

SURVEYED LONG. 80° 45' 21.5"

1695'

LATITUDE 39° 20' 00"

8070'

LONGITUDE 80° 45' 00"

SURVEYED LAT. 39° 18' 40.2"

CALHOUN LEASE 95.67 ACRES ± WELL NO. 1

PROPOSED WELL
STATE PLANE NAD 27
COORDINATES
N) 297929
E) 1644628

CHARTER MCKINNEY
13 ACRES ±
SURFACE

FENCE POST
AT 3-WAY

STEVE GASPAR
102.67 ACRES ±
SURFACE

SHIRLEY RAMSEY
15.14 ACRES ±
SURFACE

1/2-INCH IRON
ROD, FOUND

CAROL A. THOMAS
ET AL
2.04 ACRES ±
SURFACE

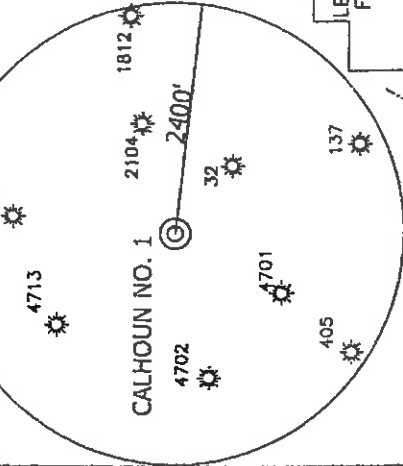
CALHOUN NO. 1

JENNIE MAE
SPONAUGLE
50 ACRES ±
SURFACE

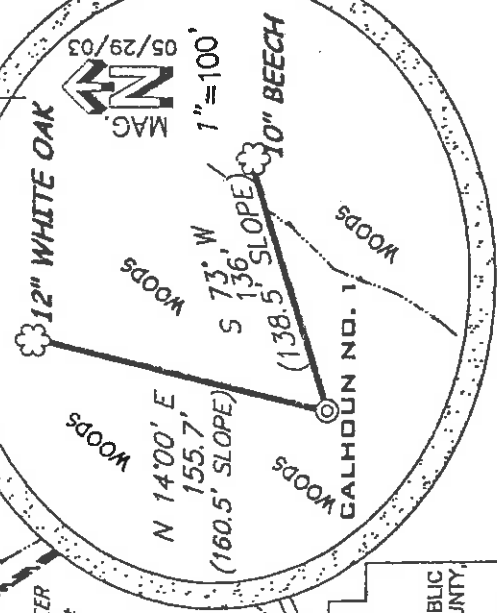
JACKSON & BETTY
CALHOUN
95.67 ACRES ±
SURFACE

SURFACE LOTS

DORETHA FOUTZ
87 SQ. POLES ±
SURFACE



REFERENCES



REFERENCE NOTES
LEASE AS SHOWN TAKEN
FROM DEED BOOK 173
ON PAGE 582.

OWNERSHIP TAKEN FROM PUBLIC
RECORDS OF DODDRIDGE COUNTY,
WV IN MAY, 2003.
LAT./LONG. BY DIFFERENTIAL
SUBMETER MAPPING GRADE GPS

(*) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS

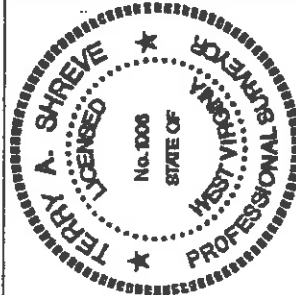
FILE NUMBER 0300015
DRAWING NUMBER WP1(W1-11)
SCALE 1"=600'
MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION BENCH MARK
ELEVATION 833'

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



P.S. 1008
Terry A. Shreve

I, THE UNDERSIGNED HEREBY CERTIFY THAT THIS PLAN 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 ENVIRONMENTAL PROTECTION



DATE: JUNE 03, 2003
OPERATORS WELL NO. JACK CALHOUN NO. 1
API WELL NO.

