

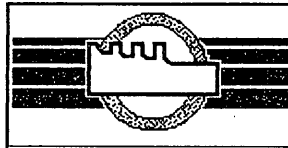
# EXPERTEST PTY. LTD.

A.C.N. 008 034 062

## Production Testing Report

### Test Details

Customer	Santos Ltd.
Well Name	Croft # 1
Formation	Waarre C
Perforations	6642' - 6656' KB
Type Of Test	Flow Test
Operator	N. Dover
Date Of Test	28/02/02
Reference Date	28/02/02
Reference Time	1405
Control No.	Croft 1 280202



## EXPERTEST PTY. LTD.

### Equipment Configuration

#### General

Customer: Santos Ltd.  
 Well Name: Croft # 1  
 Formation: Waarre C  
 Perforations: 6642' - 6656' KB  
 Type Of Test: Flow Test  
 Operator: N. Dover  
 Date Of Test: 28/02/02  
 Control No.: 0  
 Ref. Date: 28/02/02  
 Ref. Time: 1405

#### Metering

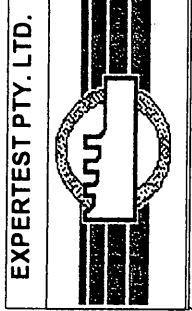
Orifice Meter Type: Daniel Senior  
 Meter Run Size: 2.9

#### Separator

Separator No.: 449  
 Static Pressure Range: 0-1500 PSIG  
 Differential Pressure Range: 0-200 In. WC  
 Standard Conditions: 14.75 @ 16 F

#### Tanks

No.	Unit No.	Capacity	Cap. Units	Scale	Scale Units
1	129a	8221	ltrs	1	1
2					
3					
4					



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# SEQUENCE OF EVENTS

<b>Customer:</b> Santos Ltd.	<b>Well Name:</b> Croft # 1	<b>Formation:</b> Waarre C
<b>Perforations:</b> 6642' - 6656' KB	<b>Type Of Test:</b> Flow Test	<b>Operator:</b> N. Dover
<b>Date Of Test:</b> 28/02/02		<b>Control No.:</b> 0

Date	Time	Description Of Events
28/02/02	0730	Arrive on location. Conduct toolbox safety meeting.
28/02/02	0740	Spot Test equipment and commence rig in.
28/02/02	1300	Complete test equipment rig in.
28/02/02	1330	Rig in wireline equipment.
28/02/02	1400	Prepare EMP-Q gauges for survey.
28/02/02	1415	Gauges in lubricator.
28/02/02	1418	Spartek gauge turned on.
28/02/02	1425	Rig in Spartek gauge and wellhead recorder.
28/02/02	1427	Pressure up lubricator.
28/02/02	1442	Run in hole with EMP-Q gauges performing SGS with stops at 1000' intervals.
28/02/02	1556	Arrive at hang depth of 6710'KB (50' below perfs). Secure wireline equipment.
28/02/02	1600	Complete final test equipment rig in.
28/02/02	1630	Pressure test lines to heater choke to full SITHP, pressure test lines to Separator inlet to 1000psi. All ok.
28/02/02	1650	Fire up and function test heater. Pre-warm water for testing.
28/02/02	1740	Secure location overnight.
01/03/02	0700	Arrive on location. Conduct toolbox safety meeting.
01/03/02	0710	Fire up and function test heater. Pre-warm water for testing.
01/03/02	0907	Open well to flare on 16/64ths choke.
01/03/02	0910	Trim flow through Separator.
01/03/02	0927	Pressure increase at wellhead. Rock choke.
01/03/02	0928	Possible perforation debris in choke, pressure building, continue to rock choke.
01/03/02	0937	Increase choke to 32/64ths and attempt to clean up well.
01/03/02	0940	Choke at 32/64ths.
01/03/02	1115	Decrease choke to 16/64ths for first rate. Trim flow through separator.
01/03/02	1130	Commence first rate. 1.75" orifice plate in service.
01/03/02	1245	Co2 reading = 5%, H2s reading = 0 ppm.
01/03/02	1335	Commence dumping fluids to test tank.
01/03/02	1400	Oil API gravity from Hydrometer - 57.2 @ 60 F.
01/03/02	1600	Shut well in for buildup. End of first rate test. Secure location overnight.
02/03/02	0650	Arrive on location. Conduct toolbox safety meeting.
02/03/02	0700	Start heater and pre-heat water for test.

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## SEQUENCE OF EVENTS

<b>Customer:</b> Santos Ltd	Well Name	Croft # 1	Formation: Waarre C
<b>Perforations:</b> 6642' - 6656' KB	Type Of Test:	Flow Test	Operator: N. Dover
<b>Date Of Test:</b> 28/02/02			Control No.: 0

Date	Time	Description Of Events
------	------	-----------------------

02/03/02	0900	Open well to flare on a 20/64ths choke.
02/03/02	0910	Trim flow through separator.
02/03/02	0915	Commence test. 2.25" orifice plate in service.
02/03/02	0950	Increase choke to 24/64ths to attain flow rate of approx 10 mmscf/d.
02/03/02	1200	Obtain first set of HP samples. HP Oil # 469 - HP Gas # 465. Sample pressure 704 psia.
02/03/02	1300	Obtain 2nd set of HP samples HP Oil # 428, HP Gas # 427, Sample pressure 709 psi. Obtain 2 LP H2O samples.
02/03/02	1335	Increase choke to 32/64ths for third rate.
02/03/02	1600	End test. Shut well in for build-up.
02/03/02	1610	Dump fluids from separator to test tank. Measured 250 litres of water produced during 3 rate test.
02/03/02	1620	Commence rigging out test equipment.
02/03/02	1800	Secure location overnight.
03/03/02	0700	Arrive on location. Conduct toolbox safety meeting.
03/03/02	0734	POOH with gauges performing SGS to surface with 1000' stops.
03/03/02	0854	At Surface with gauges.
03/03/02	0909	Depressure lubricator, rig out gauges. Rig out wireline equipment.
03/03/02	0945	Download gauges and generate reports. Complete rig out of test equipment.

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# FIELD READINGS

Customer:	Santos Ltd.	Well Name:	Croft # 1	Formation:	Waarre C
Perforations:	6642' - 6656' KB	Type Of Test:	Flow Test	Operator:	N. Dover
Date Of Test:	28/02/02			Control No.:	0

TIME		WELLHEAD DATA					SEPARATOR DATA					LIQUID PRODUCTION			
		Time	Elapsed Time (Hours)	Pressures	Well-Head Temp	Choke Size	BS Orifice & W Plate (%) (Inch)	Static Pressure	Differential Pressure	Gas Temp	Tnk No.	Total Liquid	Oil Dip	Water Dip	Units
28/02/02	0730		-6.5833	Arrive on location. Conduct toolbox safety meeting.											
28/02/02	0740		-6.4167	Spot Test equipment and commence rig in.											
28/02/02	1300		-1.0833	Complete test equipment rig in.											
28/02/02	1330		-0.5833	Rig in wireline equipment.											
28/02/02	1400		-0.0833	Prepare EMP-Q gauges for survey.											
28/02/02	1415		0.1667	Gauges in lubricator.											
28/02/02	1418		0.2167	Spartek gauge turned on.											
28/02/02	1425		0.3333	Rig in Spartek gauge and wellhead recorder.											
28/02/02	1427		0.3667	2390	0 PSI	16 °C									
28/02/02	1427		0.3667	Pressure up lubricator.											
28/02/02	1442		0.6167	2390	0 PSI	16 °C									
28/02/02	1442		0.6167	RIH with EMP-Q gauges performing SGS with stops at 1000' intervals.											
28/02/02	1556		1.8500	2389	0 PSI	17 °C									
28/02/02	1556		1.8500	Arrive at hang depth of 6710KB (50' below perms). Secure wireline equipment.											
28/02/02	1600		1.9167	Complete final test equipment rig in.											
28/02/02	1630		2.4167	2389	0 PSI	17 °C									
28/02/02	1630		2.4167	Pressure test lines to heater choke to full SITHP, pressure test lines to Separator inlet to 1000psi. All ok.											
28/02/02	1650		2.7500	Fire up and function test heater. Pre-warm water for testing.											
28/02/02	1740		3.5833	Secure location overnight.											
01/03/02	0907		19.0333	2389	0 PSI	13 °C									
01/03/02	0907		19.0333	Open well to flare on 16/64ths choke.											
01/03/02	0910		19.0833	Trim flow through Separator.											
01/03/02	0920		19.2500	2364	0 PSI	13 °C	16	64th							
01/03/02	0924		19.3167	2372	0 PSI	13 °C	16	64th							
01/03/02	0927		19.3667	2373	0 PSI	13 °C	16	64th							
01/03/02	0927		19.3667	Pressure increase at wellhead. Rock choke											
01/03/02	0928		19.3833	2362	0 PSI	13 °C	16	64th							

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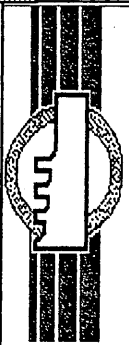


# FIELD READINGS

**Customer:** Santos Ltd. **Well Name:** Croft # 1 **Formation:** Waarre C  
**Perforations:** 6642' - 6656' KB **Type Of Test:** Flow Test **Operator:** N. Dover  
**Date Of Test:** 28/02/02 **Control No.:** 0

TIME		WELLHEAD DATA				SEPARATOR DATA				LIQUID PRODUCTION				
Date	Time Elapsed (Hours)	Pressures Tubing Casing Units	Well-Head Temp.	Choke Size	BS Orifice Spec. &W Plate (%) (Inch)	Static Pressure	Differential Pressure	Gas Temp	Tnk No.	Total Liquid	Oil Dip	Water Dip	Dip Units	
01/03/02	0928	Possible perforation debris in choke, pressure building, continue to rock choke.												
01/03/02	0937	0 PSI	15 °C	16 64th										
01/03/02	0937	Increase choke to 32/64ths and attempt to clean up well.												
01/03/02	0940	0 PSI	12 °C	32 64th										
01/03/02	0940	Choke at 32/64ths.												
01/03/02	0943	0 PSI	12 °C	32 64th										
01/03/02	0945	0 PSI	12 °C	32 64th										
01/03/02	0950	0 PSI	12 °C	32 64th										
01/03/02	1000	0 PSI	13 °C	32 64th										
01/03/02	1050	0 PSI	14 °C	32 64th										
01/03/02	1100	0 PSI	14 °C	32 64th										
01/03/02	1115	0 PSI	15 °C	32 64th										
01/03/02	1115	Decrease choke to 16/64ths for first rate. Trim flow through separator.												
01/03/02	1120	0 PSI	15 °C	16 64th	1.750	0.7								
01/03/02	1130	0 PSI	15 °C	16 64th	1.750	0.7								
01/03/02	1130	Commence first rate. 1.75" orifice plate in service.												
01/03/02	1159			16 64th	1.750	0.7			1	80.00	0.00	80.00	Ltrs	
01/03/02	1200	0 PSI	14 °C	16 64th	1.750	0.7	704 PSI	115 In WC	35 °C	80.00	0.00	80.00	Ltrs	
01/03/02	1215	0 PSI	14 °C	16 64th	1.750	0.7	705 PSI	115 In WC	35 °C	80.00	0.00	80.00	Ltrs	
01/03/02	1230	0 PSI	13 °C	16 64th	1.750	0.7	707 PSI	115 In WC	34 °C	80.00	0.00	80.00	Ltrs	
01/03/02	1245	0 PSI	15 °C	16 64th	1.750	0.7	708 PSI	115 In WC	35 °C	80.00	0.00	80.00	Ltrs	
01/03/02	1245	Co2 reading = 5%, H2s reading = 0 ppm.												
01/03/02	1300	0 PSI	16 °C	16 64th	1.750	0.7	708 PSI	116 In WC	35 °C	80.00	0.00	80.00	Ltrs	
01/03/02	1315	0 PSI	14 °C	16 64th	1.750	0.7	709 PSI	116 In WC	32 °C	80.00	0.00	80.00	Ltrs	
01/03/02	1330	0 PSI	15 °C	16 64th	1.750	0.7	708 PSI	116 In WC	32 °C	80.00	0.00	80.00	Ltrs	
01/03/02	1335	Commence dumping fluids to test tank.												
01/03/02	1345	0 PSI	18 °C	16 64th	1.750	0.7	705 PSI	115 In WC	32 °C	160.00	80.00	80.00	Ltrs	

