

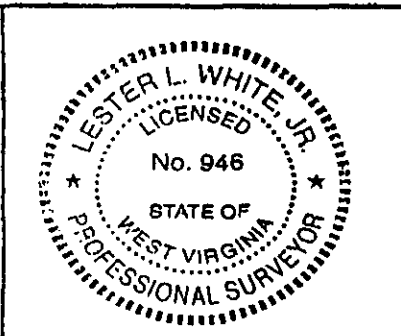
PERMANENT POINTS

S18-00-00W	APP1	85.31
JG-3	APP2	
N83-11-18E		114.78

FILE NO. JG-3
 DRAWING NO. JG-3PERMIT
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1:2500
 PROVEN SOURCE OF ELEVATION BM Y40 @ GLEN DANIEL

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.

Lester L. White Jr.
 Lester L. White Jr. P.L.S. NO. 946



WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS #10 McJUNKIN ROAD NITRO, WEST VIRGINIA 25143-2506

DATE May 22, 1998
 OPERATOR'S WELL NO. JG-3
 API WELL NO. _____

47 - 081 - 01145G
 STATE COUNTY FRAC PERMIT

WELL TYPE: OIL _____ GAS XX LIQUID INJECTION _____ WASTE DISPOSAL _____
 IF "GAS", PRODUCTION XX STORAGE _____ DEEP _____ SHALLOW _____ CBM XX

LOCATION: ELEVATION 2079.69' WATER SHED STEPHENS BRANCH
 DISTRICT TRAP HILL COUNTY RALEIGH
 QUADRANGLE ECCLES

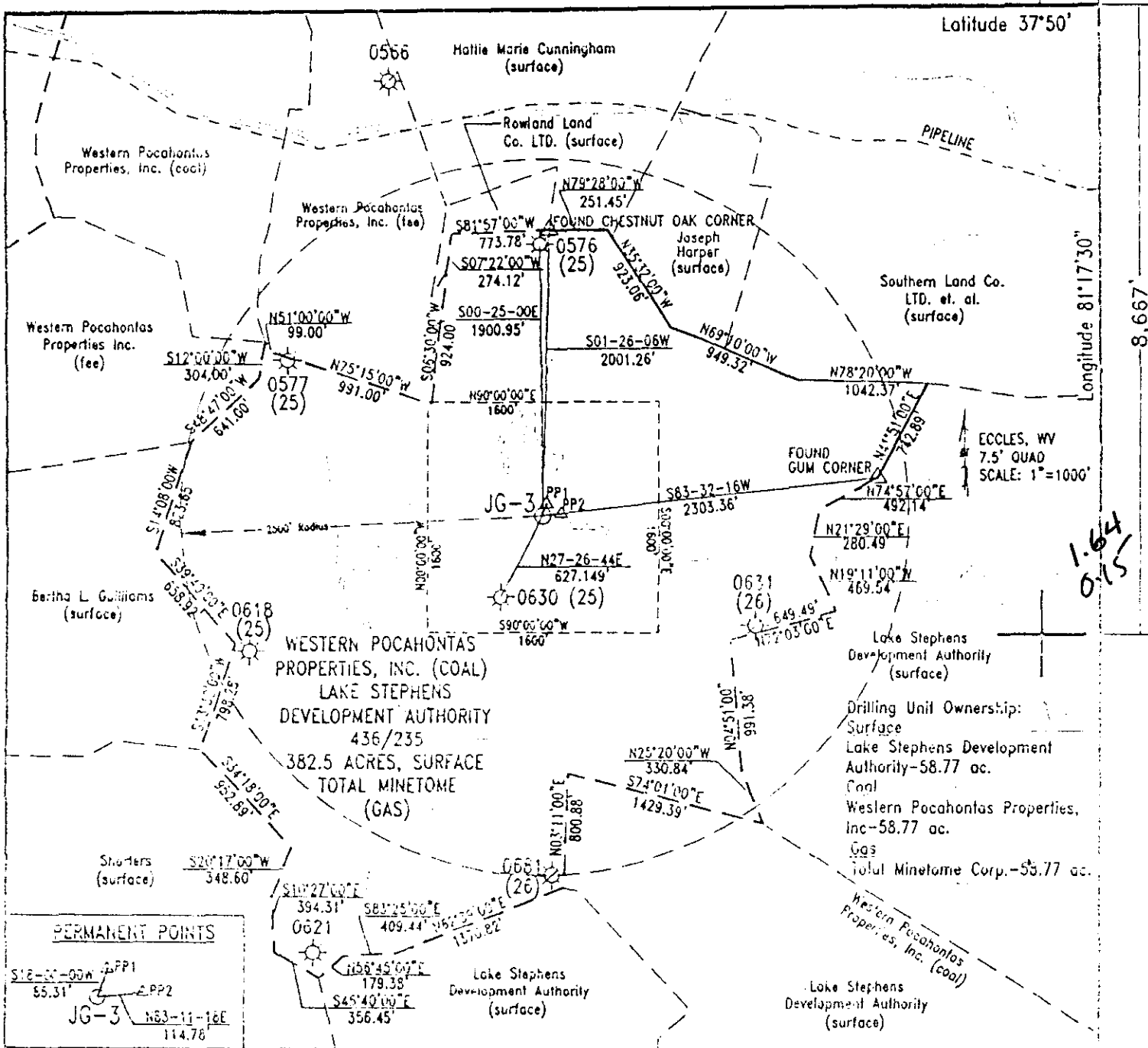
SURFACE OWNER: LAKE STEPHENS DEVELOPMENT AUTHORITY LEASE ACREAGE 382.5
 COALBED METHANE ROYALTY OWNER: WESTERN POCAHONTAS PROPERTIES, L.P. LEASE ACREAGE 5473.3
 PROPOSED WORK: DRILL XX CONVERT _____ DRILL DEEPER _____ REDRILL _____
 FRACTURE OR STIMULATE XX PLUG OFF OLD FORMATION _____
 PERFORATE NEW FORMATION XX OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____

