

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name DIANE #1 Test No. 1 Date 9/24/93
Company BEREXCO INC Zone MORROW
Address 970 FOURTH FINANCIAL CNTR WICHITA KS 67202 Elevation 2956
Co. Rep./Geo. CHARLIE SPRADLIN Cont. BEREDCO RIG #4 Est. Ft. of Pay 6
Location: Sec. 35 Twp. 28S Rge. 33W Co. HASKELL State KS

Interval Tested 5365-5385
Anchor Length 20
Top Packer Depth 5358
Bottom Packer Depth 5365
Total Depth 5385

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run 623
Mud Wt. 9.1 lb/Gal.
Viscosity 55 Filtrate 8.6

Tool Open @ _____ Initial Blow PACKER FAILURE

Final Blow _____

Recovery - Total Feet 120 Flush Tool? NO

Rec. 120 Feet of GASSY OIL CUT MUD-20% GAS/ 10% OIL/ 70% MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 123 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 1600 ppm System

(A) Initial Hydrostatic Mud 2648.9 PSI AK1 Recorder No. 13337 Range 3975

(B) First Initial Flow Pressure _____ PSI @ (depth) 5369 w / Clock No. 31152

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. 10333 Range 4050

(D) Initial Shut-in Pressure _____ PSI @ (depth) 5382 w / Clock No. 17640

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

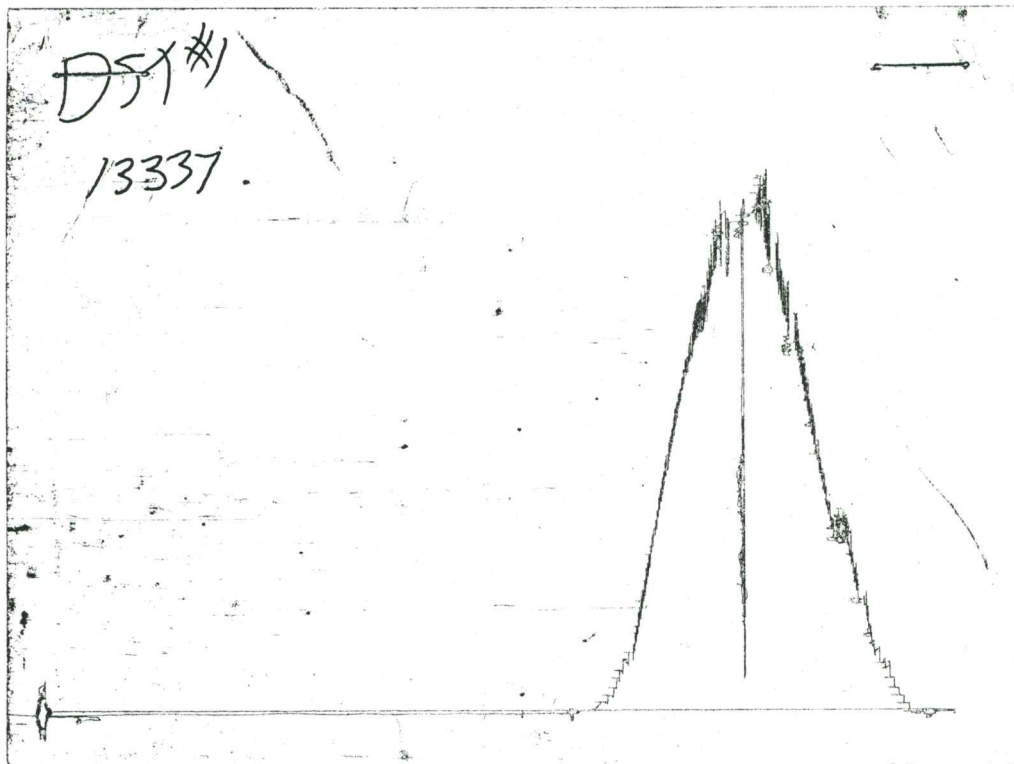
(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening _____ Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in _____ Final Shut-in _____

