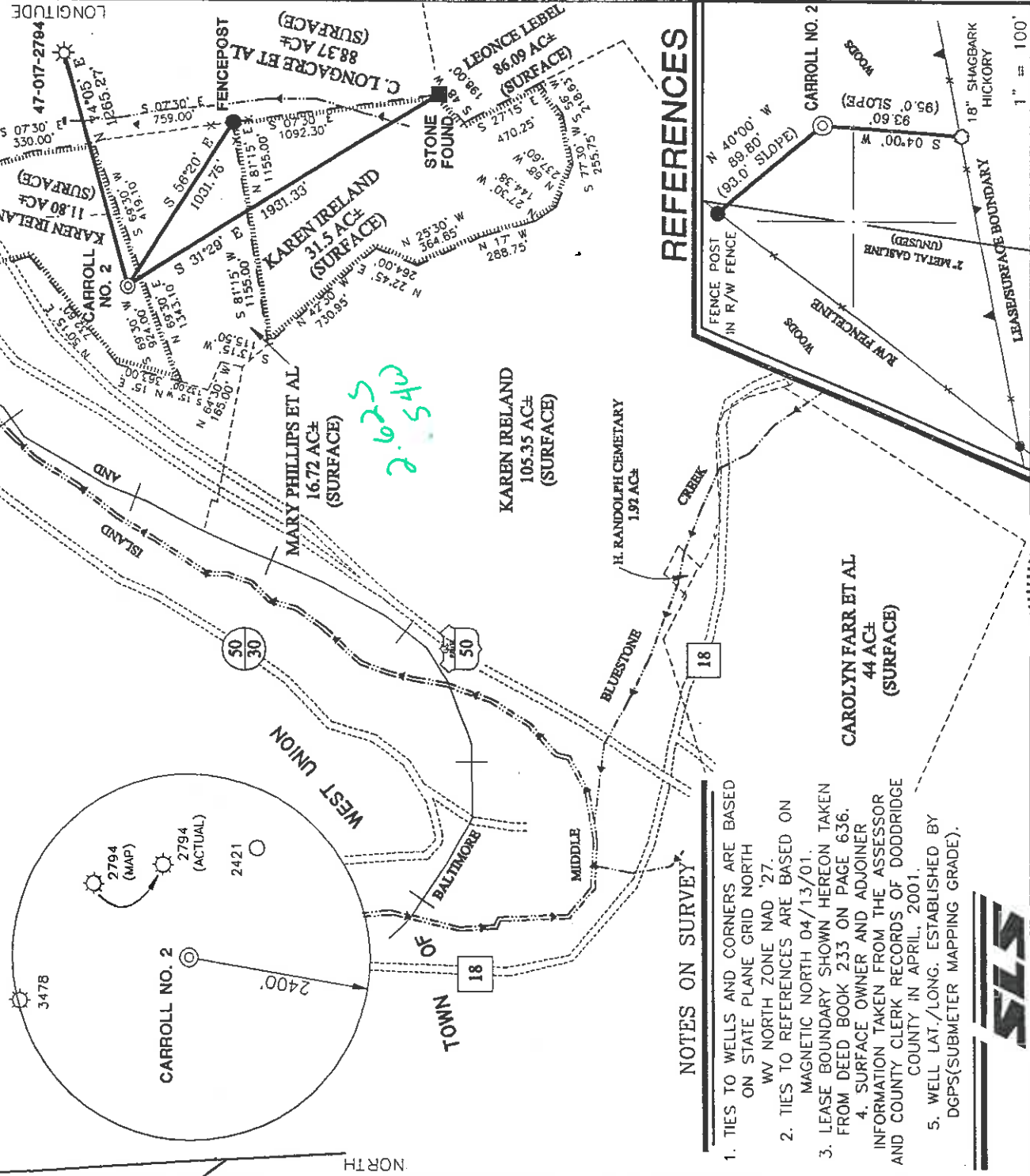
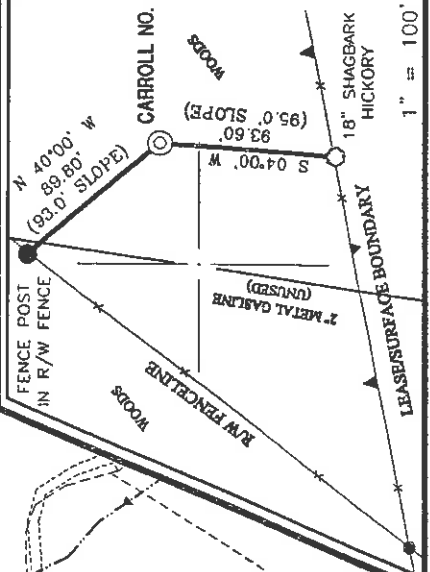


LONGITUDE 80°45'36.3" LATITUDE 39°20'00"

CARROLL LEASE 70.7 ACRES ± CARROLL NO. 2



REFERENCES



NOTES ON SURVEY

1. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH
WV NORTH ZONE NAD '27.
MAGNETIC NORTH 04/13/01.
2. TIES TO REFERENCES ARE BASED ON FROM DEED BOOK 233 ON PAGE 636.
3. LEASE BOUNDARY SHOWN HEREON TAKEN FROM DEED BOOK 233 ON PAGE 636.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN APRIL, 2001.
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 ENVIRONMENTAL PROTECTION.

