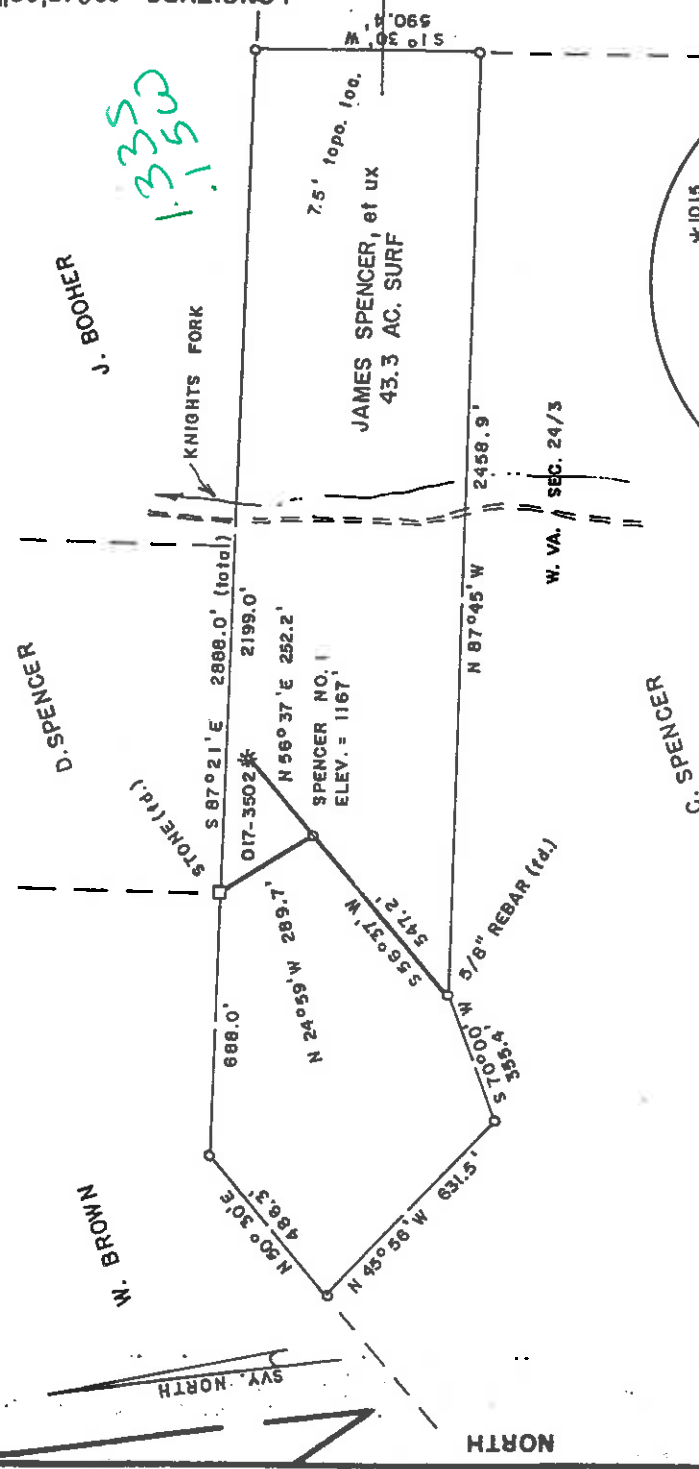


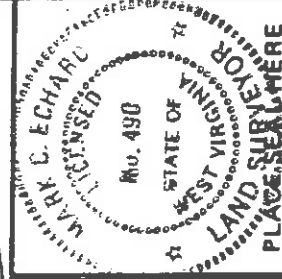
SPENCER LEASE 43.3 AC.

