TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name REIN "G" #16 Test No. 1 Date 8/31/93

Company OXY USA, INC. Zone ARBUCKLE

Address 110 S MAIN #800 WICHITA KS 67202 Elevation 1741

Co. Rep./Geo. HAROLD TRAPP Cont. DUKE DRLG CO RIG #1 Est. Ft. of Pay 3

Location: Sec. 8 Twp. 15S Rge. 13W Co. RUSSELL State KS

Interval Tested 3141-3192

Anchor Length 51

Top Packer Depth 3136

Bottom Packer Depth 3141

Total Depth 3192

Drill Pipe Size 4.5" FH

Wt. Pipe I.D. - 2.7 Ft. Run 441

Drill Collar – 2.25 Ft. Run

Mud Wt. 9.4 lb/Gal.

Viscosity 44 Filtrate 11.2

Tool Open @ 12:28 PM Initial Blow STRONG BLOW - BOTTOM OF BUCKET IN 30 SECONDS
(3/4" BLOW SHUTIN)

Final Blow STRONG-BOTTOM OF BUCKET IN 90 SECONDS
(SURFACE BLOW ON SHUTIN)

Recovery - Total Feet 2680 Flush Tool? NO

Rec. 370 Feet of GAS IN PIPE

Rec. 120 Feet of GSY WTR & MUD CUT OIL-30% GAS/ 40% OIL/ 25% WTR/5% MUD

Rec. 2440 Feet of GASSY WTR CUT OIL-45% GAS/ 40% OIL/ 15% WTR

Rec. Feet of (REVERSED INTO PIT)

Rec. 120 Feet of MUDDY WATER-20% MUD / 80% WTR

BHT 109 °F Gravity 39 °API @ 80 °F Corrected Gravity 37 °API

RW 0.24 @ 69 °F Chlorides 30000 ppm Recovery Chlorides ppm System

(A) Initial Hydrostatic Mud 1633.9 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 434.0 PSI @ (depth) 3148 w / Clock No. 8179

(C) First Final Flow Pressure 892.4 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 1085.6 PSI @ (depth) 3190 w / Clock No. 30401

(E) Second Initial Flow Pressure 972.6 PSI AK1 Recorder No. Range

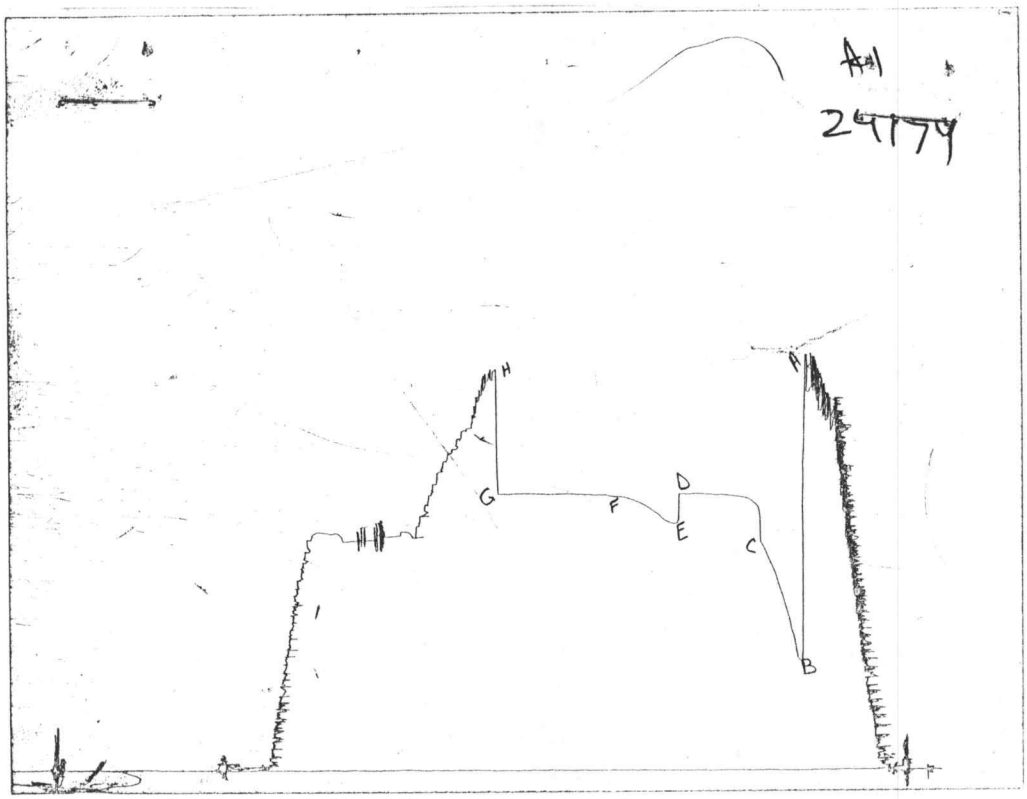
(F) Second Final Flow Pressure 1068.9 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 1083.4 PSI Initial Opening 30 Final Flow 45

