

LONG. 80°50'27.4" 2.150'

LATITUDE 39°17'30"

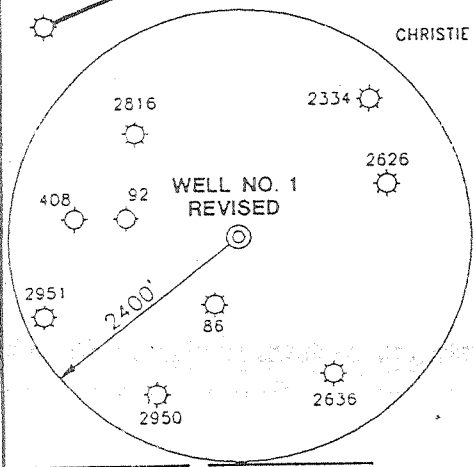
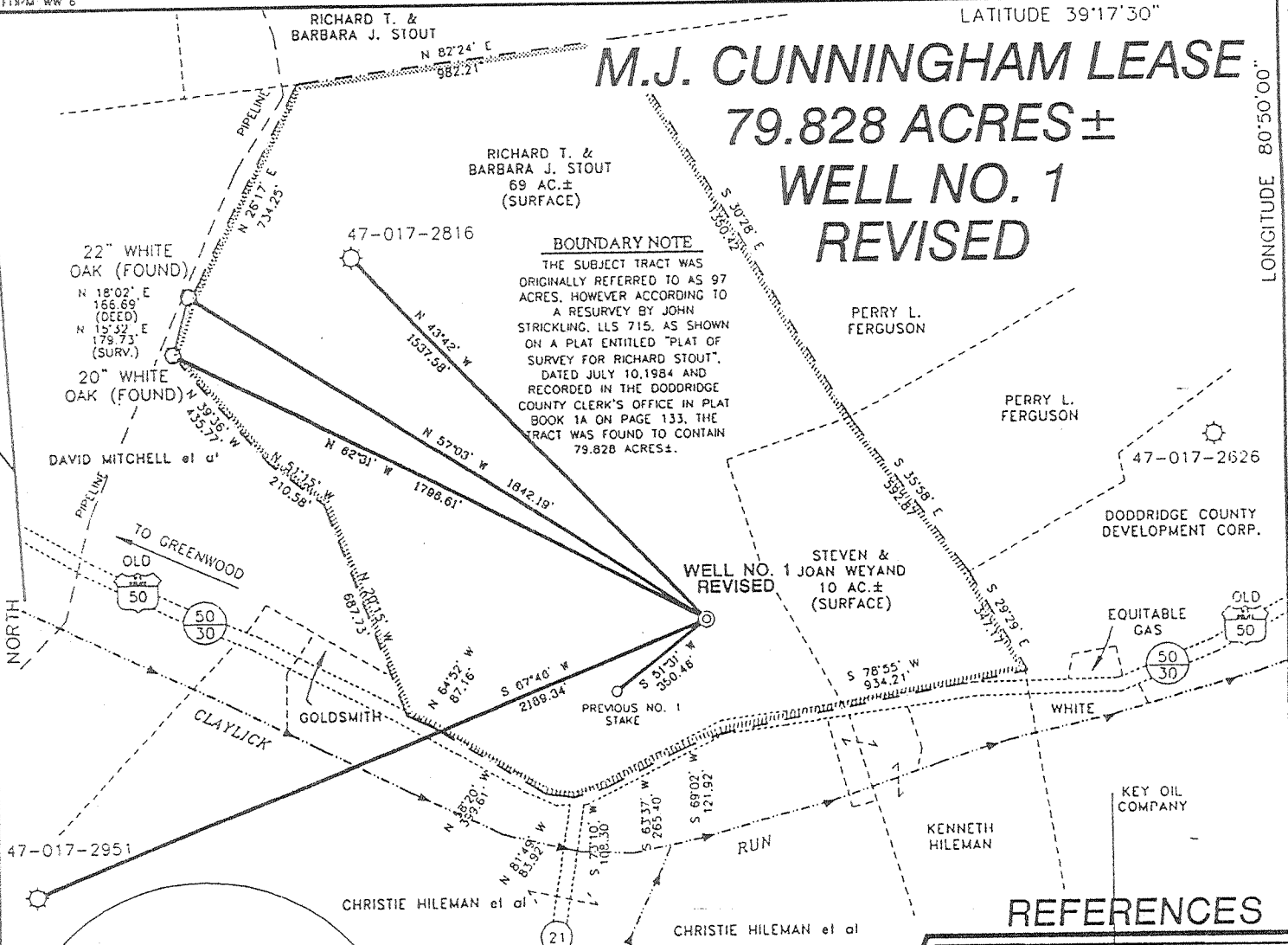
M.J. CUNNINGHAM LEASE

