Operations Name: <u>V R SUTHERLAND VCP3569</u> Permit #: 3053 RU-47

(Company)

(Signature)

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

COMPLETION REPORT

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

Permittee: EQUITABLE RESQUECES EXPLORATION

Form DGO-GO-15 Rev. 9/91

Operations Name: <u>V R SUTHERLAND VCP3569</u> Permit #: <u>3053 RU-47</u>

Department of Mines, Minerals and Energy
Division of Gas and Oil
P. O. Box 1410
Abingdon, Virginia 24210
703/676-5423

DRILLING REPORT

Pursuant to VR-480-05-22.1 NEW GARDEN District of the JULY month, 19 96.					II <u>VCP3569</u> day,	in the	
LOCATION							
County: RUSSELL Surface Elevation: 2521.60 280 FT S. of Latitude 3			g: <u>2531.60</u>		uadrangle: <u>DU</u>	<u>ITY</u>	
Attach a final location plat as	required by VR 480)-05-22.1, § 1.3	6.				
DRILLING DATA							
Date Drilling Commenced: Date Drilling Completed: Total Depth of Well: LTD=2	05-23-96		g Contractor: <u>Uni</u> ype: <u>x</u> Rotary				
GEOLOGICAL DATA							
Fresh Water at:	feet feet	GPM GPM		eet eet	GP! GP!		
Salt Water at:	feet feet	GPM GPM		eet eet	GPM GPM		
COAL SEAMS:					MINING	IN AREA	
NAME UPPER SEABOARD (SPLIT GREASY CREEK LOWER SEABOARD UNNAMED "A" (SPLIT) WARCREEK RIDER WARCREEK BECKLEY (SPLIT) LOWER HORSEPEN (SPLIT X-SEAM POCO #6	880 1043 1112 1364 1387 1446	BOTTOM 715 882 1045 1115 1366 1389 1456 1522 1559 1913	THICKNESS 2 2 2 3 2 2 10 8 2 3	YES	<u>NO</u>	MINED OUT	
GAS AND OIL SHOWS:							
FORMATION T	ор воттом	THICKNESS	IPF (MCFD/B	OPD)	PRESSURE	HOURS TES	STE

Operations Name: <u>V R SUTHERLAND VCP3569</u> Permit #: 3053 RU-47

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

ELECTRIC LOGS AND SURVEYS

List logs run on wellbore: DEN/TMP/GR

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
200	1/4°	1348	1-1/4°
500	1°	1365	1-1/4°
530	1°	1387	1-1/4°
700	1/4°	1481	1-1/4°
900	1/4°	1576	1-1/2°
1100	1/2°	1776	1-1/2°
1216	1°	1906	3/4°
1300	1-1/4°	1950	3/4°

CASING AND TUBING

	SIZE TOP	BOTTOM	<u>LENGTH</u>	CEMENT USED (IN CU/FT)	DATE CEMENTED	PACKERS OR BRIDGE PLUGS KIND SIZE SET AT
Conductor	16"	20'				
Surface Water Protection	11-3/4" 8-5/8"	352' 594'	342' 584'	78(92) 48(57) 150(177)	5-20-96 5-21-96 5-21-96	SQUEEZE
Coal Protection						
Other Casing and Tubing Left in Well	4 1/2" 2 3/8"	2082' 2003'	2072'	315(397)	5-23-96	

Liners

REMARKS: Shut down, fishing jobs, depths and dates, caving, lost circulation, etc. OPEN MINE @ 304-309'; LOST CIRCULATION 5-20-96; LOST CIRCULATION 5-21-96

Form DGO-GO-14

Rev. 9/91

2 of 3

Operations Name: VR SUTHERLAND VCP3569

Permit #: 3053 RU-47

DRILLER'S LOG

Compiled by Engineering

		GENERAL		DE	PTH		
AGE	FORMATION	<u>LITHOLOGY</u>	COLOR	TOP	BOTTOM	THICKNESS	REMARKS
Donneylyanian	Sand, Shale & Thi	n Coole		0	713	713	
reillisylvalliali							
	UPPER SEABOAR			713	715	2	
	Sand, Shale & Thi	n Coals		715	880	165	
	GREASY CREEK			880	882	2	
	Sand, Shale & Thi	n Coals		882	1043	161	
	LOWER SEABOA	RD		1043	1045	2	
	Sand, Shale & Thi	n Coals		1045	1112	67	
	UNNAMED "A" (SI	PLIT		1112	1115	3	
	Sand, Shale & Thi			1115	1364	249	
	WARCREEK RIDE			1364	1366	2	
	Sand, Shale & Thi			1366	1387	21	
	WARCREEK	ii oodio		1387	1389	2	
	Sand, Shale & Thi	n Cools		1389	1446	57	
	BECKLEY (SPLIT)			1446	1456	10	
	Sand, Shale & Thi			1456	1514	58	
	LOWER HORSEP	EN (SPLIT)		1514	1522	8	
	X-SEAM			1557	1559	2	
	Sand, Shale & Thi	n Coals		1559	1910	351	
POCO #6				1910	1913	3	
	Sand, Shale & Thi	n Coals		1913	2115	202	
	Logger's Total Dep	oth			2115		

Permittee: <u>EQUITABLE RESOURCES EXPLORATION</u> (Company)

Joseph J. Juny (Signature)

Form DGO-GO-14 Rev. 9/91 Operations Name: VR SUTHERLAND VCP3569

Permit #: 3053 RU-47

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: Oil _ Gas _ Coalbed Methane X or Injection _ well

Date Well Completed: 5-30-96

Total Depth of Well: LTD = 2115 DTD = 2111

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.

