

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

put in

Well Operator's Report of Well Work

Farm Name: ELLA ROSE TATE ESTATE

Operator Well No.: GRANT NO. 1

LOCATION: Elevation: 1010'

Quadrangle: WEST UNION

District: WEST UNION
Latitude: 200 Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude: 11065 Feet West of 80 Deg. 42 Min. 30 Sec.

County: DODDRIDGE

Company: KEY OIL COMPANY
22 GARTON PLAZA
WESTON, WV 26452-0000

Agent: JAN CHAPMAN

Inspector: MIKE UNDERWOOD
Permit Issued: 05/04/04
Well Work Commenced: 07/29/04
Well Work Completed: 08/02/04

Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5343'
Fresh water depths (ft) 451'
Salt water depths (ft) NONE

Is coal being mined in area (Y / N)? N
Coal Depths (ft): 143' (3)

OPEN FLOW DATA

Warren
Speechley
Rileys
Benson

Producing formation Alexander
Gas: Initial open flow 60 MCF / d Oil: _____
Final open flow 2,054 MCF / d Oil: _____
Time of open flow between initial and final tests N/A
Static rock pressure 1695 psig (surface pressure) after 96 Hours

3180' - 3218'
3229' - 3312'
4342' - 4789'
4834' - 4844'
5083' - 5186'
Bbl / d
Bbl / d
Hours
Hours

Second producing formation _____
Gas: Initial open flow _____ Commingled MCF / d Oil: Initial open flow _____
Final open flow _____ Commingled MCF / d Oil: Final open flow _____
Time of open flow between initial and final tests _____
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: KEY OIL COMPANY

By: *Jan Chapman*
Date: February 3, 2005

MAY 27 2005

RECEIVED
Office of Oil & Gas
Office of Chief
FEB 14 2005
WV Department of
Environmental Protection
PRESIDENT

0000 4813

Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
8 5/8"	1016'	1016'	230 sks To Surface
4 1/2"	5271'	5271'	480 sks.

Grant #1 (47-017-4813)
Four Stage Foam Frac – BJ Services

1 st Stage:	Alexander (14 holes) (5103.75' to 5180.50')	60 Quality Foam, 500 gal. 15% HCL., 60,000# 20/40 sand, 565,000 SCF N2, 814 bbls foam
2 nd Stage:	Benson (6 holes) (4842' to 4843.25') Third Riley (6 holes) (4785' to 4786.50')	60 Quality Foam, 750 gal 15% HCl, 30,000# 20/40 sand, 359,000 SCF N2, 525bbls foam
3 rd Stage:	Riley (14 holes) (4347.50' to 4398.50')	60 Quality Foam, 750 gal 15% HCl 5,000# 80/100 sand, 35,000# 20/40 sand, 448,000 SCF N2, 615 bbls foam
4 th Stage:	Speechley (7 holes) (3231.75' to 3305.25') Warren (6 holes) (3192.75' to 3202.25')	60 Quality Foam, 1,000 gal 15% HCl 5,000# 80/100 sand, 45,000# 20/40 sand, 517,000 SCF N2, 728 bbls foam

	<u>WELL LOG</u>	
KB	0	10
Clay	10	12
Sand	12	18
Red Rock & Sand & Shale	18	125
Sand & Shale	125	143
Coal	143	146
Sand & Shale & Red Rock	146	267
Sand & Shale	267	422
Sand	422	432
Sand & Shale	432	540
Red Rock	540	575
Sand & Shale	575	615
Sand	615	727
Sand & Shale	727	821
Red Rock	821	862
Sand & Shale	862	1021
Sand	1021	1168
Sand & Shale	1168	1728
Little Lime	1728	1775
Big Lime	1775	1820
Keener	1820	1875
Big Injun	1875	1932
Shale	1932	2085
Weir	2085	2176
Shale	2176	2276
Berea	2276	2307
Shale	2307	2486
Gordon	2486	2544
Shale	2544	3180
Warren	3180	3218
Shale	3218	3229
Speechley	3229	3312
Shale	3312	4342
Riley	4342	4416
Shale	4416	4740
Third Riley	4740	4789
Shale	4789	4834
Benson	4834	4844
Shale	4844	5083
Alexander	5083	5186
Shale	5186	5343
TD	5343	

Hole damp @ 451'

Gas Checks

- 1702' – No Show
- 2013' - 2/10^{ths} 2" water
- 2516' - 2/10^{ths} 2" water
- 3207' - 2/10^{ths} 2" water
- 3965' - 2/10^{ths} 2" water
- 4372' - 2/10^{ths} 2" water
- 4810' - 2/10^{ths} 2" water
- 5060' - 2/10^{ths} 2" water

MAY 27 2009