

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

Operations Name: J T CHASE Well #: VAD2839
Permit #: 3298 VA File #: WS-0494

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 VAD2839 in the
ROBERSON District of the WISE County, Virginia on 1st day,
APRIL month, 1998.

LOCATION

County: WISE District: ROBERSON
Surface Elevation: 2696.12 Elev of Kelly Bushing: 2706.12 Quadrangle: FLAT GAP
9825 Ft. S of Latitude 37 05 00 and 3510 Ft. W of Longitude 82 37 30

DRILLING DATA

Date Drilling Commenced: 8/27/97 Drilling Contractor: UNION DRILLING
Date Drilling Completed: 9/7/97 Rig Type: X Rotary Cable Tool
Total Depth of Well: LTD - 5878 DTD - 5876

GEOLOGICAL DATA

Fresh Water at:	120 feet	DAMP	GPM	feet	GPM
	feet		GPM	feet	GPM
Salt Water at:	feet		GPM	feet	GPM
	feet		GPM	feet	GPM

COAL SEAMS:

MINING IN AREA

<u>NAME</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>YES</u>	<u>NO</u>	<u>MINED OUT</u>
UPPER BANNER	1121	1123	2			
GREASY CREEK	2090	2092	2			
WARCREEK	2404	2406	2			
BECKLEY	2452	2454	2			

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>
	1396/1609/2407/2468/2559/2683	2868		158 MCFD		
	1793/1979/3080			169 MCFD		
	2190			133 MCFD		
	3125			189 MCFD		

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

ELECTRIC LOGS AND SURVEYS

List logs run on wellbore: GR/DEN/TMP

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

SURVEY RESULTS

<u>DEPTH OF SURVEY</u>	<u>DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL</u>	<u>DEPTH OF SURVEY</u>	<u>DIRECTION/DISTANCE/DEGREES FROM TRUE VERTICAL</u>
200	3/4°	2169	1°
3335	1/2°	2369	1°
369	1/2°	2457	1°
569	3/4°	2657	1 1/4°
769	3/4°	2857	1 1/4°
969	3/4°	3057	1 1/4°
1169	3/4°		
1369	3/4°		
1569	3/4°		
1769	1°		
1969	1°		

CASING AND TUBING

	<u>SIZE</u>	<u>TOP</u>	<u>BOTTO M</u>	<u>LENGTH</u>	<u>CEMENT USED IN CU/FT</u>	<u>DATE CEMENTED</u>	<u>PACKERS OR BRIDGE PLUGS KIND SIZE SET AT</u>
<u>Conductor</u>	16		57	50	GROUTED		
<u>Surface</u>	11 3/4		471	461	250(295)	8/29/98	
<u>Water Protection</u>	7		3083	3073	495(675)	9/3/97	
<u>Coal Protection</u>							
<u>Other Casing and Tubing Left in Well</u>	4 1/2		5577	5567	208(262)	9/7/97	