(H) Final Hydrostatic Mud 1577.9 PSI Initial Shut-in 60 Final Shut-in 90

Our Representative PAUL SIMPSON

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1628	1633.9
(B) FIRST INITIAL FLOW PRESSURE	423	434
(C) FIRST FINAL FLOW PRESSURE	888	892.4
(D) INITIAL CLOSED-IN PRESSURE	1085	1085.6
(E) SECOND INITIAL FLOW PRESSURE	964	972.6
(F) SECOND FINAL FLOW PRESSURE	1085	1068.9
(G) FINAL CLOSED-IN PRESSURE	1085	1083.4
(H) FINAL HYDROSTATIC MUD	1575	1577.9

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

OXY USA, INC.

REIN "G" #16 DST 1

8 15S 13W RUSSELL KS

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ELEVATION:	1741 KB	EST. PAY	3	FT
DATUM:	-1450	ZONE TESTED:	ARBUCKLE	
TEST INTERVAL:	3141-3192	TIME INTERVALS:	30-60-45-90	
RECORDER DEPTH:	3190	VISCOSITY:	8.71	CP
BOTTOM HOLE TEMP:	109	HOLE SIZE:	7.875	IN

****

CUBIC FEET OF GAS IN PIPE:	30			
TOTAL FEET OF RECOVERY:	2680.00	CORRECTED PIPE FILLUP:	2936.538	
TOTAL BARRELS OF RECOVERY:	34.93	CORR. BARRELS OF RECOVERY:	38.580	BBL
BARRELS IN DRILL PIPE:	31.84	API GRAVITY:	37	
BARRELS IN WEIGHT PIPE:	3.09	FLUID GRADIENT:	0.364	
BARRELS IN DRILL COLLARS:	0.00			
GAS OIL RATIO:	0.85	CU.FT/BBL		
BUBBLE POINT PRESSURE:	10			
UNCORRECTED INITIAL PRODUCTION:			670.57	BBL
INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE:			740.74	BBL/DAY
INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE:			144.567	

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INITIAL SLOPE	27.50	PSI/CYCL	FINAL SLOPE	18.95	PSI/CYCLE
INITIAL P*	1090.31	PSI	FINAL P*	1088.35	PSI