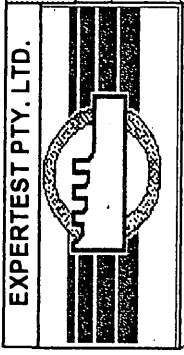




# FIELD READINGS

Customer: Santos Ltd.	Well Name: Croft # 1	Formation: Waarre C
Perforations: 6642 - 6656' KB	Type Of Test: Flow Test	Operator: N. Dover
Date Of Test: 28/02/02		Control No.: Croft 1 280202

Date	Time	WELLHEAD DATA				SEPARATOR DATA				LIQUID PRODUCTION							
		Elapsed Time (Hours)	Pressures	Well-Head Temp.	Choke Size	BS &W (%)	Orifice Plate (Inch)	Spec. Grav.	Static Pressure	Differential Pressure	Gas Temp	Tnk No.	Total Liquid	Oil Dip	Water Dip	Dip Units	
01/03/02	1400	23.9167	0 PSI	18 °C	16 64th	0.7	1.750	0.7	706 PSI	116 In WC	33 °C	1	240.00	160.00	80.00	Ltrs	
01/03/02	1400	23.9167	Oil API gravity from Hydrometer - 57.2 @ 60 F.														
01/03/02	1415	24.1667	0 PSI	16 °C	16 64th	0.7	1.750	0.7	706 PSI	116 In WC	33 °C	1	300.00	220.00	80.00	Ltrs	
01/03/02	1430	24.4167	0 PSI	16 °C	16 64th	0.7	1.750	0.7	708 PSI	116 In WC	34 °C	1	340.00	260.00	80.00	Ltrs	
01/03/02	1445	24.6667	0 PSI	17 °C	16 64th	0.7	1.750	0.7	709 PSI	116 In WC	34 °C	1	400.00	320.00	80.00	Ltrs	
01/03/02	1500	24.9167	0 PSI	17 °C	16 64th	0.7	1.750	0.7	709 PSI	116 In WC	35 °C	1	460.00	380.00	80.00	Ltrs	
01/03/02	1515	25.1667	0 PSI	16 °C	16 64th	0.7	1.750	0.7	710 PSI	116 In WC	35 °C	1	520.00	440.00	80.00	Ltrs	
01/03/02	1530	25.4167	0 PSI	17 °C	16 64th	0.7	1.750	0.7	710 PSI	116 In WC	35 °C	1	580.00	500.00	80.00	Ltrs	
01/03/02	1545	25.6667	0 PSI	17 °C	16 64th	0.7	1.750	0.7	710 PSI	116 In WC	35 °C	1	640.00	560.00	80.00	Ltrs	
01/03/02	1600	25.9167	0 PSI	16 °C	16 64th	0.7	1.750	0.7	710 PSI	116 In WC	35 °C	1	700.00	620.00	80.00	Ltrs	
01/03/02	1600	25.9167	Shut well in for buildup. End of first rate test. Secure location overnight.														
02/03/02	0650	40.7500	Arrive on location. Conduct toolbox safety meeting.														
02/03/02	0700	40.9167	Start heater and pre-heat water for test.														
02/03/02	0900	42.9167	0 PSI	13 °C	20 64th												
02/03/02	0900	42.9167	Open well to flare on a 20/64ths choke.														
02/03/02	0910	43.0833	0 PSI	14 °C	20 64th												
02/03/02	0910	43.0833	Trim flow through separator.														
02/03/02	0915	43.1667	0 PSI	14 °C	20 64th												
02/03/02	0915	43.1667	Commence test. 2.25" orifice plate in service.														
02/03/02	0916	43.1833			20 64th	0.7	2.250	0.7	0 PSI	0 In WC	0 °C	1	700.00	620.00	80.00	Ltrs	
02/03/02	0930	43.4167	0 PSI	14 °C	20 64th	0.7	2.250	0.7	558 PSI	84 In WC	26 °C	1	700.00	620.00	80.00	Ltrs	
02/03/02	0945	43.6667	0 PSI	14 °C	20 64th	0.7	2.250	0.7	556 PSI	84 In WC	25 °C	1	780.00	700.00	80.00	Ltrs	
02/03/02	0950	43.7500	Increase choke to 24/64ths to attain flow rate of approx 10 mmscfd.														
02/03/02	1000	43.9167	0 PSI	15 °C	24 64th	0.7	2.250	0.7	697 PSI	116 In WC	24 °C	1	950.00	870.00	80.00	Ltrs	
02/03/02	1015	44.1667	0 PSI	15 °C	24 64th	0.7	2.250	0.7	699 PSI	117 In WC	25 °C	1	1100.00	1020.00	80.00	Ltrs	
02/03/02	1030	44.4167	0 PSI	16 °C	24 64th	0.7	2.250	0.7	695 PSI	117 In WC	26 °C	1	1280.00	1200.00	80.00	Ltrs	
02/03/02	1100	44.9167	0 PSI	15 °C	24 64th	0.7	2.250	0.7	695 PSI	117 In WC	28 °C	1	1590.00	1510.00	80.00	Ltrs	



# FIELD READINGS

Customer:	Santos Ltd.	Well Name:	Croft # 1
Perforations:	6642' - 6656' KB	Type Of Test:	Flow Test
Date Of Test:	28/02/02	Formation:	Waarre C
		Operator:	N. Dover
		Control No.:	Croft 1 280202

TIME		WELLHEAD DATA						SEPARATOR DATA						LIQUID PRODUCTION			
		Pressure	Well-Head Temp	Choke Size	BS & W (%)	Orifice Plate (Inch)	Spec. Grav.	Static Pressure	Differential Pressure	Gas Temp	Tnk No	Total Liquid	Oil Dip	Water Dip	Dip Units		
02/03/02	1115	0 PSI	17 °C	24 64th		2.250	0.7	695 PSI	117 In WC	30 °C	1	1720.00	1640.00	80.00			
02/03/02	1130	0 PSI	17 °C	24 64th		2.250	0.7	695 PSI	117 In WC	30 °C	1	1850.00	1770.00	80.00			
02/03/02	1145	0 PSI	15 °C	24 64th		2.250	0.7	697 PSI	118 In WC	31 °C	1	1960.00	1880.00	80.00			
02/03/02	1200	0 PSI	17 °C	24 64th		2.250	0.7	697 PSI	118 In WC	32 °C	1	2080.00	2000.00	80.00			
02/03/02	1200	Obtain first set of HP samples. HP Oil # 469 - HP Gas # 465. Sample pressure 704 psia.															
02/03/02	1215	0 PSI	18 °C	24 64th		2.250	0.7	698 PSI	118 In WC	33 °C	1	2210.00	2130.00	80.00			
02/03/02	1230	0 PSI	19 °C	24 64th		2.250	0.7	698 PSI	118 In WC	34 °C	1	2310.00	2230.00	80.00			
02/03/02	1245	0 PSI	19 °C	24 64th		2.250	0.7	698 PSI	118 In WC	34 °C	1	2420.00	2340.00	80.00			
02/03/02	1300	0 PSI	18 °C	24 64th		2.250	0.7	698 PSI	118 In WC	35 °C	1	2500.00	2420.00	80.00			
02/03/02	1300	Obtain 2nd set of HP samples HP Oil # 428, HP Gas # 427, Sample pressure 709 psi. Obtain 2 LP H2O samples.															
02/03/02	1315	0 PSI	17 °C	24 64th		2.250	0.7	699 PSI	119 In WC	35 °C	1	2680.00	2600.00	80.00			
02/03/02	1330	0 PSI	18 °C	24 64th		2.250	0.7	699 PSI	119 In WC	35 °C	1	2780.00	2700.00	80.00			
02/03/02	1335	Increase choke to 32/64ths for third rate.															
02/03/02	1345	0 PSI	17 °C	32 64th		2.250	0.7	1044 PSI	177 In WC	37 °C	1	2950.00	2870.00	80.00			
02/03/02	1400	0 PSI	16 °C	32 64th		2.250	0.7	1047 PSI	176 In WC	37 °C	1	3100.00	3020.00	80.00			
02/03/02	1415	0 PSI	17 °C	32 64th		2.250	0.7	1042 PSI	176 In WC	36 °C	1	3300.00	3220.00	80.00			
02/03/02	1430	0 PSI	17 °C	32 64th		2.250	0.7	1042 PSI	176 In WC	36 °C	1	3400.00	3320.00	80.00			
02/03/02	1445	0 PSI	18 °C	32 64th		2.250	0.7	1045 PSI	176 In WC	37 °C	1	3580.00	3500.00	80.00			
02/03/02	1500	0 PSI	19 °C	32 64th		2.250	0.7	1043 PSI	176 In WC	37 °C	1	3780.00	3700.00	80.00			
02/03/02	1530	0 PSI	17 °C	32 64th		2.250	0.7	1040 PSI	176 In WC	38 °C	1	4100.00	4020.00	80.00			
02/03/02	1545	0 PSI	17 °C	32 64th		2.250	0.7	1046 PSI	176 In WC	38 °C	1	4240.00	4160.00	80.00			
02/03/02	1600	0 PSI	17 °C	32 64th		2.250	0.7	1040 PSI	176 In WC	38 °C	1	4380.00	4300.00	80.00			
02/03/02	1600	End test. Shut well in for build-up.															
02/03/02	1610	Dump fluids from separator to test tank. Measured 250 litres of water produced during 3 rate test.															
02/03/02	1620	Commence rigging out test equipment.															
02/03/02	1800	Secure location overnight.															
03/03/02	0700	Arrive on location. Conduct toolbox safety meeting.															