Liners

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

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DRILLER'S LOG

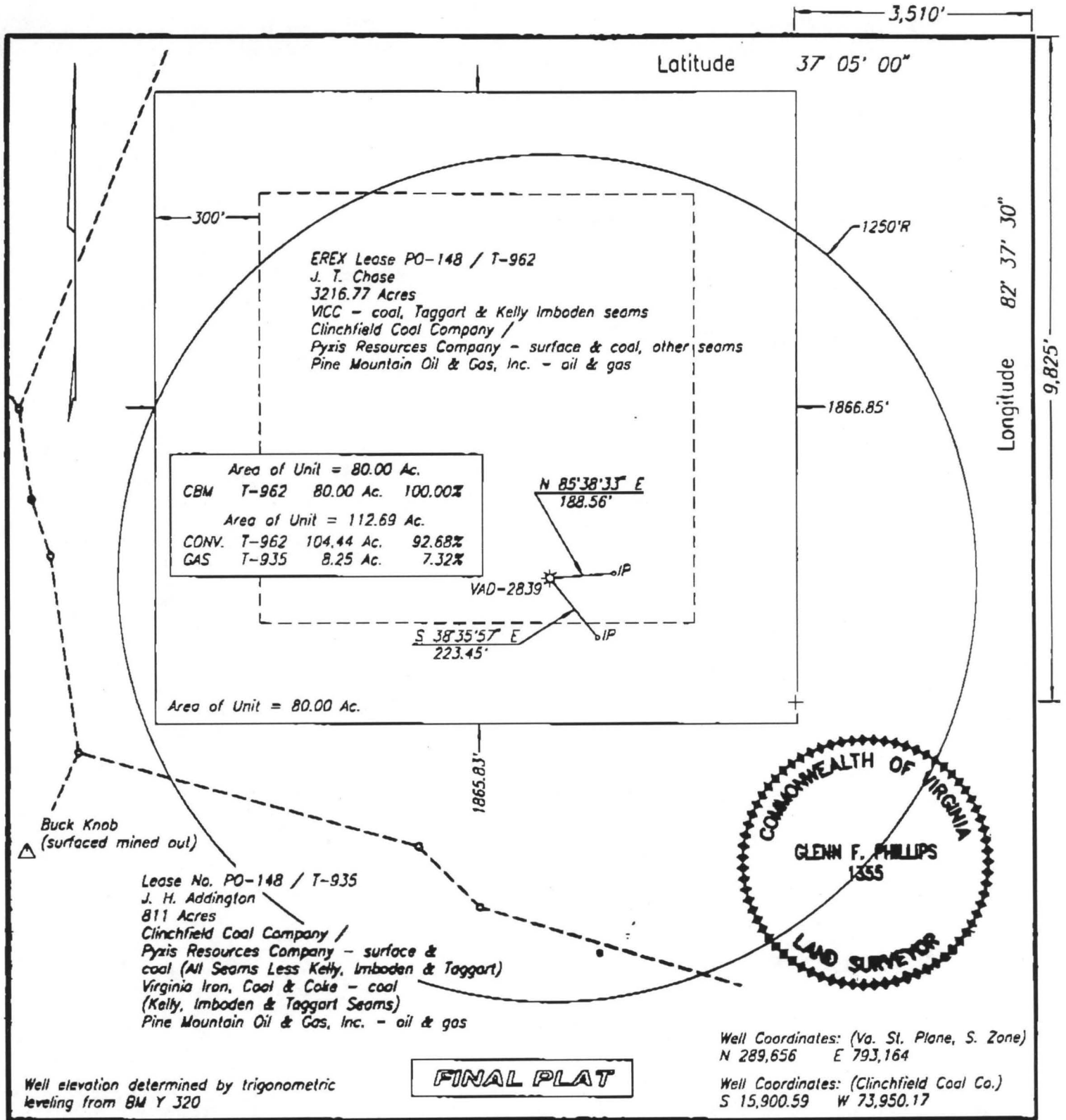
Compiled by: GEOLOGY & ENGINEERING

AGE	FORMATION	GENERAL LITHOLOGY	COLOR	DEPTH		THICKNESS	REMARKS	
				TOP	BOTTOM			
PENN	SAND, SHALE & THIN COALS				1121	1121		
	UPPER BANNER COAL			1121	1123	2		
	SAND, SHALE & THIN COALS			1123	2090	967		
	GREASY CREEK COAL			2090	2092	2		
	SAND, SHALE & THIN COALS			2092	2404	312		
	WARCREEK COAL			2404	2406	2		
	SAND, SHALE & THIN COALS			2406	2452	46		
	BECKLEY COAL			2452	2454	2		
	SAND, SHALE & LEE SANDS			2454	3040	586		
	SAND & SHALE			3040	3167	127		
	MISS	RAVENCLIFF			3167	3320	153	
		SAND & SHALE			3320	3490	170	
		MAXON SANDS			3490	3616	126	
		SAND & SHALE			3616	3830	214	
LITTLE LIME			3830	3874	44			
BIG LIME			3874	4302	428			
WEIR			4302	4676	374			
SUNBURY			4676	4753	77			
DEV	BEREA			4753	4800	47		
	DEVONIAN SHALE			4800	5878	1078		

LOGGER'S TOTAL DEPTH 5878

Permittee: EQUITABLE RESOURCES ENERGY COMPANY (Company)

By: *Joseph A. Long* (Signature)



WELL LOCATION PLAT

7-G-83

COMPANY Equitable Resources Energy Company WELL NAME AND NUMBER VAD-2839
 TRACT NO. T-962 ELEVATION 2696.36 QUADRANGLE Flat Gap
 COUNTY Wise DISTRICT Roberson SCALE 1" = 400' DATE 11-7-1997

This Plat is a new plat ; 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.

Glenn F. Phillips
 Licensed Professional Engineer or Licensed Land Surveyor

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COALBED METHANE COMPLETION REPORT

WELL TYPE: Oil Gas Coalbed Methane or Injection well

Date Well Completed: 10/15/97 Total Depth of Well: LTD - 5374 DTD - 5427

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: 70Q FOAM W/
8700# 12/20 SAND - 420,000 SCF N2 - 320 BF

Perforated:	<u>1121.5</u> to:	<u>2453.5</u>	No. of Perforations:	<u>12</u>	Size:	<u>046"</u>
Formation Broke Down at:	<u>N/A</u> PSIG		Average Injection Rate:	<u>20</u>	BPM	
ISIP:	<u>1835</u> PSIG	5 Min SIP: <u>1754</u>	PSIG Average Injection	Pressure	<u>3610</u>	
Date Stimulated:	<u>10/15/97</u>					