TARGET FORMATION POCAHONTAS 1 & 2 ESTIMATED DEPTH 944 feet
 WELL OPERATOR AMVEST Oil & Gas, Inc. DESIGNATED AGENT W. SCOTT PERKINS
 ADDRESS P.O. BOX 5347 ADDRESS 31 FOX SPARROW RD.
CHARLOTTEVILLE, VA 22905 BECKLEY, WV 25801

COUNTY NAME RALEIGH
 PERMIT 1145 F

800'



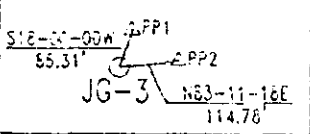
Latitude 37°50'

Longitude 81°17'30"

8,667'

1.64
0.15

PERMANENT POINTS



FILE NO. JG-3

DRAWING NO. JG-3 PERMIT

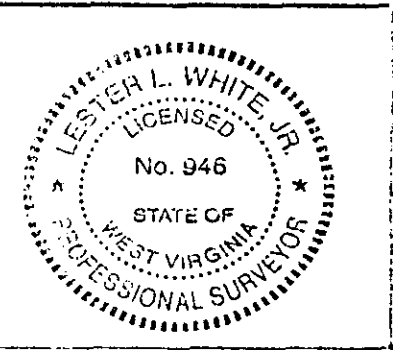
SCALE 1" = 1000'

MINIMUM DEGREE OF ACCURACY 1:2500

PROVEN SOURCE OF ELEVATION BM V40 @ GLEN DANIEL

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Lester L. White Jr. P.L.S. NO. 946



+ Denotes location of well on United States Topographic Maps, scale 1 to 24,000, latitude and longitude lines being represented by border lines as shown.

○ Proposed well site

DATE May 22, 1998
OPERATOR'S WELL NO. JG-3
API WELL NO.