S.	П	M	IU	LA	Т	0	V	R	EC	0	RI	כ

Zone 1: COAL SEAMS* Formation Stimulated With: 70Q FOAM

W/27679# 12/20 SAND - 985000 SCF N2 - 901 BF

Perforated: 1349 to 1913

No. of Perforations: 18 Perforation size: .34 PSIG Average Injection Rate: 69 (DH) BPM

Formation Broke Down at: 1145 ISIP: 1149 PSIG 5

Min SIP: 1058 PSIG Average Injection Pressure:3685

Date Stimulated: 5-30-96

* C-SEAM, WARCREEK RIDER, WARCREEK, UNNAMED "C", BECKLEY, L HORSEPEN, X-SEAM, POCO #6

Zone 2: Formation Stimulated With:

Perforated:

to

PSIG

No. of Perforations:

Perforation size:

Formation Broke Down at:

ISIP:

Min SIP:

PSIG Average Injection Pressure:

Date Stimulated:

Zone 3:

ISIP:

Formation Stimulated With:

PSIG Average Injection Rate:

Perforated:

No. of Perforations:

Perforation size:

Formation Broke Down at:

PSIG

Min SIP:

PSIG Average Injection Rate: PSIG Average Injection Pressure:

Date Stimulated:

FINAL PRODUCTION:

After Stimulation

HOURS TESTED

ROCK PRESSURE

HOURS TESTED

Zone (1)

Zone (2)

Zone (3)

Final Production if Gas Zones are Commingled 61 MCFD 6 Hours Tested 96 PSIG 48 Hours Tested

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

Permittee: EQUITABLE RESOURCES EXPLORATION (Company)

(Signature)

Form DGO-GO-15

Rev. 9/91

Operations Name: <u>V R SUTHERLAND VCP3569</u> Permit #: 3053 RU-47

Department of Mines, Minerals and Energy
Division of Gas and Oil
P. O. Box 1410
Abingdon, Virginia 24210
703/676-5423

DRILLING REPORT

Pursuant to VR-480-05-22 <u>NEW GARDEN</u> District o <u>JULY</u> month, 19 <u>96</u> .						ell <u>VCP356</u> day,	9 in the
LOCATION							
County: RUSSELL Surface Elevation: 2521.6 280 FT S. of Latitude			District: NEV of Kelly Bushing 3990 FT W	g: <u>2531.60</u>		uadrangle:	<u>DUTY</u>
Attach a final location plat	as requ	uired by VR 48	0-05-22.1, § 1.36	5.			
DRILLING DATA		(41)					
Date Drilling Commenced Date Drilling Completed: Total Depth of Well: LTD	05-2		Drilling Rig Ty	g Contractor: <u>U</u> /pe: <u>x</u> Rotar	nion Drillin y Ca		
GEOLOGICAL DATA							
Fresh Water at: Salt Water at:	fee fee fee	t t	GPM GPM GPM GPM		feet feet feet feet	(GPM GPM GPM GPM
COAL SEAMS:	166	L	GFIVI		ieet		NG IN AREA
NAME UPPER SEABOARD (SPL GREASY CREEK LOWER SEABOARD UNNAMED "A" (SPLIT) WARCREEK RIDER WARCREEK BECKLEY (SPLIT) LOWER HORSEPEN (SPL X-SEAM POCO #6	LIT)	TOP 713 880 1043 1112 1364 1387 1446 1514 1557	BOTTOM 715 882 1045 1115 1366 1389 1456 1522 1559 1913	THICKNESS 2 2 2 3 2 10 8 2 3	YES	NO	MINED OUT
GAS AND OIL SHOWS:							
FORMATION	TOP	BOTTOM	THICKNESS	IPF (MCFD	/BOPD)	PRESSUE	RE HOURS TESTED

Operations Name: <u>V R SUTHERLAND VCP3569</u> Permit #: 3053 RU-47

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Form DGO-GO-14

Rev. 9/91

2 of 3

Operations Name: VR SUTHERLAND VCP3569

Permit #: 3053 RU-47

DRILLER'S LOG

Compiled by Engineering

AGE	FORMATION	GENERAL LITHOLOGY	COLOR	DE TOP	PTH BOTTOM	THICKNESS	REMARKS
	FORMATION Sand, Shale & Thi UPPER SEABOAI Sand, Shale & Thi GREASY CREEK Sand, Shale & Thi LOWER SEABOAI Sand, Shale & Thi UNNAMED "A" (S Sand, Shale & Thi WARCREEK RIDI Sand, Shale & Thi WARCREEK Sand, Shale & Thi BECKLEY (SPLIT Sand, Shale & Thi BECKLEY (SPLIT Sand, Shale & Thi	LITHOLOGY n Coals RD (SPLIT) n Coals RD n Coals PLIT) n Coals PLIT) n Coals RR n Coals	7 7 8 8 1 1 1 1 1 1 1	the property of the same of		THICKNESS 713 2 165 2 161 2 67 3 249 2 21 2 57 10 58	REMARKS
	LOWER HORSEF X-SEAM Sand, Shale & Thi POCO #6 Sand, Shale & Thi Logger's Total De	EN (SPLIT) n Coals n Coals	1 1 1 1	514 557 559 910 913	1522 1559 1910 1913 2115	8 2 351 3 202	

Permittee: <u>EQUITABLE RESOURCES EXPLORATION</u> (Company)

By: Joseph (d. Juny (Signature)