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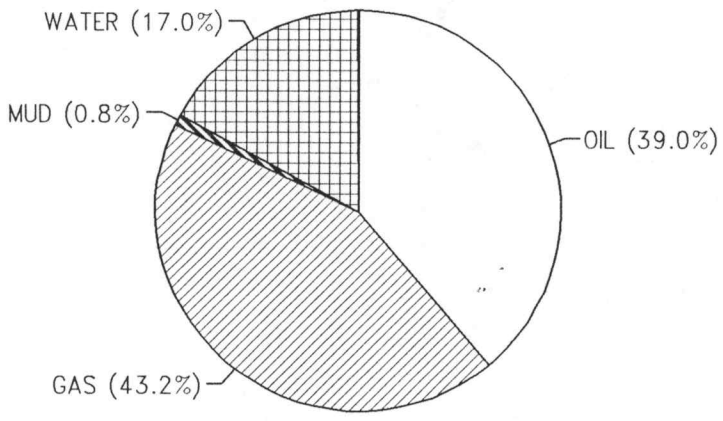
TRANSMISSIBILITY	6356.53	(MD.-FT./CP.)
PERMEABILITY	18446.63	(MD.)
INDICATED FLOW CAPACITY	55339.90	(MD.FT)
PRODUCTIVITY INDEX	7.18	(BARREL/DAY/PSI)
DAMAGE RATIO	0.19	
RADIUS OF INVESTIGATION	1176.22	(FT,)
POTENTIOMETRIC SURFACE	1074.88	(FT.)
DRAWDOWN FACTOR	0.180	(%)
THEORETICAL POTENTIAL FROM FINAL FLOW PRESSURE	0.00	
THEORETICAL POTENTIAL FROM PSEUDO STEADY FLOW STATE	0.00	

CALCULATED RECOVERY ANALYSIS

DST 1 TICKET # 6132

SAMPLE #	TOTAL FEET	GAS %	GAS FEET	OIL %	OIL FEET	WATER %	WATER FEET	MUD %	MUD FEET
DRILL 1	120	30	36	40	48	25	30	5	6
PIPE 2	2119	45	953.55	40	847.6	15	317.85	0	0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
6			0		0		0		0
WEIGHT 1	321	45	144.45	40	128.4	15	48.15	0	0
PIPE 2	120	0	0	0	0	80	96	20	24
3			0		0		0		0
4			0		0		0		0
DRILL 1			0		0		0		0
COLLAR 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	2680		1134		1024		492		30

			HRS OPEN	BBL/DAY
BBL OIL=	13.634232	*	1.25	261.77725
BBL WATER=	5.955477	*		114.34516
BBL MUD=	0.27252			
BBL GAS =	15.082551			



