or other contract has Recorded on 10/20/76 & 12/201979, in the of Mineral County, West Virginia, in PROPOSED WORK: Drill X / Drill Deeper Plug off old formation Other physical change in Other physical change in Planned as shown on the physical change in Other physical change i	led to operate for oil or gas purposes at the X/ other contract / dated , 19, and Bertha J. Spencer and Marvin & Elizabeth Spencer.  been recorded:)  fice of the Clerk of County Commission of 207 & 219 Book at page 580 & 123 A permit is  / Redrill / Fracture or stimulate X / Perforate new formation / well (specify)  e work order on the reverse side hereof. ), and coal lessee are hereby notified that any to make by Code \$22-4-3 must be filed with the safter receipt of this Application by the Dept. nclosed plat and reclamation plan have been and to the above named coal operator, coal own-y of the mailing or delivery of this Application est Virginia.  Upland Resources, Inc.  Well Operator  Y: Michael A. Partigue.

(Revised 3-81)

### PROPOSED WORK ORDER

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

DRILLING CON	TRACTOR	(IF K	(NOWN)	Talki	ngton	-Brady,	Inc.		
		Ad	ldress	P.O.	Box 1	016			
				Keyse	er, W	26726			· •>
GEOLOGICAL T Estimated Approxima Approxima Is coal b	depth of te water te coal	of com r stra seam	npleted nta dept depths:	well_ hs: _No_c	2,400 Fresh coal	fee , <u>50-80</u> No	feet; :	ry / Cab salt,	le tools <u>x</u> / feet。
CASING AND T	UBING P	ROGRAM	1						
CASING OR TUBING TYPE			Veight			For Dri	- Left in	CEMENT FILL UP OR SACKS	
Conductor	3126 4	aue	bei if	MEM	used	ling	Well	Cubic ft.	Kinds
Fresh water 8	5/8	A	24.7	X	<del> </del>	400	400	cement to	: INTHUS
Coal	, 3/6	A			<del> </del>	100	300	surface	Sizes
Intermed.				<del>                                     </del>			1		101200
Production :	41/2	A	10.5	X	1	2,200	2,200	cement	Depths set
Tubing				1		1	12,200	approx. 400	
Liners		1							Perforations:
							<b>1</b>		Top Bottom
i									
requir 822-1- posed A sepa where	sed by Co 8a from well. crate For fractur Mind is being in a Code, the ng	ode \$2 the c the c rm IV- ing or rotes location location	owner of stimul stimul of stimul of stimul of stimul of stimul on is hereby 2-23-	any	(v) a water be rec is to the Fo	if applic well or quired for o be part	eable, the dwelling was fractured to for the wo	consent requisithin 200 fe vithin 200 fe ing or stimu	me well, the fee uired by Code eet of the pro- lating a well h a permit is herewith.
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 ocation has examined this proposed well location. If a mine map exists which covers the erea 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 regularions.									
Date:		_, 19	•					***************************************	, ************************************
					В	у:			

lts:\_



IV-35 (Rev 8-81)

## RECEIVED State of Mest Nirginia

OCT 1 3 1981

Bepartment of Mines Gil und Gas Bivision

Date_	_Oct	ober	9,	1981	
Opera	itor	's			
Well	No.	1			j'
Farm	Sp	encer	^		
APT N	in.	47 _	05	7 _	0064

(Continue on reverse side)

