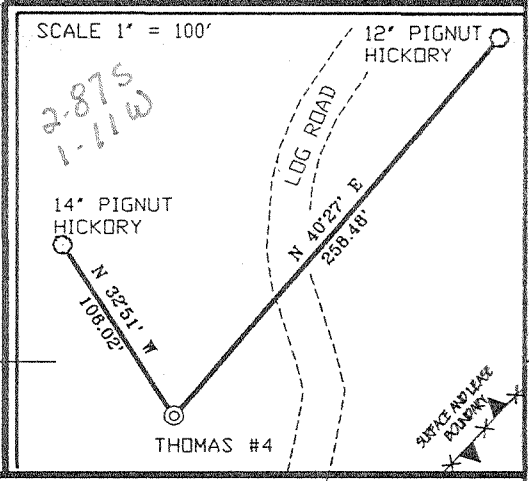
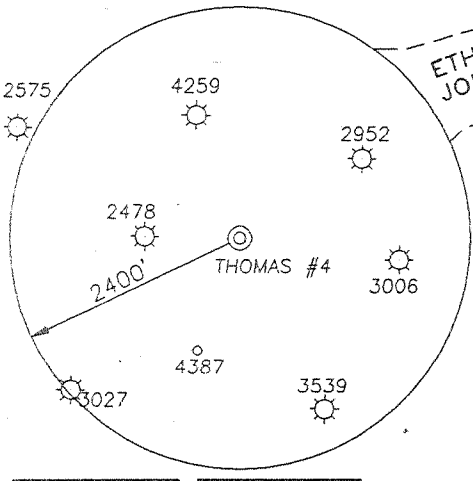
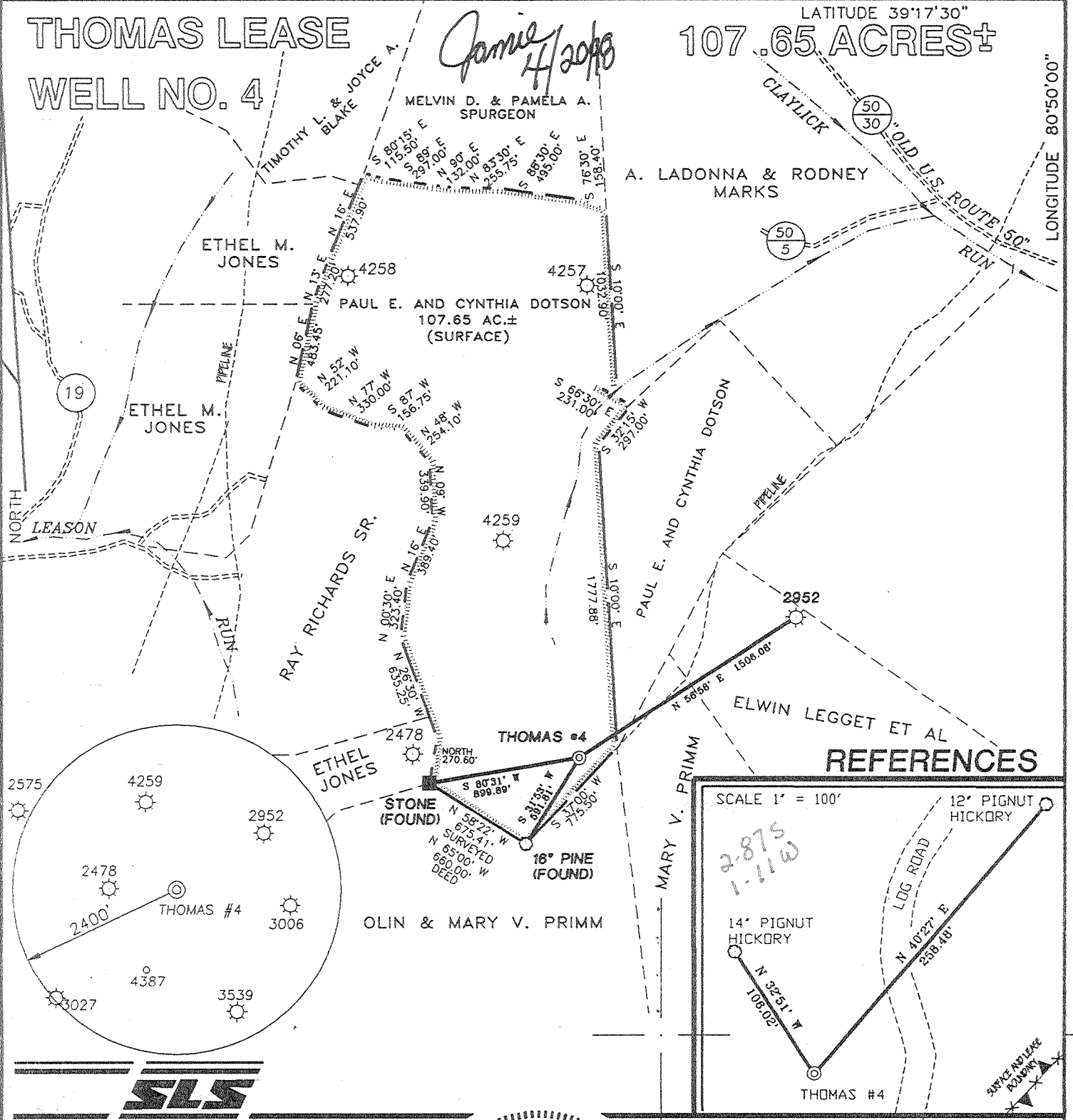


