

NE MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		Test Date 6-11-80		JUN 23 1980	
Company AMOCO PRODUCTION COMPANY			Connection NATURAL GAS PIPELINE		
Pool WILDCAT			Formation MORROW		Unit ARTESIA, OFFICE
Completion Date 1/19/79		Total Depth 9867.		Plug Back TD 9825.	Elevation 3366.
Farm or Lease Name RIO SIETE	Well No. 1	Set At 9865.	Perforations: From 9448. To 9660.		Unit Sec. Twp. Rge. J 11 20S 25E
Csq. Size 5.500	Wt. 15.5	d 4.950	Set At 9865.	Perforations: From 0. To 0.	
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 9260.	Perforations: From 0. To 0.	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE			Packer Set At 9190.		County EDDY
Producing Thru TUBING		Reservoir Temp. °F 169. @ 9554.	Mean Annual Temp. °F 60.0	Baro. Press. - P _a 13.2	State NEW MEXICO
L 9554.	H 9554.	G _g 0.611	% CO ₂ 0.80	% N ₂ 0.28	% H ₂ S 0.
Prover 0.	Meter Run 3.0	Taps FLANGE			

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							2295.	72.			43.0
1.	3.00 X 1.250			110.	6.2	74.	2238.	72.	0.	0.	0.7
2.	3.00 X 1.250			118	19.4	77.	2055.	73.	0.	0.	1.0
3.	3.00 X 1.250			142.	41.0	31.	1848.	74.	0.	0.	1.0
4.	3.00 X 1.250			170.	64.0	30.	1502.	75.	0.	0.	1.0
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	7.59	27.75	123.2	0.9868	1.2793	1.0099	269.
2.	7.59	50.40	131.2	0.9840	1.2793	1.0103	487.
3.	7.59	79.73	155.2	0.9804	1.2793	1.0118	768.
4.	7.59	108.28	183.2	0.9813	1.2793	1.0141	1046.
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	0.18	534.	1.48	0.980	0.	0.	0.611	X X X X X X X X	675.	360.
2.	0.19	537.	1.49	0.980				X X X X X		
3.	0.23	541.	1.50	0.977						
4.	0.27	540.	1.50	0.972						
5.										

P _r 2298.3		P _c ² 5282.		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.7709$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.3737$	
NO	P _r ²	P _w ²	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1433.$		
1	5068.	2242.	5026.	257.			
2	4277.	2060.	4242.	1041.			
3	3464.	1855.	3442.	1840.			
4	2296.	1516.	2299.	2983.			
5							