OIL AND GAS DIVISION WY DEPARTMENT OF MINES

WELL OPERATOR'S REPORT

OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas X / Liquid Injection (If "Gas," Production X / Undergro	on/ Wast	ce Disposa ge/ Deep	l/ p/ Sha	llow_X/)
LOCATION: Elevation: 772 Watershed Pa	atterson Cr	ek		
District: Cabin Run County Mir			e Keyse	r
COMPANY Upland Resources %Westvaco				
ADDRESS 299 Park Ave., N.Y., N.Y. 10017	Casing	Used in	Teft	Cement
DESIGNATED AGENT T. Brady	Tubing	Drilling		fill up Cu. ft.
ADDRESS P.O. Box 1016, Keyser, W.Va. 26726	Size		2, ,,,,,,,,	
SURFACE OWNER Ray Spencer	20-16			
ADDRESS Rt. 2, Box 240, Keyser, W.Va.	Cond.			
MINERAL RIGHTS OWNER Same as above	13-10"			
ADDRESS	9 5/8	000	000	ausés co
OIL AND GAS INSPECTOR FOR THIS WORK	8 5/8	880	880	surface
R. Stewart ADDRESS Jane Lew, W.Va.	5 1/2			
PERMIT ISSUED	The same of the sa		4550	230 sks
DRILLING COMMENCED 7/13/81	4 1/2		1000	
DRILLING COMPLETED 7/29/81	2			
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON	Liners useđ			
GEOLOGICAL TARGET FORMATION Oriskany		Dept	th 4044	feet
Depth of completed well 4640 feet	Rotary XXX	/ Cable	e Tools_	
Water strata depth: Fresh 30' feet;				
Coal seam depths: No Coal	_ Is coal	being mine	ed in the	area?
OPEN FLOW DATA  PB. from 4640  Production Needman Shale	<b>73</b>	3		. 6
Producing formation Needmore Shale		·		
Gas: Initial open flow 0 Mcf/d				
Final open flow 15 Mcf/d  Time of open flow between ini-				
Static rock pressure 640 psig(surfa			***************************************	
(If applicable due to multiple completion	•	eic, are		TO SIME TIE
Second producing formation		r zone deni	-ħ	foot
Gas: Initial open flow Mcf/d				
Final open flow Mcf/d				
Time of open flow between ini	tial and fi	nal tests	bo	urs
Static rock pressurepsig(surfac	e measureme	ent) after	hou	 rs shut in

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

Bridge Plug at 3520
Perforated at 3320-3360, 15 shots
Fractured with a 5% acid foam frac of 220 bbls. of top hole
fluid and 453 sacks of 20/40 sand.

#### WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fres and salt water, coal, oil and ga
Sandstone & Shale Marcellus Shale Purcell Member of the Marcellus Shale Lower Marcellus Shale Tioga Bentonite Needmore Shale Overturned Sequence Needmore Shale Tioga Bentonite Upright Sequence Marcellus Shale Tioga Bentonite Needmore Shale Oriskany Sandstone Shriver Shert Mandara Shale Corriganville Lm. New Creek Lm. Keyser Lm. T.D.	0 2300' 2660' 2890' 3040' 3068' 3240' 3394' 3517' 3610' 3714' 4044' 4162' 4378' 4380' 4472' 4508'	2300' 2660' 2890' 3040' 3068' 3240' 3394' 3517' 3610' 3714' 4044' 4162' 4348 4380' 4472' 4508' 4640' 4640'	
ns '			

(Attach separate sheets as necessary)

Upland Resources

Note: 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."

3(2)

Paratting 7

# STATE OF WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION SECTION OF OIL AND GAS

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Division, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

respective	, uu = 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				
Farm name:	SPENCER, RA	ΑY	Operator	Well No.:SPENCE	ER #1
LOCATION:	Elevation: District: Latitude: Longitude	772.48 Qu CABIN RUN 14550 Feet S 3998 Feet W	adrangle: KE Co South of 39 West of 78	EYSER bunty: MINERAL Deg. 27 Min. 30 Deg. 52 Min. 30	) Sec. ) Sec.
Well Type:	OIL	GAS x			
PC	land Resource Box 429 yser, WV 2672		Coal Or or Owne	perator N.A	
Agent: Ra	lph Webb		Coal Or	perator <u>N.A.</u>	
Permit Issu	ed: 12/13/9	3			
		AF	FIDAVIT		
STATE OF WE County of U					
in the wor the above and fillin Gas Inspec commenced the well w	k of pluggi: named well g the above tor repre on the as plugged	ng and fillir operator, a well, and senting the	ng oil and ga and participa Phillip Trad Director, ay of Febru	l Clutter say that they as as wells and we ated in the work cy say that sa uary lowing manner: PIPE REMOVED	re employed by k of plugging Oil and id work was and that
Cement		3380	3280	Cut 45 @ 2150	2400
Gel		3280	0		
Cement		2100	2000		
Cement		950	850		
Cement		100	0		
				All the second	2 61,194
and th	at the wor	nument: <u>Erect</u> k of pluggi: February	ng and filli	above ground with ng said well wa	ID per DOE reg. s completed on
And furthur	deponents	saith not.	P	What	
		fore me this November 3, 2		Of February Cleve Mur	, 19 <u>94</u>
	Oil a	nd Gas Inspe	ctor:	Notary Pu	cef 1994