





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

Well Operator's Report of Well Work

Farm name:

Able, Paul

Operator Well No.: L. E. Dulaney # 97 NOV \$ 4 2003

Pine Grove

Used in

Drilling

1123.00'

3278.00'

Office of Oil & Gas Office of Chief

RECEIVED

LOCATION:

1,300.00

Quadrangle:

Left

in Well

1123.00'

3278.00'

API#

Sec.

Sec.

Elevation:

WV Department of

District:

Grant

County: WETZEL

Casing

&

Tubing

Size

8 5/8"

4 1/2"

Environmental Protection

Cement

Fill Up

Cu. Ft.

sks

sks

485

275

Latitude: Longitude: 14.050 Feet south of

10,800 Feet west of

39 Deg 37 Min 30 80 Deg 37 Min 30

Company:

EAST RESOURCES, INC.

P.O. BOX 5519

VIENNA, WV 26105-5519

Agent:

MICHAEL MCCOWN

Inspector:

MIKE UNDERWOOD

Permit Issued: Well work Commenced: 09/08/03 10/23/03

10/30/03

Well work Completed:

Verbal plugging

permission granted on: Rotary

Rig Cable

Total Depth (feet) Fresh water depths (ft) 3303'

NA

Salt water depths (ft)

NA

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

1075-1081

OPEN FLOW DATA Wa	ater Inejction Well		
Producing formation	Gordon	Pay zone depth (ft)	3153'-3170'
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 flo	ow between initial and fina	l tests	Hours
Static rock pressure	psig (su	rface pressure) after	Hours
Second producing formati	on	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 flo	ow between initial and fina	l tests	Hours
Static rock pressure		rface 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: EAST RESOURCES, INC.

By: Date:

Kell 11/3/03

MON T & Shop

Trea	tme	nt	•

Treated perforations 3156'-3166 w/ 250 gals 15% HCL, 327 Bbls cross linked gel and 20,400 # 20/40 sand

Well Log:

See original well record

API#

47

103 01719 - F

217

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

Well Operator's Report of Well Work

Farm name:

ABLE, PAUL

Operator Well No.: L. E. DULANEY # 97

Pine Grove

Ouadrangle:

Sec.

LOCATION:

Elevation:

1300'

District: Latitude: Grant

County: Wetzel

14,050 Feet south of

39 Deg 37 Min 30

Longitude:

10,800 Feet west of

30 Sec. 80 Deg 37 Min

Company:

EAST RESOURCES, INC.

P.O. BOX 5519

VIENNA, WV 26105-5519

Agent:

MICHAEL MCCOWN

Inspector:

Permit Issued:

Randy Mick 09/15/99

Well work Commenced:

10/05/99 10/14/99

Well work Completed: Verbal plugging

permission granted on:

X Cable Rotary

Rig $\overline{3.303}$

Total Depth (feet) Fresh water depths (ft)

NA

NA

Salt water depths (ft)

Coal Depths (ft):

Is coal being mined in area (Y/N)

1075-1081

	Deg 37	WIII 50	300.	
	Casing	Used in	Left	Cement
	& Tubina	Deilling	in Well	Fill Up Cu. Ft.
-	Tubing	Drilling	III WEII	Cu. 1 t.
	Size			
	0. # /0.11	1100.00	1102.00	405 -1
	8 5/8"	1123.00	1123.00	485 sks
	4 1/2"	3278.00'	3278.00'	275 sks

OPEN FLOW DATA * water injection well

Produc	ing formation	Gordon	Pay z	one depth (ft)	315	53-3170
Gas:	Initial open flow	* MC	F/d Oil: Initial oper	n flow	*	Bbl/d
Gas.	Final open flow	* MC	-		*	Bbl/d
	Time of open flow bety		-		Hours	
Static r	ock pressure	* psig	(surface pressure)	after	*	Hours
Second	I producing formation			one depth (ft)		
			F/d Oil: Initial ope			Bbl/d
Gas:	Initial open flow Final open flow	MC	•			Bbl/d
	Time of open flow bety	ween initial and	final tests		Hours	
Static 1	cock pressure	psig	(surface pressure)	after		Hours
		orrownia 1) Di	TATE OF DEDECT AT	TANGED WAL	C EDACTID	ING

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.

Office of Oil A Gas Permitting APR 0 1 2002

W Department

Environmenta: Freezewor

For: EAST RESOURCES.XN By:

Date:

APR 5 2002 $\boldsymbol{\pi}$

Treatment:

Treated Gordon Perfs 3158-3162 w/500 gals 15% HCl, 180 bbls gelled water and 6600 # 20/40 sand

Well Log:

See original record

MD.	25
WK	- 17

2-Oct-96 47 -103- 1719

API#

RECEIVE

ffice of Oil & Co

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

Well Operator's Report of Well Work

Farm name:

Abel, Paul.

