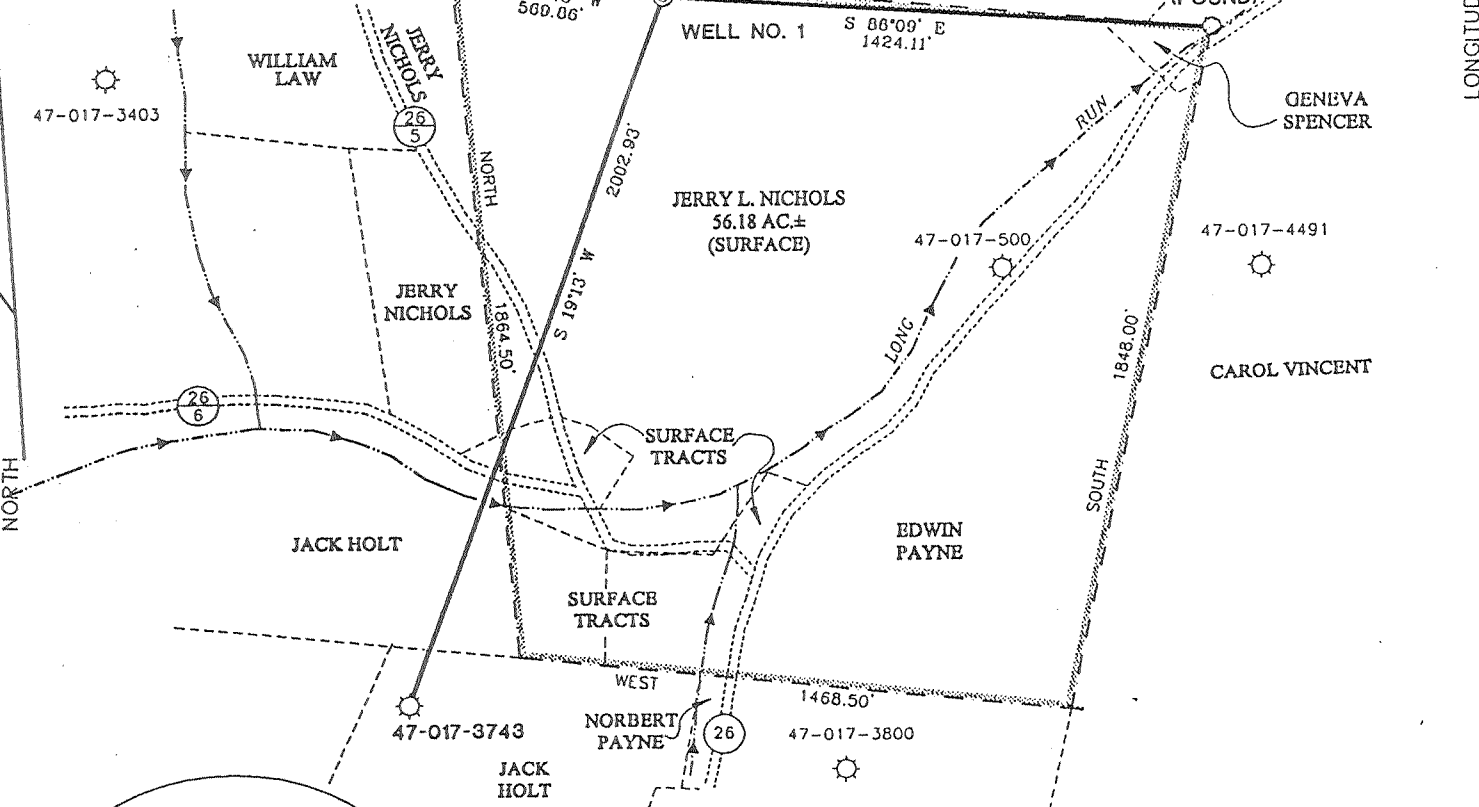


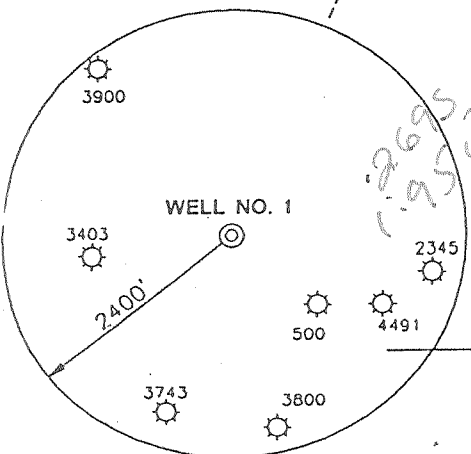
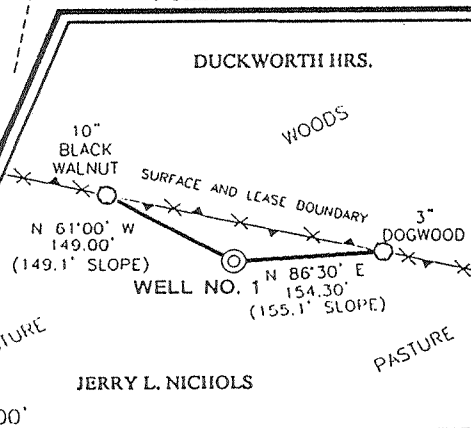
A.D. DUTY LEASE 71 ACRES ± WELL NO. 1



NOTES ON SURVEY

1. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV NORTH ZONE NAD '27.
2. TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 6/28/99.
3. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A TITLE OPINION PREPARED BY R. BRUCE WHITE, ATTORNEY, DATED AUGUST 30, 1994.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN JUNE, 1999.
5. WELL LAT./LONG. ESTABLISHED BY DGPS (SUBMETER MAPPING GRADE).