47-017-4747
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF 'GAS') PRODUCTION STORAGE DEEP SHALLOW
LOCATION ELEVATION 967' WATERSHED ROCK RUN
DISTRICT WEST UNION COUNTY

QUADRANGLE WEST UNION 7.5' LEASE NUMBER
SURFACE OWNER JACKSON H. AND BETTY LOU CALHOUN ACREAGE 95.67 ±
OIL & GAS ROYALTY OWNER JACKSON H. AND BETTY LOU CALHOUN LEASE ACREAGE 95.67 ±

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDELL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE (SPECIFY)

TARGET FORMATION ALEXANDER PLUG & ABANDON CLEAN OUT & REPLUG
ESTIMATED DEPTH 5600'
WELL OPERATOR KEY OIL COMPANY DESIGNATED AGENT JAN CHAPMAN
ADDRESS 22 CARTON PLAZA WESTON, WV 26452 ADDRESS 22 CARTON PLAZA WESTON, WV 26452

0000 4747

6-6 Smithson - Flinn - Sedalia 99'

JUN 08 2003

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

Ac 13

Well Operator's Report of Well Work

Farm Name: JACKSON H. AND BETTY LOU CALHOUN

Operator Well No. : CALHOUN #1

LOCATION: Elevation: 967.00

Quadrangle: WEST UNION

District: WEST UNION
Latitude: 8070 Feet South of 39 Deg. 20 Min. 00 Sec.
Longitude: 1695 Feet West of 80 Deg. 45 Min. 00 Sec.

County: DODDRIDGE

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

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD
Permit Issued: 08/05/03
Well Work Commenced: 12/06/03
Well Work Completed: 12/17/03

Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5345'
Fresh water depths (ft) 415'
Salt water depths (ft) 1500'

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"	961'	961'	220 sks To Surface
4 1/2"	5294'	5294'	480 sks

RECEIVED
Office of Oil & Gas
FEB 0 2 2004

OPEN FLOW DATA

WV Department of
Environmental Protection

Warren
Speechley
Rileys
Benson

3240' - 3298'
3306' - 3398'
4410' - 4872'
4896' - 4910'
5144' - 5237'

Producing formation _____
Gas: Initial open flow 84 MCF / d
Final open flow 1750 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 _____
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 E. Chapman*

Date: January 25, 2004

PRESIDENT

0000 4747

Cathoun #1 (47-017-4747)
Four Stage Foam Frac – Universal Well Services

1 st Stage:	Alexander (14 holes) (5153.50' to 5228')	60 Quality Foam. 500 gal. 15% HCL. 60,000# 20/40 sand, 565,000 SCF N2, 815 bbis foam.
2 nd Stage:	Benson (9 holes) (4901.75' to 4903.75') Third Riley (4 holes) (4766' to 4812.25')	60 Quality Foam. 750 gal 15% HCL. 30,000# 20/40 sand, 359,000 SCF N2, 526 bbis foam.
3 rd Stage:	Riley (14 holes) (4419.75' to 4477.50')	60 Quality Foam 750 gal 15% HCL. 5,000# 80/100 sand, 35,000# 20/40 sand, 448,000 SCF N2, 65'1 bbis foam.
4 th Stage:	Speechley (9 holes) (3321.50' to 3391') Warren (4 holes) (3270.75' to 3280.25')	60 Quality Foam. 750 gal 15% HCL. 5,000# 80/100 sand, 45,000# 20/40 sand, 517,000 SCF N2, 729 bbis foam.

WELL LOG

KB-GL	0	10	
Shale	10	14	
Sand & Shale	14	125	
Red Rock	125	153	
Sand & Shale	153	180	
Red Rock	180	193	
Sand & Shale & Red Rock	193	506	
Sand	506	564	
Sand & Shale	564	658	
Sand	658	665	
Sand & Shale	665	1509	
Shale	1509	1555	
Sand	1555	1644	
Sand & Shale	1644	1829	
Big Lime	1829	1898	
Keener	1898	1958	
Big Injun	1958	2023	
Shale	2023	2170	
Weir	2170	2258	
Shale	2258	2370	
Berea	2370	2389	
Shale	2389	2576	
Gordon	2576	2626	
Shale	2626	3240	
Warren	3240	3298	
Shale	3298	3306	
Speechley	3306	3398	
Shale	3398	3590	
Balltown	3590	4242	
Shale	4242	4410	
Riley	4410	4481	
Shale	4481	4755	
Third Riley	4755	4872	
Shale	4872	4896	
Benson	4896	4910	
Shale	4910	5144	
Alexander	5144	5237	
Shale	5237	5345	
TD	5345		

1/2" water @ 415'

Damp @ 1500'

Gas Checks

1727' – No Show
1979' – 2/10^{ths} water/w 2"
2042' – 2/10^{ths} water/w 2"
3412' – 2/10^{ths} water/w 2"
3804' – 2/10^{ths} water/w 2"
4434' – 4/10^{ths} water/w 2"
4872' – 4/10^{ths} water/w 2"