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

Operations Name: R. E. CHASE

VC2149

Permit #:

1756

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

## COMPLETION REPORT

WELL TYPE: 0il Gas Coalbed Methane	X or Injection well	
Date Well Completed: 12-17-91	Total North of Wo	11. LTD=2650 DTD=2652
bace well completed	Total bepth of we	11
Attach the Drilling Report, if not previously	submitted. In addition, submit any	changes in casing or tubing that wer-
approved after the Drilling Report was submitt		onlinges in our ing or our ing once here
approved an extended and additional additional and additional addit		
STIMULATION RECORD M. HOR	CEDEN HADCDEEK HMANAMED "C	" PECKLEY I HODGEDEN DOCO #0
STIMULATION RECORD  Zone 1: U. SEABOARD, L. SEABOARD,	Formation Stimulated With: 70	O FOAM
W/10,900 # 12/20 SAND - 801290 SCF N	2, 683 BF	
Perforated: 1381.5 TO 2100.5	No. of Perforations: 15	Perforation Size: .34"
Formation Broke Down at: 1362	PSIG Average Injection Rate:	14.8 BPM (47 DH)
ISIP <u>1750</u> PSIG <u>5</u> MIN SIP	1598 PSIG Average	Injection Pressure 3474 P
Date Stimulated 12-17-91		
Zone 2:	Formation Stimulated With:	-
Name of the state		
Perforated: TO	No. of Perforations:	Perforation Size:
Formation Broke Down at:  ISIPPSIGMIN SIP	PSIG Average Injection Rate:	
ISIP PSIG MIN SIP	PSIG Average	Injection PressurePS
Date Stimulated		
Zone 3:	Formation Stimulated With:	
Douglassed TO	No. of Books	0.6.1.6.
Perforated:	No. of Perforations:	Perforation Size:
TSID DOWN AL:	PSIG Average Injection Rate: _	Injection December 35
Date Stimulated Page Min SIP	PSIG Average	Injection PressurePS
Date Stimulated		
FINAL PRODUCTION: Natural X	After Stimulation	
		ROCK PRESSURE HOURS TESTED
		NOCK TRESSURE HOURS TESTED
Zone (1)		
Zone (2) Zone (3)		
Final Production if Gas Zones are Commingled	*26 MCFD 6 Hours Test	ed 320 PSIG 48 Hours Test
That Froduction is day zones are sommingled	*O.F. NOT ABSOLUTE	<u> </u>
* Use additional sheets with this format, if m		lated
and address and a street and a	ore than times (5) zones were serma	
Permittee: EQUITAB	LE RESOURCES EXPLORATION	(Company)
By: GOLEPH	( ) lung	(Signature)
( )	•	

Form DGO-GO-15 Rev. 9/91

Operations Name: R. E. CHASE VC2149
Permit #: 1756

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

## DRILLING REPORT

			tee submits this report on County, Vir		
JANUARY mont	h, 19 <u>92</u> .		county, vii	911114 011	<u> </u>
LOCATION					
County: DICKENSON Surface Elevation: 232			et: <u>ERVINTON</u> g: <u>2336.63</u> Quadrangle:	NORA	
_10,620 FT. S	. of Latitude 37°	07' 30" ar	nd 9,100 FT. W. of	Longitude 82°	17' 30"
Attach a final location	plat as required	by VR 480-05-22.1	1, § 1.36.		
DRILLING DATA					
Date Drilling Commenced:	12-3-91		_ Drilling Contractor: _	UNION DRIL	LING
Date Drilling Completed:	12-8-91		Rig Type: X Rotary	Cable Too	1
Total Depth of Well: LT	D=2650 DTD=26	552	-		
GEOLOGICAL DATA					
Fresh Water at:180	Feet DAMI	P= <del>OPM</del>	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
JAWBONE COAL	1153	1158	5	X	
LOWER HORSEPEN	1988	1990	2		
GAS AND OIL SHOWS:					
FORMATION	<u>BOTTOM</u> 2000	THICKNESS	IPF (MCFD/BOPD) 42 MCFD	PRESSURE	HOURS TESTED
-	2400		33 MCFD	<del></del>	
	2648		21 MCFD		

