

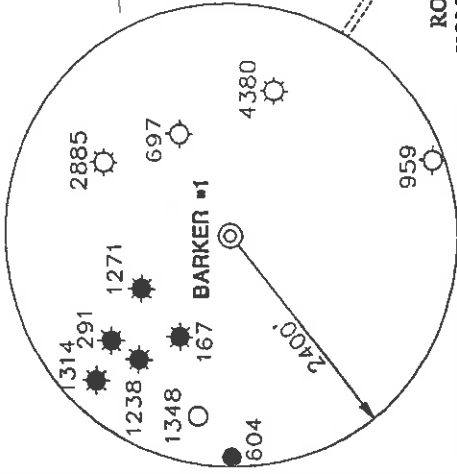
BARKER LEASE 31 OF 127 ACRES ± WELL NO. 1

1996
805

DUCKWORTH

NOTES ON SURVEY

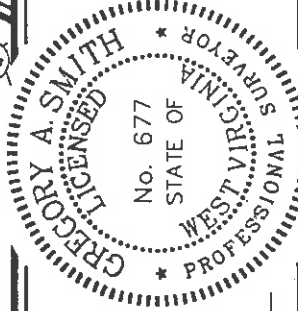
1. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH W/ NORTH ZONE NAD '27.
2. TIES TO REFERENCES ARE BASED ON DOTSON MAGNETIC NORTH 01/13/00.
3. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A TITLE REPORT DATED 08/30/99 AS PREPARED BY RICHARD M. REDDECLIFF, ATTORNEY AT LAW.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN JANUARY, 2000.
5. WELL LAT./LONG. ESTABLISHED BY DGPS (SUBMETER MAPPING GRADE).



ROBERT HOLLAND Jr.

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 JANUARY 25, 20 00

OPERATORS WELL NO. BARKER #1

API WELL NO.

STATE 47 COUNTY 017 PERMIT 04555

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 4292P1 (80-57)

PROVEN SOURCE OF ELEVATION BENCH MARK ELEVATION 941' SCALE 1" = 500'

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

LOCATION : ELEVATION 1045' WATERSHED DOTSON CUN

DISTRICT CENTRAL COUNTY DODDRIDGE

SURFACE OWNER JERRY A. NORMAN et al

ROYALTY OWNER ANNA BLANCHE BARKER et al

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

ADDRESS 22 GARTON PLAZA WESTON, WV 26452

DESIGNATED AC INT JAN CHAPMAN JUN 30 2000

ADDRESS 22 GARTON PLAZA WESTON, WV 26452

COUNTY NAME DODD

PERMIT 4555



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

REFERENCES

LEASE/SURFACE BOUNDARY

WOODS

WOODS

WOODS

BARKER #1

S 77°30' E
143.80'
(144' SLOPE)

N 23°30' W
141.70'
(146' SLOPE)

ELECTRIC POLE

1" = 100'

DENNIS II POWELL

JAMES W. MCGRAW HIRRS

ROY E. VOGT

ANNABELLI HARPER

ANNA BARKER LOT #5

JERRY A. NORMAN et al 31 AC ± (SURFACE)

STONE (FOUND)

FRANK MCGILL et al

1/2" IRON PIPE (FOUND)

47-017-4380

5 2700' W
S 27°00' E

N 82°18' E
1886.94'

S 71°10' E
1583.06'

N 84°30' W
102.30'

S 88°30' W
26.40'

S 62°00' W
627.80' (SUPLY)

S 64°57' E
613.27' (SUPLY)

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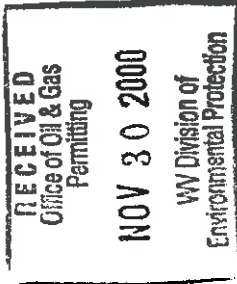
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State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

[Signature]

Well Operator's Report of Well Work

Farm name: JERRY A. NORMAN, ET. AL.

