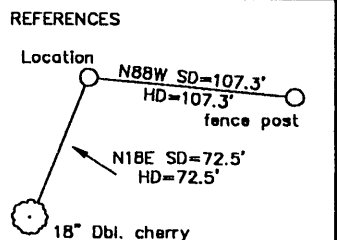


Note: Location is at least 400' from all outside lease lines. All wells within 3000' of this location are shown on this plat.

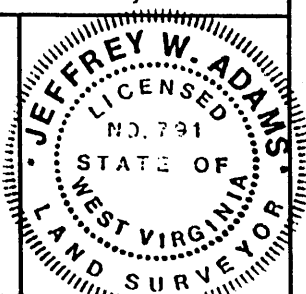
NUMBER	DIRECTION	DISTANCE
L1	N 60°11' E	754'
L2	S 78°17' W	193'



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

FILE NO. \_\_\_\_\_  
 DRAWING NO. 1  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION BM 2400' NE of location EL. 2007

I THE UNDERSIGNED, HERBY 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.  
 (SIGNED) Jeffrey W. Adams  
 R.P.E. \_\_\_\_\_ L.L.S. 791



STATE OF WEST VIRGINIA  
 Division of Environmental Protection  
 OFFICE OF OIL AND GAS

DATE May 6 1999  
 OPERATOR'S WELL NO. 623830  
 API WELL NO. 47-061-01368  
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION 1708' WATER SHED Whiteday Creek  
 DISTRICT Clinton COUNTY Monongalia  
 QUADRANGLE Gladesville 7 1/2'

SURFACE OWNER Richard Scott Shaffer ACREAGE 37.2247  
 OIL & GAS ROYALTY OWNER Richard Scott Shaffer, et ux. LEASE ACREAGE 105.61  
 LEASE NO. 7005187

PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION X OTHER PHYSICAL CHANGE IN WELL (SPECIFY) 6-6 313

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION Huntersville Chert ESTIMATED DEPTH 8300  
 WELL OPERATOR Columbia Natural Resources, Inc. DESIGNATED AGENT W. A. Watson, Jr.  
 ADDRESS P.O. Box 6070, Charleston, WV 25362 ADDRESS P.O. Box 6070, Charleston, WV 25362

COUNTY NAME MONO  
 PERMIT 1368

JUL 12 1999

DEEP WELL

WR-35

Office of Oil & Gas  
Permitting

SEP 30 1999

WV Division of  
Environmental Protection

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

07-Jul-99  
API # 47-61-01368

Reviewed [Signature]

Farm name: SHAFFER, RICHARD SCOTT Operator Well No.: 623830

LOCATION: Elevation: 1708.00 Quadrangle: GLADESVILLE

District: CLINTON County: MONONGALIA  
Latitude: 10700 Feet South of 39 Deg. 30 Min. 0 Sec.  
Longitude 10375 Feet West of 79 Deg. 55 Min. 0 Sec.

Company: COLUMBIA NATURAL RESOURCES  
P.O. BOX 6070  
CHARLESTON, WV 25362-0000

Agent: MARK HACKETT

Inspector: RANDAL MICK  
Permit Issued: 07/09/99  
Well work Commenced: 08/14/99  
Well work Completed: 09/21/99  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig  
Total Depth (feet) 7747  
Fresh Water depths (ft) 391

Salt water depths (ft) None

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

Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
11-3/4	340	340	CTS 150 SXS
8-5/8	3074	3074	CTS 805 SXS
4-1/2	7734	7734	215 SXS

OPEN FLOW DATA

Producing formation Chert Pay zone depth (ft) 7473-7596  
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d  
Final open flow 1,400 MCF/d Final open flow 0 Bbl/d  
Time of open flow between initial and final tests 4 Hours  
Static rock Pressure 2750 psig (surface pressure) after 72 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 WELLBORE.

For: COLUMBIA NATURAL RESOURCES

By: [Signature]

Date: 7/27/99

OCT 18 1999

MOND 1368