# FIELD READINGS

Customer: Santos Ltd. Well Name: Croft # 1 Formation: Waarre C  
 Perforations: 6642' - 6656' KB Type Of Test: Flow Test Operator: N. Dover  
 Date Of Test: 28/02/02 Control No.: 0

TIME		WELLHEAD DATA				SEPARATOR DATA					LIQUID PRODUCTION				
		Date	Time Elapsed (Hours)	Pressures Tubing Casing Units	Well-Head Temp	Choke Size	BS Orifice Spec. & W Plate (%) (Inch)	Static Pressure	Differential Pressure	Gas Temp	Tnk No.	Total Liquid	Oil Dip	Water Dip	Units
03/03/02	0734	65.4833	2395	0 PSI											
POOH with gauges performing SGS to surface with 1000' stops.															
03/03/02	0734	65.4833													
03/03/02	0854	66.8167	2394	0 PSI											
At Surface with gauges.															
03/03/02	0854	66.8167													
03/03/02	0909	67.0667	2394	0 PSI											
Depressure lubricator, rig out gauges. Rig out wireline equipment.															
03/03/02	0909	67.0667													

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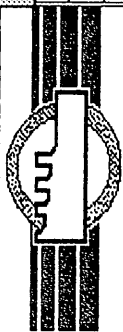
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# TEST RESULTS

**Customer:** Santos Ltd.    **Well Name:** Croft # 1    **Formation:** Waarre C  
**Perforations:** 6642' - 6656' KB    **Type Of Test:** Flow Test    **Operator:** N. Dover  
**Date Of Test:** 28/02/02    **Control No.:** 0

Date	Time	Elapsed Time (Hours)	WELLHEAD DATA			SEPARATOR		FLOW RATES			CUMULATIVE PRODUCTION						
			Tubing Pressure (kPa)	Annulus Pressure (kPa)	Wellhead Temp (°C)	Choke Size (64fh)	Pressure (kPa)	Temp (°C)	Gas Flow Rate (m³10³/D)	Oil Flow Rate (m³/D)	Water Flow Rate (m³/D)	Gas (m³)	Oil (m³)	Water (m³)	W.G.R. (m³/10³m³)		
28/02/02	1427	-16.5500	16479	0	16												
28/02/02	1442	-16.3000	16479	0	16												
28/02/02	1556	-15.0667	16472	0	17												
28/02/02	1630	-14.5000	16472	0	17												
01/03/02	0907	2.1167	16472	0	13												
01/03/02	0920	2.3333	16299	0	13	16											
01/03/02	0924	2.4000	16354	0	13	16											
01/03/02	0927	2.4500	16361	0	13	16											
01/03/02	0928	2.4667	16286	0	13	16											
01/03/02	0937	2.6167	16320	0	15	16											
01/03/02	0940	2.6667	14893	0	12	32											
01/03/02	0943	2.7167	14886	0	12	32											
01/03/02	0945	2.7500	14913	0	12	32											
01/03/02	0950	2.8333	14962	0	12	32											
01/03/02	1000	3.0000	15017	0	13	32											
01/03/02	1050	3.8333	15148	0	14	32											
01/03/02	1100	4.0000	15162	0	14	32											
01/03/02	1115	4.2500	15175	0	15	32											
01/03/02	1120	4.3333	16548	0	15	16											
01/03/02	1130	4.5000	16527	0	15	16											
01/03/02	1159	4.9833				16											
01/03/02	1200	5.0000	16485	0	14	16	4854	35	163.070	0.00	0.00	0.00	33.97	0.00	0.00	0.00	
01/03/02	1215	5.2500	16479	0	14	16	4861	35	163.199	0.00	0.00	0.00	35.67	0.00	0.00	0.00	
01/03/02	1230	5.5000	16472	0	13	16	4875	34	163.863	0.00	0.00	0.00	37.38	0.00	0.00	0.00	
01/03/02	1245	5.7500	16465	0	15	16	4882	35	163.586	0.00	0.00	0.00	39.08	0.00	0.00	0.00	
01/03/02	1300	6.0000	16465	0	16	16	4882	35	164.297	0.00	0.00	0.00	40.80	0.00	0.00	0.00	



# TEST RESULTS

**Customer:** Santos Ltd.      **Well Name:** Croft # 1      **Formation:** Waarre C  
**Perforations:** 6642' - 6656' KB      **Type Of Test:** Flow Test      **Operator:** N. Dover  
**Date Of Test:** 28/02/02      **Control No.:** 0

Date	Time	Elapsed Time (Hours)	WELLHEAD DATA			SEPARATOR		FLOW RATES			CUMULATIVE PRODUCTION				
			Tubing Pressure (kPa)	Annulus Pressure (kPa)	Wellhead Temp (°C)	Choke Size (64th)	Pressure (kPa)	Temp (°C)	Gas Flow Rate (m³10³/D)	Oil Flow Rate (m³/D)	Water Flow Rate (m³/D)	Gas (m³10³)	Oil (m³)	Water (m³)	W.G.R. (m³/10³m³)
01/03/02	1315	6.2500	16451	0	14	16	4888	32	165.666	0.00	0.00	42.52	0.00	0.00	
01/03/02	1330	6.5000	16451	0	15	16	4882	32	165.535	0.00	0.00	44.25	0.00	0.00	
01/03/02	1345	6.7500	16444	0	18	16	4861	32	164.427	7.68	0.00	45.96	0.08	0.00	
01/03/02	1400	7.0000	16451	0	18	16	4868	33	164.857	7.68	0.00	47.68	0.16	0.00	
01/03/02	1415	7.2500	16451	0	16	16	4868	33	164.857	5.76	0.00	49.39	0.22	0.00	
01/03/02	1430	7.5000	16451	0	16	16	4882	34	164.705	3.84	0.00	51.11	0.26	0.00	
01/03/02	1445	7.7500	16451	0	17	16	4888	34	164.835	5.76	0.00	52.83	0.32	0.00	
01/03/02	1500	8.0000	16458	0	17	16	4888	35	164.426	5.76	0.00	54.54	0.38	0.00	
01/03/02	1515	8.2500	16458	0	16	16	4895	35	164.555	5.76	0.00	56.25	0.44	0.00	
01/03/02	1530	8.5000	16458	0	17	16	4895	35	164.555	5.76	0.00	57.97	0.50	0.00	
01/03/02	1545	8.7500	16458	0	17	16	4895	35	164.555	5.76	0.00	59.68	0.56	0.00	
01/03/02	1600	9.0000	16458	0	16	16	4895	35	164.555	5.76	0.00	61.39	0.62	0.00	
02/03/02	0900	26.0000	16492	0	13	20									
02/03/02	0910	26.1667	16127	0	14	20									
02/03/02	0915	26.2500	16141	0	14	20									
02/03/02	0916	26.2667				20	0	0	0.000	0.00	0.00	61.39	0.62	0.00	
02/03/02	0930	26.5000	16175	0	14	20	3847	26	241.155	0.00	0.00	63.74	0.62	0.00	
02/03/02	0945	26.7500	16196	0	14	20	3834	25	241.264	7.68	0.00	66.25	0.70	0.00	
02/03/02	1000	27.0000	15906	0	15	24	4806	24	322.523	16.32	0.00	69.61	0.87	0.00	
02/03/02	1015	27.2500	15934	0	15	24	4819	25	323.568	14.40	0.00	72.98	1.02	0.00	
02/03/02	1030	27.5000	15955	0	16	24	4792	26	321.659	17.28	0.00	76.33	1.20	0.00	
02/03/02	1100	28.0000	15975	0	15	24	4792	28	319.975	14.88	0.00	83.00	1.51	0.00	
02/03/02	1115	28.2500	15982	0	17	24	4792	30	318.329	12.48	0.00	86.32	1.64	0.00	
02/03/02	1130	28.5000	15989	0	17	24	4792	30	318.329	12.48	0.00	89.63	1.77	0.00	
02/03/02	1145	28.7500	15996	0	15	24	4806	31	319.389	10.56	0.00	92.96	1.88	0.00	
02/03/02	1200	29.0000	15996	0	17	24	4806	32	318.583	11.52	0.00	96.28	2.00	0.00	



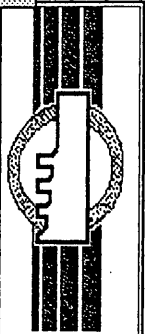
# TEST RESULTS

**Customer:** Santos Ltd.    **Well Name:** Croft # 1    **Formation:** Waarre C  
**Perforations:** 6642' - 6656' KB    **Type Of Test:** Flow Test    **Operator:** N. Dover  
**Date Of Test:** 28/02/02    **Control No.:** 0

Date	TIME		Elapsed Time (Hours)	WELLHEAD DATA			SEPARATOR		FLOW RATES			CUMULATIVE PRODUCTION			W.G.R. (m <sup>3</sup> /10 <sup>6</sup> m <sup>2</sup> )
	Time	Time		Tubing Pressure (kPa)	Annulus Pressure (kPa)	Wellhead Temp (°C)	Choke Size (64th)	Pressure (kPa)	Temp (°C)	Gas Flow Rate (m <sup>3</sup> 10 <sup>3</sup> /D)	Oil Flow Rate (m <sup>3</sup> /D)	Water Flow Rate (m <sup>3</sup> /D)	Gas (m <sup>3</sup> )	Oil (m <sup>3</sup> )	
02/03/02	1215		29.2500	16003	0	18	24	4813	33	318.040	12.48	0.00	99.59	2.13	0.00
02/03/02	1230		29.5000	16010	0	19	24	4813	34	317.250	9.60	0.00	102.89	2.23	0.00
02/03/02	1245		29.7500	16010	0	19	24	4813	34	317.250	10.56	0.00	106.20	2.34	0.00
02/03/02	1300		30.0000	16010	0	18	24	4813	35	316.468	7.68	0.00	109.50	2.42	0.00
02/03/02	1315		30.2500	16017	0	17	24	4819	35	318.061	17.28	0.00	112.81	2.60	0.00
02/03/02	1330		30.5000	16017	0	18	24	4819	35	318.061	9.60	0.00	116.12	2.70	0.00
02/03/02	1345		30.7500	15155	0	17	32	7198	37	485.324	16.32	0.00	121.18	2.87	0.00
02/03/02	1400		31.0000	15162	0	16	32	7219	37	484.764	14.40	0.00	126.23	3.02	0.00
02/03/02	1415		31.2500	15169	0	17	32	7184	36	484.834	19.20	0.00	131.28	3.22	0.00
02/03/02	1430		31.5000	15169	0	17	32	7184	36	484.834	9.60	0.00	136.33	3.32	0.00
02/03/02	1445		31.7500	15175	0	18	32	7205	37	484.221	17.28	0.00	141.37	3.50	0.00
02/03/02	1500		32.0000	15182	0	19	32	7191	37	483.678	19.20	0.00	146.41	3.70	0.00
02/03/02	1530		32.5000	15182	0	17	32	7171	38	481.458	15.36	0.00	156.44	4.02	0.00
02/03/02	1545		32.7500	15189	0	17	32	7212	38	483.078	13.44	0.00	161.47	4.16	0.00
02/03/02	1600		33.0000	15189	0	17	32	7171	38	481.458	13.44	0.00	166.49	4.30	0.00
03/03/02	0734		48.5667	16513	0										
03/03/02	0854		49.9000	16506	0										
03/03/02	0909		50.1500	16506	0										



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# GAS FLOW CALCULATIONS

Customer: Santos Ltd.	Well Name: Croft # 1	Formation: Waarre C
Perforations: 6642' - 6656' KB	Type Of Test: Flow Test	Operator: N. Dover
Date Of Test: 28/02/02		Control No.: 0