47 - 081 - 01145C
STATE COUNTY PERMIT

WELL TYPE: OIL GAS XX LIQUID INJECTION WASTE DISPOSAL 6-6 249

IF "GAS", PRODUCTION XX STORAGE DEEP SHALLOW CBM XX

LOCATION: ELEVATION 2079.69' WATER SHED STEPHENS BRANCH

DISTRICT TRAP HILL COUNTY RALEIGH

QUADRANGLE ECCLES

SURFACE OWNER: LAKE STEPHENS DEVELOPMENT AUTHORITY LEASE ACREAGE 382.5

COALBED METHANE ROYALTY OWNER: WESTERN POCAHONTAS PROPERTIES, L.P. LEASE ACREAGE 5473.3

PROPOSED WORK: DRILL XX CONVERT DRILL DEEPER REDRILL

FRACTURE OR STIMULATE XX PLUG OFF OLD FORMATION

PERFORATE NEW FORMATION XX OTHER PHYSICAL CHANGE IN WELL (SPECIFY)

PLUG AND ABANDON CLEAN OUT AND REPLUG

TARGET FORMATION POCAHONTAS 1 & 2 ESTIMATED DEPTH 944 feet

WELL OPERATOR AMVEST Oil & Gas, Inc. DESIGNATED AGENT W. SCOTT PERKINS

ADDRESS P.O. BOX 5347 ADDRESS 31 FOX SPARROW RD.

CHARLOTTESVILLE, VA 22905 BECKLEY, WV 25801

COUNTY NAME RALEIGH

PERMIT NO. 1145C

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Lake Stephens Tourist Dev. Operator Well No.: JG-3

LOCATION: Elevation: 2079.69 Quadrangle: Eccles

District: Trap Hill County: Raleigh
Latitude: 8667 Feet South of 37 Deg. 50 Min. 0 Sec.
Longitude 800 Feet West of 81 Deg. 17 Min. 30 Sec.

Company: AMVEST Oil & Gas, Inc.

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: One Boar's Head Pointe	8.625	301.25	301.25	CTS
Charlottesville, VA 22903	4.5	1181	1181	TOC 200'
Agent: Allen Mueller				
Inspector: Rodney Dillon				
Date Permit Issued: March 24, 2000				
Date Well Work Commenced: April 21, 2000				
Date Well Work Completed: May 22, 2000				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig Horn				
Total Depth (feet): 1212'				
Fresh Water Depth (ft.): 215' - 255'				
Salt Water Depth (ft.): N.A.				
Is coal being mined in area (N/Y)? Yes				
Coal Depths (ft.): <u>544-46, 871-74, 888-91</u>				

RECEIVED
Office of Oil & Gas
AUG 11 2004
WV Department of
Environmental Protection

OPEN FLOW DATA

Producing formation Poca 2 & 3 coals Pay zone depth (ft) 869-891
Gas: Initial open flow N.A. MCF/d Oil: Initial open flow N.A. Bbl/d
Final open flow 76 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests N.A. Hours
Static rock Pressure 300 psig (surface pressure) after N.A. 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
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

SEP 17 2004

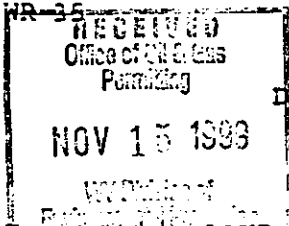
NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: John F. Sinclair
By: John F. Sinclair VP-Exploration
Date: 8/10/04

RAAL 1145 C

11/04/99 00:53 FAX

02



03-Nov-99
API # 47- 81-01145 C

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

Well Operator's Report of Well Work

Reviewed: [Signature]

Farm Name: LAKE STEPHENS TOURIST DEV Operator Well No.: JG-3

LOCATION: Elevation: 2,080.00 Quadrangle: ECCLES

District: TRAP HILL County: RALEIGH
Latitude: 8667 Feet South of 37 Deg. 50Min. 0 Sec.
Longitude 800 Feet West of 81 Deg. 17 Min. 30 Sec.