Form DGO-GO-14 Rev. 9/91

. <u>11</u>	unione de la companya		Section of the second	نشاره واستعملت وال			
Department of Mines,	, Minerals and Er	ergy		Operations N	lame: R.E.	CHASE	VC2149
Division of Gas and	0i1				Perr	nit #: _1756	
Cuttings or samples Cuttings or samples							sion of Mineral Resource rces
ELECTRIC LOGS AND SU	JRVEYS						
List logs run on wel	llbore:SDI	/TEMP/C	GR				
Did log disclose ver	tical location o	of a coal	seam? Yes	<u>X</u> No			6
SURVEY RESULTS  DEPTH DI  OF SURVEY  233  448  620  815  1033  1200  1375	1° 1° 1 1/2° 1 1/4° 2° 2 1/4° 3/4°		<u>OF</u>	DEPTH SURVEY 1600 1813 2000 2210 2400 2648		/4°	ES
			CAS	ING AND TUBING			
	SIZE	<u>TOP</u>	BOTTOM	LENGTH	CEMENT USED (IN CU/FT)	DATE CEMENTED	PACKERS OR BRIDGE PLU KIND SIZE SET A
Conductor	11 3/4	4"	32'	22'		×	
Surface							
Water Protection	8 5/3 4 1/3		354' 2186'	344' 2176'	100(118) 440(568)	12-4-91 12-8-91	
Coal Protection							
Other Casing							

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Liners

and Tubing Left in Well

2 3/8" 2144"