Absolute Open Flow 1438. Mcfd @ 15.025 Angle of Slope θ 60.9 Slope, n 0.556

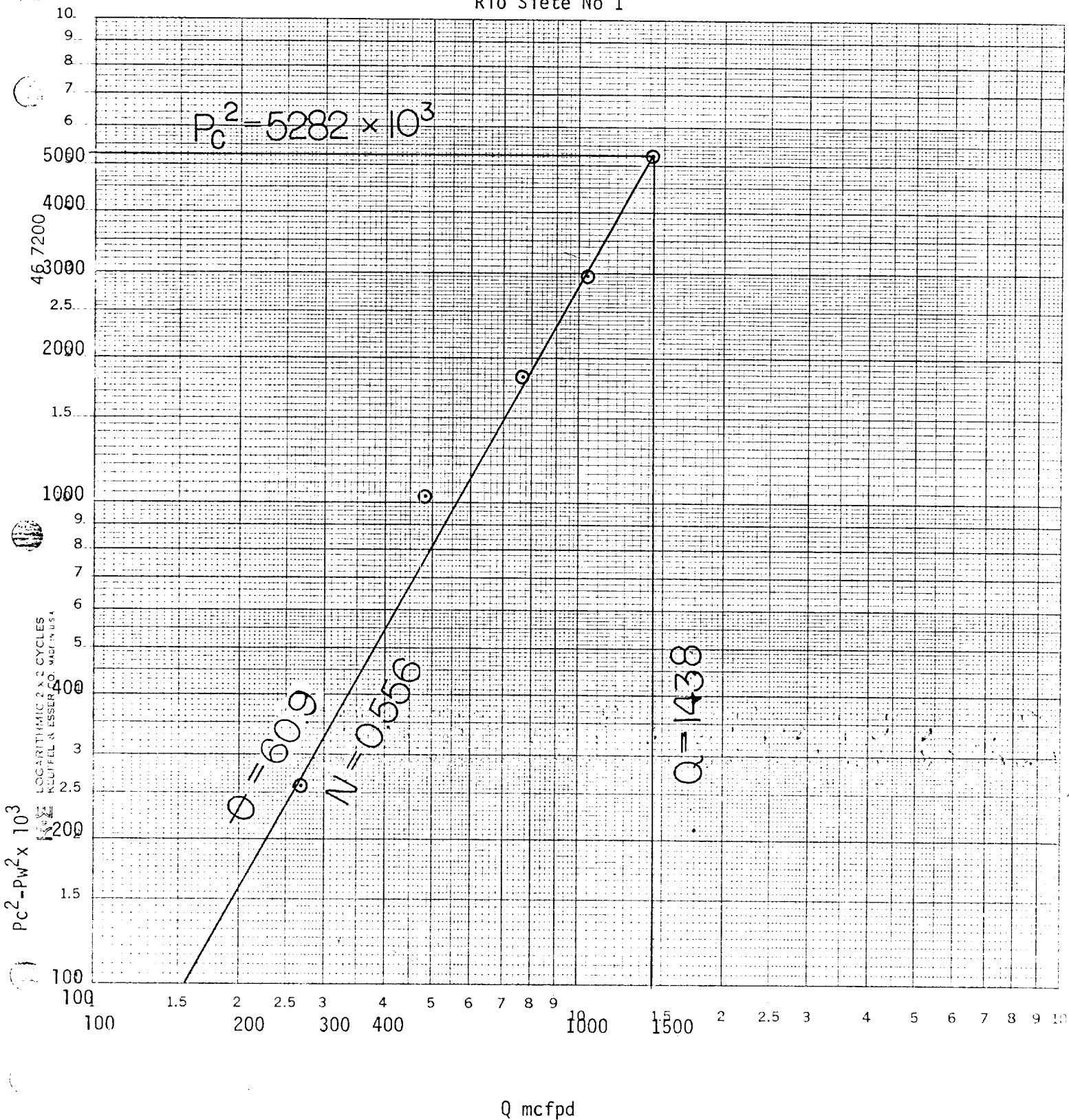
Remarks:

Approved By Commission:	Conducted By: John West Engineering	Calculated By: Regena Whitten	Checked By: L. W. Sheppard
-------------------------	--	----------------------------------	-------------------------------

3-NMOCD-A 1-Hou 1-Susp 1-DLB 1-LWS

AMOCO PRODUCTION COMPANY

Rio Siete No 1



SUGGESTED FIELD DATA SHEET (Not Required To File)

Type Test: Initial Annual Special Test Date: 6-11-1980 Lease No. or Serial No. _____

Company: Amaco Production Corporation Association: Natural Gas Pipeline Allottee _____

Field: Wildcat Reservoir: _____ Location: _____ Unit: _____

Completion Date: _____ Total Depth: 4250' Packer Set At: _____ Elevation: _____ Form or Lease Name: Rio Siete

Coq. Size: 2 1/2" WT. d. Set At: _____ Perforations: From _____ To 660' Well No. 1

Tbg. Size: 2 1/2" WT. d. Set At: _____ Perforations: From _____ To _____ Sec. 11 Twp.-Blk. 7203 R25E

Type Completion (Describe): Single Packer Set At _____ County or Parish: Eddy State: N.M.