79.828 ACRES ±

WELL NO. 1 REVISED

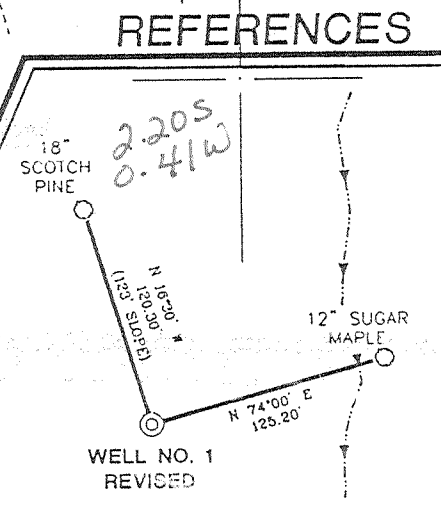
RICHARD T. & BARBARA J. STOUT
69 AC. ± (SURFACE)

BOUNDARY NOTE
THE SUBJECT TRACT WAS ORIGINALLY REFERRED TO AS 97 ACRES. HOWEVER ACCORDING TO A RESURVEY BY JOHN STRICKLING, LLS 715, AS SHOWN ON A PLAT ENTITLED "PLAT OF SURVEY FOR RICHARD STOUT", DATED JULY 10, 1984 AND RECORDED IN THE DODDRIDGE COUNTY CLERK'S OFFICE IN PLAT BOOK 1A ON PAGE 133, THE TRACT WAS FOUND TO CONTAIN 79.828 ACRES ±.



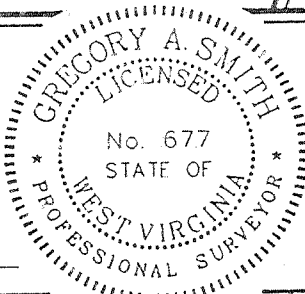
NOTES ON SURVEY

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 06/04/99.
3. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A SURVEY PLAT PREPARED BY JOHN STRICKLING LLS#715. SEE BOUNDARY NOTE ABOVE.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN MAY, 1999
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 JUNE 7 19 99
OPERATORS WELL NO. M.J. CUNNINGHAM #1 REVISED
API WELL NO. 47-017-04519
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 4211P1 (72-67)
PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEVATION 1332' 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: 980' WATERSHED CLAYLICK RUN
DISTRICT CENTRAL COUNTY DODDRIDGE QUADRANGLE WEST UNION 7.5'
SURFACE OWNER RICHARD T. & BARBARA J. STOUT ACREAGE 69
ROYALTY OWNER RICHARD J. CUNNINGHAM et al LEASE ACREAGE 79.828 (SEE NOTE)
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 JUL 06 1999
ADDRESS 22 GARTON PLAZA WESTON, WV 26452 ADDRESS 22 GARTON PLAZA WESTON, WV 26452

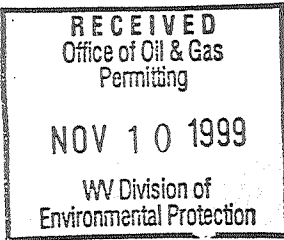
LONGITUDE 80°50'00" 11.700' LAT. 39°15'34.1"