Operator Well No.: L.E. Dulaney #97

MAR 1 6 1998

/ WV Division of Environmental Protection

LOCATION:

Elevation:

1,300.00

Quadrangle:

Pine Grove

District:

Grant

County:

Wetzel

30 Sec.

Latitude: Longitude: 14,050 Feet south of 10,800 Feet west of

39 Deg 37 Min 80 Deg 37 Min

30 Sec.

Company:

PENNZOIL PRODUCTS COMPANY

P.O. BOX 5519

VIENNA, WV 26105-5519

Agent:

PHILIP S. ONDRUSEK

Inspector:

Permit Issued:

Randal Mick

10/2/96

Well work Commenced: Well work Completed:

12/30/96 3/24/97

Verbal plugging

permission granted on:

Cable Rotary

Total Depth (feet)

Rig 33031

Fresh water depths (ft)

NA

NΑ

Salt water depths (ft)

Is coal being mined in area (Y/N) Coal Depths (ft): 1075-1081

Casing &	Used in	Left	Cement Fill Up
Tubing	Drilling	in Well	Cu. Ft.
Size			
8-5/8''	1123'	1123'	485 Sacks
4 ½"	3278.00'	3278.00'	275 Sacks

OPEN FLOW DATA

*Well was drilled as a waterflood injection well. No open-flow data was obtained

	Produc	ing formation	Gord	on	Pay zor	ne depth (ft)		3153-3170
	Gas:	Initial open flow	*	MCF/d	Oil: Initial open t		*	Bbl/d
		Final open flow	*	MCF/d	Final open fl	ow	*	Bbl/d
		Time of open flow	between initial	and final	tests	*	Hours	
	Static 1	rock pressure	*	_psig (su	rface pressure)	after		Hours
	Second	d producing formation			Pay zor	ne depth (ft)	ı	
	Gas:	Initial open flow		MCF/d	Oil: Initial open	flow	_	Bbl/d
		Final open flow		MCF/d	Final open fl	low		Bbl/d
٠.		Time of open flow	between initial	and final	tests		Hours	
	Static 1	rock pressure		_psig (su	rface pressure)	after	:	Hours
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DRM, 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:	DENINGOII DI	CONNA	DA NEV

By:

Date:

Treatment:

Perforations:

3158-3162 -4 holes/ft. (16 holes)

Teatment:

Treated via 4.5" Casing with 300 gals. 15% HCl, 189 bbls.

Borate cross-linked gelled water and 9500 lbs. of 20/40 sand.

Well Log:

TD = 3303'

Sand & Shale	0	-	306
Shale	306	-	548
Sand	548	-	566
Shale	566	-	920
Sand	920	-	968
Shale	968	-	1075
Coal	1075	-	1081
Shale	1081	-	1576
Sand	1576	-	1604
Shale	1604	-	1672
Sand	1672	-	1704
Shale	1704	-	1884
Sand	1884	-	1926
Shale	1926	-	1973
Sand	1973	-	1988
Shale	1988	-	2268
Big Lime	2268	-	2343
Big Injun	2343	-	2560
Shale	2560	-	3120
Sand	3120	-	3142
Shale	3142	-	3153
Gordon	3153	_	3170
Shale	3170	_	3303

FORM W Obverse 10/91	Office of Oil & Gas UIC Section					
	SEP 0 5 1996					
۶ وع	WM Division of Environmental Protection					

COPY

Lease X

Wetzel

Other Contract

County Clerk's Office in

Dated

Lease

Jan. 3, 1999

61

at Page

Book

of record in the

115

by Deed

1) Date 2) Well No. 3) SIC Code

State

L.E. Dulaney No.97 103 47 1719-LI

County

August 29, 1996

5) UIC Code

4) API Well No.

