

CLINE LEASE

0.47 ACRES± (CALC.)

LOT NO.'S 26, 27, 28 & 29 OF DUCKWORTH-FAIRVIEW

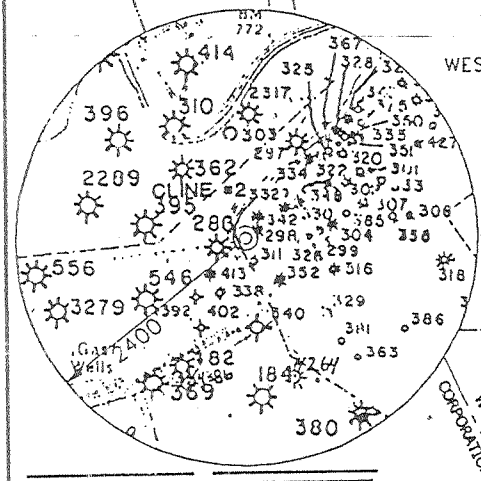
ADDITION WELL NO. 2

NORTH

LONGITUDE 80°45'00"

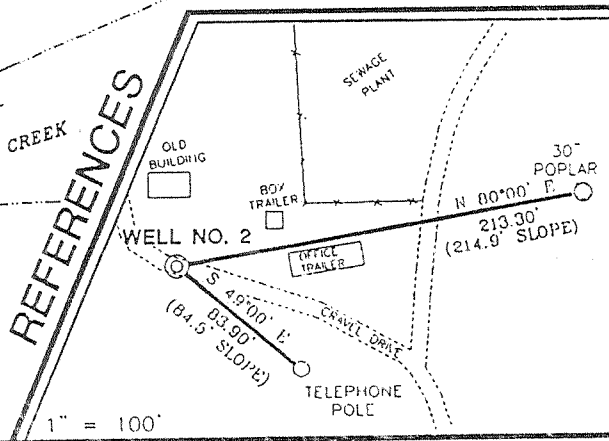
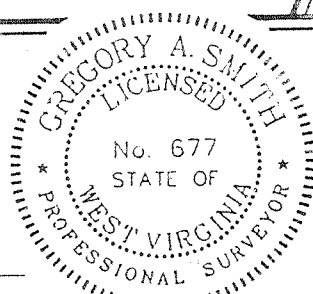
13.200

LAT. 39°17'49.53"



I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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



- #### 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 5/11/99.
 3. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A TITLE REPORT PREPARED BY RICHARD M. REDDECLIFF.
 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).
 6. A WAIVER FOR DRILLING OPERATIONS WITHIN 200 FEET OF A DEWELLING AND OF A NONPUBLIC POTABLE WATER SOURCE IS REQUIRED BEFORE DRILLING.

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

DATE MAY 24, 19 99

OPERATORS WELL NO. CLINE 110. 2

API WELL NO. 47-017-04518

STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 4202P2 (72-59)

PROVEN SOURCE OF ELEVATION BENCH MARK ELEVATION 772' SCALE 1" = 100'

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 775' WATERSHED MIDDLE ISLAND CREEK

DISTRICT WEST UNION CORPORATION COUNTY DODDRIDGE QUADRANGLE WEST UNION 7.5'

SURFACE OWNER TOWN OF WEST UNION ACREAGE 0.12 AC± (CALC.) LOT 27

ROYALTY OWNER HARRY E. CLINE LEASE ACREAGE 0.47 AC± (CALC.) LEASE NO. _____

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 ALEXANDEF

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

JUL 06 1999

COUNTY NAME DODD
PERMIT 4518

API # 47 - 017-4518

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

Office of Oil & Gas
Permitting
DEC 18 1999

Well Operator's Report of Well Work

Farm name: TOWN OF WEST UNION

Operator Well No. : CLINE #2

LOCATION: Elevation: 775.00

Quadrangle: WEST UNION

District: WEST UNION County: DODDRIDGE
Latitude: 13200 Feet South of 39 Deg. 20 Min. 00 Sec.
Longitude: 9020 Feet West of 80 Deg. 45 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: 08/10/99
Well Work Completed: 08/15/99
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5158'
Fresh water depths (ft) 65', 200'
Salt water depths (ft) 1388'

Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
11 3/4"	128.95'	128.95'	70 sks To Surface
8 5/8"	789.80'	789.80'	200 sks To Surface
4 1/2"	5097'	5097'	475 sks
2 3/8"		4936'	

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

OPEN FLOW DATA
Warren 3040' - 3098'
Speechley 3110' - 3209'
Balltown 3575' - 4150'
Rileys 4219' - 4272'
Benson 4678' - 4686'
Producing formation Alexander Pay zone depth (ft) 4916' - 5010'
Gas: Initial open flow 82 MCF / d Oil: Initial open flow 0 Bbl / d
Final open flow 1,524 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

FEB 25 2000

D000 4518

Four Stage Foam Frac - Halliburton

1 st Stage:	Alexander (19 holes) (4956' to 5005.75')	60 Quality Foam. 500 gal. 15% HCL. 60,000# 20/40 sand, 550,000 SCF N2, 806 bbls foam.
2 nd Stage:	Benson (7 holes) (4681.75' to 4683.25') Third Riley (7 holes) (4604.75' to 4606.25')	60 Quality Foam. 750 gal 15% HCL. 40,000# 20/40 sand, 417,000 SCF N2, 612 bbls foam.
3 rd Stage:	Rileys (12 holes) (4232.50' to 4250.25') Balltown (3 holes) (4136' to 4136.50')	60 Quality Foam. 750 gal 15% HCL. 5,000# 80/100 sand, 45,000# 20/40 sand, 502,000 SCF N2, 738 bbls foam.
4 th Stage:	Balltown (3 holes) (3614' to 3614.50') Speechley (7 hole) (3153.75' to 3199.75') Warren (3 holes) (3083.25' to 3083.75')	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	7	
Loose Sand	7	20	
Red Rock	20	32	
Sand & Shale	32	106	½" H ² O @ 65'
Black Shell	106	112	
Sand & Shale	112	175	
Sand	175	200	½" H ² O @ 200'
Sand & Shale	200	376	
Lime	376	390	
Sand & Shale	390	584	
Red Rock & Lime	584	643	
Sand & Shale	643	774	
Shell	774	800	
Sand & Shale	800	987	
Sand	987	1153	
Sand & Shale	1153	1325	
Shell	1325	1381	
Sand	1381	1560	Hole damp @ 1388'
Sand & Shale	1560	1624	
Little Lime	1624	1633	
Shell	1633	1670	
Big Lime	1670	1725	
Big Injun	1725	1833	
Shale	1833	1971	
Weir	1971	2074	
Sand & Shale	2074	2180	
Berea	2180	2186	
Sand & Shale	2186	2374	
Gordon	2374	2428	
Sand & Shale	2428	3040	
Warren	3040	3098	
Sand & Shale	3098	3110	
Speechley	3110	3209	Gas Checks
Sand & Shale	3209	3575	1630' - No Show
Balltown	3575	4150	1909' - 10/10 ^{ths} - 1" w/H ² O
Shale	4150	4219	3022' - 24/10 ^{ths} - 1" w/H ² O
Riley	4219	4272	3794' - 40/10 ^{ths} - 1" w/H ² O
Shale	4272	4594	4258' - 30/10 ^{ths} - 1" w/H ² O
Third Riley	4594	4625	4694' - 60/10 ^{ths} - 1" w/H ² O
Shale	4625	4678	4908' - 30/10 ^{ths} - 1" w/H ² O
Benson	4678	4686	T.D. - 60/10 ^{ths} - 1" w/H ² O
Shale	4686	4916	
Alexander	4916	5010	
Sand & Shale	5010	5158	T.D. 51580