DODDRIDGE COUNTY NAME PERMIT 4519

6-6 89

WR-35

29 - Jun - 99
API # 47 - 017-4519



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

Reviewed [Signature]

Well Operator's Report of Well Work

Farm name: STOUT, RICHARD T. & BARBARA Operator Well No. : M.J. CUNNINGHAM #1

LOCATION: Elevation: 980.00 Quadrangle: WEST UNION

District: CENTRAL County: DODDRIDGE
Latitude: 11700 Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude: 2150 Feet West of 80 Deg. 50 Min. 00 Sec.

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

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD
Permit Issued: 06/30/99
Well Work Commenced: 08/04/99
Well Work Completed: 08/09/99
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5419'
Fresh water depths (ft) 19', 200'
Salt water depths (ft) NONE

Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
11 3/4"	130.85'	130.85'	70 sks To Surface
8 5/8"	1845.35'	1845.35'	455 sks To Surface
4 1/2"	5365'	5365'	470 sks
2 3/8"		5204'	

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

OPEN FLOW DATA
Warren 3354' - 3424'
Speechley 3432' - 3551'
Balltown 3742' - 4474'
Rileys 4508' - 4926'
Benson 4953' - 4966'
Producing formation Alexander Pay zone depth (ft) 5202' - 5292'
Gas: Initial open flow Show MCF / d Oil: Initial open flow 0 Bbl / d
Final open flow 1,624 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: October 28, 1999

PRESIDENT

Rev. DEC 15 1999

D000 4519

M.J. Cunningham #1 (47-017-4519)
Four Stage Foam Frac - Halliburton

1 st Stage:	Alexander (17 holes) (5224.25' to 5276.75')	60 Quality Foam. 500 gal. 15% HCL. 60,000# 20/40 sand, 550,000 SCF N2, 811 bbls foam.
2 nd Stage:	Benson (12 holes) (4959.50' to 4962.25')	60 Quality Foam. 750 gal 15% HCL. 40,000# 20/40 sand, 417,000 SCF N2, 619 bbls foam.
3 rd Stage:	Rileys (16 holes) (4537.75' to 4624.25')	60 Quality Foam. 750 gal 15% HCL. 5,000# 80/100 sand, 45,000# 20/40 sand, 502,000 SCF N2, 741 bbls foam.
4 th Stage:	Balltown (8 holes) (3805.50' to 3954') Speechley (6 hole) (3444.25' to 3539.75') Warren (3 holes) (3415.75' to 3416.25')	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

Red Clay	0	9	
Red Rock	9	19	
Sand	19	28	
Red Rock & Shale	28	42	
White Sand	42	76	
Sand & Shale	76	94	
Red Rock	94	113	
Sand & Shale	113	225	
Red Rock	225	240	
Sand & Shale & Red Rock	240	500	
Sand	500	715	
Lime	715	728	
Sand & Shale & Red Rock	728	1170	
Sand	1170	1240	
Sand & Shale & Red Rock	1240	1363	
Sand	1363	1620	
Sand & Shale	1620	1964	
Little Lime	1964	2000	
Big Lime	2000	2080	
Big Injun	2080	2128	
Shale	2128	2290	
Weir	2290	2416	
Sand & Shale	2416	3354	
Warren	3354	3424	
Shale	3424	3432	
Speechley	3432	3551	
Sand & Shale	3551	3742	
Balltown	3742	4474	
Shale	4474	4508	
Riley	4508	4586	
Shale	4586	4754	
Third Riley	4754	4926	
Shale	4926	4953	
Benson	4953	4966	
Shale	4966	5202	
Alexander	5202	5292	
Sand & Shale	5292	5419	
T.D.	5419		

Gas Checks

1984' - No Show
3309' - No Show
3708' - No Show
4569' - No Show
4909' - No Show
5218' - No Show
TD - 2/10^{ths} - 1/2" w/H²O