INITIAL FLOW

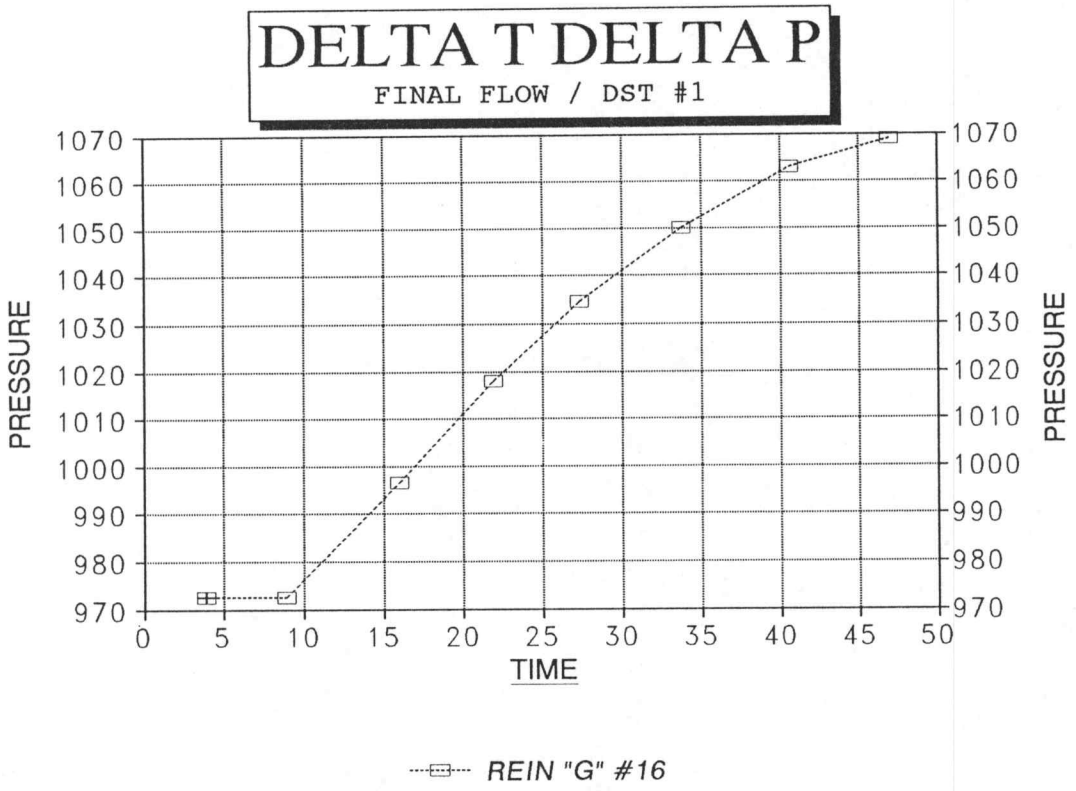
RECORDER 24174 DST # 1

TIME(MIN)	PRESSURE	<> PRESSURE
2.6	434.0	434.0
5.9	493.0	59.0
10.3	611.6	118.6
17	725.8	114.2
22.9	814.8	89.0
29.2	880.1	65.3
30.8	892.4	12.3

FINAL FLOW

RECORDER 24174 DST # 1

TIME(MIN)	PRESSURE	<> PRESSURE
3.9	972.6	972.6
8.9	972.6	0.0
16.2	996.6	24.0
21.9	1017.9	21.3
27.3	1034.7	16.8
33.8	1050.1	15.4
40.6	1062.9	12.8
47	1068.9	6.0



INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE: 144.567

REIN "G" #16 DST #1
INITIAL SHUTIN

30 INITIAL FLOW TIME

SLOPE 27.5 PSI/CYCLE
P* 1090.31 PSI

	TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
	0.8	1013.3	1.585	1013.3	38
	5.9	1050.4	0.784	37.1	6
	12.5	1069.2	0.531	18.8	3
	19	1073.1	0.411	3.9	3
	24.7	1074.8	0.345	1.7	2
	32.1	1080.8	0.287	6.0	2
	38.1	1082.1	0.252	1.3	2
	44.3	1084.7	0.225	2.6	2
X	49.8	1084.7	0.205	0.0	2
	56.8	1085.6	0.184	0.9	2
X	61.9	1085.6	0.172	0.0	1