Operator Well No.: BARKER #1

LOCATION: Elevation: 1045.00

Quadrangle: WEST UNION

District: CENTRAL

County: DODDRIDGE

Latitude: 4,600 Feet South of 39 Deg. 17 Min. 30 Sec.

Longitude: 10,270 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: 06/26/00
Well Work Commenced: 10/21/00
Well Work Completed: 10/26/00

Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5402'
Fresh water depths (ft) 100'
Salt water depths (ft) 1851', 1904'

Is coal being mined in area (Y / N) ? N
Coal Depths (ft) : NONE

Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
11 3/4"	133'	133'	70 sks To Surface
8 5/8"	1970.15'	1970.15'	450 sks To Surface
4 1/2"	5323'	5323'	370 sks
2 3/8"		5175'	

OPEN FLOW DATA

Balltown
Rileys
Benson

Producing formation Alexander

Gas: Initial open flow _____ MCF / d
Final open flow 1,516 _____ MCF / d

Time of open flow between initial and final tests N/A
Static rock pressure 1750 _____ psig (surface pressure) after 96 _____ Hours

Second producing formation Commingled

Gas: Initial open flow _____ MCF / d
Final open flow _____ MCF / d

Time of open flow between initial and final tests _____ Hours
Static rock pressure _____ psig (surface pressure) after _____ Hours

3666' - 4364'
4470' - 4868'
4908' - 4919'
5152' - 5236'

Pay zone depth (ft)
Oil: Initial open flow _____ Bbl / d
Oil: Final open flow _____ Bbl / d
Hours

Pay zone depth (ft)
Oil: Initial open flow _____ Bbl / d
Oil: Final open flow _____ Bbl / d
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: *[Signature]*
Date: November 22, 2000

PRESIDENT

0000 4555
JAN 5 2001

Barker #1 (47-017-4555)
 Three Stage Foam Frac - B.J. Services

1st Stage: Alexander (13 holes) (5195.50' to 5215.25') 60 Quality Foam. 500 gal. 15% HCL.
 60,000# 20/40 sand, 550,000 SCF N2,
 810 bbls foam.

2nd Stage: Benson (9 holes) (4913' to 4915') 4913' ?
 60 Quality Foam. 750 gal 15% HCL.
 Third Riley (4 holes) (4859' to 4859.75') 40,000# 20/40 sand, 417,000 SCF N2,
 615 bbls foam.

3rd Stage: Riley (9 holes) (4499.75' to 4517.50') 60 Quality Foam. 1,000 gal 15% HCL.
 Balltown (9 holes) (3885.25' to 3936.50') 5,000# 80/100 sand, 45,000# 20/40 sand,
 502,000 SCF N2, 684 bbls foam.

WELL LOG

KB-GL	0	10	
Clay	10	13	
Red Rock	13	18	
Shale & Sand	18	40	
Sale & Red Rock	40	115	Damp @ 100'
Sand & Shale	115	526	
Shale & Red Rock	526	609	
Sand & Shale	609	712	
Sand	712	727	
Sand & Shale	727	1920	1/2" water @ 1851'
Little Lime	1920	1963	
Big Lime	1963	2012	3/4" water @ 1904'
Big Injun	2012	2101	
Sand & Shale	2101	2265	
Weir	2265	2390	
Sand & Shale	2390	2861	
Gordon	2861	2870	
Shale	2870	3351	
Warren	3351	3404	<u>Gas Checks</u>
Shale	3404	3412	2200' - No Show
Speechley	3412	3348	3409' - Odor
Shale	3348	3666	3597' - Odor
Balltown	3666	4364	4501' - Odor
Shale	4364	4470	5185' - Odor
Riley	4470	4544	
Shale	4544	4832	
Third Riley	4832	4868	
Shale	4868	4908	
Benson	4908	4919	
Shale	4919	5152	
Alexander	5152	5236	
Sand & Shale	5236	5402	
T.D.	5402		