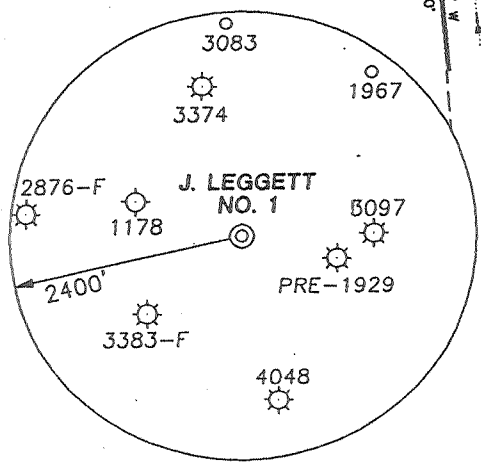
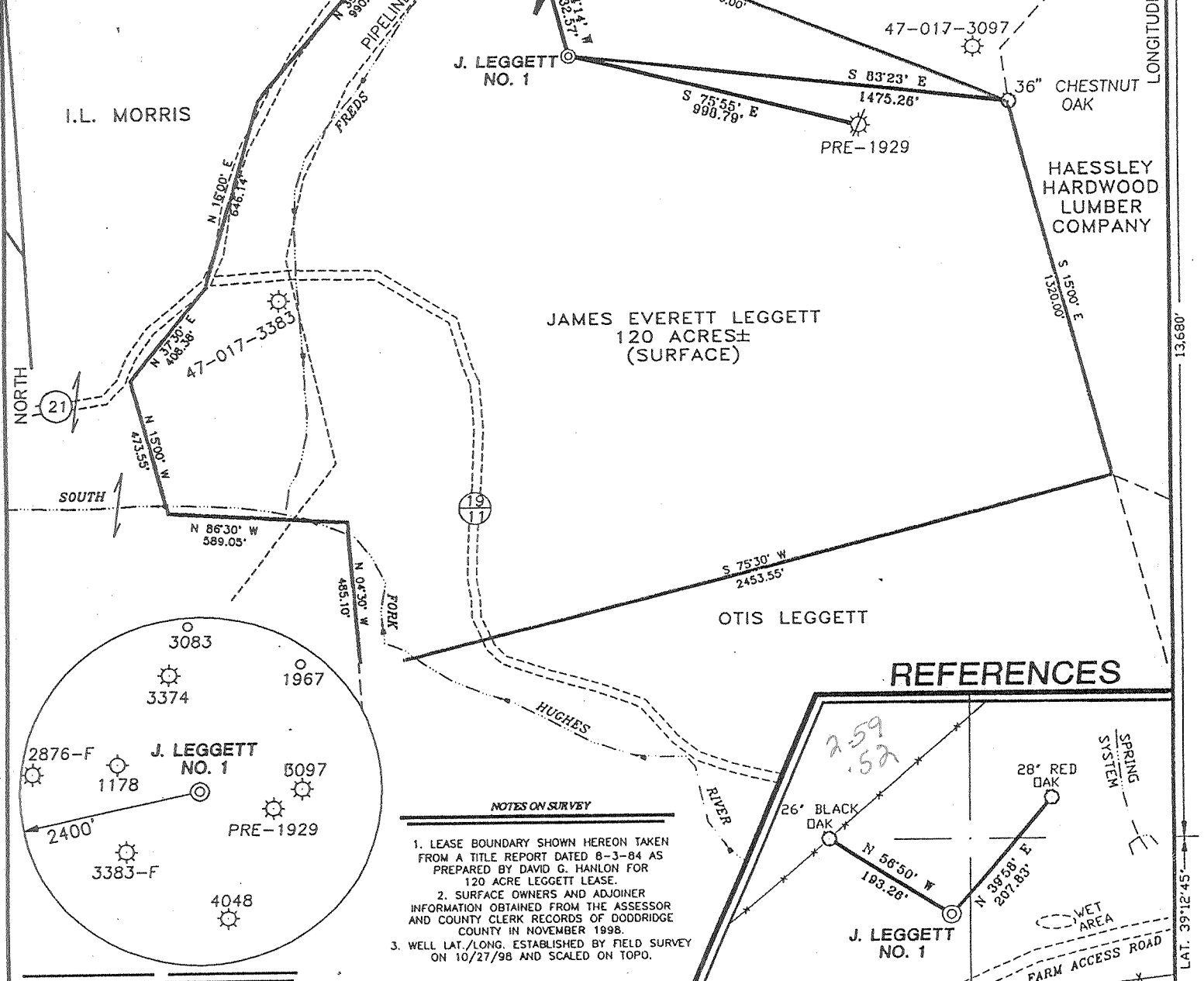
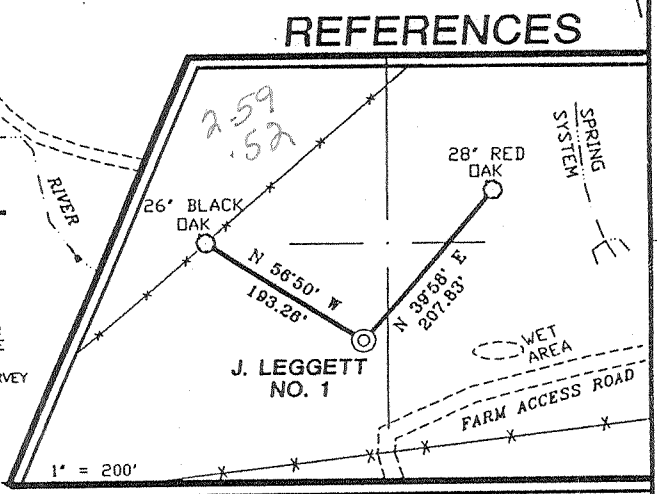