Orifice Meter Type: Daniel Senior	Static Pressure Range: 0-1500 PSIG	Separator No: 449
Meter Run Size: 2.9	Differential Pressure Range: 0-200 In. WC	Stand. Conditions: 14.75 @ 16 F

Date	Time	Elapsed Time (Hours)	Choke Size (64th)	Static Press P <sub>F</sub> (PSIA)	Diff Press H <sub>w</sub> (In. WC)	Gas Flow Temp (°F)	Gas Spec. Grav.	Orifice Plate Size (Ins)	√(P <sub>F</sub> H <sub>w</sub> )	C <sub>1</sub> = F <sub>B</sub> × F <sub>TF</sub> × F <sub>PV</sub> × Y <sub>2</sub>			C <sub>1</sub>	C = C <sub>1</sub> × C <sub>2</sub> Where C <sub>2</sub> = √(P <sub>F</sub> / (1.5G) × 24 (MMSCFD)	Gas FI
										F <sub>B</sub>	F <sub>TF</sub>	F <sub>PV</sub>			
01/03/02	1200	5.0000	16	719	115	95	0.7	1.750	287.50	0.96796	1.06898	1.00086	698.46	20035.64	5.76017
	1215	5.2500	"	720	115	95	"	"	287.70	"	1.06908	1.00086	698.53	20037.55	5.76472
	1230	5.5000	"	722	115	93	"	"	288.10	0.96953	1.07020	1.00086	700.39	20091.15	5.78817
	1245	5.7500	"	723	115	95	"	"	288.29	0.96796	1.06939	1.00086	698.73	20043.27	5.77837
	1300	6.0000	"	723	116	95	"	"	289.55	"	"	1.00086	698.73	20043.42	5.80349
	1315	6.2500	"	724	116	90	"	"	289.75	0.97270	1.07230	1.00086	704.07	20196.52	5.85186
	1330	6.5000	"	723	116	90	"	"	289.55	"	1.07220	1.00086	704.00	20194.51	5.84723
	1345	6.7500	"	720	115	90	"	"	287.70	"	1.07187	1.00086	703.78	20188.31	5.80810
	1400	7.0000	"	721	116	91	"	"	289.14	0.97111	1.07103	1.00087	702.08	20139.65	5.82327
	1415	7.2500	"	721	116	91	"	"	"	"	"	"	"	"	5.82327
	1430	7.5000	"	723	116	93	"	"	289.55	0.96953	1.07031	1.00086	700.47	20093.24	5.81791
	1445	7.7500	"	724	116	93	"	"	289.75	"	1.07041	1.00086	700.53	20095.19	5.82250
	1500	8.0000	"	724	116	95	"	"	"	0.96796	1.06949	"	698.80	20045.33	5.80805
	1515	8.2500	"	725	116	95	"	"	289.95	"	1.06960	1.00086	698.86	20047.24	5.81262
	1530	8.5000	"	725	116	95	"	"	"	"	"	"	"	"	5.81262
	1545	8.7500	"	725	116	95	"	"	"	"	"	"	"	"	5.81262
	1600	9.0000	"	725	116	95	"	"	"	"	"	"	"	"	5.81262
02/03/02	0916	26.2667	20	15	0	32	"	2.250	0.00	1298.75	1.02806	1.00188	1337.70	38372.68	0.00000
	0930	26.5000	"	573	84	79	"	"	219.34	0.98240	1.06063	1.00046	1353.88	38836.58	8.51835
	0945	26.7500	"	571	84	77	"	"	218.96	0.98404	1.06119	1.00046	1356.86	38922.22	8.52222
	1000	27.0000	24	712	116	75	"	"	287.33	0.98570	1.07915	1.00052	1382.20	39649.14	11.39254
	1015	27.2500	"	714	117	77	"	"	288.97	0.98404	1.07830	1.00052	1378.81	39551.78	11.42947
	1030	27.5000	"	710	117	79	"	"	288.16	0.98240	1.07675	1.00052	1374.53	39429.06	11.36203
	1100	28.0000	"	710	117	82	"	"	"	0.97913	1.07469	"	1367.34	39222.68	11.30256

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### GAS FLOW CALCULATIONS

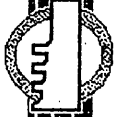
Customer: Santos Ltd. Well Name: Croft #1 Formation: Waarre C  
 Perforations: 6642' - 6656' KB Type Of Test: Flow Test Operator: N. Dover  
 Date Of Test: 28/02/02 Control No.: 0

Orifice Meter Type: Daniel Senior Static Pressure Range: 0-1500 PSIG Separator No: 449  
 Meter Run Size: 2.9 0 Differential Pressure Range: 0-200 In. WC Stand. Conditions: 14.75 @ 16 F

Date	Time	Elapsed Time (Hours)	Choke Size (64th)	Static Press (PSIA)	Diff Press (In. WC)	Gas Flow Temp (°F)	Gas Spec Grav.	Orifice Plate Size (Ins)	$\sqrt{(P_F H_w)}$	$C_1 = F_B \times F_{TF} \times F_{PV} \times Y_2$			$C_1$	$C = C_1 \times C_2$ Where $C_2 = \sqrt{\frac{P_F}{(1.5G)^2 \times 4}}$ (MMSCFD)	Gas FI
										$F_B$	$F_{TF}$	$F_{PV}$			
		1115	28.2500	710	117	86		"	"	0.97590	1.07270	"	1360.30	39020.91	11.24442
02/03/02		1130	28.5000	710	117	86	0.7	2.250	288.16	0.97590	1.07270	1.00052	1360.30	39020.91	11.24442
		1145	28.7500	712	118	88		"	289.80	0.97430	1.07196	1.00052	1357.12	38929.79	11.28186
		1200	29.0000	712	118	90		"	"	0.97270	1.07101	"	1353.70	38831.50	11.25338
		1215	29.2500	713	118	91		"	290.00	0.97111	1.07018	1.00052	1350.44	38738.10	11.23419
		1230	29.5000	713	118	93		"	"	0.96953	1.06926	"	1347.09	38641.85	11.20628
		1245	29.7500	713	118	93		"	"	"	"	"	"	"	11.20628
		1300	30.0000	713	118	95		"	"	0.96796	1.06836	"	1343.77	38546.60	11.17866
		1315	30.2500	714	119	95		"	291.43	"	1.06846	1.00053	1343.90	38550.46	11.23492
		1330	30.5000	714	119	95		"	"	"	"	"	"	"	11.23492
		1345	30.7500	1059	177	99		"	432.89	0.96483	1.10115	1.00053	1380.55	39601.62	17.14321
		1400	31.0000	1062	176	99		"	432.28	"	1.10144	1.00052	1380.91	39612.04	17.12342
		1415	31.2500	1057	176	97		"	431.26	0.96639	1.10242	1.00053	1384.37	39711.39	17.12590
		1430	31.5000	1057	176	97		"	"	"	"	"	"	"	17.12590
		1445	31.7500	1060	176	99		"	431.87	0.96483	1.10125	1.00052	1380.66	39605.02	17.10425
		1500	32.0000	1058	176	99		"	431.46	"	1.10105	1.00053	1380.42	39597.99	17.08507
		1530	32.5000	1055	176	100		"	430.85	0.96328	1.09932	1.00053	1376.03	39472.22	17.00664
		1545	32.7500	1061	176	100		"	432.07	"	1.09990	1.00052	1376.75	39492.89	17.06387
		1600	33.0000	1055	176	100		"	430.85	"	1.09932	1.00053	1376.03	39472.22	17.00664



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# LIQUID PRODUCTION

Customer: Santos Ltd. Well Name: Croft # 1 Formation: Waarre C  
 Perforations: 6642' - 6656' KB Type Of Test: Flow Test Operator: N. Dover  
 Date Of Test: 28/02/02 Control No. 0

Tank	Unit No.	Capacity	Cap. Units	Scale	Scale Units
1	129a	8221	ltrs	1	1
2	0	0	0	0	0

Tank	Unit No.	Capacity	Cap. Units	Scale
3	0	0	0	0
4	0	0	0	0

Date	Time	Elapsed Time (Hours)	Tank Used (1-4)	Total Tank Dip (Litres)	OIL/CONDENSATE PRODUCTION			WATER PRODUCTION			
					Tank Dip (Litres)	Tank Prod. (m <sup>3</sup> )	Flow Rate (m <sup>3</sup> /D)	Cum. Prod. (m <sup>3</sup> )	Oil API Grav	Tank Dip (Litres)	Tank Prod. (m <sup>3</sup> )
01/03/02	1159	4.9833	1	80.000	0.000	0.000	0.000	0.000	80.000	0.000	0.000
01/03/02	1200	5.0000	1	80.000	0.000	0.000	0.000	0.000	80.000	0.000	0.000
01/03/02	1215	5.2500	1	80.000	0.000	0.000	0.000	0.000	80.000	0.000	0.000
01/03/02	1230	5.5000	1	80.000	0.000	0.000	0.000	0.000	80.000	0.000	0.000
01/03/02	1245	5.7500	1	80.000	0.000	0.000	0.000	0.000	80.000	0.000	0.000
01/03/02	1300	6.0000	1	80.000	0.000	0.000	0.000	0.000	80.000	0.000	0.000
01/03/02	1315	6.2500	1	80.000	0.000	0.000	0.000	0.000	80.000	0.000	0.000
01/03/02	1330	6.5000	1	80.000	0.000	0.000	0.000	0.000	80.000	0.000	0.000
01/03/02	1345	6.7500	1	160.000	80.000	0.0800	0.0800	7.6800	80.000	0.0000	0.0000
01/03/02	1400	7.0000	1	240.000	160.000	0.0800	0.0800	7.6800	160.000	0.1600	0.0000
01/03/02	1415	7.2500	1	300.000	220.000	0.0600	0.0600	5.7600	220.000	0.2200	0.0000
01/03/02	1430	7.5000	1	340.000	260.000	0.0400	0.0400	3.8400	260.000	0.2600	0.0000
01/03/02	1445	7.7500	1	400.000	320.000	0.0600	0.0600	5.7600	320.000	0.3200	0.0000
01/03/02	1500	8.0000	1	460.000	380.000	0.0600	0.0600	5.7600	380.000	0.3800	0.0000
01/03/02	1515	8.2500	1	520.000	440.000	0.0600	0.0600	5.7600	440.000	0.4400	0.0000
01/03/02	1530	8.5000	1	580.000	500.000	0.0600	0.0600	5.7600	500.000	0.5000	0.0000
01/03/02	1545	8.7500	1	640.000	560.000	0.0600	0.0600	5.7600	560.000	0.5600	0.0000
01/03/02	1600	9.0000	1	700.000	620.000	0.0600	0.0600	5.7600	620.000	0.6200	0.0000
02/03/02	0916	26.2667	1	700.000	620.000	0.0000	0.0000	0.0000	620.000	0.6200	0.0000
02/03/02	0930	26.5000	1	700.000	620.000	0.0000	0.0000	0.0000	620.000	0.6200	0.0000
02/03/02	0945	26.7500	1	780.000	700.000	0.0800	0.0800	7.6800	700.000	0.7000	0.0000
02/03/02	1000	27.0000	1	950.000	870.000	0.1700	0.1700	16.3200	870.000	0.8700	0.0000
02/03/02	1015	27.2500	1	1100.000	1020.000	0.1500	0.1500	14.4000	1020.000	1.0200	0.0000
02/03/02	1030	27.5000	1	1280.000	1200.000	0.1800	0.1800	17.2800	1200.000	1.2000	0.0000