losued 10/02/96

Permit

STATE OF WEST VIRGINIA

NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION for the for the DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS 10/02/98 WELL TYPE: Liquid Injection X Gas Injection Waste Disposal LOCATION: North Fork of Fishing Creek Elevation 1300 Watershed District Grant County Wetzel Quadrangie Pine Grove Pennzoil Products Company WELL OPERATOR: 8) 9) DESIGNATED AGENT: Philip S. Ondrusek P.O. Box 5519 P.O. Box 5519 Vienna, WV 26105 Vienna, WV 26105 OIL & GAS INSPECTOR TO BE NOTIFIED: 10) 11) DRILLING CONTRACTOR: Name Randal Mick Name Address 111 Blackshere Drive Address Mannington, WV 26582 12) PROPOSED WELL WORK: Drill Deeper Redrill Stimulate X Plug Off Old Formation Perforate New Formation Convert Other Physical Change in Well (specify) 419 13) Geological target formation Gordon 3190 Ft. (Top) t 3205 Ft. (Bottom) Estimated depth of completed well (or actual depth of existing well) 14) 3290 15) Approximate water strata depths: Fresh 480 Ft. Salt 1600 16) Approximate coal seam depths: 1100 Ft. Is coal being mined in the area? 17) Yes X No 18) Virgin reservoir pressure in target formation: 1400 psig. Source Estimated 19) Estimated reservoir fracture pressure: 3500 psig. 20) Maximum proposed injection operations: Volume per hour 25 bbl. Bottom Hole Pressure 2332 psig. Detailed indentification of materials to be injected, including additives: 21) Fresh water, produced water, bactericides and other chemicals as needed to maintain water quality and improve oil recovery. 22) Filters (if any): Cartridge filters and/or coal bed filters Specifications for cathodic protection and other corrosion control: 23) CASING AND TUBING PROGRAM: CASING OR SPECIFICATIONS FOOTAGE INTERVALS CEMENT FILLUP **PACKERS** TUBING TYPE Grade | Weight | New | Used Size For Drilling Left in Well OR SACKS Conductor Kinds Fresh Water 8 5/8" LS. 20# X 1150 1150 Cement To Coal Surface Sizes Intermediate Production 4 1/2" J-55 10.5# $\overline{\mathbf{x}}$ 3290 3290 Cement Over Depths Set Tubing Salt Sand Liners Perforations Top Bottom APPLICANTS OPERATING RIGHTS were acquired from 25) Louisa E. & Edward Dulaney

FORM V	
	WM Division of Environment & Protection

1) Date	August 29, 1996				
2) Well No.	L.E. Dulaney No.97				
3) SIC Code					
4) API Well No.	47	- 103	-	1719.01	
_	State	County		Permit	

STATE OF WEST VIRGINIA

NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION for the

6) SURFACE OWNER(S) OF RECORD TO BE SERVED 7 (i) COAL OPERATOR: Name N/A Address Rt. 2, Box 10 Jacksonburg, WV 26377 7 (ii) COAL OWNER WITH DECLARATION ON RECORD:
(i) Name Paul Able Address Address Rt. 2, Box 10 Jacksonburg, WV 26377 7 (ii) COAL OWNER WITH DECLARATION ON RECORD:
Address Rt. 2, Box 10 Jacksonburg, WV 26377 7(ii) COAL OWNER WITH DECLARATION ON RECORD:
Jacksonburg, WV 26377 7(ii) COAL OWNER WITH DECLARATION ON RECORD:
(ii) Name Agnes Morris Name DUPECH, Inc.
Address Box 21 Address 6451 Pleasant St.
Pine Grove, WV 26419 Library, PA 15129
(iii) Name Herbert & Hester Slaughter 7(iii) COAL LESSEE WITH DECLARATION ON RECORD:
Address HC 62, Box 16 Name N/A
Pine Grove, WV 26419 Address
TO THE PERSON(S) NAMED ABOVE: You should have received this Form and the following documents:
(1) The Application for a Liquid Injection or Waste Disposal Well Work Permit on Form WW-3(B), which
sets out the parties involved in the drilling or other work, and
(2) The plat (surveyor's map) showing the well location on Form WW-6; and
(3) The Construction and Reclamation Plan on Form WW-9 (unless the well work is only to plug a well),
which sets out the plan for erosion and sediment control and for reclamation for the site and access road.
The date proposed for the first injection or waste disposal is
THE REASON YOU RECEIVED THESE DOCUMENTS IS THAT YOU HAVE RIGHTS REGARDING THE APPLICATION
WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS" ON THE REVERSE SIDE OF THE COPY OF THE APPLICATION
(FORM WW-3(B)) DESIGNATED FOR YOU. HOWEVER, YOU ARE NOT REQUIRED TO TAKE ANY ACTION AT ALL.
Take notice that under Chapter 22B of the West Virginia Code, the undersigned well operator
proposes to file or has filed this Notice and Application and accompanying documents for a
Well Work Permit with the Director of the Division of Oil and Gas, West Virginia Department
of Energy, with respect to a well at the location described on the attached Application and
depicted on attached Form WW-6. Copies of this Notice, the Application, the plat, and the
Construction and Reclamation Plan have been mailed by registered or certified mail or delivered
by hand to the person(s) named above (or by publication in certain circumstances) on or before
the day of mailing or delivery to the Director.
The person signing this document shall make the following certification:
"I certify under penalty of law that I have Pennzoil Products Company

personally examined and am familiar with the information submitted in this document 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 bmitting false information, including the

ibility of fine and imprisonment."

Well Operator

Timothy P. Roush

Supervisor, Surveying/Mapping Its

(304) 422-6565 Telephone_