Company: AMVEST OIL AND GAS, INC.
P. O. BOX 5347
CHARLOTTESVILLE, VA 22903-0000

Agent: SCOTT W. PERKINS

Inspector: RODNEY DILLON
Permit Issued: 07/23/98
Well work Commenced: 10/21/98
Well work Completed: 10/24/98
Verbal Plugging
Permission granted on: _____
Rotary XX Cable _____ Rig
Total Depth (feet) 1212
Fresh water depths (ft) _____
Salt water depths (ft) _____

Size	Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8.625		301.25	301.25	CTS
4.500		1181	1181	TOC @ 200

Is coal being mined in area (Y/N)? Y
Coal Depths (ft): 871, 889, 893.

OPEN FLOW DATA

Producing formation Pocahontas #3 Pay zone depth (ft) 891-898
 Gas: Initial open flow 0 MCF/d Oil: Initial open flow _____ Bbl/d
 Final open flow _____ MCF/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests _____ Hours
 Static rock Pressure _____ psig (surface pressure) after _____ 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
 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 WELLS.

For: AMVEST OIL AND GAS, INC.
By: [Signature]
Date: 11/12/99

Perforated but not stimulated - Details on back

RAL 1145C

NOV 23 1999

Well: JG-3
 Permit No: 47-81-1145C
 District: Trap Hill
 County: Raleigh

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

10/24/98 Ran 4-1/2" casing w/ frac baffles @ 884

12/03/98 Perforated coal 888-891 w/ 13 - 2-1/8 charges
 Did not frac

Formation	Top	Bottom	Remarks
Sand	0	215	
Shale	215	255	1/4" water
Sand	255	278	
Shale	278	290	
Sand	290	296	
Shale	296	320	
Sand	320	544	
Coal	544	546	
Sand	546	564	
Sand and Shale	564	624	
Sand	624	871	
Coal	871	874	
Sand	874	888	
Coal	888	891	Show of gas
Sand	891	1000	
Shale	1000	1052	
Sand	1052	1110	
Sand and Shale	1110	1190	
Sand	1190	1207	
TD		1207	

Well: JG-3
 Permit No: 47-81-1145C
 District: Trap Hill
 County: Raleigh

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

04/27/00

MIRU Halliburton and Key Energy; Perforate Poca 3 @ 869' - 872'; 4 spf

Stage 1 Poca 2,3 Coals Poca 2 already perforated 888' - 891'

Drop acid in casing; Hookup HES and Pressure test; Bkdn Coals @ 1933 psi
 Immediately began pumping 70Q Foam Pad; Start ramping 16/30 Sand 1.67 - 6.7 ppg
 at 3 ppg; rapid incr. in psi to 3500 psi; flush casing; begin working sand back in at
 1 ppg; gradually inc. sand up to 8 ppg; Sand in; flush casing

Item	Planned	Actual	Treatment Remarks
Water Vol.	251 bbl	268 bbl	Ave Foam Rate 30 bpm
Sand lbs.	35,000 #	36,000 #	Ave Trt. Psi 2400 psi
N2 Vol.	274,000 scf	283,000 scf	Max Psi 3519 psi
			Final ISIP 1416 psi

SandWedge was added to sand-ladened fluid

Formation	Top	Bottom	Remarks
Sand	0	215	
Shale	215	255	1/4" water
Sand	255	278	
Shale	278	290	
Sand	290	296	
Shale	296	320	
Sand	320	544	
Coal	544	546	
Sand	546	564	
Sand and Shale	564	624	
Sand	624	871	
Coal	871	874	
Sand	874	888	
Coal	888	891	Show of gas
Sand	891	1000	
Shale	1000	1052	
Sand	1052	1110	
Sand and Shale	1110	1190	
Sand	1190	1207	
TD (DTD)		1207	LTD = 1212'

SEP 17 2004