Our Representative ROBERT COLLINS

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2640	2648.9
(B) FIRST INITIAL FLOW PRESSURE		
(C) FIRST FINAL FLOW PRESSURE		
(D) INITIAL CLOSED-IN PRESSURE		
(E) SECOND INITIAL FLOW PRESSURE		
(F) SECOND FINAL FLOW PRESSURE		
(G) FINAL CLOSED-IN PRESSURE		
(H) FINAL HYDROSTATIC MUD		

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Well Name DIANE #1 Test No. 2 Date 9/25/93
Company BEREXCO INC Zone MORROW
Address 970 FOURTH FINANCIAL CNTR WICHITA KS 67202 Elevation 2956
Co. Rep./Geo. CHARLIE SPRADLIN Cont. BEREDCO RIG #4 Est. Ft. of Pay 6
Location: Sec. 35 Twp. 28S Rge. 33W Co. HASKELL State KS

Interval Tested _____	5368-5385	Drill Pipe Size _____	4.5" XH
Anchor Length _____	17	Wt. Pipe I.D. - 2.7 Ft. Run _____	
Top Packer Depth _____	5361	Drill Collar - 2.25 Ft. Run _____	623
Bottom Packer Depth _____	5368	Mud Wt. _____	9 lb/Gal.
Total Depth _____	5385	Viscosity _____	61
		Filtrate _____	9.2

Tool Open @ 11:00 AM ^{Initial} Blow STRONG BLOW - BOTTOM OF BUCKET IN 2 MINUTES
GAS TO SURFACE ON INITIAL SHUTIN IN 20 MINUTES
 Final Blow GAS TO SURFACE AS TOOL OPENED

Recovery - Total Feet 1734 Flush Tool? NO

Rec. <u>1644</u>	Feet of	CLEAN GASSY OIL-30% GAS/ 70% OIL
Rec. <u>90</u>	Feet of	OIL & GAS CUT MUD-30% GAS/ 30% OIL / 40% MUD
Rec. _____	Feet of	_____
Rec. _____	Feet of	_____
Rec. _____	Feet of	_____

BHT 139 °F Gravity 29 °API @ 78 °F Corrected Gravity 28 °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 2050 ppm System

