



Department of Mines, Minerals and Energy
Division of Gas and Oil
P. O. Box 1416
Abingdon, Virginia 24210
703/676-5423



DRILLING REPORT

Pursuant to VR-480-05-22.1, § 1.36, the undersigned Permittee submits this report on Well EH-44 in the North Grundy District of the Buchanan County, Virginia on 11th day, January month, 1992.

LOCATION

County: Buchanan District: North Grundy
Surface Elevation: 1498.90 Elevation of Kelly Bushing: 1504.90 Quadrangle: Grundy
8810 FT. S. of Latitude 37° 20' 00" and 500 FT. W. of Longitude 82° 02' 30"

or, State Plane Coordinates: _____ and _____

Attach a final location plat as required by VR 480-05-22.1, § 1.36.

DRILLING DATA

Date Drilling Commenced: 12-9-91 Drilling Contractor: Gasco Drilling
Date Drilling Completed: 12-11-91 Rig Type: Rotary Cable Tool
Total Depth of Well: _____

GEOLOGICAL DATA

Fresh Water at:	<u>165</u>	Feet	<u>damp</u>	GPM	_____	Feet	_____	GPM
	<u>1050</u>	Feet	<u>damp</u>	GPM	_____	Feet	_____	GPM
	_____	Feet	_____	GPM	_____	Feet	_____	GPM
Salt Water at:	_____	Feet	_____	GPM	_____	Feet	_____	GPM
	_____	Feet	_____	GPM	_____	Feet	_____	GPM
	_____	Feet	_____	GPM	_____	Feet	_____	GPM

COAL SEAMS:

<u>NAME</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>MINING IN AREA</u>		
				<u>YES</u>	<u>NO</u>	<u>MINED OUT</u>
- see attached Drillers' Log -						

GAS AND OIL SHOWS:

<u>FORMATION</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>IPF (MCFD/BOPD)</u>	<u>PRESSURE</u>	<u>HOURS TESTED</u>
<u>War Creek</u>	<u>1175'</u>	<u>1181'</u>	<u>6'</u>	<u>82 Mcfd</u>		

Cuttings or samples are are not X available for examination by a member of the Virginia Division of Mineral Resources
 Cuttings or samples have have not X been furnished to the Virginia Division of Mineral Resources

ELECTRIC LOGS AND SURVEYS:

List logs ran on wellbore: GR, DEN, CAL

Did log disclose vertical location of a coal seam? Yes X No

SURVEY RESULTS:

DEPTH OF SURVEY	DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL	DEPTH OF SURVEY	DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL
<u>55'</u>	<u>1/4°</u>	<u>1165'</u>	<u>1/2°</u>
<u>255'</u>	<u>1/2°</u>	<u>1365'</u>	<u>1/2°</u>
<u>450'</u>	<u>1/2°</u>	<u>1550'</u>	<u>3/4°</u>
<u>650'</u>	<u>1°</u>	<u>1683'</u>	<u>1/4°</u>
<u>850'</u>	<u>3/4°</u>	<u> </u>	<u> </u>
<u>1050'</u>	<u>1/2°</u>	<u> </u>	<u> </u>

* Use additional sheets if necessary.

CASING AND TUBING

	SIZE	TOP	BOTTOM	LENGTH	CEMENT USED IN CU/FT	DATE CEMENTED	PACKERS OR BRIDGE PLUGS KIND SIZE SET AT
<u>Conductor</u>							
<u>Surface</u>	11 3/4"	0	17'	17'	20 ft ³	12-9-91	
<u>Water Protection</u>	8 5/8"	0	301'	301'	100 ft ³	12-9-91	
<u>Coal Protection</u>	4 1/2"	0	1643'	1643'	474 ft ³	12-11-91	
<u>Other Casing and Tubing Left In Well</u>	2 3/8"	0	1261'	1261'			

Liners

REMARKS: Shut down, fishing jobs, depths and dates, caving, lost circulation, etc.

Edwards & Harding Petroleum Company

WELL: EH-44

Driller's/Geophysical Log

Datum measured from K.B.

Geological Age	Formation	Lithology	Top	Bottom	Thickness	Remarks
		Fill	0	17	17	
Pennsylvanian	Norton	sandy shale	17	55	38	Hole Damp @ 165'
		coal	55	58	3	
		sand & shales	58	370	312	
		Raven Coal	370	371	1	
		sandstone	371	425	54	
		shale	425	488	63	
		Jawbone Rider	488	489	1	
		shale	489	498	9	
		Jawbone	498	500	2	
		Council Sandstone	500	545	45	
		sandy shale	545	585	40	
		Tiller Coal	585	586	1	
		sandy shale	586	625	39	
		shale	625	683	58	
		Upper Seaboard Rider	683	684	1	
		shale	684	695	11	
		Upper Seaboard Coal	695	696	1	
		sandstones	696	844	148	
		Greasy Creek Coal	844	845	1	
		Lee	sand & shales	845	911	
	sandstone		911	961	50	
	Upper Horsepen Coal		961	962	1	
	shale		962	974	12	
	sandstone		974	1025	51	
	Middle Horsepen Coal		1025	1026	1	
	sand & shale		1026	1090	64	
	sandstone		1090	1153	63	
	shale		1153	1175	22	
	War Creek Coal		1175	1181	6	
	sands & shales		1181	1248	67	
	Poca #9 Coal		1248	1249	1	
	sand & shales		1249	1325	76	
	Salt Sand		1325	1526	201	
	Pocahontas	shale	1526	1556	30	
		sand & shale	1556	1590	34	
		Poca #1	1590	1591	1	
		sand & shales	1591	1688	97	
Mississippian	Bluestone	Red shales	1688	1693	5	Gas check @ TD = 82 MCFD
		Total Depth	1693			