REFERENCES



I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.

P.S. 677 *Gregory A. Smith*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE JUNE 29, 19 99
 OPERATORS WELL NO. A.D. DUTY NO.1
 API WELL NO. 47-017-04525
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 4231P1 (80-6)
 PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS ELEVATION 875' SCALE 1" = 500'

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS

WELL TYPE: OIL GAS LIQUID WASTE IF INJECTION DISPOSAL "GAS" PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 989' WATERSHED TRIBUTARY OF LONG RUN
 DISTRICT CENTRAL COUNTY DODDRIDGE QUADRANGLE WEST UNION 7.5'

SURFACE OWNER JERRY L. NICHOLS ACREAGE 56.18
 ROYALTY OWNER A.D. DUTY HEIRS et al LEASE ACREAGE 71
 PROPOSED WORK: LEASE NO. _____
 DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER _____
 PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION ALEXANDER
 ESTIMATED DEPTH 5600'

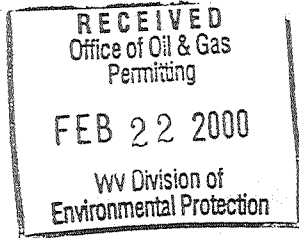
WELL OPERATOR KEY OIL COMPANY DESIGNATED AGENT JAN CHAMPAN AUG 30 1999
 ADDRESS 22 GARTON PLAZA WESTON, WV 26452 ADDRESS 22 GARTON PLAZA WESTON, WV 26452

LONGITUDE 80°52'10.9" LAT. 39°17'39.2"

COUNTY NAME PERMIT

67-89

WR-35



23 - Aug - 99
API # 47 - 017-4525

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

Reviewed K

Well Operator's Report of Well Work

Farm name: NICHOLS, JERRY L.

Operator Well No. : A.D. DUTY #1

LOCATION: Elevation: 989'

Quadrangle: WEST UNION

District: CENTRAL County: DODDRIDGE
Latitude: 14250 Feet South of 39 Deg. 20 Min. 00 Sec.
Longitude: 10300 Feet West of 80 Deg. 50 Min. 00 Sec.

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

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD
Permit Issued: 08/23/99
Well Work Commenced: 11/16/99
Well Work Completed: 12/02/99
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5492'
Fresh water depths (ft) 35', 300'
Salt water depths (ft) 1834'

Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
11 3/4"	130.45'	130.45'	70 sks To Surface
8 5/8"	1584.85'	1584.85'	450 sks To Surface
4 1/2"	5160'	5118'	470 sks
2 3/8"		5005'	

Is coal being mined in area (Y / N)? N
Coal Depths (ft): 148' (5')

OPEN FLOW DATA
Speechley 3348' - 3482'
Balltown 3576' - 4376'
Riley 4410' - 4484'
Benson 4842' - 4854'
Producing formation Alexander Pay zone depth (ft) 5094' - 5177'
Gas: Initial open flow No Show MCF / d Oil: Initial open flow 0 Bbl / d
Final open flow 1,254 MCF / d Oil: Final open flow show Bbl / d
Time of open flow between initial and final tests N/A Hours
Static rock pressure 1750 psig (surface pressure) after 96 Hours

Second producing formation Commingled Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF / d Oil: Initial open flow _____ Bbl / d
Final open flow _____ MCF / d Oil: Final open flow _____ Bbl / d
Time of open flow between initial and final tests _____ Hours
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 16, 2000

PRESIDENT

0000 4525

MAR 3 2000

A.D. Duty #1 (47-017-4525)
Three Stage Foam Frac - Halliburton

1st Stage: Alexander (14 holes) (5139.50' to 5155.25') 60 Quality Foam. 500 gal. 15% HCL.
60,000# 20/40 sand, 550,000 SCF N2,
809 bbls foam.

2nd Stage: Benson (12 holes) (4847.50' to 48949') 60 Quality Foam. 750 gal 15% HCL.
40,000# 20/40 sand, 417,000 SCF N2,
615 bbls foam.

3rd Stage: Riley (8 holes) (4450.50' to 4473.25') 60 Quality Foam. 1,000 gal 15% HCL.
Balltown (7 holes) (4212' to 4256') 5,000# 80/100 sand, 45,000# 20/40 sand,
Speechley (3 holes) (3471' to 3471.50') 502,000 SCF N2, 684 bbls foam.

WELL LOG

Red Rock	0	5	
Sand	5	13	
Sand & Shale	13	20	
Red Rock & Shale	20	148	½" H ² O @ 25'
Coal	148	153	
Sand	153	215	
Red Rock	215	221	
Sand & Shale & Red Rock	221	626	½" H ² O @ 300'
Lime	626	640	
Red Rock & Shale	640	868	
Sand	868	955	
Red Rock	955	1113	
Sand & Shale	1113	1412	
Sand	1412	1451	
Sand & Shale	1451	1740	
Sand	1740	1830	
Little Lime	1830	1845	1½" H ² O @ 1834'
Sand & Shale	1845	1868	
Big Lime	1868	1934	
Big Injun	1934	2020	
Shale	2020	2184	
Weir	2184	2309	
Sand & Shale	2309	2663	
Gordon	2663	2673	
Shale	2673	3282	<u>Gas Checks</u>
Warren	3282	3335	No Show
Sand & Shale	3335	3348	
Speechley	3348	3482	
Shale	3482	3576	
Balltown	3576	4376	
Shale	4376	4410	
Riley	4410	4484	
Shale	4484	4766	
Third Riley	4766	4805	
Shale	4805	4842	
Benson	4842	4854	
Shale	4854	5094	
Alexander	5094	5177	
Sand & Shale	5177	5492	
T.D.	5492		