(A) Initial Hydrostatic Mud 2674.1 PSI AK1 Recorder No. 13337 Range 3975

(B) First Initial Flow Pressure 143.2 PSI @ (depth) 5372 w / Clock No. 31152

(C) First Final Flow Pressure 153.1 PSI AK1 Recorder No. 10333 Range 4050

(D) Initial Shut-in Pressure 1434.1 PSI @ (depth) 5382 w / Clock No. 17640

(E) Second Initial Flow Pressure 224.2 PSI AK1 Recorder No. _____ Range _____

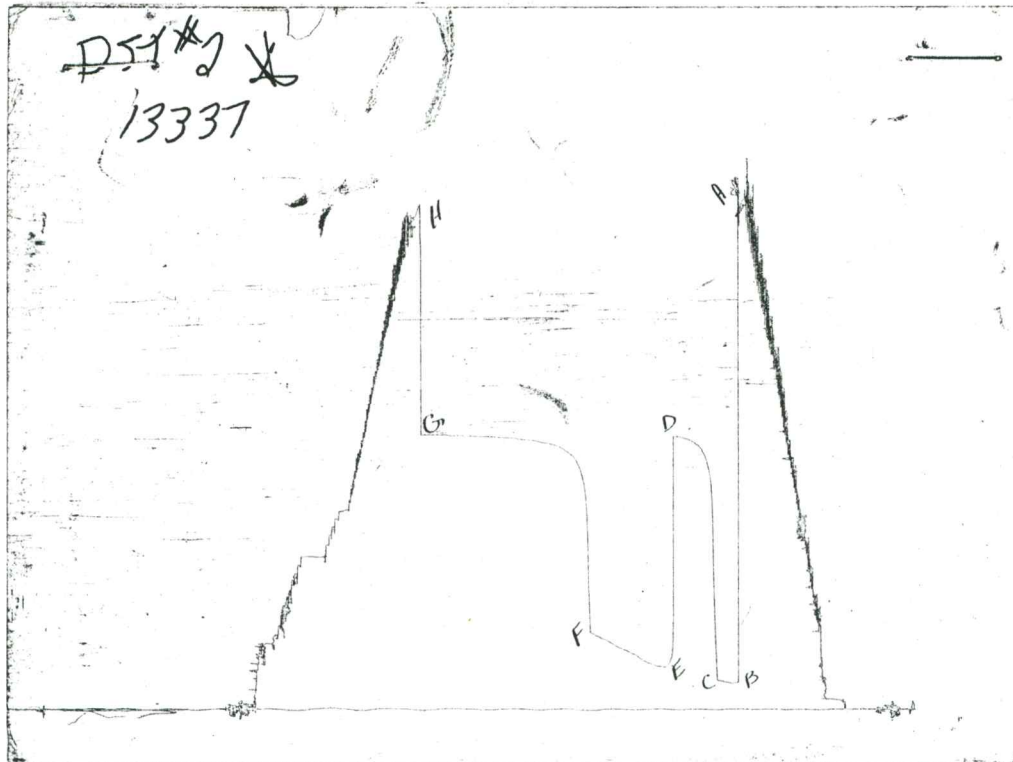
(F) Second Final Flow Pressure 405.1 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 1442.1 PSI Initial Opening 15 Final Flow 60

(H) Final Hydrostatic Mud 2615.8 PSI Initial Shut-in 30 Final Shut-in 120

Our Representative ROBERT COLLINS

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2662	2674.1
(B) FIRST INITIAL FLOW PRESSURE	138	143.2
(C) FIRST FINAL FLOW PRESSURE	148	153.1
(D) INITIAL CLOSED-IN PRESSURE	1434	1434.1
(E) SECOND INITIAL FLOW PRESSURE	207	224.2
(F) SECOND FINAL FLOW PRESSURE	405	405.1
(G) FINAL CLOSED-IN PRESSURE	1434	1442.1
(H) FINAL HYDROSTATIC MUD	2613	2615.8

COMPUTER OIL EVALUATION BY TRILOBITE TESTING, L.L.C.

BEREXICO INC

DIANE #1

DST 2

35

28S

33W

HASKELL KS

ELEVATION:	2956	KB	EST. PAY	6	FT
DATUM:	-2417		ZONE TESTED:	MORROW	
TEST INTERVAL:	5368-5385		TIME INTERVALS:	15-30-60-120	
RECORDER DEPTH:	5372		VISCOSITY:	7.19	CP
BOTTOM HOLE TEMP:	139		HOLE SIZE:	7.875	IN

CUBIC FEET OF GAS IN PIPE:	661				
TOTAL FEET OF RECOVERY:	1734.00	CORRECTED PIPE FILLUP:	1054.948		
TOTAL BARRELS OF RECOVERY:	18.84	CORR. BARRELS OF RECOVERY:	9.190	BBL	
BARRELS IN DRILL PIPE:	15.80	API GRAVITY:	28		
BARRELS IN WEIGHT PIPE:	0.00	FLUID GRADIENT:	0.384		
BARRELS IN DRILL COLLARS:	3.05				
GAS OIL RATIO:	35.10	CU.FT/BBL			
BUBBLE POINT PRESSURE:	266				
UNCORRECTED INITIAL PRODUCTION:			361.82	BBL	
INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE:			176.44	BBL/DAY	
INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE:			188.361		