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

Department	of	Mines	, Minera	1s a	ind	Energy
Division d	f G	as and	011			

Operations Name: R.E. CHASE

1756 Permit #:

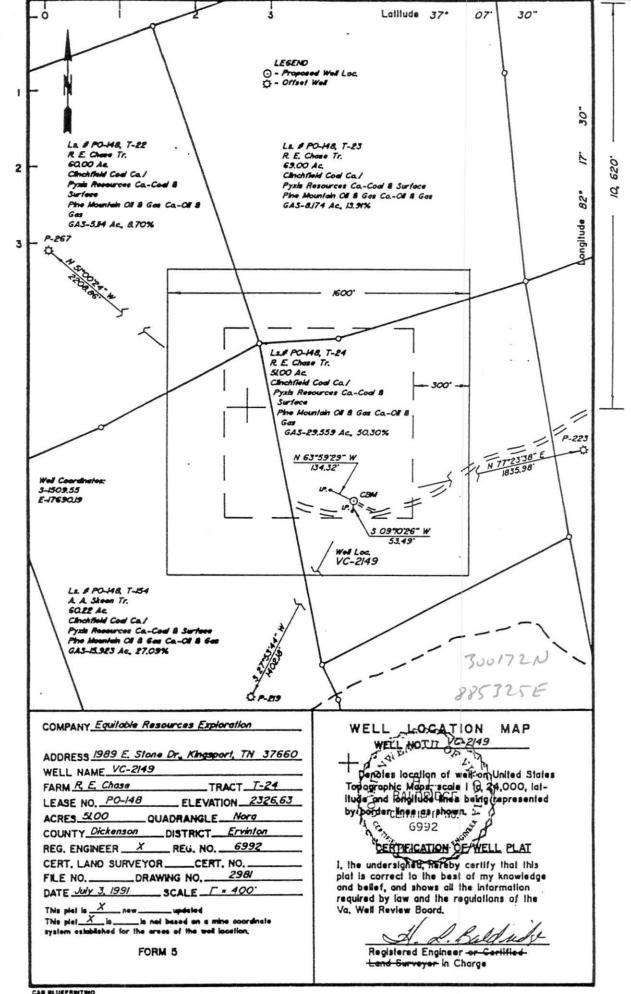
DRILLER'S LOG

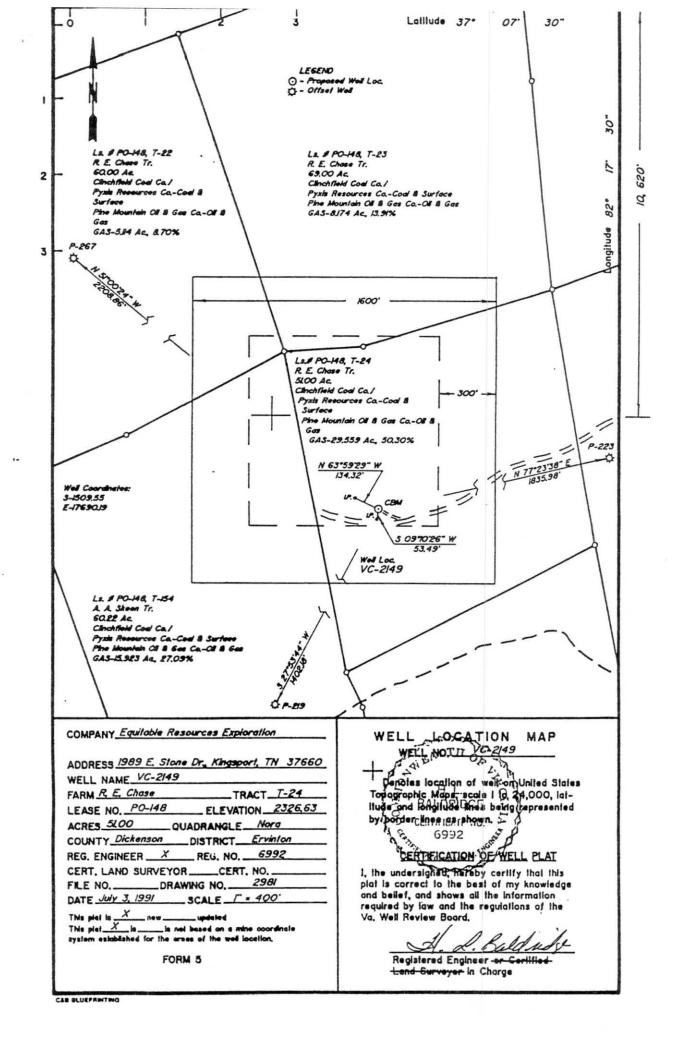
Compiled by \_\_\_\_ENGINEERING

GEOLOGIC AFE	FORMATION	GENERAL LITHOLOGY	COLOR	DEPTI TOP	H BOTTOM	THICKNESS	REMARKS
'ENNSYLVANIAN	SAND, SHALE	& THIN COALS	3	0	1153	1153	
)	JAWBONE COAL			1153	1158	5	
)	SAND, SHALE	& THIN COALS	3	1158	1988	830	
	LOWER HORSE	PEN COAL		1988	1990	2	
V	SAND, SHALE	& THIN COALS	3	1990	2640	650	
1ISSISSIPPIAN	RED ROCK			2640	2650	10	
	LOGGER'S TO	TAL DEPTH			2650		

Permittee: EQUITABLE RESOURCES EXPLORATION (Company)

(Signature)





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

Operations Name: R. E. CHASE

VC2149

Permit #: 1756

21-608

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 ERVINTON	.1, § 1.36, the un	dersigned Permitt	tee submits this report o	n Well <u>VC214</u>	9 in the day,
JANUARY mont	h, 19 <u>92</u> .		• • • • • • • • • • • • • • • • • • • •		,
LOCATION					
County: DICKENSON Surface Elevation: 232 10,620 FT. S	6.63 Elevation	of Kelly Bushing	et: <u>ERVINTON</u> g: <u>2336.63</u> Quadrangle nd <u>9,100</u> FT. W. of	: NORA Longitude 82°	17' 30"
Attach a final location	plat as required	by VR 480-05-22.1	1, § 1.36.		
DRILLING DATA					
Date Drilling Commenced: Date Drilling Completed: Total Depth of Well: <u>LT</u>	12-8-91		Drilling Contractor: Rig Type:X_ Rotary	UNION DRII	LLING
GEOLOGICAL DATA					
Fresh Water at:180	Feet DAM		Feet Feet		
Salt Water at:	Feet Feet	GPM	FeetFeet	GPM	
COAL SEAMS:	TOP	BOTTOM	THICKNESS	MINING YES NO	IN AREA MINED OUT
JAWBONE COAL LOWER HORSEPEN	1153 1988	1158 1990	5 2	TES NO	111111111111111111111111111111111111111
GAS AND OIL SHOWS:					
	<u>BOTTOM</u> 2000	THICKNESS	IPF (MCFD/BOPD) 42 MCFD	PRESSURE	HOURS TESTED
	2400 2648		33 MCFD 21 MCFD	£67891077	
			( )	JAN 1992	3
			115055	RECEIVED	16177
				GAS & OIL	3