THOMAS LEASE WELL NO. 4

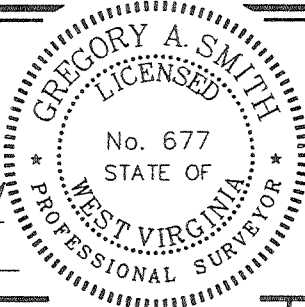
LATITUDE 39°17'30"
107.65 ACRES±

LONGITUDE 80°50'00"



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 FEBRUARY 16, 19 98
 OPERATORS WELL NO. THOMAS #4
 API WELL NO. 47-017-04428
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 3886P4 (64-72)
 PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS ELEVATION 899' SCALE 1" = 800'

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 1205' WATERSHED TRIBUTARY OF CLAYLICK RUN
 DISTRICT CENTRAL COUNTY DODDRIDGE QUADRANGLE WEST UNION 7.5

SURFACE OWNER PAUL E. AND CYNTHIA DOTSON ACREAGE 107.65
 ROYALTY OWNER S.R. TAYLOR HEIRS ET AL LEASE ACREAGE 107.65
 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

COUNTY NAME Dodd PERMIT 4428

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

Well Operator's Report of Well Work

Farm name: Paul Dotson

Operator Well No. : Thomas #4

LOCATION: Elevation: 1,205.00 Quadrangle: WEST UNION

District: CENTRAL County: DODDRIDGE
Latitude: 15070 Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude: 5850 Feet West of 80 Deg. 50 Min. 0 Sec.

Company: KEY OIL COMPANY
22 Garton Plaza
WESTON, WV 26452-0000

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD
Permit Issued: 04/13/98
Well Work Commenced: 04/22/98
Well Work Completed: 04/26/98
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5634'
Fresh water depths (ft) 35', 295'
Salt water depths (ft) NONE

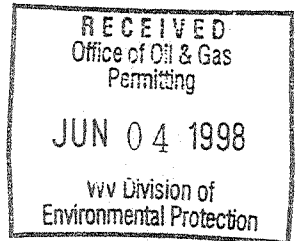
Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
11 3/4"	132'	132'	70 sks To Surface
8 5/8"	2119.25'	2119.25'	610 sks To Surface
4 1/2"	5549'	5549'	365 sks
2 3/8"		5397'	

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

OPEN FLOW DATA

Balltown	3940' - 4666'
Rileys	4693' - 4972'
Benson	5132' - 5143'
Producing formation <u>Alexander</u>	Pay zone depth (ft) <u>5377' - 5463'</u>
Gas: Initial open flow <u>189</u> MCF / d	Oil: Initial open flow <u>0</u> Bbl / d
Final open flow <u>1,524</u> MCF / d	Oil: Final open flow <u>show</u> Bbl / d
Time of open flow between initial and final tests <u>N/A</u> Hours	
Static rock pressure <u>1750</u> psig (surface pressure) after <u>96</u> Hours	

Second producing formation <u>Commingled</u>	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: May 1, 1998

PRESIDENT

JUN 22 1998

D000 4428

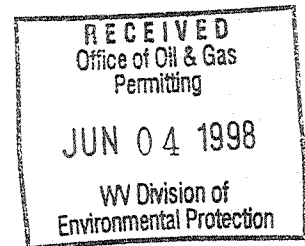
Thomas #4 (47-017-04428)
Four Stage Foam Frac - Halliburton

1 st Stage:	Alexander (12 holes) (5417' to 5451.50')	60 Quality Foam. 500 gal. 15% HCL. 60,000# 20/40 sand, 550,000 SCF N2, 815 bbls foam.
2 nd Stage:	Benson (9 holes) (5136' to 5138') Second Riley (4 holes) (4968.75' to 4969.50')	60 Quality Foam. 750 gal 15% HCL. 40,000# 20/40 sand, 417,000 SCF N2, 617 bbls foam.
3 rd Stage:	Riley (10 holes) (4726.50' to 4759.75') Balltown (4 holes) (4641' to 4641.75')	60 Quality Foam. 750 gal 15% HCL. 5,000# 80/100 sand, 45,000# 20/40 sand, 502,000 SCF N2, 746 bbls foam.
4 th Stage:	Balltown (13 holes) (4001.75' to 4139.75')	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	5
Sand & Shale	5	184
Red Rock	184	200
Red Rock & Shale	200	442
Red Rock	442	459
Sand & Shale	459	595
Sand	595	751
Red Rock & Shale	751	831
Sand & Shale	831	958
Red Rock & Sand & Shale	958	2057
Sand & Shale	2057	2109
Little Lime	2164	2195
Sand & Shale	2195	2200
Big Lime	2200	2258
Big Injun	2258	2327
Shale	2327	2488
Weir	2488	2616
Sand & Shale	2616	2681
Berea	2681	2687
Shale	2687	3367
Warren	3367	3614
Shale	3614	3627
Speechley	3627	3748
Sand & Shale	3748	3940
Balltown	3940	4666
Shale	4666	4693
Riley	4693	4771
Shale	4771	4960
Second Riley	4960	4972
Shale	4972	5050
Third Riley	5050	5090
Sand & Shale	5090	5132
Benson	5132	5143
Shale	5143	5377
Alexander	5377	5463
Sand & Shale	5463	5634
T.D.	5634	

¼" H₂O @ 35'
½" H₂O @ 295'



Gas Checks

2536' - 4/10ths -2" w/H₂O
3058' - 18/10ths -2" w/H₂O
3710' - 18/10ths -2" w/H₂O
4515' - 18/10ths -2" w/H₂O
5013' - 20/10ths -2" w/H₂O
5323' - 20/10ths -2" w/H₂O