Department of Mines, Minerals and Energy Division of Gas and Oil

Operations Name: \_\_LUCINDA HORN VCP2627 Permit #: 2155

# Department of Mines, Minerals and Energy

Division of Gas and Oil P. 0. Box 1416
Abingdon, Virginia 24210
703/676-5423 WELL TYPE: Oil \_\_\_ Gas \_\_\_ Coalbed Methane X or Injection \_\_\_ well Date Well Completed: 12-22-92 Total Depth of Well: LTD=255 Attach the Drilling Report, if not previously submitted. In addition, submit any changes in casing or tubing that were approved after the Drilling Report was submitted. STIMULATION RECORD Zone 1: COAL SEAMS\* Formation Stimulated With: 70 Q FOAM/LE W/17844# 12/20 SAND - 1431350 SCF N2 - 2294 BF Perforated: 1248.5 To 2272.5 No. of Perforations: 15 Perforation Broke Down at: N/A PSIG Average Injection Rate: 8.2 BPM PSIG 5 MIN SIP 1832 PSIG Average Injection Pressure 3701 PSIG Date Stimulated 12-22-92 \*RAVEN, JAWBONE RIDER, TILLER, M.SEABOARD, WARCREEK, BECKLEY, L.HORSEPEN Zone 2: \_\_\_\_\_\_ Formation Stimulated With: \_\_\_\_\_ Perforated: \_\_\_\_\_\_ TO \_\_\_\_\_\_ No. of Perforations: \_\_\_\_\_ Perforation Size: \_\_\_\_\_ Formation Broke Down at: \_\_\_\_\_ PSIG Average Injection Rate: \_\_\_\_ ISIP \_\_\_\_\_\_ PSIG \_\_\_\_\_ MIN SIP \_\_\_\_\_\_ PSIG Average Injection Pressure \_\_\_\_\_ PSIG Date Stimulated Zone 3: Formation Stimulated With: Perforated: \_\_\_\_\_\_ TO \_\_\_\_\_\_ No. of Perforations: \_\_\_\_\_ Perforation Size: Formation Broke Down at: \_\_\_\_\_\_ PSIG Average Injection Rate: \_\_\_ ISIP \_\_\_\_\_\_ PSIG \_\_\_\_\_ MIN SIP \_\_\_\_\_\_ PSIG Average Injection Pressure \_\_\_\_\_ PSIG Date Stimulated FINAL PRODUCTION: Natural X After Stimulation MCFD HOURS TESTED ROCK PRESSURE HOURS TESTED Zone (1) Zone (2)

\* Use additional sheets with this format, if more than three (3) zones were stimulated.

Permittee: EQUITABLE RESOURCES EXPLORATION (Company)

Final Production if Gas Zones are Commingled 17 MCFD 6 Hours Tested 255 PSIG 48 Hours Tested

Form DGO-GO-15 Rev. 9/91

W5-344

Department of Mines, Minerals and Energy Division of Gas and Oil

Operations Name: L				
	Permit	#- 2	155	

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-480-0	5-22.1, § 1.36, the	undersigned Permit WISE	tee submits this repor		
JANUARY			count	,, viigiiia sii	and day,
LOCATION					
County:WISE		Distri	ct: _GLADEVILLE		
Surface Elevation:	2632.20 Elevat T. S. of Latitude	ion of Kelly Bushi 37° 02' 30" a	ng: 2642.2 Quadr and 3490 FT. W.	of Longitude 82	° 37' 30"
Attach a final locat	ion plat as require	d by VR 480-05-22.	1, § 1.36.		
DRILLING DATA	10.0.00				
Date Drilling Commen	ced: 12-8-92		_ Drilling Contractor		
Date Drilling Complet Total Depth of Well:	LTD=2557 D	TD=2570	_ Rig Type: X Rota	ry Cable Too	ol
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	A.		-		
GEOLOGICAL DATA					
Fresh Water at: 4	0 Feet 1"	STREAM GPM	Feet	GPM	
	Feet	GPM _	Feet	GPM	
Salt Water at:	Feet	GPM	Feet	GPM	
	Feet	GPM	Feet	GPM	
COAL SEAMS:				MINING	IN AREA
NAME	TOP	BOTTOM	THICKNESS	YES NO	MINED OUT
RAVEN	1248	1250	2		
TILLER	1534	1537	3		
WARCREEK	2151	2153	2		
BECKLEY	2201	2203	2		
L. HORSEPEN	2272	2274	2		
GAS AND OIL SHOWS:					
FORMATION	TOP BOTTOM	THICKNESS 2479/2570	ODOR	PRESSURE	HOURS TESTED
	20027	417/43/0	JUGO		
			NEW COLUMN COLUM		

