

LONG. 80°44'09.3" LATITUDE 39°15'00"

PORTER MAXWELL LEASE 1400 ACRES ± WELL NO. 1-A

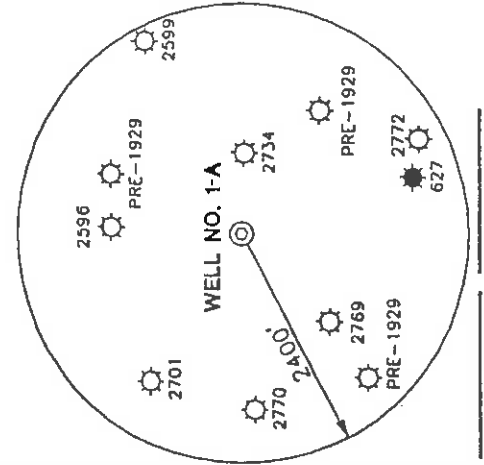
TO COUNTY
ROUTE 13

I.L. MORRIS
2331.51 AC. ±
(SURFACE)

WELL NO. 1-A

I.L. MORRIS
2331.51 AC. ±
(SURFACE)

47-017-2789

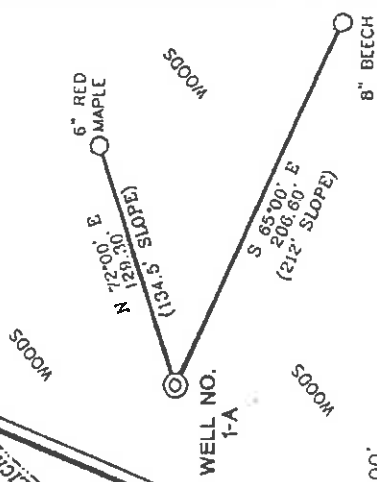


NOTES ON SURVEY

1. TIES TO WELLS ARE BASED ON STATE PLANE GRID NORTH WV SOUTH ZONE NAD '27
2. TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 4/24/00.
3. LEASE BOUNDARY DOES NOT FALL WITHIN THE SCOPE OF THIS PLAT.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN APRIL, 2000.
5. WELL LAT./LONG. ESTABLISHED BY DGPS (SUBMETER MAPPING GRADE).

REFERENCES

I.L. MORRIS
2331.51 AC. ±
(SURFACE)



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 APRIL 26 20 00
OPERATORS WELL NO. PORTER MAXWELL 1-A
API NO. 47-017-017
STATE COUNTY PERMIT NO. 04552

MINIMUM DEGREE OF ACCURACY 1 / 200
FILE NO. 4385P1 (90-2)
PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEVATION 1193'
SCALE 1" = 500'



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

LOCATION : ELEVATION 990' WATERSHED TRIBUTARY OF LICK RUN

DISTRICT SOUTHWEST COUNTY DODDRIDGE QUADRANGLE NEW MILTON 7.5'

SURFACE OWNER I.L. MORRIS ACREAGE 2331.51

ROYALTY OWNER PORTER MAXWELL, SR., ESTATE LEASE ACREAGE 1400' LEASE NO. _____

PROPOSED WORK :
 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 GORDON ESTIMATED DEPTH 3000'

WELL OPERATOR KEY OIL COMPANY DESIGNATED AGENT JAN CHAPMAN
 ADDRESS 22 GARTON PLAZA WESTON, WV 26452 ADDRESS 22 GARTON PLAZA WESTON, WV 26452

6-6-134

JUN 16 2000

COUNTY NAME DODD PERMIT 4552

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

Reviewed Ar B

Well Operator's Report of Well Work

Farm name: I.L. MORRIS

Operator Well No.: PORTER MAXWELL #1A

LOCATION: Elevation: 990.00

Quadrangle: NEW MILTON

District: SOUTHWEST

County: DODDRIDGE

Latitude: 8330 Feet South of 39 Deg. 15 Min. 00 Sec.
Longitude: 7850 Feet West of 80 Deg. 42 Min. 30 Sec.

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

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD
Permit Issued: 06/15/00
Well Work Commenced: 01/02/01
Well Work Completed: 01/04/01

Verbal Plugging
Permission granted on: _____ Rig
Rotary X Cable _____
Total Depth (feet) 2640'
Fresh water depths (ft) 111'
Salt water depths (ft) 1100'

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. |
|----------------------|------------------|--------------|------------------------|
| 8 5/8" | 1002.1' | 1002.1' | 230 sks To Surface |
| 4 1/2" | 2554' | 2554' | 250 sks |
| 2 3/8" | | 2430' | |

Environmental Protection
MAY 17 2001
West Virginia Environmental Protection

OPEN FLOW DATA

Big Injun Weir
Berea

Producing formation Gordon

Gas: Initial open flow 30 MCF / d

Final open flow 239 MCF / d

Time of open flow between initial and final tests N/A

Static rock pressure 450 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

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

1801' - 1878'
2023' - 2120'
2227' - 2244'
2434' - 2470'

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: May 4 2001

PRESIDENT

MAY 25 2001

DODD 4552

Porter Maxwell #1A (47-017-4552)
 Three Stage Foam Frac - B.J. Services

1st Stage: Gordon (13 holes) (2449.50' to 2465') 60 Quality Foam. 500 gal. 15% HCL.
 30,000# 20/40 sand, 321,000 SCF N2,
 500 blis foam.

2nd Stage: Berea (6 holes) (2239.50' to 2240.75') 60 Quality Foam. 1,000 gal 15% HCL.
 Weir (10 holes) (2054' to 2100') 30,000# 20/40 sand, 321,000 SCF N2,
 497 blis foam.

3rd Stage: Big Injun (13 holes) (1806.5' to 1817') 60 Quality Foam. 1,000 gal 15% HCL.
 40,000# 20/40 sand, 429,000 SCF N2,
 609 blis foam.

WELL LOG

| | | | |
|------------------|------|------|--|
| Sand | 0 | 18 | |
| Shell | 18 | 29 | |
| Sand | 29 | 150 | 1/2" H2O @ 111' |
| Red Rock & Shale | 150 | 238 | |
| Sand | 238 | 411 | |
| Sand & Shale | 411 | 567 | |
| Red Rock | 567 | 691 | |
| Sand & Shale | 691 | 712 | |
| Red Rock | 712 | 764 | |
| Sand | 764 | 823 | |
| Sand & Shale | 823 | 1000 | 1/2" H2O @ 1325' |
| Sand | 1000 | 1062 | |
| Sand & Shale | 1062 | 1705 | |
| Little Lime | 1705 | 1716 | |
| Blue Monday | 1716 | 1748 | |
| Big Lime | 1748 | 1801 | |
| Big Injun | 1801 | 1878 | |
| Shale | 1878 | 2023 | |
| Weir | 2023 | 2120 | |
| Shale | 2120 | 2227 | Gas Checks |
| Berea | 2227 | 2244 | 1809' - 4/10 ^{ths} - 2" - w/water |
| Sand & Shale | 2244 | 2434 | 2120' - 2/10 ^{ths} - 2" - w/water |
| Gordon | 2434 | 2470 | 2399' - 2/10 ^{ths} - 2" - w/water |
| Shale | 2470 | 2640 | TD - 8/10 ^{ths} - 1" - w/water |
| T.D. | 2640 | | |