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# LIQUID PRODUCTION

**Customer:** Santos Ltd. **Well Name:** Croft # 1 **Formation:** Waarre C  
**Perforations:** 6642' - 6656' KB **Type Of Test:** Flow Test **Operator:** N. Dover  
**Date Of Test:** 28/02/02 **Control No.:** 0

Tank	Unit No.	Capacity	Cap. Units	Scale	Scale Units
1	129a	8221	ltrs	1	1
2	0	0	0	0	0

Tank	Unit No.	Capacity	Cap. Units	Scale
3	0	0	0	0
4	0	0	0	0

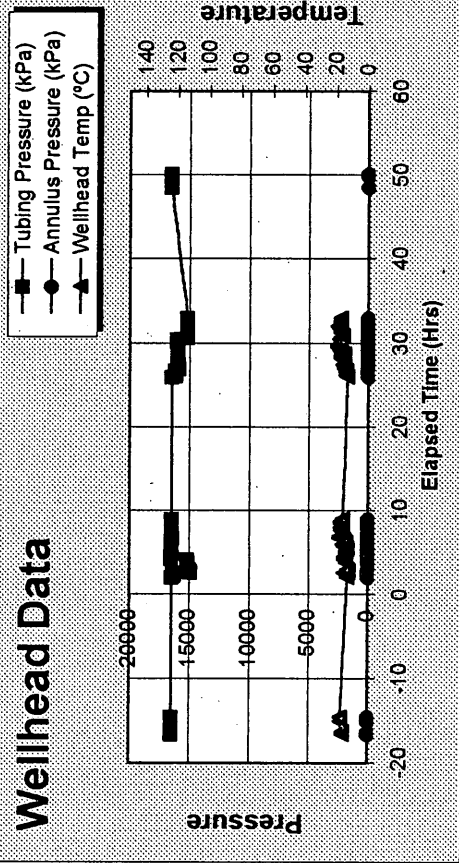
Date	Time	Elapsed Time (Hours)	Tank Used (1-4)	Total Tank Dip (Litres)	OIL/CONDENSATE PRODUCTION				WATER PRODUCTION			
					Tank Dip (Litres)	Tank Prod. (m³)	Flow Rate (m³/D)	Cum. Prod. (m³)	Oil API Grav	Tank Dip (Litres)	Tank Prod. (m³)	Flow Rate (m³/D)
02/03/02	1100	28.0000	1	1590.000	1510.000	0.3100	14.8800	1.5100	80.000	0.0000	0.0000	
02/03/02	1115	28.2500	1	1720.000	1640.000	0.1300	12.4800	1.6400	80.000	0.0000	0.0000	
02/03/02	1130	28.5000	1	1850.000	1770.000	0.1300	12.4800	1.7700	80.000	0.0000	0.0000	
02/03/02	1145	28.7500	1	1960.000	1880.000	0.1100	10.5600	1.8800	80.000	0.0000	0.0000	
02/03/02	1200	29.0000	1	2080.000	2000.000	0.1200	11.5200	2.0000	80.000	0.0000	0.0000	
02/03/02	1215	29.2500	1	2210.000	2130.000	0.1300	12.4800	2.1300	80.000	0.0000	0.0000	
02/03/02	1230	29.5000	1	2310.000	2230.000	0.1000	9.6000	2.2300	80.000	0.0000	0.0000	
02/03/02	1245	29.7500	1	2420.000	2340.000	0.1100	10.5600	2.3400	80.000	0.0000	0.0000	
02/03/02	1300	30.0000	1	2500.000	2420.000	0.0800	7.6800	2.4200	80.000	0.0000	0.0000	
02/03/02	1315	30.2500	1	2680.000	2600.000	0.1800	17.2800	2.6000	80.000	0.0000	0.0000	
02/03/02	1330	30.5000	1	2780.000	2700.000	0.1000	9.6000	2.7000	80.000	0.0000	0.0000	
02/03/02	1345	30.7500	1	2950.000	2870.000	0.1700	16.3200	2.8700	80.000	0.0000	0.0000	
02/03/02	1400	31.0000	1	3100.000	3020.000	0.1500	14.4000	3.0200	80.000	0.0000	0.0000	
02/03/02	1415	31.2500	1	3300.000	3220.000	0.2000	19.2000	3.2200	80.000	0.0000	0.0000	
02/03/02	1430	31.5000	1	3400.000	3320.000	0.1000	9.6000	3.3200	80.000	0.0000	0.0000	
02/03/02	1445	31.7500	1	3580.000	3500.000	0.1800	17.2800	3.5000	80.000	0.0000	0.0000	
02/03/02	1500	32.0000	1	3780.000	3700.000	0.2000	19.2000	3.7000	80.000	0.0000	0.0000	
02/03/02	1530	32.5000	1	4100.000	4020.000	0.3200	15.3600	4.0200	80.000	0.0000	0.0000	
02/03/02	1545	32.7500	1	4240.000	4160.000	0.1400	13.4400	4.1600	80.000	0.0000	0.0000	
02/03/02	1600	33.0000	1	4380.000	4300.000	0.1400	13.4400	4.3000	80.000	0.0000	0.0000	



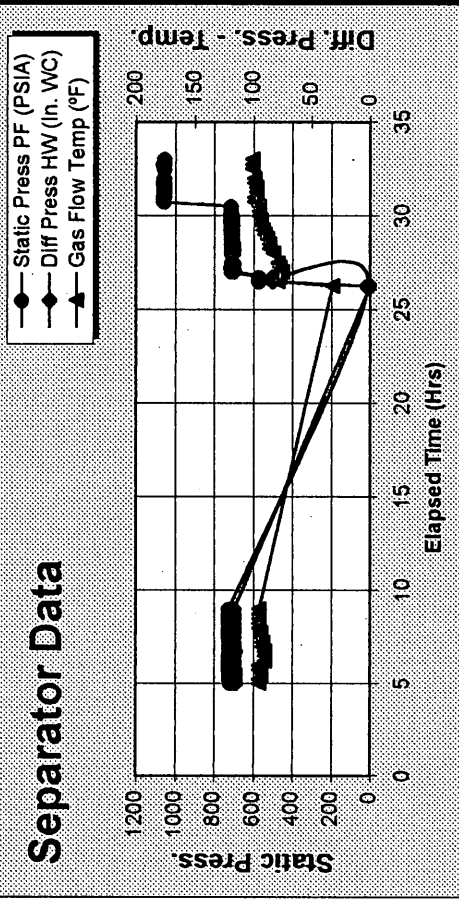
# GRAPHICAL SUMMARY

Customer:	Santos Ltd.	Well Name:	Croft # 1	Formation:	Waarre C
Perforations:	6642' - 6656' KB	Type Of Test:	Flow Test	Operator:	N. Dover
Date Of Test:	28/02/02			Control No.:	0