EH-44

COAL LOG

MOHAWK REALTY #1

TD 1693

12/11/91

GROUND LEVEL 1498.88 FT

BU-414

	<u>DEPTHS (FEET)</u>	<u>THICKNESS (FT)</u>	
RAVEN	369.75 - 370.25	0.50	
RAVEN	370.75 - 371.50	0.75	
JAWBONE RIDER	488.00 - 489.00	1.00	
JAWBONE	498.75 - 500.50	1.75	
TILLER	585.50 - 586.00	0.50	
UPPER SEABOARD RIDER	683.75 - 684.50	0.75	
UPPER SEABOARD	695.50 - 696.50	1.00	
MIDDLE SEABOARD	844.00 - 844.75	0.75	
UPPER HORSEPEN	961.25 - 962.00	0.75	
MIDDLE HORSEPEN	1025.50 - 1026.75	1.25	
WAR CREEK	1175.50 - 1181.00	5.50	SG 1050
WAR CREEK RIDER	1184.25 - 1184.50	0.25	
POCAHONTAS #10	1234.75 - 1235.00	0.25	
POCAHONTAS #9	1248.00 - 1248.75	0.75	
RED SHALES	1688		

FLUID LEVEL 1516'

1359 - 1524

TOTAL COAL BELOW DRAINAGE 9.5

500'

LATITUDE 37° 20' 00"

LONGITUDE 82° 02' 30"

8810'

TOTAL UNIT AREA
= 58.77 ACRES

N 18000.00
E 42000.00

TRACT D-8
BUCHANAN REALTY

coal, oil & gas
COAL LESSEES
WELLMORE COAL CORP.
RAPOCA ENERGY CO.
58.77 AC. - 100%

CHRIS PERRY
surface

MONROE STILTNER - surface

BILLY ELSWICK
surface

N/F BYRDIE YATES
surface

VIOLET STACY - surface

HORSE BR.
COUNTY ROAD 3060
OLD MINE ROAD

EH 44

S 74°18'30" E
213.61'

S 74°18'30" E
154.15'

N/F BYRDIE YATES
surface

HERBERT GRIFFITH
surface

N 16000.00
E 42000.00

COORDINATES OF WELL

N 16915.69
E 42590.85
(AS DRILLED)

ROUTE 642
ELKINS BR.

TO ROUTE 83

NOTE: WELL COORDINATE
SYSTEM IS BASED ON RAPOCA
ENERGY CO. MINE COORDINATE
SYSTEM

SYSTEM IS BASED ON RAPOCA
ENERGY CO. MINE COORDINATE TO ROUTE 83
SYSTEM

COMPANY Edwards & Harding Petroleum Company

ADDRESS P.O. Box 2404 Abingdon, Virginia 24210

WELL NAME EH - 44

FARM BUCHANAN REALTY TRACT D-8

LEASE NO. _____ ELEVATION 1498.88 (Trig)

ACRES 239 AC. QUADRANGLE GRUNDY

COUNTY BUCHANAN DISTRICT NORTH GRUNDY

REG. ENGINEER X REG. NO. 8106

CERT. LAND SURVEYOR X CERT. NO. 1340

FILE NO. _____ DRAWING NO. _____

DATE DECEMBER 11, 1991 SCALE 1" = 400'

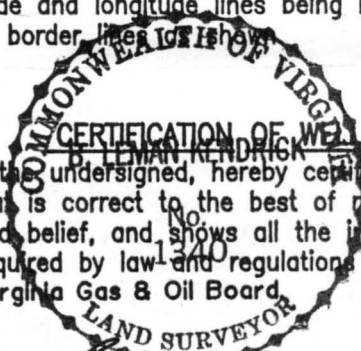
This plat is X new _____ updated
this plat X is _____ is not based on a mine coordinate
system established for the areas of the well location

WELL LOCATION MAP

WELL NO. EH - 44



Denotes location of well on United States
Topographic Maps, scale 1 to 24,000, lat-
itude and longitude lines being represented
by border lines of 15'.



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 regulations of the
Virginia Gas & Oil Board.

B. Lemman Kendrick 12/11/91

Registered Engineer or Certified
Land Surveyor in Charge

500'

LATITUDE 37° 20' 00"

LONGITUDE 82° 02' 30"

8810'

TOTAL UNIT AREA
= 58.77 ACRES

N 18000.00
E 42000.00

CHRIS PERRY
surface
TRACT D-8
BUCHANAN REALTY

coal, oil & gas
COAL LESSEES
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58.77 AC. - 100%

MONROE STILTNER - surface

BILLY ELSWICK
surface

N/F BYRDIE YATES
surface

VIOLET STACY - surface

HORSE BR.
COUNTY ROAD 3060

EH

44

753'

S 74°18'30" E
213.61'

S 74°18'30" E
154.15'

N/F BYRDIE YATES
surface

RPS

RPS

HERBERT GRIFFITH
surface

N 16000.00
E 42000.00

COORDINATES OF WELL
N 16915.69
E 42590.85
(AS DRILLED)

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TO ROUTE 83

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This plat is X new _____ updated

this plat X is _____ is not based on a mine coordinate system established for the areas of the well location

WELL LOCATION MAP

WELL NO. EH - 44



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.



CERTIFICATION OF WELL PLAT

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 regulations of the Virginia Gas & Oil Board.

Registered Engineer or Certified Land Surveyor in Charge