



(1) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NUMBER: _____
 DRAWING NUMBER: EVOLV2.PCS
 SCALE: 1" = 500'
 MINIMUM DEGREE OF ACCURACY: 1 IN 2500
 PROVEN SOURCE OF ELEVATION: TOP OF KNOWN ADJ. HI
OF LOCATION 111V. 1/51'

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.

(SIGNATURE) _____
 STEPHEN D. TOSL, P.E. #674



STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 110 McCURRAN ROAD
 NINTO, WV 25143-2506

LAND SURVEYING SERVICES
 21 CEDAR LANE, BRIDGEPORT, WV 26301
 PHONE: 304 842 2018 OR 304 576 5767

DATE: AUGUST 14, 2000
 OPERATOR'S WELL NO: HARDIN NO. 7
 API WELL NO. 47-001-02780
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 1688' WATERSHED _____ TRK CREEK
 DISTRICT TRK COUNTY HARBOUR
 QUADRANGLE BROWNTON LEASE NUMBER _____

SURFACE OWNER RICHARD & JAMES HARDIN ACREAGE 200
 OIL & GAS ROYALTY OWNER N. C. HARDIN III LEASE ACREAGE 92

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULANT PLUG OLD FORMATION
 REFRAC NEW FORMATION OTHER PHYSICAL CHANGE (SPECIFY) _____
 PLUG & ABANDON CLEAN OUT & RE PLUG _____

TARGET FORMATION BENSON ESTIMATED DEPTH _____

WELL OPERATOR ENVIRONMENTAL DRILLING LLC DESIGNATED AGENT KENNETH MARIANI
 ADDRESS P. O. DRAWER 1878 CLARKSBURG, WV 26302-1878 ADDRESS P. O. DRAWER 1878 CLARKSBURG, WV 26302-1878

LATITUDE 39 12-50
 SCALD COOR: 1,150' WEST 8,660' SOUTH
 COUNTY NAME HARBOUR
 PERMIT 2780

Prod 2010

WR-35

Date: 11-02-00
API # 47-001-02780

State of West Virginia
Division of Environmental Protection
Section of Oil & Gas
Well Operator's Report of Well Work

Reviewed: _____

Farm Name: N. C. Hardin
Location: Elevation: 1688' Quadrangle: Browntown
District: Elk County: Barbour
Latitude: 39-12-30 S. 8660"
Longitude: 80-10-00 W. 1,150'

Company: EnerVest Operating, L.L.C.
PO Drawer 1878
Clarksburg, WV 26302-1878
Agent: Kenneth Mariani

Inspector: Tim Bennett
Permit Issued: 09-25-00
Well Work Commenced: 10-10-00
Well Work Completed: 10-15-00
Verbal Plugging
Permission granted on: N/A
Rotary X Cable _____ Rig
Total Depth (feet) 5127'
Fresh Water Depths (ft) N/A
Salt Water Depths (ft) 1310'

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill up Cu. Ft.
11 3/4"	22.30'	22.30'	N/A
9 5/8"	442'	442'	Filled to surface 172 sks
7"	1425'	1425'	Circulated 195 sks
4 1/2"	5083'	5083'	100 sks

Is coal being mined in area (Y/N)? N
Coal Depths (ft) (335-41' open mine) 368-80'

OPEN FLOW DATA

Producing formation Riley Pay zone depth (ft) 4589-96', 4618-29'
Gas: Initial open flow N/A MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 150 commingled MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 14 Hours
Static rock pressure 1100 psig (surface pressure) after 48 Hours

Second producing formation Benson Pay zone depth (ft) 4927-41'
Gas: Initial open flow N/A MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 150 commingled MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 14 Hours
Static rock pressure 1100 psig (surface pressure) after 48 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 WELL BORE

FOR: EnerVest Operating, L.L.C.

BY: Kenneth Mariani
DATE: 11/2/00

RECEIVED
Office of Oil & Gas
Permitting
NOV 27 2000
WV Division of
Environmental Protection

BAR 2780

<u>Formation</u>	<u>Perforations</u>	<u>Stimulation</u>
Riley	4589-96', 4618-29' 18 shots	20,000 # 20/40, x-link gel
Benson	4927-41' 20 shots	30,000 # 20/40, x-link gel,

Fill	=	6'	-	0'	Sand & Shale	=	2680'	-	2800'
Sand	=	10'	-	40'	Sand	=	2800'	-	2830'
Redrock	=	40'	-	50'	Shale	=	2830'	-	2860'
Sand & Shale	=	50'	-	95'	Redrock	=	2860'	-	2875'
Redrock	=	95'	-	100'	Sand	=	2875'	-	2950'
Shale	=	100'	-	135'	Shale	=	2950'	-	3200'
Redrock	=	135'	-	155'	Sand & Shale	=	3200'	-	3600'
Sand	=	155'	-	190'	Shale	=	3600'	-	3750'
Sand & Shale	=	190'	-	335'	Sand & Shale	=	3750'	-	3900'
Open Mine	=	335'	-	341'	Sand	=	3900'	-	4200'
Sand & Shale	=	341'	-	368'	Sand & Shale	=	4200'	-	4535'
Coal	=	368'	-	380'	Sand	=	4535'	-	4585'
Shale	=	380'	-	470'	Sand & Shale	=	4585'	-	4690'
Sand & Shale	=	470'	-	515'	Shale	=	4690'	-	4760'
Redrock	=	515'	-	535'	Sand & Shale	=	4760'	-	4905'
Sand & Shale	=	535'	-	620'	Sand	=	4905'	-	4995'
Redrock	=	620'	-	640'	Sand & Shale	=	4995'	-	5127'
Shale	=	640'	-	675'					
Sand & Shale	=	675'	-	725'	TD	=	5127'		
Redrock	=	725'	-	735'					
Sand & Shale	=	735'	-	920'					
Redrock	=	920'	-	935'					
Sand & Shale	=	935'	-	940'					
Coal	=	940'	-	945'					
Sand & Shale	=	945'	-	1150'					
Sand	=	1150'	-	1220'					
Sand & Shale	=	1220'	-	1340'	1/4" Water 1310'				
Sand	=	1340'	-	1380'					
Sand & Shale	=	1380'	-	1706'					
Redrock	=	1706'	-	1710'					
Sand & Shale	=	1710'	-	1830'					
Redrock	=	1830'	-	1850'					
Sand & Shale	=	1850'	-	1920'					
Sand	=	1920'	-	1970'					
Lime	=	1970'	-	2200'					
Sand	=	2200'	-	2455'					
Sand & Shale	=	2455'	-	2525'					
Redrock	=	2525'	-	2540'					
Sand & Shale	=	2540'	-	2585'					
Redrock	=	2585'	-	2605'					
Sand & Shale	=	2605'	-	2665'					
Redrock	=	2665'	-	2680'					