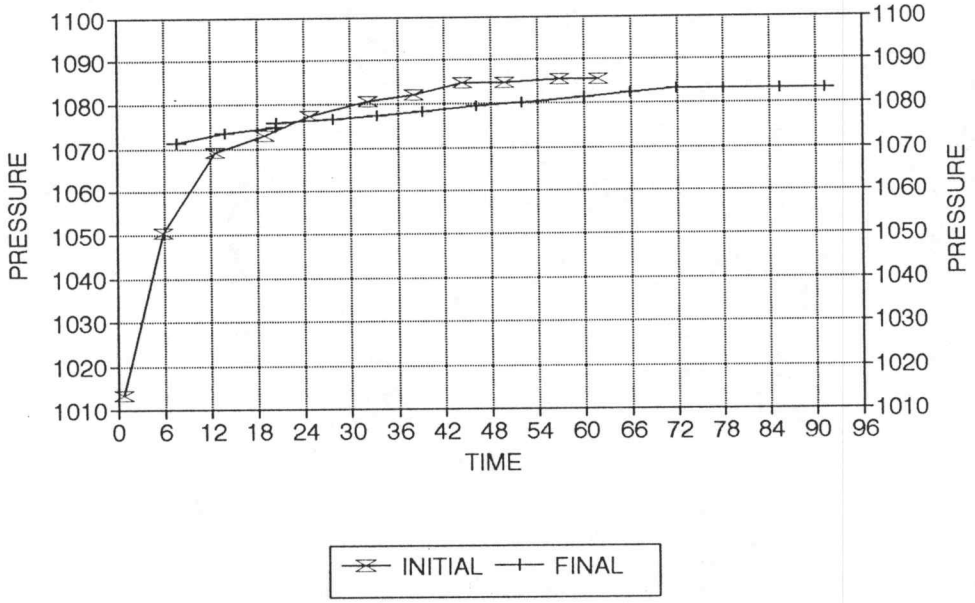
REIN "G" #16 DST #1
FINAL SHUTIN

75 TOTAL FLOW TIME

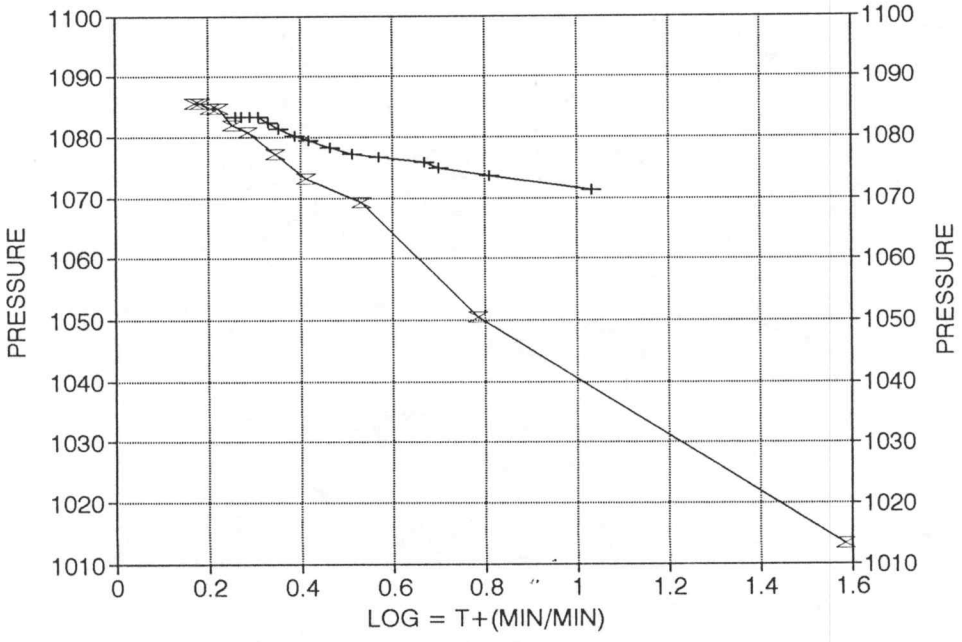
SLOPE 18.9 PSI/CYCLE
P* 1088.3 PSI

		Pws (psi)	Log Horn T	<> PRESSURE	Horn T
	7.7	1071.3	1.031	1071.3	11
	13.8	1073.6	0.809	2.3	6
	20.3	1074.9	0.672	1.3	5
	20.5	1075.8	0.668	0.9	5
	27.6	1076.7	0.570	0.9	4
	33.3	1077.2	0.512	0.5	3
	39.2	1078.2	0.464	1.0	3
	46.1	1079.5	0.419	1.3	3
	51.9	1080.2	0.388	0.7	2
	59.9	1081.4	0.353	1.2	2
X	65.9	1082.1	0.330	0.7	2
	71.9	1083.4	0.310	1.3	2
	78	1083.4	0.293	0.0	2
	85.3	1083.4	0.274	0.0	2
X	91.2	1083.4	0.261	0.0	2

REIN "G" #16 / DST #1
DELTA T DELTA P



HORNER PLOT



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 6132

Well Name & No. Rein 'G' #16 Test No. 1 Date 8-31-93

Company OXY USA, Inc Zone Tested Arbuckle

Address 110 S. Main # 800 Wichita, Ks 67202 Elevation 1741 GL

Co. Rep./Geo. Hardd Tropp Cont. Duke #1 Est. Ft. of Pay 3

Location: Sec. 8 Twp. 15s Rge. 13w Co. Russell State Ks

No. of Copies 5 (Normal) Distribution Sheet ____ Yes ____ No Turnkey ____ Yes ____ No yes Evaluation