Department	of	Mines,	Minerals	and	Energy
Division of	f Ga	as and	Oil		

Operations	Name:	LUCINDA	HO	RN	VCP2627	
		Permit	#:	2155	,	

Cuttings	or	samples	are	are	not_	X	availab	le for	exar	minati	on by	a mem	ber of	the	Virginia	Division	of	Mineral	Resources
Cuttings	or	samples	have	hav	/e no	t_X	been	furnis	shed 1	to the	Virgi	nia D	ivisio	n of	Mineral	Resources			

#### ELECTRIC LOGS AND SURVEYS

SLD/TEMP/GR List logs run on wellbore: Did log disclose vertical location of a coal seam? Yes X

SURVEY	RESULTS

DEPTH	DIRECTION/DISTANCE/DEGREES	DEPTH	DIRECTION/DISTANCE/DEGREES
OF SURVEY	FROM TRUE VERTICAL	OF SURVEY	FROM TRUE VERTICAL
221	1 0	1889	10
390	1°	2082	10
616	1 0	2259	1°
837	10	2479	1°
1022	1 0		
1241	10		
1428	10		
1645	10		

### CASING AND TUBING

	SIZE	TOP	BOTTOM	<u>LENGTH</u>	CEMENT USED	DATE -	PACKERS (	OR BRIDG	SET AT
Conductor	13 3/8"		25'						
Surface									
	8 5/8"		370		130(153)	12-9-92			
Water Protection									
	412		2386'	2376'	480(618)	12-14-92			
Coal Protection									

Other Casing 2 3/8" 23381 and Tubing Left in Well

# Liners

REMARKS: Shut down, fishing jobs, depths and dates, caving, lost circulation, etc. 1-8-93 LOST BTM OF SAND PUMP (FISH); LEFT IN HOLE BELOW BOTTOM PERFS Department of Mines, Minerals and Energy Division of Gas and Oil

Operations	Name:	LUCINDA	HORN	VCP2627	
-	_	Permit #:	215	5	

DRILLER'S LOG

Compiled by \_\_\_ENGINEERING

GEOLOGIC AGE	FORMATION	GENERAL LITHOLOGY		DEP1		THICKNESS	REMARKS
ENNSYLVANIAN	SAND, SHALE			0	1248	1248	NE IMMO
\	RAVEN COAL				1250	2	
	SAND, SHALE	& THIN	COALS			284	
1	TILLER COAL			1534	1537	3	
	SAND, SHALE	& THIN	COALS	1537	2151	614	
	WARCREEK CO.	AL		2151	2153	2	
	SAND, SHALE	& THIN	COALS	2153	2201	48	
	BECKLEY COA	L		2201	2203	2	
	SAND, SHALE	& THIN	COALS	2203	2272	69	
	LOWER HORSE	PEN COAI	2	2272	2274	. 2	
V	SAND, SHALE	& THIN	COALS	2274	2557	283	
	LOGGER'S TO	ral.			2557		

By: Grant (Signature)

Form DGO-GO-14 Rev. 9/91 Lease No. PO-148 / T-935

J. H. Addington

811 Acres
Clinchfield Coal Company /
Pyxis Resources Company - surface & coal
Pine Mountain Oil & Gas, Inc. - oil & gas
gas 5.42 Ac. 30.06%

naitude

VAC-2627 CBM IP S 34°30°45° W 295.03°

37°02' 25.08" 82° 38' 13.03'

384418:25 E 4400392.64 h 792916,73 E

283844.46 n



Lease No. PO-148 / T-938
Lucinda Horn
207 Acres
Clinchfield Coal Company /
Pyxis Resources Company - surface & coal
Pine Mountain Oil & Gas, Inc. - oil & gas
gas 12.61 Ac. 69.94%

Note: Well is Located Approximately IOO East of the Boundary of DMLR Permit No. IIOO574 (Red River Coal Company)

Well elevation determined by trigonometric leveling from BM Y-320

Area of Unit = 18.03 Ac.

Well Coordinates: (Clinchfield Coal Co.) S 21,687.66 W 73,923.58

## WELL LOCATION PLAT

COMPANY <u>Fauitable Resources Exploration</u> WELL NAME AND NUMBER <u>VAC-2627</u>
TRACT NO. <u>PO-148 / T-938</u> ELEVATION <u>2632.20</u> QUADRANGLE <u>Flat Gap</u>
COUNTY <u>Wise</u> DISTRICT <u>Gladeville</u> SCALE <u>1" = 400"</u> DATE <u>7-31-1992</u>
This Plat is a new plat <u>x</u>; an updated plat \_\_\_; or a final location plat \_\_\_

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

icensed Professional Engineer or Licensed Land Surveyor