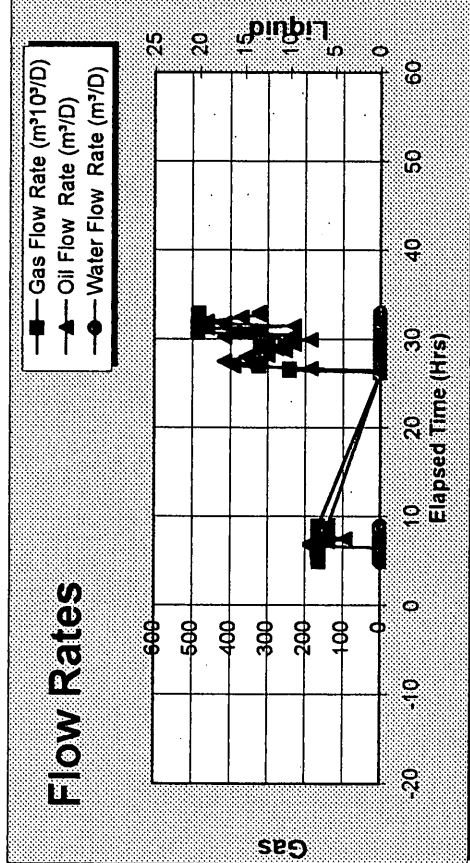
## Wellhead Data



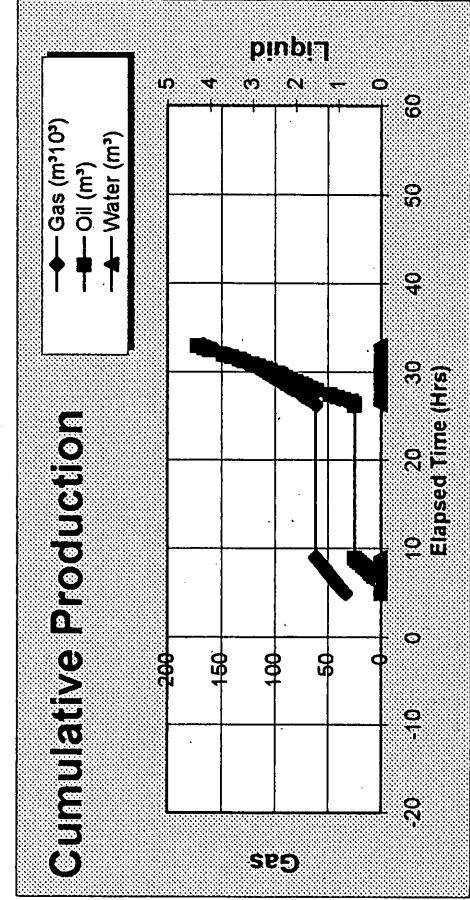
## Separator Data



## Flow Rates



## Cumulative Production

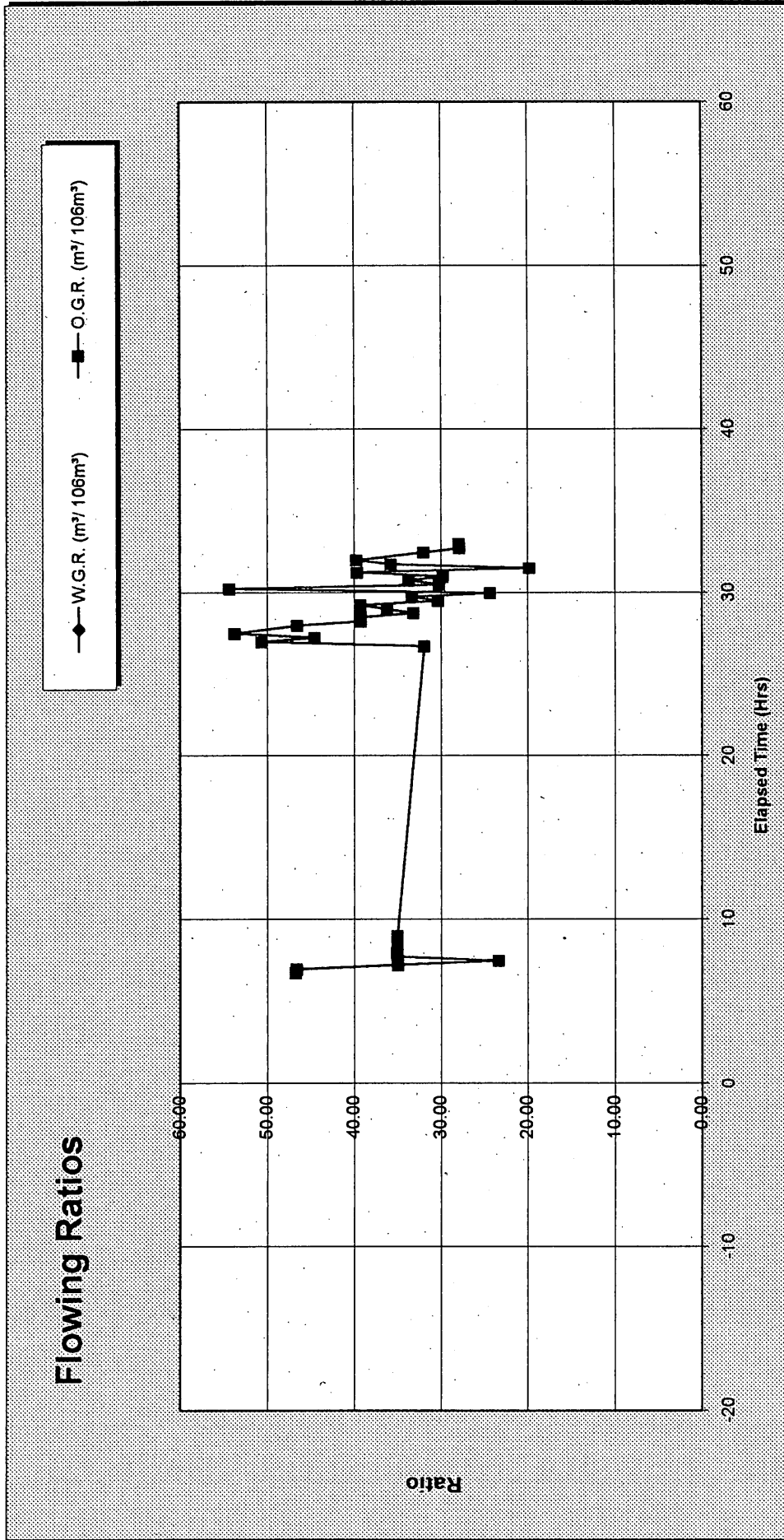


EXPERTEST PTY. LTD.



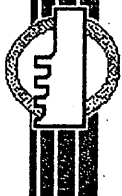
# Flowing Ratio Plot

Customer:	Santos Ltd.	Well Name:	Croft # 1	Formation:	Waarre C
Perforations:	6642' - 6656' KB	Type Of Test:	Flow Test	Operator:	N. Dover
Date Of Test:	28/02/02	Control No.:	0		





# SAMPLING DATA



**Customer:** Santos Ltd.      **Well Name:** Croft # 1      **Formation:** Waarre C  
**Perforations:** 6642' - 6656' KB      **Type Of Test:** Flow Test      **Operator:** N. Dover  
**Date Of Test:** 28/02/02      **Control No.:** 0

SAMPLE # 1												
Time Sample Collected	Cylinder Serial Number	Cylinder Volume (cc)	Sample Type	Sampling Duration (Mins)	Cylinder Initially Filled With	Outage (cc)	Volume of Fill Remaining with Sample (cc)	FLOW RATES			Ambient Press (kPa)	
								Oil	Gas	Water		
1200	469	500	HP Oil	15	Acidified brine	450	25	Oil sight glass	4854.08	32	101.7	
<b>SEPARATOR DATA</b>												
Tubing Press (kPa)	Wellhead Temp (°C)	Choke Size	BS&W (%)	Separator Press (kPa)	Separator Temp (°C)	Gas Specific Gravity @ 60°F	Oil API Grav	Gas (10 <sup>3</sup> m <sup>3</sup> /D)	Oil (m <sup>3</sup> /D)	Water (m <sup>3</sup> /D)	WGR	OGR
15996.4	17	24/64th		4805.8	32	0.7	57.2	318.583	11.52	0	0	36.16
Remarks:												

SAMPLE # 1												
Time Sample Collected	Cylinder Serial Number	Cylinder Volume (cc)	Sample Type	Sampling Duration (Mins)	Cylinder Initially Filled With	Outage (cc)	Volume of Fill Remaining with Sample (cc)	FLOW RATES			Ambient Press (kPa)	
								Oil	Gas	Water		
1200	465	500	HP Gas	15	Evacuated	N/A	N/A	Separator meter run	4806	32	101.7	
<b>SEPARATOR DATA</b>												
Tubing Press (kPa)	Wellhead Temp (°C)	Choke Size	BS&W (%)	Separator Press (kPa)	Separator Temp (°C)	Gas Specific Gravity @ 60°F	Oil API Grav	Gas (10 <sup>3</sup> m <sup>3</sup> /D)	Oil (m <sup>3</sup> /D)	Water (m <sup>3</sup> /D)	WGR	OGR
15996.4	17	24/64th		4805.8	32	0.7	57.2	318.583	11.52	0	0	36.16
Remarks:												

SAMPLE # 2												
Time Sample Collected	Cylinder Serial Number	Cylinder Volume (cc)	Sample Type	Sampling Duration (Mins)	Cylinder Initially Filled With	Outage (cc)	Volume of Fill Remaining with Sample (cc)	FLOW RATES			Ambient Press (kPa)	
								Oil	Gas	Water		
1300	428	500	HP Oil	15	Acidified brine	475	25	Oil sight glass	4889	35	101.7	
<b>SEPARATOR DATA</b>												
Tubing Press (kPa)	Wellhead Temp (°C)	Choke Size	BS&W (%)	Separator Press (kPa)	Separator Temp (°C)	Gas Specific Gravity @ 60°F	Oil API Grav	Gas (10 <sup>3</sup> m <sup>3</sup> /D)	Oil (m <sup>3</sup> /D)	Water (m <sup>3</sup> /D)	WGR	OGR
16010	18	24/64th		4813	35	0.7	57.2	316.468	7.68	0	0	24.27
Remarks:												

909618 019

# SAMPLING DATA

909618 020

Customer: Santos Ltd. Well Name: Croft # 1 Formation: Waarre C  
 Perforations: 6642' - 6656' KB Type Of Test: Flow Test Operator: N. Dover  
 Date Of Test: 28/02/02 Control No.: 0

**SAMPLE # 2**

Time Sample Collected	Cylinder Serial Number	Cylinder Volume (cc)	Sample Type	Sampling Duration (Mins)	Cylinder Initially Filled With	Outage (cc)	Volume of Fill Remaining with Sample (cc)	FLOW RATES			Sample Press (kPa)	Sample Temp (°C)	Ambient Press (kPa)
								Separator meter run	Oil	Water			
1300	427	500	HP Gas	15	Evacuated					4889	35	101.7	
<b>SEPARATOR DATA</b>													
Tubing Press (kPa)	Wellhead Temp (°C)	Choke Size	BS&W (%)	Separator Press (kPa)	Separator Temp (°C)	FPV	Gas Specific Gravity @ 60°F	Oil API Grav	Gas (10 <sup>3</sup> m <sup>3</sup> /D)	Oil (m <sup>3</sup> /D)	Water (m <sup>3</sup> /D)	WGR	OGR
16010	18	24/64th		4813	35	1.06836	0.7	57.2	316.468	7.68	0	0	24.27
Remarks:													

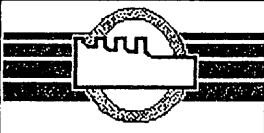
**SAMPLE # 3 & 4**

Time Sample Collected	Cylinder Serial Number	Cylinder Volume (cc)	Sample Type	Sampling Duration (Mins)	Cylinder Initially Filled With	Outage (cc)	Volume of Fill Remaining with Sample (cc)	FLOW RATES			Sample Press (kPa)	Sample Temp (°C)	Ambient Press (kPa)
								Water sight glass	Oil	Water			
1300	1 & 2	500	LP H2O	1						4889	35	101.7	
<b>SEPARATOR DATA</b>													
Tubing Press (kPa)	Wellhead Temp (°C)	Choke Size	BS&W (%)	Separator Press (kPa)	Separator Temp (°C)	FPV	Gas Specific Gravity @ 60°F	Oil API Grav	Gas (10 <sup>3</sup> m <sup>3</sup> /D)	Oil (m <sup>3</sup> /D)	Water (m <sup>3</sup> /D)	WGR	OGR
16010	18	24/64th		4813	35	1.06836	0.7	57.2	316.468	7.68	0	0	24.27
Remarks: No water dumped to test tank. Sample obtained from separator water sight glass.													

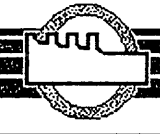
**SAMPLE #**

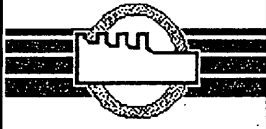
Time Sample Collected	Cylinder Serial Number	Cylinder Volume (cc)	Sample Type	Sampling Duration (Mins)	Cylinder Initially Filled With	Outage (cc)	Volume of Fill Remaining with Sample (cc)	FLOW RATES			Sample Press (kPa)	Sample Temp (°C)	Ambient Press (kPa)
								Oil	Gas	Water			
<b>WELLHEAD DATA</b>													
Tubing Press (kPa)	Wellhead Temp (°C)	Choke Size	BS&W (%)	Separator Press (kPa)	Separator Temp (°C)	FPV	Gas Specific Gravity @ 60°F	Oil API Grav	Gas (10 <sup>3</sup> m <sup>3</sup> /D)	Oil (m <sup>3</sup> /D)	Water (m <sup>3</sup> /D)	WGR	OGR
Remarks:													