Producing thru: _____ Reservoir Temp. F: _____ Meter Run: 3" FLANG

DATE	ELAP. TIME	Wellhead Working Pressure			METER OR PROVER				REMARKS
		Tbg. Psig.	Coq. Psig.	Temp. F	Pressure Psig.	Diff.	Temp. F	Orifice	
9:30		2295	Shut IN				174	4' 6 1/2" OF FLUID IN TANK - START	
9:45		2260		72°	74	6.25	74°	FIRST RATE - 4/64 CHOKE	
10:00		2255		72°	86	6.25	74°		
10:15		2238		72°	102	6.25	74°	265 MCF	
10:30	I	2238		72°	110	6.25	74°		
10:45		2160		72°	118	17.64	75°	SECOND RATE, - 6/64 CHOKE	
11:00		2140		72°	118	17.64	76°	780 GALS WITH CHOKE	
11:15		2100		72°	118	19.36	76°		
11:30	II	2055		73°	118	19.36	77°	481 MCF	
11:45		1964		74°	126	38.44	78°	THIRD RATE 8/64 CHOKE	
12:00		1928		74°	134	40.96	79°		
12:15		1883		74°	142	40.96	80°	760 MCF	
12:30	III	1848		74°	142	40.96	81°		
12:45		1712		74°	151	68.89	81°	FOURTH RATE 9/64 CHOKE	
1:00		1640		74°	160	67.29	81°	1029 MCF	
1:15		1549		74°	170	64	80°		
1:30	IV	1502		75°	170	64	80°	NO FLUID FLOW DURING PUMP DOWN	

Notes: Choke had to be lapped throughout test.

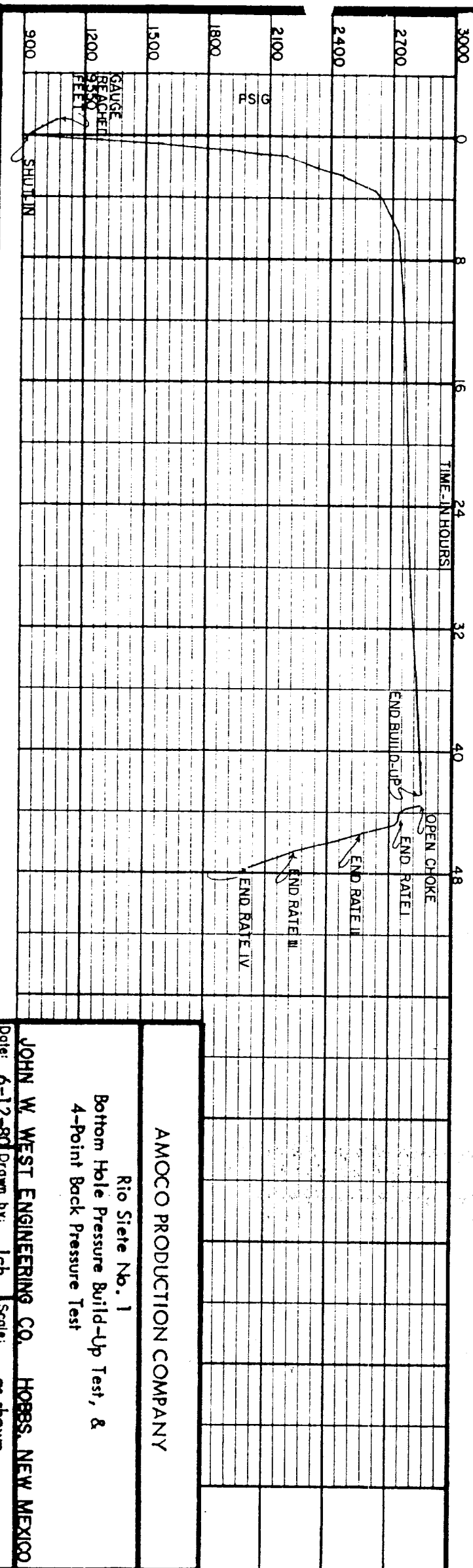
TEMP. 2-150
SINK 1200

By: *Green Hollow*

Test Date: June 9, to June 11, 1980
 Test Depth: 9550 Feet

Element No.: 34912
 Range: 0 - 8000 psi
 Clock No.: 22507
 Range: 72 Hours

NOTE: See following page for tabulation of times and pressures.



