

PORTER MAXWELL LEASE 1400 ACRES ±

WELL NO. 2-A

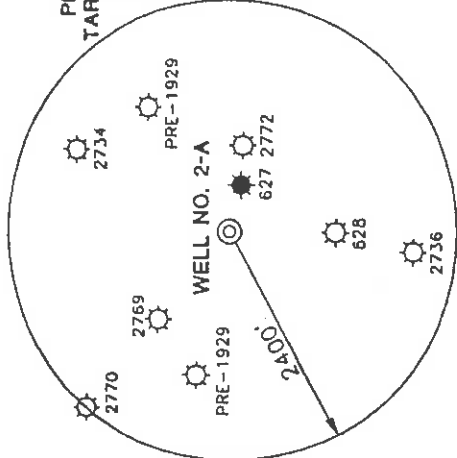
UNNAMED TRIBUTARY OF LICK RUN
TO COUNTY ROUTE 13

I.L. MORRIS
2331.51 AC. ±
(SURFACE)

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2331.51 AC. ±
(SURFACE)

47-017-2734

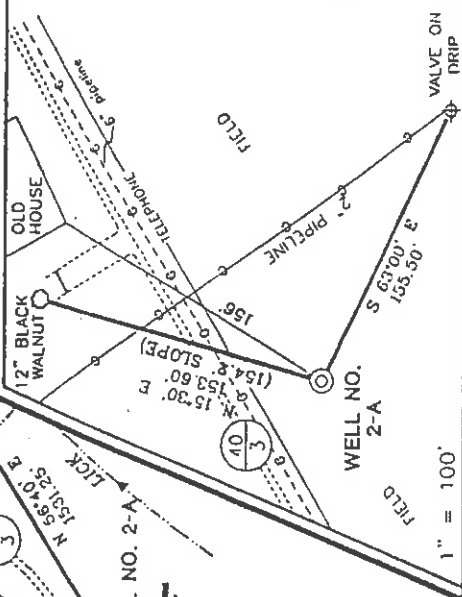
47-017-2769



NOTES ON SURVEY

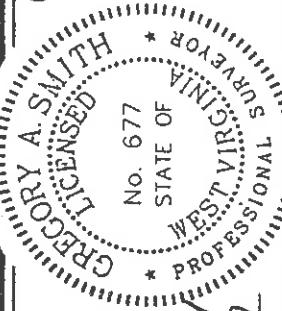
1. TIES TO WELLS ARE BASED ON STATE PLANE GRID NORTH WV SOUTH ZONE NAD '27. MAGNETIC NORTH 4/24/00.
2. TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 4/24/00.
3. LEASE BOUNDARY DOES NOT FALL WITHIN THE SCOPE OF THIS PLAT.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK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

REFERENCES



I 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*

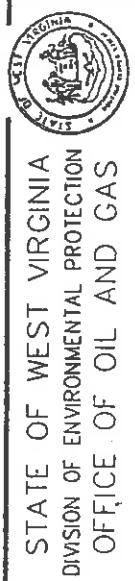


(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

DATE MAY 24 OPERATORS WELL NO. PORTER MAXWELL 2-A

API WELL NO. 47-017 STATE COUNTY PERMIT 04554

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 4385P2 (90-2)
PROVEN SOURCE SCALE 1" = 500'
TOP OF KNOB ELEVATION 1193'



WELL TYPE : OIL ___ GAS INJECTION ___ DISPOSAL ___ "GAS" PRODUCTION STORAGE ___ DEEP ___ SHALLOW
LOCATION : ELEVATION 900' WATERGHED LICK RUN

DISTRICT NEW MILTON COUNTY DODDRIDGE
SURFACE OWNER I.L. MORRIS
ROYALTY OWNER PORTER MAXWELL, SR. ESTATE
LEASE NO. 1400'

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 5000' ± 2000'

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

DODD COUNTY NAME 4554 PERMIT

6-6-134

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

Reviewed: ALB

Well Operator's Report of Well Work

Farm name: I.L. MORRIS

Operator Well No. : PORTER MAXWELL #2A

LOCATION: Elevation: 900.00

Quadrangle: NEW MILTON

District: SOUTHWEST
Latitude: 10020 Feet South of 39 Deg. 15 Min. 00 Sec.
Longitude: 7730 Feet West of 80 Deg. 42 Min. 30 Sec.

County: DODDRIDGE

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

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD
Permit Issued: 06/21/00
Well Work Commenced: 01/05/01
Well Work Completed: 01/08/01

Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 2573'
Fresh water depths (ft) 45'
Salt water depths (ft) 1180'

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"	922.80'	922.80'	210 sks To Surface
4 1/2"	2420'	2420'	250 sks
2 3/8"			

2346'
MAY 17 2001
WV DEPARTMENT OF Environmental Protection

OPEN FLOW DATA

Weir Berea Gordon
Producing formation _____
Gas: Initial open flow 30 MCF / d Pay zone depth (ft) 1942' - 2038'
Final open flow 223 MCF / d Oil: Initial open flow 0 Bbl / d 2148' - 2163'
Time of open flow between initial and final tests N/A Oil: Final open flow show Bbl / d 2331' - 2388'
Static rock pressure 610 psig (surface pressure) after 96 Hours

Second producing formation Commingled
Gas: Initial open flow _____ MCF / d Pay zone depth (ft) _____ Bbl / d
Final open flow _____ MCF / d Oil: Initial 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 PERFORMED 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 7, 2001

PRESIDENT

DoD 4554

MAY 25 2001

Porter Maxwell #2A (47-017-4554)
Two Stage Foam Frac - B.J. Services

1 st Stage:	Gordon (14 holes) (2368' to 2383.50')	60 Quality Foam. 500 gal. 15% HCL. 30,000# 20/40 sand, 321,000 SCF N2, 514 bbis foam.
2 nd Stage:	Berea (4 holes) (2158' to 2159.25') Weir (10 holes) (1956' to 2021.25')	60 Quality Foam. 1,000 gal 15% HCL. 40,000# 20/40 sand, 364,000 SCF N2, 629 bbis foam.

WELL LOG

Fill	0		
Sand	15	48	1/2" H ₂ O @ 45'
Sand & Shale	48	60	
Sand	60	70	
Red Rock & Shale	70	80	
Sand & Shale	80	251	
Sand	251	417	
Sand & Shale	417	711	
Sand	711	764	
Red Rock	764	784	
Shell	784	791	
Sand & Shale	791	843	
Sand	843	1187	Damp @ 1180'
Sand & Shale	1187	1402	
Sand	1402	1448	
Sand & Shale	1448	1616	
Little Lime	1616	1626	
Blue Monday	1626	1650	
Big Lime	1650	1710	
Keener	1710	1732	
Shale	1732	1738	
Big Injun	1738	1798	
Shale	1798	1942	
Weir	1942	2038	
Shale	2038	2148	TD - 8/10 ^{ths} - 1" - w/water
Berea	2148	2163	
Sand & Shale	2163	2331	
Gordon	2331	2388	
Shale	2388	2573	
T.D.	2573		

Gas Checks