EXPERTEST PTY. LTD.		Electronic Memory Recorder							
		Customer: Santos Ltd.			Well Name: Croft # 1				
		Perforations: 6642' - 6656' KB			Formation: Waarre C				
		Date Of Test: 28/02/02			Type Of Test: Flow Test				
		Operator: N. Dover			Control No.: Croft 1 280202				
Data Filter: 12000 Secs; 7 PSI Window									
Top EMP Q Serial Number: 2208 "					Bottom EMP Q Serial Number: 2209 "				
EMP Q Calibration I.D.: 2208-19244 "					EMP Q Calibration I.D.: 2209-20196 "				
Full Scale Pressure: 10000 psi "					Full Scale Pressure: 10000 psi "				
Probe Started: 28/02/02 @ 14:05:00					Probe Started: 28/02/02 @ 14:07:00				
TOP GAUGE					BOTTOM GAUGE				
Date	Real Time	Elapsed Time (Hrs)	Top Pressure (PSIG)	Top Temp. (°F)	Date	Real Time	Elapsed Time (Hrs)	Bottom Pressure (PSIG)	Bottom Temp. (°F)
28/02/02	14:05:01	0.000	1.55	70.07	28/02/02	14:07:01	0.034	6.00	67.31
28/02/02	14:25:21	0.339	29.80	66.00	28/02/02	14:25:31	0.342	94.74	65.30
28/02/02	14:25:31	0.342	133.70	66.00	28/02/02	14:25:41	0.345	160.87	65.30
28/02/02	14:25:41	0.345	189.79	66.00	28/02/02	14:25:51	0.348	207.05	65.30
28/02/02	14:25:51	0.348	222.04	66.00	28/02/02	14:26:01	0.350	236.32	65.22
28/02/02	14:26:01	0.350	261.37	65.97	28/02/02	14:26:11	0.353	281.05	65.22
28/02/02	14:26:11	0.353	301.47	65.97	28/02/02	14:26:21	0.356	335.95	65.22
28/02/02	14:26:21	0.356	495.55	65.97	28/02/02	14:26:31	0.359	667.11	65.22
28/02/02	14:26:31	0.359	971.03	65.97	28/02/02	14:26:41	0.361	1244.33	65.22
28/02/02	14:26:41	0.361	1568.29	65.97	28/02/02	14:26:51	0.364	1807.79	65.22
28/02/02	14:26:51	0.364	2131.58	65.97	28/02/02	14:27:01	0.367	2282.62	65.22
28/02/02	14:27:01	0.367	2365.14	65.97	28/02/02	14:27:11	0.370	2384.74	65.22
28/02/02	14:27:11	0.370	2386.86	65.97	28/02/02	14:42:01	0.617	2391.94	63.87
28/02/02	14:42:21	0.623	2394.09	68.62	28/02/02	14:43:01	0.634	2400.48	63.77
28/02/02	14:43:11	0.636	2402.96	68.03	28/02/02	14:43:51	0.648	2408.56	63.58
28/02/02	14:44:01	0.650	2410.41	67.08	28/02/02	14:44:41	0.661	2416.05	63.37
28/02/02	14:44:51	0.664	2418.00	66.68	28/02/02	14:45:31	0.675	2423.69	63.43
28/02/02	14:45:41	0.678	2425.48	66.51	28/02/02	14:46:21	0.689	2431.28	63.62
28/02/02	14:46:31	0.692	2432.95	66.56	28/02/02	14:47:11	0.703	2439.74	64.43
28/02/02	14:47:21	0.706	2441.03	67.28	28/02/02	14:48:01	0.717	2447.29	65.06
28/02/02	14:48:11	0.720	2448.45	67.93	28/02/02	14:48:51	0.731	2454.56	65.83
28/02/02	14:49:01	0.734	2455.62	68.77	28/02/02	14:49:41	0.745	2461.59	66.74
28/02/02	14:49:51	0.748	2462.64	69.77	28/02/02	14:55:41	0.845	2469.40	75.34
28/02/02	14:55:41	0.845	2470.14	77.78	28/02/02	14:56:21	0.856	2476.61	76.01
28/02/02	14:56:31	0.859	2478.56	78.36	28/02/02	14:57:01	0.867	2484.67	76.76
28/02/02	14:57:11	0.870	2487.61	79.13	28/02/02	14:57:31	0.875	2492.62	77.65
28/02/02	14:57:41	0.878	2495.31	80.13	28/02/02	14:58:01	0.884	2500.51	78.74
28/02/02	14:58:11	0.886	2502.99	81.41	28/02/02	14:58:31	0.892	2508.45	80.06
28/02/02	14:58:41	0.895	2510.95	82.97	28/02/02	14:59:11	0.903	2518.48	81.60
28/02/02	14:59:21	0.906	2521.01	84.79	28/02/02	14:59:51	0.914	2528.49	83.34
28/02/02	14:59:51	0.914	2528.49	86.29	28/02/02	15:00:31	0.925	2537.90	85.23
28/02/02	15:00:31	0.925	2537.09	88.41	28/02/02	15:06:11	1.020	2546.21	98.00
28/02/02	15:06:01	1.017	2544.27	99.91	28/02/02	15:06:51	1.031	2556.70	99.18
28/02/02	15:06:31	1.025	2552.28	100.98	28/02/02	15:07:31	1.042	2567.28	100.49
28/02/02	15:07:11	1.036	2562.80	102.26	28/02/02	15:08:11	1.053	2578.03	101.89
28/02/02	15:07:51	1.048	2573.42	103.71	28/02/02	15:08:51	1.064	2588.80	103.37
28/02/02	15:08:31	1.059	2584.25	105.24	28/02/02	15:09:31	1.075	2599.58	104.90
28/02/02	15:09:11	1.070	2595.04	106.85	28/02/02	15:10:11	1.086	2607.96	106.47
28/02/02	15:09:51	1.081	2605.55	108.49	28/02/02	15:15:41	1.178	2615.26	115.44
28/02/02	15:15:31	1.175	2613.69	117.18	28/02/02	15:16:11	1.186	2623.93	116.30

EXPERTEST PTY. LTD.		Electronic Memory Recorder							
Customer: Santos Ltd.				Well Name: Croft # 1					
Perforations: 6642' - 6656' KB				Formation: Waarre C					
Date Of Test: 28/02/02				Type Of Test: Flow Test					
Operator: N. Dover				Control No.: Croft 1 280202					
Data Filter: 12000 Secs; 7 PSI Window									
Top EMP Q Serial Number: 2208 "				Bottom EMP Q Serial Number: 2209 "					
EMP Q Calibration I.D.: 2208-19244 "				EMP Q Calibration I.D.: 2209-20196 "					
Full Scale Pressure: 10000 psi "				Full Scale Pressure: 10000 psi "					
Probe Started: 28/02/02 @ 14:05:00				Probe Started: 28/02/02 @ 14:07:00					
TOP GAUGE					BOTTOM GAUGE				
Date	Real Time	Elapsed Time (Hrs)	Top Pressure (PSIG)	Top Temp. (°F)	Date	Real Time	Elapsed Time (Hrs)	Bottom Pressure (PSIG)	Bottom Temp. (°F)
28/02/02	15:16:01	1.184	2622.16	117.91	28/02/02	15:16:41	1.195	2631.32	116.30
28/02/02	15:16:31	1.192	2630.70	118.85	28/02/02	15:17:11	1.203	2639.89	117.31
28/02/02	15:17:01	1.200	2638.69	119.40	28/02/02	15:17:41	1.211	2648.70	118.45
28/02/02	15:17:31	1.209	2647.44	120.62	28/02/02	15:18:11	1.220	2657.40	119.70
28/02/02	15:18:01	1.217	2654.81	120.62	28/02/02	15:18:41	1.228	2665.83	120.72
28/02/02	15:18:31	1.225	2663.52	121.98	28/02/02	15:19:21	1.239	2675.87	122.16
28/02/02	15:19:01	1.234	2672.18	123.47	28/02/02	15:25:11	1.336	2683.85	130.77
28/02/02	15:24:51	1.331	2680.71	132.80	28/02/02	15:25:41	1.345	2691.47	131.54
28/02/02	15:25:31	1.342	2690.54	133.56	28/02/02	15:26:11	1.353	2699.11	132.43
28/02/02	15:26:11	1.353	2700.46	134.52	28/02/02	15:26:41	1.361	2706.91	133.45
28/02/02	15:26:51	1.364	2710.58	135.65	28/02/02	15:27:21	1.373	2717.07	134.59
28/02/02	15:27:31	1.375	2720.73	136.93	28/02/02	15:28:01	1.384	2727.18	135.85
28/02/02	15:28:11	1.386	2730.91	138.32	28/02/02	15:28:41	1.395	2737.40	137.21
28/02/02	15:28:51	1.398	2740.98	139.84	28/02/02	15:34:31	1.492	2745.33	146.32
28/02/02	15:34:41	1.495	2749.32	148.81	28/02/02	15:35:01	1.500	2752.43	147.09
28/02/02	15:35:21	1.506	2758.49	149.65	28/02/02	15:35:31	1.509	2759.48	147.92
28/02/02	15:36:01	1.517	2767.66	150.67	28/02/02	15:36:11	1.520	2768.28	148.39
28/02/02	15:36:41	1.528	2776.76	151.87	28/02/02	15:36:51	1.531	2777.33	149.42
28/02/02	15:37:21	1.539	2785.97	153.24	28/02/02	15:37:21	1.539	2784.40	150.60
28/02/02	15:38:01	1.550	2794.99	154.78	28/02/02	15:38:01	1.550	2793.38	151.93
28/02/02	15:38:41	1.561	2804.16	156.45	28/02/02	15:38:31	1.559	2800.41	153.41
28/02/02	15:44:31	1.659	2812.32	166.22	28/02/02	15:41:41	1.611	2807.54	160.78
28/02/02	15:45:11	1.670	2820.23	167.00	28/02/02	15:44:51	1.664	2814.93	164.79
28/02/02	15:45:51	1.681	2828.29	168.01	28/02/02	15:45:31	1.675	2822.88	165.69
28/02/02	15:46:31	1.692	2836.29	169.26	28/02/02	15:46:11	1.686	2830.94	166.76
28/02/02	15:53:01	1.800	2843.96	180.59	28/02/02	15:46:51	1.698	2838.34	167.99
28/02/02	15:54:01	1.817	2856.45	181.40	28/02/02	15:53:31	1.809	2846.09	179.60
28/02/02	15:54:21	1.823	2869.15	182.31	28/02/02	15:54:01	1.817	2853.93	179.60
28/02/02	15:54:51	1.831	2876.17	182.31	28/02/02	15:54:21	1.823	2867.04	180.48
28/02/02	16:25:01	2.334	2867.33	192.06	28/02/02	15:54:41	1.828	2877.55	180.48
28/02/02	16:25:11	2.336	2857.62	192.07	28/02/02	16:25:11	2.336	2865.87	192.07
28/02/02	16:25:51	2.348	2867.44	192.08	28/02/02	16:25:31	2.342	2858.51	192.07
28/02/02	16:26:01	2.350	2874.49	192.08	28/02/02	16:26:01	2.350	2872.49	192.08
28/02/02	19:46:11	5.686	2876.28	192.25	28/02/02	19:46:01	5.684	2878.38	192.30
28/02/02	23:06:21	9.023	2876.21	192.26	28/02/02	23:06:11	9.020	2878.34	192.32
01/03/02	02:26:31	12.359	2876.17	192.27	01/03/02	02:26:21	12.356	2878.32	192.32
01/03/02	05:46:41	15.695	2876.15	192.26	01/03/02	05:46:31	15.692	2878.31	192.32
01/03/02	07:24:41	17.328	2869.06	192.27	01/03/02	07:24:51	17.331	2871.00	192.32
01/03/02	07:26:51	17.364	2876.09	192.27	01/03/02	07:26:21	17.356	2878.09	192.32
01/03/02	09:05:11	19.003	2868.80	192.26	01/03/02	09:05:21	19.006	2868.42	192.31