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Department of Mines, Miner	als and Energy		Operations I	Name: R.E.		VC2149
Division of Gas and Oil				Perm	it #: _1756_	
Cuttings or samples are Cuttings or samples have						
ELECTRIC LOGS AND SURVEYS						
List logs run on wellbore:	SDL/TEMP/G	SR .				
Did log disclose vertical	location of a coal	seam? Yes	X No _			
OF SURVEY     FROM       233     448       620     815       1033	N/DISTANCE/DEGREES TRUE VERTICAL  1° 1° 1 1/2° 1 1/4° 2° 2 1/4° 3/4°	0F 1 1 2 2 2	DEPTH SURVEY .600 .813 .2000 .2210 .2400 .2648		°	
		CASI	NG AND TUBING			
	SIZE TOP	BOTTOM	LENGTH	CEMENT USED (IN CU/FT)	DATE CEMENTED	PACKERS OR BRIDGE PLUG- KIND SIZE SET AT
Conductor	11 3/4"	32'	22'			
<u>Surface</u>						8
Water Protection	8 5/8" 4 1/2"			100(118) 440(568)	12-4-91 12-8-91	
Coal Protection						
Other Casing and Tubing Left in Well	2 3/8"	2144'				
Liners						

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

Departmen	nt	of	Mi	nes.	Minerals	and	Energy
Division	of	Ga	S	and	0i1		

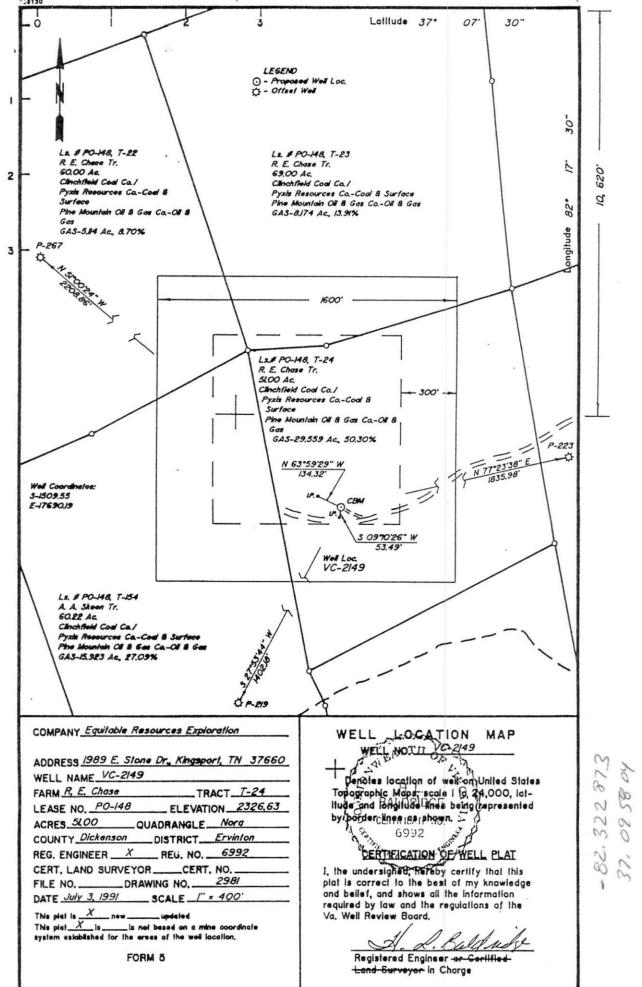
DRILLER'S LOG

Compiled by \_\_\_\_ENGINEERING

GEOLOGIC _AFE	FORMATION	GENERAL LITHOLOGY	COLOR	DEP'	TH BOTTOM	THICKNESS	REMARKS
PENNSYLVANIAN	SAND, SHALE	& THIN COALS	S	0	1153	1153	
	JAWBONE COAL	<u>.</u>		1153	1158	5	
)	SAND, SHALE	& THIN COALS	S	1158	1988	830	
	LOWER HORSE	PEN COAL		1988	1990	2	
V	SAND, SHALE	& THIN COAL	S	1990	2640	650	
MISSISSIPPIAN	RED ROCK			2640	2650	10	
	LOGGER'S TO	TAL DEPTH			2650		

Permittee: EQUITABLE RESOURCES EXPLORATION (Company)

(Signature)



CAR RILITERINTIN