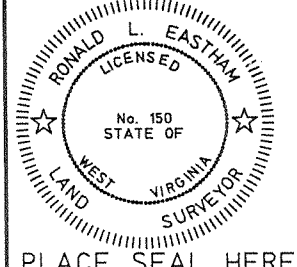


NOTES:
All known oil & gas wells within 3,000' of the proposed location are shown hereon.
The bearings and distances shown hereon are based on the West Virginia State Plane Coordinate System, South Zone NAD '27.

West Virginia State Plane Coordinates for Loc. No. 14
N 404,826.41 : E 1,576,075.47

FILE NO. 4870 WW
DRAWING NO. 14WW6
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY 1 : 30,278
PROVEN SOURCE OF ELEVATION U.S.C.&G.S. BM "F-149"
Elev. = 644.88 NGVD '29

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 THE LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.
(SIGNED) Ronald L. Eastham
R.P.E. _____ L.L.S. 150



**STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
NITRO, WV**



DATE March 10, 2000
OPERATOR'S WELL NO. 14
API WELL NO. _____

47-099-02040
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION ___ STORAGE X DEEP X SHALLOW ___
LOCATION: ELEVATION 978.84 WATER SHED Sam Noe Branch of the West Fork of Twelvepole Creek
DISTRICT Lincoln COUNTY Wayne
QUADRANGLE Radnor
SURFACE OWNER Oscar Barker, Jr., et ux (D.B. 412, Pg. 187) ACREAGE 128.125
OIL & GAS ROYALTY OWNER Columbia Natural Resources, Inc. LEASE ACREAGE 5,000

LEASE NO. _____
PROPOSED WORK: DRILL ___ CONVERT X DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) 6-6 303

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION Big Six ESTIMATED DEPTH _____
WELL OPERATOR Cabot Oil & Gas Corp. DESIGNATED AGENT John Abshire FEB 23 2001
ADDRESS P.O. Box 454 ADDRESS P.O. Box 454
Glasgow, WV 25080 ADDRESS Glasgow, WV 25080

DEEP well

COUNTY NAME WAYNE
PERMIT 2040

DEEP

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

Reviewed: *for*

Farm name: Oscar Barker Operator Well No.: CNR #14

LOCATION: Elevation: 979' Quadrangle: Radnor
District: Lincoln County: Wayne
Latitude: 8,190' feet South of 38° DEG. 7' MIN. 30" SEC.
Longitude: 4,310' feet West of 82° DEG. 27' MIN. 30" SEC.

Company: Cabot Oil & Gas Corporation
900 Lee Street East, Suite 500
Charleston, WV 25301

Agent: John Abshire
Inspector: Dave Belcher
Permit Issued: 2/21/01
Well Work Commenced: 5/6/01
Well Work Completed: 5/23/01
Verbal Plugging
Permission granted on:
Rotary X Cable
Total Depth (feet) 4174'
Fresh Water Depths (ft) 190'
Salt Water Depths (ft) 1012', 1067', 1128',
1252', 1378'

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill up Cu. Ft.
16"		34'	
9 5/8"		621'	289 sks
7"		1810'	310 sks
4 1/2"		4040'	115 sks Latex

Is coal being mined in area (Y / N)?
Coal Depths (ft) 226'-228', 381'-383', 558'-560', 715'-720'

RECEIVED
Office of Oil & Gas Permitting
AUG 22 2001
WV Department of Environmental Protection

OPEN FLOW DATA
Producing formation BIG SIX Pay zone depth (ft) 3960' - 3968'
Gas: Initial open flow 246 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 179 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock pressure 13 psig (surface pressure after 13 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: CABOT OIL & GAS CORPORATION
By: Ray Prudnick Operations Manager
Date: 8/21/01

AUG 24 2001

MAY 2040

Perforate Big Six w/ 3 3/8" Tag Gun, 3 SPF (38gm., 0.40" dia. hole), 25 shots total, from 3960' KB to 3968' KB. Treat with 14 bbl fluid at 8 bbl/min, break down pressure was 4000 psi at surf., 5700 psi at bottom hole. Pumped 82 bbl total slurry (unfoamed volume), 3100 lb sand. 162 MSCF/N2. ATP 4277 psi, MTP 7663 psi, AIR (N2) 1218 bbl/min, MIR(N2) 3411 bbl/min. Well screened out after 2 bbl of 1/2 lb per gal sand hit the perfs. Could not cut rate fast enough to continue pumping. Shut down at 7000 psi. ISIP 6573 psi. 5min SIP 6042 psi. 10 min SIP 5832 psi. 15 min SIP 5690 psi. After the 15 min SIP reading, attempted to pump into formation again using fluid instead of foam. Pumped 4 bbl of fluid and the pressure went to 6300 psi top hole and 7663 psi at top of cement.

FORMATION	TOP	BOTTOM	REMARKS
Breathitt Fm	Surface	920	
Lee Fm (Salt Sand)	920	1330	
Pennington Fm	1330	1400	
Little Lime	1400	1430	
Big Lime	1430	1605	
Injun	1605	1730	
Borden	1730	2190	
Coffee Shale	2190	2213	
Berea	2213	2334	
Devonian Shale	2334	3288	
Corniferous Lime	3288	3960	
Big Six	3960	3999	
Rose Hill	3999	4174	