Interval Tested 3141-3192 Drill Pipe Size 4½ FH

Anchor Length 51 Top Choke — 1" ____ Bottom Choke — ¾" ____

Top Packer Depth 3136 Hole Size — 7⅞" ____ Rubber Size — 6¾" ____

Bottom Packer Depth 3141 Wt. Pipe I.D. — 2.7 Ft. Run 441

Total Depth 3192 Drill Collar — 2.25 Ft. Run ____

Mud Wt. 9.4 lb / gal. Viscosity 44 Filtrate 11.2

Tool Open @ 12:28 PM Initial Blow strong blow - bottom of bucket in 30 seconds (3/4" blow on shutin)

Final Blow strong - bottom of bucket in 90 seconds (surface blow on shutin)

Recovery — Total Feet 2680 Feet of Gas in Pipe 370 Flush Tool? ____

Rec. 120	Feet Of	Gsy M&W CO	30	%gas 40	%oil 25	%water 5	%mud		
Rec. 2440	Feet Of	Gsy W CO	45	%gas 40	%oil 15	%water	%mud		
Rec. 120	Feet Of	Muddy water		%gas	%oil	%water	%mud		
Rec. ____	Feet Of			%gas	%oil	%water	%mud		
Rec. ____	Feet Of	reversed into pit		%gas	%oil	%water	%mud		

BHT 109 °F Gravity 39 °API @ 80 °F Corrected Gravity 37 °API

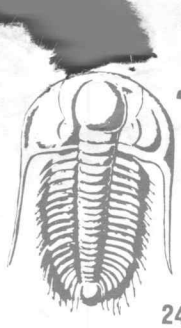
RW .24 @ 69 °F Chlorides 30,000 ppm Recovery Chlorides ____ ppm System

(A) Initial Hydrostatic Mud	1628 PSI	Ak1 Recorder No.	22150	Range	3925
(B) First Initial Flow Pressure	423 PSI	@ (depth)	3148	w/Clock No.	8179
(C) First Final Flow Pressure	888 PSI	AK1 Recorder No.	24174	Range	3050
(D) Initial Shut-In Pressure	1085 PSI	@ (depth)	3190	w/Clock No.	30401
(E) Second Initial Flow Pressure	964 PSI	AK1 Recorder No.	____	Range	____
(F) Second Final Flow Pressure	1085 PSI	@ (depth)	____	w/Clock No.	____
(G) Final Shut-In Pressure	1085 PSI	Initial Opening	30	Test	X 600
(H) Final Hydrostatic Mud	1575 PSI	Initial Shut-In	60	Jars	____
		Final Flow	45	Safety Joint	X 50
		Final Shut-In	90	Straddle	____
				Circ. Sub	X 35
				Sampler	____
				Extra Packer	____
				Other	oil cool
				TOTAL PRICE $	960.00

Approved By [signature] AFE

Our Representative Paul Simpson

Printcraft Printers - Hays, KS



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9-1-93

as per orders from Wichita office, distribution on the Kein "G" #16 as follows:

2 copies to Okl. Office
attn: David Smith

2 copies to Plainville Ks

1 copy to Wichita

Oxy - Ken "G" #16

2.687293	434.0262	1
5.933185	493.0848	1
10.3729	611.6099	1
17.01181	725.8415	1
22.98194	814.8945	1
29.29724	880.1365	1
30.85582	892.449	2
30.81366	1013.322	2
35.95618	1050.436	2
42.51343	1069.266	2
49.06941	1073.12	2
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62.18145	1080.828	2
68.17197	1082.104	2
74.31308	1084.717	2
79.87951	1084.059	2
86.80398	1085.688	2
91.93699	1082.404	2
93.98612	972.6335	3
98.94421	971.1552	3
106.2546	996.6737	3
111.9151	1017.924	3
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123.8279	1050.105	3
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142.7625	1071.341	3
148.8329	1073.633	3
155.3704	1076.1	3
155.5546	1074.987	4
162.6204	1077.26	4
168.3096	1075.861	4
174.248	1078.201	4
181.1018	1079.507	4
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194.9564	1078.234	4
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206.9803	1079.029	4
213.0172	1083.77	4
220.3102	1083.173	4
226.2207	1083.434	4

-30 min

-90

-135