

LEEMAN MAXWELL LEASE 90 OF 640 AC. ± TOTAL WELL NO. 1

LONG. 80°45'11.1" → 900'
LATITUDE 39°17'30"
LONGITUDE 80°45'00" ← 970'
LAT. 39°17'20.4" ← 970'

KAREN M. IRELAND

KAREN M. IRELAND
FAMILY LIMITED PARTNERSHIP

THOMAS L.
BARNES

THOMAS L.
BARNES

PAUL
McCUTCCHAN

90 AC. MINERAL TRACT

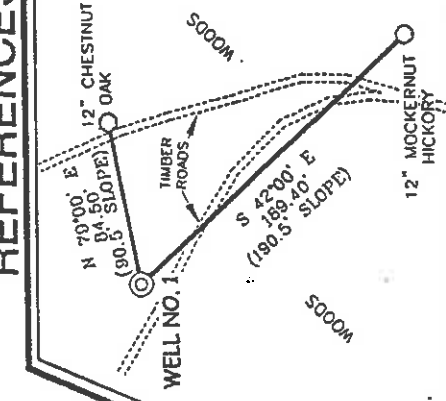
LEONCE LABEL
86.09 AC. ±
(SURFACE)

TRIBUTARY OF
BLUESTONE
CREEK

47-017-2758

47-017-4188

WELL NO. 1



REFERENCES

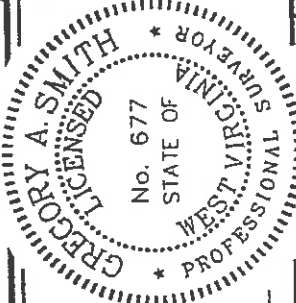
NOTES ON SURVEY

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 04/26/01.
3. TRACT BOUNDARY SHOWN HEREON TAKEN FROM DEED BOOK 225 ON PAGE 190.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN APRIL, 2001.
5. WELL LAT./LONG. ESTABLISHED BY DGPS (SUBMETER MAPPING GRADE).



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 2 20 01
OPERATORS WELL NO. LEEMAN MAXWELL NO. 1
API WELL NO. 47-017-04610
STATE COUNTY PERMIT



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

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 4732P1 (104-22)
PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS 803' SCALE 1" = 500'

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

LOCATION : ELEVATION 1167' WATERSHED BLUESTONE CREEK QUADRANGLE WEST UNION 7.5' ACREAGE 86.09

DISTRICT WEST UNION COUNTY DODDRIDGE ACREAGE 86.09

SURFACE OWNER LEONCE LABEL LEASE ACREAGE 6.40 LEASE NO. _____

ROYALTY OWNER LEEMAN MAXWELL HEIRS

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 ALEXANDER
PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION _____ ESTIMATED DEPTH 5600'

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

ADDRESS 22 GARTON PLAZA WESTON, WV 26452

Dodd 4610
COUNTY NAME PERMIT

6-6-99

JUL 06 2001

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

Reviewed: AP

Well Operator's Report of Well Work

Farm name: LEEMAN MAXWELL Operator Well No.: 1

LOCATION: Elevation: 1167 Quadrangle: WEST UNION 7.5'

District: WEST UNION County: DODDRIDGE
Latitude: 970 Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude 900 Feet West of 80 Deg. 45 Min. 00 Sec.

Company: KEY OIL COMPANY

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: <u>22 GARTON PLAZA</u>	<u>8 5/8"</u>	<u>1204'</u>	<u>1204'</u>	<u>371</u>
<u>WESTON, WV 26452</u>	<u>4 1/2"</u>		<u>5425'</u>	<u>748</u>
Agent: <u>JAN CHAPMAN</u>				
Inspector: <u>MIKE UNDERWOOD</u>				
Date Permit Issued:				
Date Well Work Commenced: <u>07-21-01</u>				
Date Well Work Completed: <u>07-25-01</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary X Cable Rig				
Total Depth (feet): <u>5456 RTD</u>				
Fresh Water Depth (ft.): <u>925'</u>				
Salt Water Depth (ft.): <u>NONE</u>				
Is coal being mined in area (N/Y)? <u>NO</u>				
Coal Depths (ft.):				

OPEN FLOW DATA ALEXANDER BENSON

5252 - 5342
5052 - 5058

Producing formation RILEY Pay zone depth (ft) 4541 - 4573

Gas: Initial open flow 131 MCF/d Oil: Initial open flow 0 Bbl/d

Final open flow 1540 MCF/d Final open flow SHOW Bbl/d

Time of open flow between initial and final tests 126 Hours

Static rock Pressure _____ psig (surface pressure) after 96 Hours

BALLTOWN SPEECHLY WARREN

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow * _____ MCF/d Oil: Initial open flow * _____ Bbl/d

Final open flow * _____ MCF/d Final open flow * _____ Bbl/d

Time of open flow between initial and final tests * _____ Hours

Static rock Pressure * _____ psig (surface pressure) after * _____ Hours

* ALL FORMATIONS CO-MINGLED

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.

Signed: KEY OIL COMPANY

By: [Signature]
Date: 12-30-01

FEB 01 2002

D000 4610

TREATMENT:

STAGE #1: ALEXANDER (5266 - 5338) 18 HOLES: 500 GA, 60,000# 20/40 SAND, 550,000 SCF N₂ & 807 BBLs 60 QUALITY FOAM.

STAGE #2: BENSON (5003 - 5006) 12 HOLES: 750 GA, 40,000# 20/40 SAND, 417,000 SCF N₂ & 623 BBLs 60 QUALITY FOAM.

STAGE #3: RILEY & LOWER BALLTOWN (4542 - 4571 & 4121 - 4125) 14 HOLES: 1000 GA, 5000# 80/100 & 35,000# 20/40 SAND, 448,000 SCF N₂ & 654 BBLs 60 QUALITY FOAM.

STAGE #4: UPPER BALLTOWN, SPEECHLY & WARREN (3881 - 3882, 3471 - 3472 & 3357 - 3367) 13 HOLES: 1000 GA, 5,000# 80/100 & 45,000# 20/40 SAND, 502,000 SCF N₂ & 689 BBLs 60 QUALITY FOAM.

FORMATIIONS:

FILL	0 -	16	1831' -	NO SHOW
SD & SH	16 -	30	2108' -	ODOR
SD	30 -	78	3287' -	170 MCF
RR & SH	78 -	150	4000' -	121 MCF
RR & SH	150 -	390	4931' -	116 MCF
SD	390 -	400	5128' -	116 MCF
SD & SH	400 -	520	5456' -	116 MCF
RR	520 -	525		
SD & SH	525 -	593		
LIME	593 -	606		
SD & SH	606 -	1000		
SD	1000 -	1060		
SD & SH	1060 -	1484		
COAL	1484 -	1484		
SD & SH	1484 -	1880		
L. LIME	1880 -	1916		
BIG LIME	1916 -	2016		
INJUN	2016 -	2110		
SD & SH	2110 -	2886		
SD & SH	2886 -	3280		
WARREN	3280 -	3320		
SD & SH	3320 -	4076		
BALLTOWN	4076 -	4187		
SD & SH	4187 -	4510		
RILEY	4510 -	4550		
SD & SH	4550 -	4910		
BENSON	4910 -	4920		
SD & SH	4920 -	5270		
ALEXANDER	5270 -	5340		
SD & SH	5340 -	5456		
				RTD

GAS TESTS:

WATER 925' - 1/2"