INITIAL SLOPE	362.56	PSI/CYCL	FINAL SLOPE	115.96	PSI/CYCLE
INITIAL P*	1488.94	PSI	FINAL P*	1464.66	PSI

TRANSMISSIBILITY	247.39	(MD.-FT./CP.)
PERMEABILITY	296.53	(MD.)
INDICATED FLOW CAPACITY	1779.17	(MD.FT)
PRODUCTIVITY INDEX	0.28	(BARREL/DAY/PSI)
DAMAGE RATIO	1.67	
RADIUS OF INVESTIGATION	149.13	(FT,)
POTENTIOMETRIC SURFACE	980.54	(FT.)
DRAWDOWN FACTOR	1.631	(%)
THEORETICAL POTENTIAL FROM FINAL FLOW PRESSURE	295.01	
THEORETICAL POTENTIAL FROM PSEUDO STEADY FLOW STATE	314.95	

CALCULATED RECOVERY ANALYSIS

DST

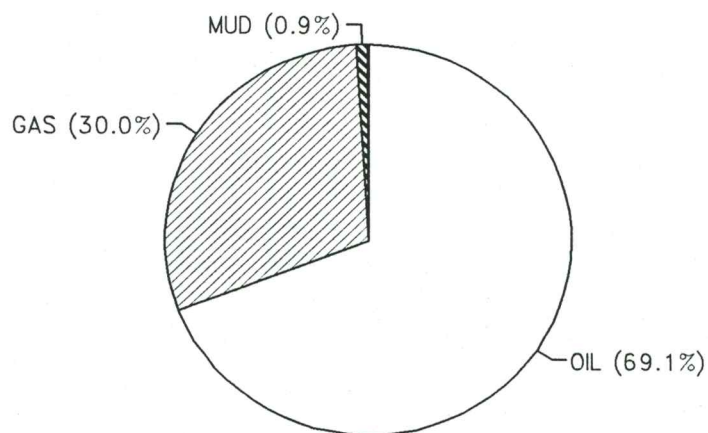
2

TICKET #

6759

SAMPLE	TOTAL	GAS		OIL		WATER		MUD	
#	FEET	%	FEET	%	FEET	%	FEET	%	FEET
DRILL 1	1111	30	333.3	70	777.7	0	0	0	0
PIPE 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
6			0		0		0		0
WEIGHT 1			0		0		0		0
PIPE 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
DRILL 1	533	30	159.9	70	373.1	0	0	0	0
COLLAR 2	90	30	27	30	27	0	0	40	36
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	1734		520.2		1177.8		0		36