P.S. *Gregory A. Smith*
677

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 4702P2(105-9)
PROVEN SOURCE SCALE 1"=800'
OF ELEVATION TOP OF KNOB ELEVATION 1210'

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE MAY 3 20 01
OPERATORS WELL NO. CARROLL NO. 2
API WELL NO. 47-017-017 COUNTY PERMIT 04603



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

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

LOCATION : ELEVATION 1029' WATERSHED MIDDLE ISLAND CREEK
DISTRICT WEST UNION COUNTY DODDRIDGE QUADRANGLE WEST UNION 7.5'
SURFACE OWNER KAREN IRELAND ACREAGE 11.80 OF 70.7±
ROYALTY OWNER R.S. MAXWELL et al LEASE ACREAGE 70.7±
LEASE NO. _____

PROPOSED WORK :
DRILL CONVERT DRILL DEEPER 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

County Name DODD 4603 PERMIT

6-6-99

February 24, 2002
API# 47-017-04603

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

AP

Well Operators Report of Well Work

Farm name: Key Oil Company Operator Well #: Carroll #2
Location: Elevation: 1029' Quadrangle: West Union 7.5'

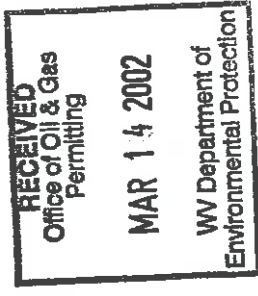
District: West Union County Doddridge
Latitude 2,900 feet south of 39 Deg. 20 Min. 00 Sec.
Longitude 13,840 feet west of 80 Deg. 45 Min. 00 Sec.

Company: Key Oil Company
22 Garton Plaza
Weston, WV 26452

Agent: Jan Chapman Casing Used in Left in Cement
Drilling Well Fill up

Inspector: Mike Underwood
Permit Issued: 06-14-01 8-5/8 1028 1028 205sks
Well Work Commenced: 01-06-02
Well Work Completed: 01-10-02 4-1/2 5292 480 sks
Verbal Plugging

Permission granted on:
Rotary ___ Cable ___ Rig
Total Depth (ft) ?
Fresh water depth (ft) 434'
Salt water depth (ft) N/A
Is coal being mined in are (Y/N) N
Coal depths (ft)



OPEN FLOW DATA

Producing formation: Alexander Pay zone depths (ft) 5164-5232
Gas: Initial open flow 60 mcf/d Initial open flow bbls/day
Final open flow 1579 mcf/d Final open flow bbls/day
Time of open flow between initial and final tests 48 Hours
Static rock pressure 1775 psig (surface pressure) after 48 Hours

Other producing formation: Warren/Balltown/Riley/Benson Pay zone depths (ft) 3264-4899
Gas: Initial open flow * mcf/day Oil Initial open flow bbls/day
Final open flow * mcf/day Final open flow bbls/day
Time of open flow between initial and final tests 48 Hours
Static rock pressure * psig (surface pressure) after 48 Hours
* = commingled zones

For: Key Oil Company
By: *[Signature]*
Date: 02-24-02

D000 4603

FEB 29 2002

API # 47-017-04603
Carroll #2

Stage #1	perts	sand	
Alexander	5163-5231	600 sks	60 quality foam
Stage #2			
3 rd Riley/Benson	4817-4900	350 sks	60 quality foam
Stage #3			
Riley	4432-4465	300 sks	60 quality foam
State #4			
Speechly/Warren	3266-3384	500 sks	60 quality foam

Drillers Log

Electric Log Tops

KB/GL	0-10		
Fill	10-16		
Sd/Sh	16-78		
RR	78-90		
Sd	90-120		
Sd/Sh	120-220		
RR	220-240		
Sd	240-260		
RR	260-280		
Sd/Sh	280-404		
Sd	404-434		
RR/Sh	434-496		
Sd	496-526		
Sd/Sh	526-751		
Sand	751-757		
Sd/Sh	757-1114		
Sd/Sh	1114-1307		
Sd/Sh	1307-1798	gas check @ 1797' 60 mcf	
L. Lime	1798-1827		
B. Lime	1827-1944	gas check @ 1891' 327 mcf	
B. Injun	1944-2070		
Sd/Sh	2070-3255	gas check @ 2111' 106 mcf;	gas check @ 2514' 189 mcf
Warren	3255-3310		
Sd/Sh	3310-4010	gas check @ 3194' 164 mcf;	gas check @ 4004 105 mcf
Ballown	4010-4160		
Sd/Sh	4160-4387		
Riley	4387-4430		
Sd/Sh	4430-4880		
Benson	4880-4890		
Sd/Sh	4890-5170		
Alexander	5170-5230		
Sd/Sh	5230-5362		