J. LEGGETT LEASE 120 ACRES± WELL NO. 1

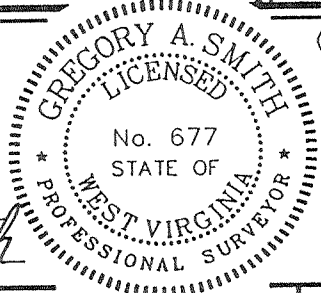


- NOTES ON SURVEY**
1. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A TITLE REPORT DATED 8-3-84 AS PREPARED BY DAVID G. HANLON FOR 120 ACRE LEGGETT LEASE.
 2. SURFACE OWNERS AND ADJOINER INFORMATION OBTAINED FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN NOVEMBER 1998.
 3. WELL LAT./LONG. ESTABLISHED BY FIELD SURVEY ON 10/27/98 AND SCALED ON TOPO.



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 NOVEMBER 5, 19 98
 OPERATORS WELL NO. J. LEGGETT #1
 API WELL NO. 47-017-04521
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 4089P1 (69-51)
 PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS ELEVATION 839' SCALE 1" = 500'

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

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

LOCATION :
 ELEVATION 1066' WATERSHED FREDS RUN OF SOUTH FORK HUGHES RIVER
 DISTRICT SOUTHWEST COUNTY DODDRIDGE QUADRANGLE OXFORD 7.5'

SURFACE OWNER JAMES E. LEGGETT ACREAGE 120
 ROYALTY OWNER JAMES E. LEGGETT, ET AL LEASE ACREAGE 120
 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 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

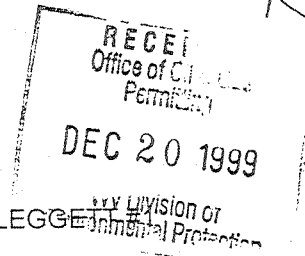
AUG 09 1999

6-6 133

COUNTY NAME DODD
 PERMIT 4521

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

Well Operator's Report of Well Work



Farm name: LEGGETT, JAMES E.

Operator Well No. : J. LEGGETT

LOCATION: Elevation: 1,066.00 Quadrangle: OXFORD
District: SOUTHWEST County: DODDRIDGE
Latitude: 13680 Feet South of 39 Deg. 15 Min. 00 Sec.
Longitude: 2730 Feet West of 80 Deg. 50 Min. 00 Sec.