LATITUDE 39°22'30"
LONGITUDE 80°45'00"



FILE NO. _____
DRAWING NO. _____
SCALE 1" = 500'
MINIMUM DEGREE OF _____
ACCURACY 1/200
PROVEN SOURCE OF _____
ELEVATION TOP OF KNOB _____
SW OF LOC. ELEV. = 1307'

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 MINES. *Mark C. Echard*
(SIGNED) MARK C. ECHARD
R.P.E. _____ L.L.S. 490



WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
#10 McJUNKIN ROAD
NITRO, WEST VIRGINIA 25140-2506



DATE DECEMBER 21, 19 98
OPERATOR'S WELL NO. SPENCER NO. 1
API WELL NO. _____
47-017-04506
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF "GAS,") PRODUCTION STORAGE DEEP SHALLOW
LOCATION: ELEVATION 1167' WATER SHED KNIGHTS FORK OF LITTLE FLINT RUN
DISTRICT GRANT COUNTY DODDRIDGE
QUADRANGLE WEST UNION 7.5'
SURFACE OWNER JAMES SPENCER, et ux ACREAGE 43.3
OIL & GAS ROYALTY OWNER JAMES SPENCER, et ux LEASE ACREAGE 43.3
LEASE NO. _____

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

PLUG AND ABANDON CLEAN OUT AND REPLUG
TARGET FORMATION BENSON ESTIMATED DEPTH 5200'
WELL OPERATOR O.A.G. DESIGNATED AGENT KENNETH MASON **17 10001**
ADDRESS P.O. BOX 99 ALMA, WV 26320
ALMA, WV 26320

6-6-97

WV-354
Office of Oil & Gas
Permitting

AUG 08 1999

WV DIVISION OF
Environmental Protection

API# -47-017-04506

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

Reviewed [Signature]

Well Operator's Report of Well Work.

Farm Name: Spencer, James Operators Well No.: Spencer #1
Location: Elevation: 1167' Quadrangle: West Union 7.5'
District: West Union County: Doddridge
Latitude: 7000 Feet South of 39 Deg. 22 min. 30sec.
Longitude: 800 Feet West of 80 Deg. 45 min. 00sec.

Company: D.A.C.

P. O: 99
Alma, WV 26320

Agent: Kenneth Mason

Inspector: Mike Underwood
Permit Issued: 05/14/99
Well Work Commenced: 06/23/99
Well Work Completed: 07/17/99
Rotary X Cable _____ Rig
Total Depth (feet) 5430'
Fresh Water Depths (ft) 180'
Salt Water Depths (ft) 1650'
Is coal being mined in area (Y/N) N.
Coal Depths (ft): N/A'

	easing tubing	used in drilling	left in well	cement fill up sks
11 3/4	150	129	63	
8 5/8	1220	1195	306	
6 5/8	1411	1411	50	
4 1/2	5430	5300	200	

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 5204-5210
Gas: Initial open flow 82 MCF/D Oil: Initial open flow 0 BBL/D
Final open flow 300 MCF/D Final open flow show BBL/D
Static Rock Pressure 1200 psig (surface pressure) after 48 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/D Oil: Initial open flow _____ BBL/D
Final open flow _____ MCF/D Final open flow _____ BBL/D
static rock pressure _____ psig (surface pressure) after _____ * _____ Hours

For: D.A.C.

By: [Signature]

Date: 07-26-99

Dodd 4506

Stage	Formation	Perfs	Sand	N2
07-26-99	Spencer #1			
1	Benson	5212-5216 15 holes	300 sks	316,000 scf

ISIP = 2995#
5 min = 2537#

Office of Oil & Gas
Permitting
AUG 06 1999
MW Division of
Environmental Protection

Drillers Log

Electric Log Tops

Formation	Top	Bottom	Formation	Depth top
Fill	0	10	Big Lime	2121
RR	10	20	Big Injun	2178
Sd/Sh	20	85	Berea	2650
Sd	85	135	Benson	5124
Sh/Sh	135	280		
Sd	280	330		
Sd/Sh	330	2080		
LL	2080	2106		
Sh	2106	2118		
BL	2118	2178		
Sd	2178	2282		
Sd/Sh	2282	2820		
Sd	2820	2838		
Sd/Sh	2838	5347		
TD	5347			

1" h2o @ 300'
gas ck @ 2961 = 04/10 in 1" w/w
gas ck @ 5217 = 06/10 in 1" w/w

Stratigraphy duplicates 17-4587