			HRS OPEN	BBL/DAY
BBL OIL=	13.015383	*	1.25	249.89535
BBL WATER=	0	*		0
BBL MUD=	0.17604			
BBL GAS =	5.653467			



INITIAL FLOW

RECORDER 13337

DST # 2

TIME(MIN) PRESSURE <> PRESSURE

0	143.2	143.2
3	139.3	-3.9
6	142.2	2.9
9	144.2	2.0
12	150.1	5.9
15	153.1	3.0

FINAL FLOW

RECORDER 13337

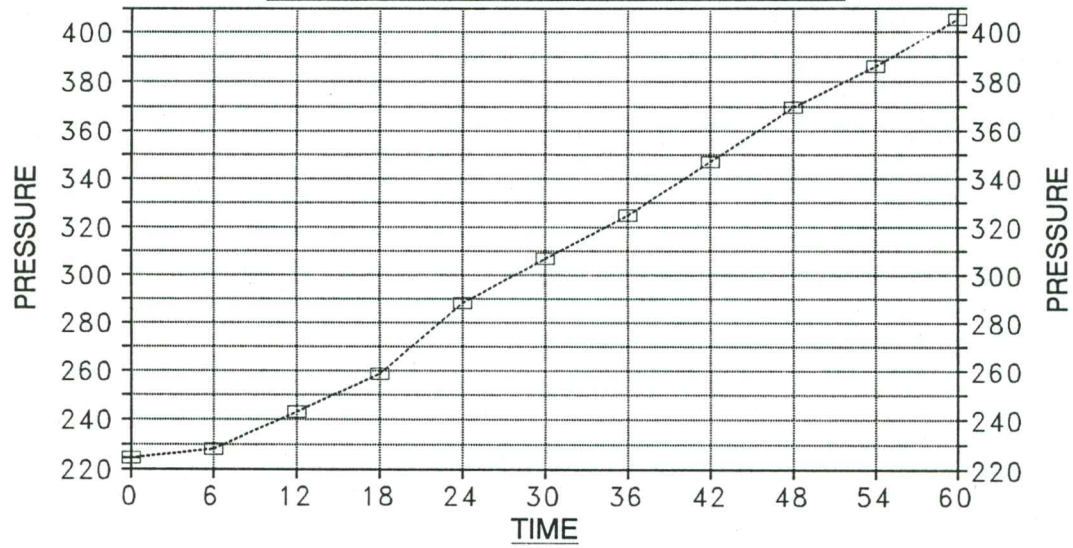
DST # 2

TIME(MIN) PRESSURE <> PRESSURE

0	224.2	224.2
6	228.2	4.0
12	243.0	14.8
18	258.8	15.8
24	288.4	29.6
30	307.2	18.8
36	325.0	17.8
42	346.8	21.8
48	369.5	22.7
54	386.3	16.8
60	405.1	18.8

DELTA T DELTA P

FINAL FLOW / DST #2



--- DIANE #1

INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE:

188.361

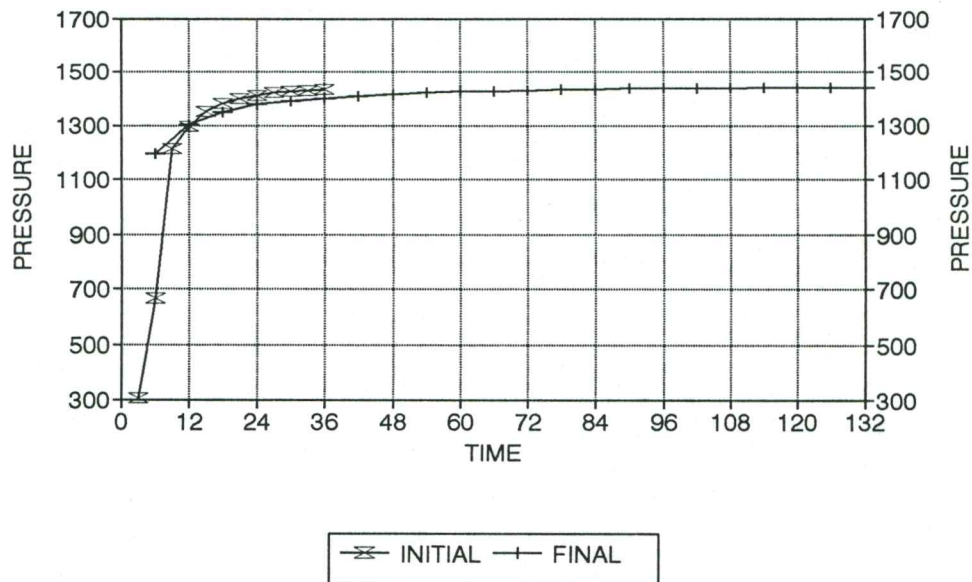
DIANE #1
INITIAL

		DST #2		SHUTIN	
15 INITIAL FLOW TIME		SLOPE		362.6	PSI/CYCLE
		P*		1488.94	PSI
		Log		<>	
TIME(MIN)	Pws (psi)	Horn T	PRESSURE	Horn T	
3	306.2	0.778	306.2	6	
6	668.9	0.544	362.7	4	
9	1213.5	0.426	544.6	3	
12	1296.3	0.352	82.8	2	
15	1352.2	0.301	55.9	2	
18	1382.2	0.263	30.0	2	
21	1399.1	0.234	16.9	2	
24	1412.1	0.211	13.0	2	
27	1420.1	0.192	8.0	2	
X 30	1425.1	0.176	5.0	2	
33	1431.1	0.163	6.0	1	
X 36	1434.1	0.151	3.0	1	