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	86.90'	86.90'	80 sks To Surface
8 5/8"	1100.20'	1100.20'	320 sks To Surface
4 1/2"	5289.85'	5289.85'	480 sks
2 3/8"		5099'	

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD
Permit Issued: 08/03/99
Well Work Commenced: 10/05/99
Well Work Completed: 10/10/99
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5303'
Fresh water depths (ft) 373'
Salt water depths (ft) NONE

Is coal being mined in area (Y / N)? N
Coal Depths (ft): 22' (2')

OPEN FLOW DATA
Warren 3279' - 3322'
Speechley 3338' - 3446'
Balltown 3653' - 4378'
Rileys 4416' - 4807'
Benson 4854' - 4864'
Producing formation Alexander Pay zone depth (ft) 5100' - 5178'
Gas: Initial open flow Show MCF / d Oil: Initial open flow 0 Bbl / d
Final open flow 1.579 MCF / d Oil: Final open flow show Bbl / d
Time of open flow between initial and final tests N/A Hours
Static rock pressure 1750 psig (surface pressure) after 96 Hours

Second producing formation Commingled Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF / d Oil: Initial open flow _____ Bbl / d
Final open flow _____ MCF / d Oil: Final 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 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: December 13, 1999

PRESIDENT

FEB 25 2000

D000 4521

J. Leggett #1 (47-017 -4521)
Four Stage Foam Frac - Halliburton

1 st Stage:	Alexander (16 holes) (5119.75' to 5172')	60 Quality Foam. 500 gal. 15% HCL. 60,000# 20/40 sand, 550,000 SCF N2, 809 bbls foam.
2 nd Stage:	Benson (5 holes) (4857.50' to 4858.50') Third Riley (3 holes) (4788.25' to 4788.75') Second Riley (6 holes) (4676' to 4708')	60 Quality Foam. 1,000 gal 15% HCL. 40,000# 20/40 sand, 417,000 SCF N2, 615 bbls foam.
3 rd Stage:	Riley (9 holes) (4445.50' to 4459.75') Balltown (6 holes) (4055.75' to 4217.25')	60 Quality Foam. 1,000 gal 15% HCL. 5,000# 80/100 sand, 45,000# 20/40 sand, 502,000 SCF N2, 742 bbls foam.
4 th Stage:	Balltown (7 holes) (3679' to 3726.25') Speechley (2 holes) (3400.75' & 3401') Warren (9 holes) (3300' to 3318')	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

KB-GL	0	10	
Clay	10	15	
Shale	15	22	
Coal	22	24	
Shale & Sand	24	30	
Red Rock	30	35	
Sand & Shale & Red Rock	35	105	
Sand & Shale	105	162	
Sand & Shale & Red Rock	162	740	
Sand & Shale	740	805	½" H ₂ O @ 373'
Red Rock & Shale	805	824	
Sand & Shale	824	1030	
Sand	1030	1042	
Sand & Shale	1042	1845	
Little Lime	1845	1885	
Shale	1885	1900	
Big Lime	1900	1960	
Big Injun	1960	2030	
Shale	2030	2192	
Weir	2192	2322	
Sand	2322	2388	
Berea	2388	2400	
Shale & Sand	2400	3279	
Warren	3279	3322	<u>Gas Checks</u>
Shale	3322	3338	1800' - Odor
Speechley	3338	3446	2011' - Odor
Shale	3446	3653	3318' - Odor
Balltown	3653	4378	3627' - Odor
Shale	4378	4416	4526' - Odor
Riley	4416	4496	
Shale	4496	4662	
Second Riley	4662	4714	
Shale	4714	4748	
Third Riley	4748	4807	
Shale	4807	4854	
Benson	4954	4864	
Shale	4864	5100	
Alexander	5100	5178	
Sand & Shale	5178	5303	
T.D.	5303		