

# HATTIE O. DOTSON LEASE

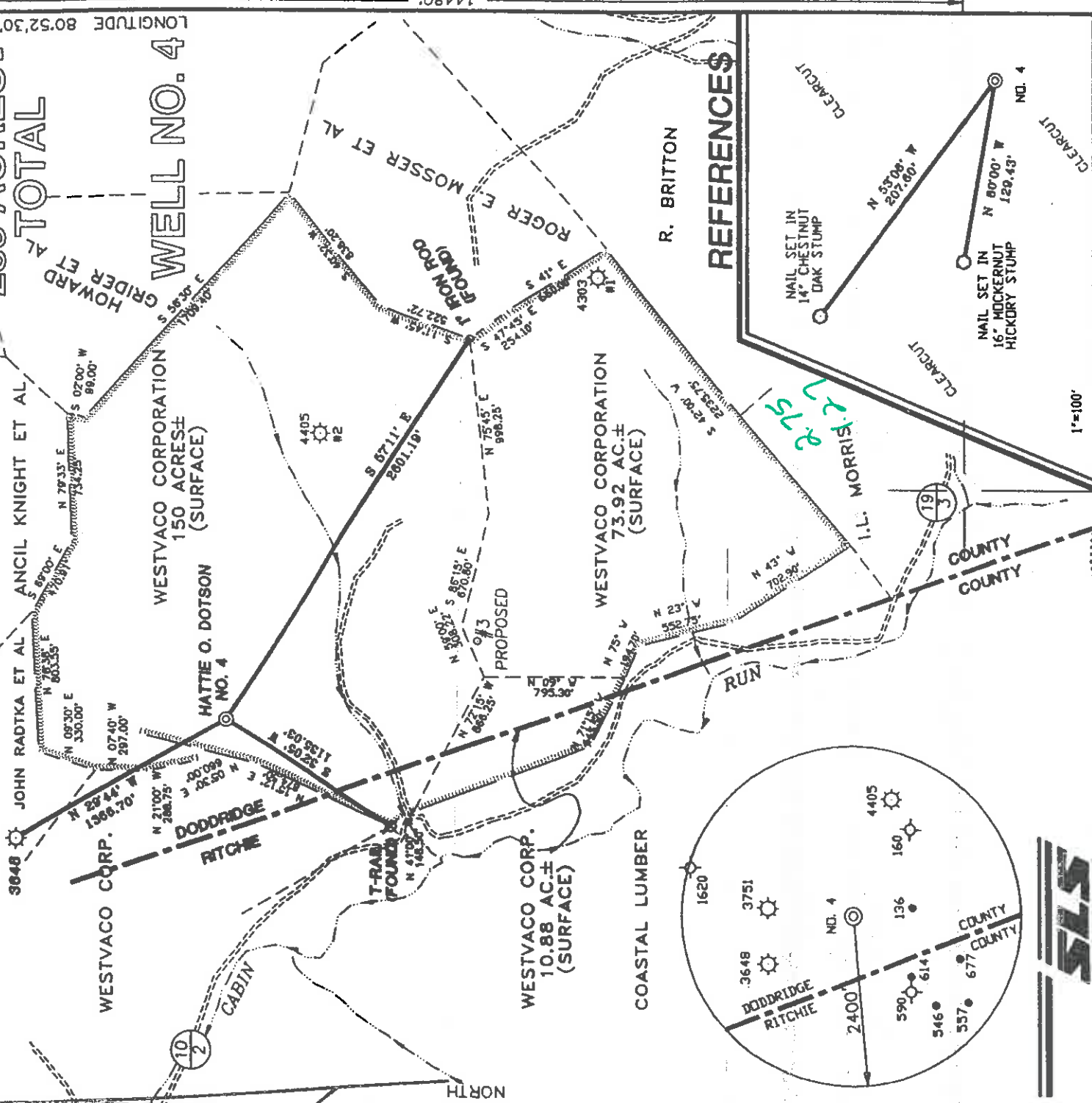
6720"

LATITUDE 39°17'30"

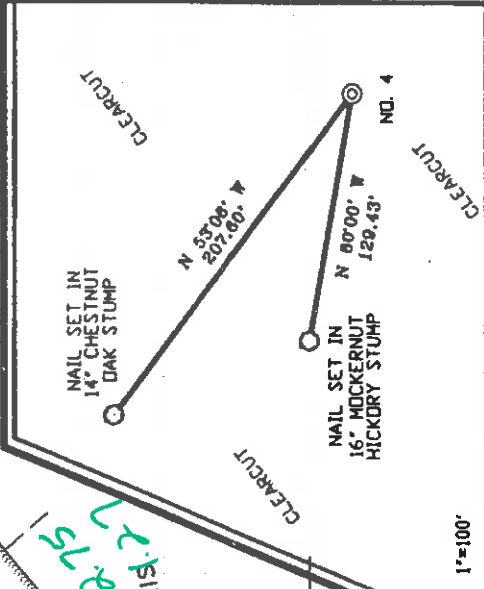
## 235 ACRES± TOTAL

LONGITUDE 80°52'30"

## WELL NO. 4

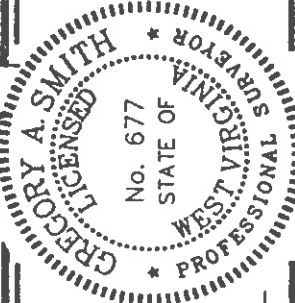


### REFERENCES



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. *Gregory A. Smith*  
677



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
DATE APRIL 29, 19 98  
OPERATORS WELL NO. HATTIE O. DOTSON #4  
API WELL NO. 47-17-04444  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 3864P4 (59-42)  
PROVEN SOURCE OF ELEVATION BENCH MARK ELEVATION 854'  
SCALE 1" = 800'