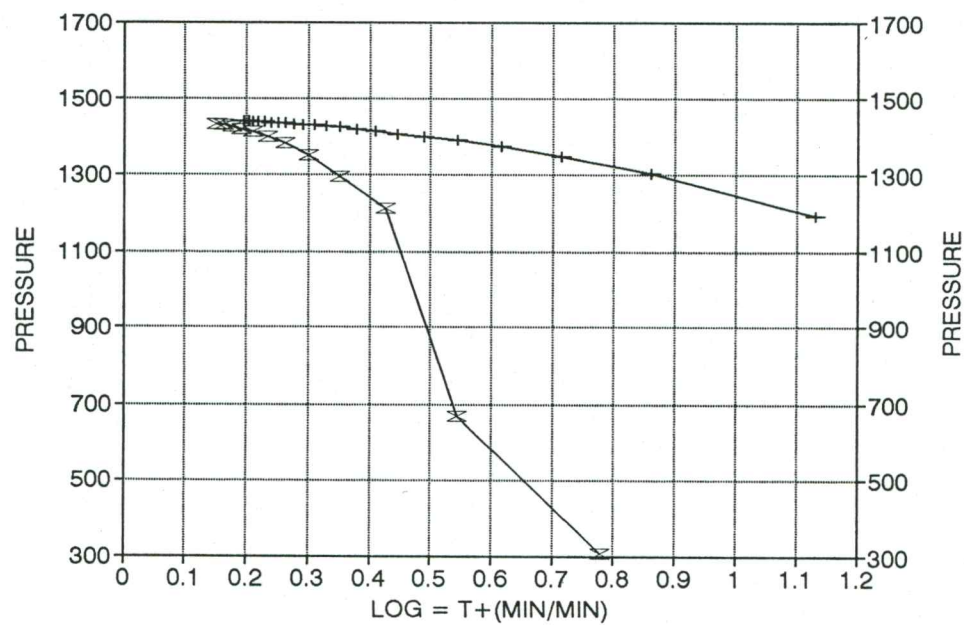
DIANE #1
FINAL

		DST #2		SHUTIN	
75 TOTAL FLOW TIME		SLOPE		116.0	PSI/CYCLE
		P*		1464.7	PSI
		Log		<>	
	Pws (psi)	Horn T	PRESSURE	Horn T	
6	1194.5	1.130	1194.5	14	
12	1303.3	0.860	108.8	7	
18	1348.2	0.713	44.9	5	
24	1376.2	0.615	28.0	4	
30	1390.1	0.544	13.9	4	
36	1400.1	0.489	10.0	3	
42	1408.1	0.445	8.0	3	
48	1416.1	0.409	8.0	3	
54	1421.1	0.378	5.0	2	
60	1425.1	0.352	4.0	2	
66	1427.1	0.330	2.0	2	
72	1430.1	0.310	3.0	2	
78	1432.0	0.293	1.9	2	
84	1433.1	0.277	1.1	2	
90	1435.0	0.263	1.9	2	
96	1436.1	0.251	1.1	2	
102	1437.1	0.239	1.0	2	
X 108	1438.1	0.229	1.0	2	
114	1439.1	0.220	1.0	2	
120	1440.0	0.211	0.9	2	
126	1441.0	0.203	1.0	2	
X 132	1442.0	0.195	1.0	2	

DIANE #1 / DST #2 DELTA T DELTA P



HORNER PLOT



GAS VOLUME REPORT

BEREXCO INC

DIANE #1

DST # 2

MIN	PSIG	ORIFICE	MCF/D	MIN	PSIG	ORIFICE	MCF/D
				5	3	0.25	15.7
				10	5	0.25	20.7
				20	5	0.25	20.7
				30	4.5	0.25	19.5
				40	2.5	0.25	14.3
				50	2	0.25	12.7
				60	2	0.25	12.7

Remarks: GAS TO SURFACE IN 20 MIN ON INITIAL SHUTIN/GAS WILL BURN