* UPPER BANNER, GREASY CREEK, WARCREEK, BECKLEY

Zone 2: _____ Formation Stimulated With: _____

Perforated:	_____ to:	_____	No. of Perforations:	_____	Size:	_____
Formation Broke Down at:	_____ PSIG		Average Injection Rate:	_____		
ISIP:	_____ PSIG	5 Min SIP: _____	PSIG Average Injection	Pressure	_____	
Date Stimulated:	_____					

Zone 3: _____ Formation Stimulated With: _____

Perforated:	_____ to:	_____	No. of Perforations:	_____	Size:	_____
Formation Broke Down at:	_____ PSIG		Average Injection Rate:	_____		
ISIP:	_____ PSIG	5 Min SIP: _____	PSIG Average Injection	Pressure	_____	
Date Stimulated:	_____					

FINAL PRODUCTION:	_____	Natural	<u>X</u>	After Stimulation		
	<u>BOD</u>	<u>MCFD</u>	<u>HOURS TESTED</u>	<u>ROCK PRESSURE</u>	<u>HOURS TESTED</u>	
Zone (1)						
Zone (2)						
Zone (3)						
Final Production if Gas						
Zones are Commingled	<u>67</u>	<u>MCFD</u>	<u>6</u>	Hours Tested	<u>108</u>	PSIG <u>48</u> Hours Tested

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

Permittee: EQUITABLE RESOURCES ENERGY COMPANY (Company)
By: Joseph D. [Signature] (Signature)

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ENTERED

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CONVENTIONAL COMPLETION REPORT

WELL TYPE: Oil Gas X Coalbed Methane or Injection well

Date Well Completed: 10/6/97 Total Depth of Well: LTD - 5878 DTD - 5876

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: L HURON Formation Stimulated With: 75Q FOAM W/
54000# 20/40 SAND - 460,000 SCF N2 - 233 BF

Perforated:	<u>5280</u>	to:	<u>5472</u>	No. of Perforations:	<u>31</u>	Size:	<u>.34"</u>
Formation Broke Down at:	<u>2772</u>	PSIG		Average Injection Rate:	<u>52</u>		
ISIP:	<u>1930</u>	PSIG	5 Min SIP: <u>1785</u>	PSIG Average Injection		Pressure	<u>3610</u>
Date Stimulated:	<u>9/18/97</u>						

Zone 2: CLEVELAND SHALE Formation Stimulated With: 75Q FOAM W/
65000 # 20/40 SAND - 480,000 SCF N2 - 318 BF

Perforated:	<u>4804</u>	to:	<u>4892</u>	No. of Perforations:	<u>20</u>	Size:	<u>.34"</u>
Formation Broke Down at:	<u>N/A</u>	PSIG		Average Injection Rate:	<u>54</u>		
ISIP:	<u>1918</u>	PSIG	5 Min SIP: <u>1524</u>	PSIG Average Injection		Pressure	<u>3320</u>
Date Stimulated:	<u>9/18/97</u>						

Zone 3: WEIR Formation Stimulated With: 75Q FOAM W/
60000 # 20/40 SAND - 479,000 SCF N2 - 322 BF

Perforated:	<u>4375</u>	to:	<u>4458</u>	No. of Perforations:	<u>14</u>	Size:	<u>.34</u>
Formation Broke Down at:	<u>3850</u>	PSIG		Average Injection Rate:	<u>52</u>		
ISIP:	<u>1590</u>	PSIG	5 Min SIP: <u>1479</u>	PSIG Average Injection		Pressure	<u>3370</u>
Date Stimulated:	<u>9/18/97</u>						

FINAL PRODUCTION: Natural X After Stimulation

	<u>BOD</u>	<u>MCFD</u>	<u>HOURS TESTED</u>	<u>ROCK PRESSURE</u>	<u>HOURS TESTED</u>
Zone (1)					
Zone (2)					
Zone (3)					
Final Production if Gas					
Zones are Commingled	<u>543</u>	<u>MCFD</u>	<u>6</u> Hours Tested	<u>795</u> PSIG	<u>48</u> Hours Tested

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

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By: *[Signature]* (Signature)

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Zone 4:	<u>BIG LIME</u>	Formation Stimulated With:	<u>50Q FOAMED ACID W/</u>
<u>3500 GAL 15% HCL - 312,000 SCF N2 - 344 BF</u>			
Perforated:	<u>4145</u> to:	<u>4151</u>	No. of Perforations: <u>7</u> Size: <u>.34"</u>
Formation Broke Down at:	<u>N/A</u> PSIG		Average Injection Rate: <u>10.4</u>
ISIP:	<u>2842</u> PSIG 5 Min SIP:	<u>2710</u>	PSIG Average Injection Pressure <u>3900</u>
Date Stimulated:	<u>9/18/97</u>		