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

LOCATION : ELEVATION 1075' WATERSHED \_\_\_\_\_ TRIBUTARY OF CABIN RUN

DISTRICT CENTRAL COUNTY DODDRIDGE QUADRANGLE PENNSBORO 7.5'

SURFACE OWNER WESTVACO CORPORATION ACREAGE 150±

ROYALTY OWNER EVELYN DOTSON ET AL LEASE ACREAGE 235±

PROPOSED WORK : LEASE NO. \_\_\_\_\_

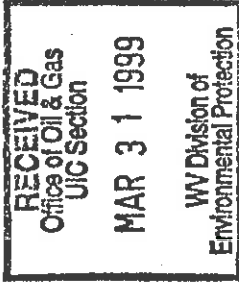
DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION ALEXANDER ESTIMATED DEPTH 5600'

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

Dodd 4444

6-6-89

WR-35



04 - Jun - 98  
API # 47 - 17 - 04444

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas  
Well Operator's Report of Well Work

Reviewed: [Signature]

Farm name: WESTVACO CORPORATION

Operator Well No.: HATTIE O. DOTSON #4

LOCATION: Elevation: 1,075.00

Quadrangle: PENNSBORO

District: CENTRAL  
Latitude: 14480  
Longitude: 6720

County: DODDRIDGE  
Feet South of 39 Deg. 17 Min. 30 Sec.  
Feet West of 80 Deg. 52 Min. 30 Sec.

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

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD  
Permit Issued: 06/04/98  
Well Work Commenced: 09/10/98  
Well Work Completed: 09/15/98

Verbal Plugging  
Permission granted on: \_\_\_\_\_ Rig  
Rotary X Cable \_\_\_\_\_ 5445'  
Total Depth ( feet ) \_\_\_\_\_  
Fresh water depths ( ft ) 50', 194'  
Salt water depths ( ft ) NONE

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

OPEN FLOW DATA

Warren  
Rileys  
Benson  
Producing formation: Alexander  
Gas: Initial open flow 18 MCF / d Pay zone depth ( ft ) 3368' - 3444'  
Final open flow 1.516 MCF / d Oil: Initial open flow 0 Bbl / d 4500' - 4892'  
Time of open flow between initial and final tests N/A Oil: Final open flow show Bbl / d 4919' - 4930'  
Static rock pressure 1600 psig ( surface pressure ) after 96 Hours 5162' - 5243'

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] PRESIDENT  
Date: March 26, 1999

0000 4444

APR 12 1999

H.O. Dotson #4 (47-017- 04444)  
 Four Stage Foam Frac - Halliburton

1<sup>st</sup> Stage: Alexander ( 12 holes) ( 5191.25' to 5232.50' ) 60 Quality Foam. 500 gal. 15% HCL.  
 60,000# 20/40 sand, 550,000 SCF N2,  
 811 bbls foam.

2<sup>nd</sup> Stage: Benson ( 7 holes ) ( 4924.50' to 4926' ) 60 Quality Foam. 750 gal 15% HCL.  
 Third Riley ( 5 holes ) ( 4861.25' to 4867.50' ) 40,000# 20/40 sand, 417,000 SCF N2,  
 616 bbls foam.

3<sup>rd</sup> Stage: Riley ( 12 holes ) ( 4522.75' to 4557.50' ) 60 Quality Foam. 750 gal 15% HCL.  
 5,000# 80/100 sand, 45,000# 20/40 sand,  
 502,000 SCF N2, 743 bbls foam.

4<sup>th</sup> Stage: Warren ( 12 hole ) ( 3375.75' to 3424' ) 60 Quality Foam. 750 gal 15% HCL.  
 5,000# 80/100 sand, 45,000# 20/40 sand,  
 502,000 SCF N2, 684 bbls foam.

WELL LOG

Fill	0	7	
Sand	7	39	
Red Rock & Shale & Sand	39	142	1/2" H2O @ 50'
Sand	142	214	1/2" H2O @ 194'
Sand & Shale	214	232	
Sand & Red Rock	232	489	
Sand	489	540	
Sand & Shale	540	1935	
Little Lime	1935	1950	
Maxton	1950	1970	
Big Lime	1970	2030	
Big Injun	2030	2107	
Shale	2107	2301	
Weir	2301	2428	
Sand & Shale	2428	2839	
Gordon	2839	2847	
Shale	2847	3368	
Warren	3368	3444	
Shale and Siltstone	3444	3825	
Balltown	3825	4464	
Sand & Shale	4464	4500	
Riley	4500	4574	
Shale	4574	4844	
Third Riley	4844	4892	
Shale	4892	4919	
Benson	4919	4930	
Shale & Sand	4930	5162	
Alexander	5162	5243	
Shale	5243	5445	
T.D.	5445		

Gas Checks

1922' - 6/10<sup>ths</sup> - 1/2" w/ water  
 2530' - Odor  
 3027' - Odor  
 3949' - No Show  
 4414' - No Show  
 4904' - No Show  
 5117' - 8/10<sup>ths</sup> - 1" w/water  
 5410' - 8/10<sup>ths</sup> - 1" w/water  
 Collars - 3/10<sup>ths</sup> - 1" w/water