AMOCO PRODUCTION COMPANY

Rio Siete No. 1

Bottom Hole Pressure Build-Up Test, &
 4-Point Back Pressure Test

JOHN W. WEST ENGINEERING CO. HOBBS, NEW MEXICO

Date: 6-12-80 Drawn by: lch Scale: as shown

Amoco Production Company
 Rio Siete No. 1
 Bottom Hole Pressure Build-Up Test,
 & 4-Point Back Pressure Test
 Tabulation of Times and Pressures

Test Conducted By:
 John West Engineering Company

Test Date: June 9, to June 11, 1980
 Test Depth: 9550 Feet
 Element No.: 34912
 Operator: M.B.

<u>DATE</u>	<u>TIME</u>	<u>CUM. HRS. / MIN.</u>		<u>PSIG @ 9550 FEET</u>
6-9-80	1:00 PM			1062 Gauge reached 9550'; Flowing
	1:15 PM			1033
	1:30 PM			996
	1:45 PM			963
6-9-80	2:00 PM	00 Hrs.	00 Min.	934 Shut-In; Begin Build-Up
	2:15 PM	00	15	1285
	2:30 PM	00	30	1583
	2:45 PM	00	45	1802
	3:00 PM	01	00	1955
	3:15 PM	01	15	2049
	3:30 PM	01	30	2176
	3:45 PM	01	45	2274
	4:00 PM	02	00	2331
	4:15 PM	02	15	2392
	4:30 PM	02	30	2453
	4:45 PM	02	45	2498
	5:00 PM	03	00	2543
6-9-80	5:30 PM	03	30	2608
	6:00 PM	04	00	2645
	6:30 PM	04	30	2665
	7:00 PM	05	00	2686
6-9-80	8:00 PM	06	00	2710
	9:00 PM	07	00	2731
	10:00 PM	08	00	2739
6-10-80	12:00 Midnight	10	00	2759
6-10-80	5:00 AM	15	00	2763
	10:00 AM	20	00	2767
	3:00 PM	25	00	2780
	8:00 PM	30	00	2808
6-11-80	1:00 AM	35	00	2825
	6:00 AM	40	00	2841
6-11-80	9:00 AM	43	00	2853 End Build-Up
6-11-80	9:30 AM	43	30	2853 Open Choke; Begin 4-Point
	9:45 AM	43	45	2776
	10:00 AM	44	00	2759
	10:15 AM	44	15	2755
	10:30 AM	44	30	2751 End Rate I

Continued on following page

Amoco Production Company
 Rio Siete No. 1
 Bottom Hole Pressure Build-Up Test,
 & 4-Point Back Pressure Test
 Tabulation of Times and Pressures

Continued from preceding page

<u>DATE</u>	<u>TIME</u>	<u>CUM. HRS. / MIN.</u>		<u>PSIG @ 9550 FEET</u>
6-11-80	10:45 AM	44 Hrs.	45 Min.	2731
	11:00 AM	45	00	2637
	11:15 AM	45	15	2575
	11:30 AM	45	30	2539 End Rate II
6-11-80	11:45 AM	45	45	2457
	12:00 Noon	46	00	2363
	12:15 PM	46	15	2286
	12:30 PM	46	30	2253 End Rate III
6-11-80	12:45 PM	46	45	2192
	1:00 PM	47	00	2139
	1:15 PM	47	15	2090
	1:30 PM	47	30	2016 End Rate IV; End 4-Point; Gauge Out; End Test

BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR Amoco Production Company
 LEASE Rio Siete
 WELL NO. 1
 FIELD _____
 DATE 6-11-80 TIME 9:00 AM
 STATUS Shut-In TEST DEPTH 9550 Feet
 TIME S.I. _____ LAST TEST DATE _____
 CAS. PRES. _____ BHP LAST TEST _____
 TUB. PRES. 2295 psi P CHANGE _____
 ELEV. _____ FLUID TOP _____
 DATUM _____ WATER TOP _____
 TEMP _____ RUN BY M.B.
 CLOCK NO. 22507 GAUGE NO. 19389
 ELEMENT NO. 34912 (0-8000 psi)

DEPTH	PRESSURE	GRADIENT
000	2295	
9050	2771	.053
9450	2820	.123
9550	2853	.330