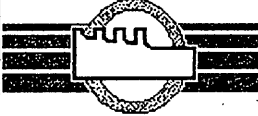
EXPERTEST PTY. LTD.		Electronic Memory Recorder							
		Customer: Santos Ltd.	Well Name: Croft # 1						
		Perforations: 6642' - 6656' KB	Formation: Waarre C						
		Date Of Test: 28/02/02	Type Of Test: Flow Test						
		Operator: N. Dover	Control No.: Croft 1 280202						
Data Filter: 12000 Secs; 7 PSI Window									
Top EMP Q Serial Number: 2208 "				Bottom EMP Q Serial Number: 2209 "					
EMP Q Calibration I.D.: 2208-19244 "				EMP Q Calibration I.D.: 2209-20196 "					
Full Scale Pressure: 10000 psi "				Full Scale Pressure: 10000 psi "					
Probe Started: 28/02/02 @ 14:05:00				Probe Started: 28/02/02 @ 14:07:00					
TOP GAUGE					BOTTOM GAUGE				
Date	Real Time	Elapsed Time (Hrs)	Top Pressure (PSIG)	Top Temp. (°F)	Date	Real Time	Elapsed Time (Hrs)	Bottom Pressure (PSIG)	Bottom Temp. (°F)
01/03/02	09:06:51	19.031	2859.59	192.26	01/03/02	09:05:31	19.009	2875.63	192.31
01/03/02	09:07:11	19.036	2852.10	192.26	01/03/02	09:06:41	19.028	2867.95	192.31
01/03/02	09:36:51	19.531	2840.41	192.26	01/03/02	09:07:01	19.034	2859.50	192.31
01/03/02	09:37:11	19.536	2828.29	192.26	01/03/02	09:07:31	19.042	2851.79	192.31
01/03/02	09:37:31	19.542	2814.83	192.26	01/03/02	09:37:01	19.534	2839.54	192.30
01/03/02	09:37:51	19.548	2803.39	192.26	01/03/02	09:37:21	19.539	2826.77	192.30
01/03/02	09:38:11	19.553	2793.94	192.25	01/03/02	09:37:41	19.545	2813.95	192.30
01/03/02	09:38:31	19.559	2784.93	192.25	01/03/02	09:38:01	19.550	2802.70	192.30
01/03/02	09:39:21	19.573	2777.54	192.25	01/03/02	09:38:21	19.556	2793.79	192.30
01/03/02	09:45:21	19.673	2784.62	192.24	01/03/02	09:38:41	19.561	2785.33	192.30
01/03/02	10:05:31	20.009	2791.73	192.25	01/03/02	10:02:01	19.950	2792.36	192.28
01/03/02	10:58:01	20.884	2798.76	192.28	01/03/02	10:42:31	20.625	2799.37	192.31
01/03/02	11:13:01	21.134	2806.63	192.28	01/03/02	11:13:11	21.136	2813.54	192.32
01/03/02	11:13:11	21.136	2816.60	192.28	01/03/02	11:13:21	21.139	2825.05	192.32
01/03/02	11:13:21	21.139	2829.65	192.28	01/03/02	11:13:31	21.142	2840.05	192.33
01/03/02	11:13:31	21.142	2844.39	192.28	01/03/02	11:13:41	21.145	2851.51	192.33
01/03/02	11:13:41	21.145	2852.70	192.28	01/03/02	11:14:01	21.150	2860.31	192.33
01/03/02	11:14:11	21.153	2859.89	192.28	01/03/02	14:34:01	24.484	2863.67	192.37
01/03/02	14:34:21	24.489	2861.49	192.31	01/03/02	15:59:21	25.906	2873.32	192.37
01/03/02	15:59:21	25.906	2873.30	192.31	01/03/02	19:19:31	29.242	2877.61	192.36
01/03/02	19:19:21	29.239	2875.43	192.30	01/03/02	22:39:41	32.578	2877.66	192.36
01/03/02	22:39:31	32.575	2875.47	192.30	02/03/02	01:59:41	35.911	2877.64	192.35
02/03/02	01:59:41	35.911	2875.46	192.30	02/03/02	05:19:51	39.248	2877.65	192.35
02/03/02	05:19:51	39.248	2875.46	192.30	02/03/02	08:40:01	42.584	2877.72	192.35
02/03/02	08:40:01	42.584	2875.53	192.29	02/03/02	08:59:31	42.909	2870.43	192.35
02/03/02	08:59:31	42.909	2867.34	192.29	02/03/02	09:00:21	42.923	2862.65	192.35
02/03/02	09:00:21	42.923	2859.97	192.29	02/03/02	09:00:51	42.931	2855.17	192.35
02/03/02	09:00:51	42.931	2851.59	192.29	02/03/02	09:50:01	43.750	2846.83	192.33
02/03/02	09:50:01	43.750	2844.01	192.28	02/03/02	09:50:41	43.761	2837.84	192.33
02/03/02	09:50:41	43.761	2834.91	192.28	02/03/02	13:10:51	47.097	2837.70	192.36
02/03/02	13:10:51	47.097	2835.52	192.31	02/03/02	13:34:31	47.492	2829.18	192.36
02/03/02	13:34:31	47.492	2825.70	192.31	02/03/02	13:35:01	47.500	2819.51	192.36
02/03/02	13:35:01	47.500	2816.26	192.30	02/03/02	13:35:31	47.509	2811.12	192.36
02/03/02	13:35:31	47.509	2807.97	192.30	02/03/02	16:00:01	49.917	2851.74	192.37
02/03/02	15:59:51	49.914	2829.71	192.31	02/03/02	16:00:11	49.920	2868.27	192.37
02/03/02	16:00:01	49.917	2857.91	192.31	02/03/02	16:29:41	50.411	2875.28	192.39
02/03/02	16:00:11	49.920	2868.49	192.31	02/03/02	19:49:51	53.748	2875.83	192.38
02/03/02	19:20:11	53.253	2873.59	192.32	02/03/02	23:10:01	57.084	2876.00	192.37
02/03/02	22:40:21	56.589	2873.78	192.31	03/03/02	02:30:11	60.420	2876.05	192.37
03/03/02	02:00:31	59.925	2873.86	192.31	03/03/02	05:50:21	63.756	2876.06	192.36

	<b>Electronic Memory Recorder</b>			
	Customer: Santos Ltd.		Well Name: Croft # 1	
	Perforations: 6642' - 6656' KB		Formation: Waarre C	
	Date Of Test: 28/02/02		Type Of Test: Flow Test	
	Operator: N. Dover		Control No.: Croft 1 280202	

Data Filter: 12000 Secs; 7 PSI Window	
Top EMP Q Serial Number: 2208 "	Bottom EMP Q Serial Number: 2209 "
EMP Q Calibration I.D.: 2208-19244 "	EMP Q Calibration I.D.: 2209-20196 "
Full Scale Pressure: 10000 psi "	Full Scale Pressure: 10000 psi "
Probe Started: 28/02/02 @ 14:05:00	Probe Started: 28/02/02 @ 14:07:00

TOP GAUGE					BOTTOM GAUGE				
Date	Real Time	Elapsed Time (Hrs)	Top Pressure (PSIG)	Top Temp. (°F)	Date	Real Time	Elapsed Time (Hrs)	Bottom Pressure (PSIG)	Bottom Temp. (°F)
03/03/02	05:20:41	63.261	2873.86	192.31	03/03/02	07:33:31	65.475	2864.66	192.36
03/03/02	07:33:31	65.475	2859.92	192.30	03/03/02	07:33:41	65.478	2856.74	192.36
03/03/02	07:33:41	65.478	2851.80	192.30	03/03/02	07:33:51	65.481	2847.85	192.35
03/03/02	07:34:11	65.486	2844.01	192.27	03/03/02	07:34:41	65.495	2840.71	192.29
03/03/02	07:41:51	65.614	2835.77	190.18	03/03/02	07:42:21	65.622	2832.74	190.32
03/03/02	07:42:41	65.628	2828.30	189.82	03/03/02	07:43:11	65.636	2824.39	189.87
03/03/02	07:43:31	65.642	2819.56	189.38	03/03/02	07:43:51	65.647	2817.35	189.41
03/03/02	07:44:11	65.653	2812.45	188.73	03/03/02	07:44:31	65.659	2810.26	188.79
03/03/02	07:50:01	65.750	2805.25	182.67	03/03/02	07:50:21	65.756	2802.76	183.30
03/03/02	07:50:41	65.761	2797.11	182.19	03/03/02	07:51:01	65.767	2794.71	182.76
03/03/02	07:51:21	65.772	2789.07	181.48	03/03/02	07:51:41	65.778	2786.64	182.08
03/03/02	07:52:01	65.784	2780.93	180.59	03/03/02	07:52:21	65.789	2778.44	181.27
03/03/02	07:52:41	65.795	2772.63	179.56	03/03/02	07:53:01	65.800	2770.13	180.34
03/03/02	07:53:21	65.806	2764.29	178.39	03/03/02	07:53:41	65.811	2761.77	179.27
03/03/02	07:54:01	65.817	2755.74	177.07	03/03/02	07:54:21	65.823	2753.23	178.09
03/03/02	07:54:41	65.828	2748.35	175.63	03/03/02	07:55:11	65.836	2745.82	176.80
03/03/02	08:01:21	65.939	2741.25	165.88	03/03/02	08:01:51	65.948	2737.67	167.21
03/03/02	08:02:01	65.950	2733.81	165.32	03/03/02	08:02:31	65.959	2729.78	166.55
03/03/02	08:02:41	65.961	2725.98	164.60	03/03/02	08:03:11	65.970	2721.91	165.79
03/03/02	08:03:21	65.973	2718.08	164.18	03/03/02	08:03:51	65.981	2713.86	164.94
03/03/02	08:04:01	65.984	2710.03	163.27	03/03/02	08:04:31	65.992	2705.83	164.00
03/03/02	08:04:41	65.995	2701.97	162.25	03/03/02	08:05:11	66.003	2697.78	163.24
03/03/02	08:05:21	66.006	2693.82	161.13	03/03/02	08:05:51	66.014	2689.63	162.18
03/03/02	08:06:01	66.017	2685.65	159.97	03/03/02	08:06:31	66.025	2681.46	161.05
03/03/02	08:06:41	66.028	2677.93	158.72	03/03/02	08:14:01	66.150	2672.93	150.38
03/03/02	08:14:11	66.153	2669.25	148.74	03/03/02	08:14:41	66.161	2665.29	149.78
03/03/02	08:14:51	66.164	2661.59	148.13	03/03/02	08:15:21	66.173	2657.43	149.12
03/03/02	08:15:31	66.175	2653.64	147.43	03/03/02	08:16:01	66.184	2649.38	148.40
03/03/02	08:16:11	66.186	2646.22	146.67	03/03/02	08:16:41	66.195	2642.15	147.62
03/03/02	08:16:51	66.198	2638.21	145.80	03/03/02	08:17:21	66.206	2633.51	146.74
03/03/02	08:17:31	66.209	2629.55	144.80	03/03/02	08:18:01	66.217	2624.89	145.80
03/03/02	08:18:11	66.220	2620.86	143.77	03/03/02	08:18:41	66.228	2616.12	144.82
03/03/02	08:18:51	66.231	2612.08	142.68	03/03/02	08:25:01	66.334	2606.97	136.69
03/03/02	08:25:11	66.336	2603.16	135.43	03/03/02	08:25:41	66.345	2598.19	136.06
03/03/02	08:25:51	66.348	2594.54	134.89	03/03/02	08:26:21	66.356	2589.38	135.36
03/03/02	08:26:31	66.359	2585.75	134.22	03/03/02	08:27:01	66.367	2580.41	134.59
03/03/02	08:27:11	66.370	2576.79	133.44	03/03/02	08:27:41	66.378	2571.35	133.75
03/03/02	08:27:51	66.381	2567.79	132.58	03/03/02	08:28:21	66.389	2562.30	132.85
03/03/02	08:28:31	66.392	2558.81	131.64	03/03/02	08:29:01	66.400	2553.24	131.89
03/03/02	08:29:11	66.403	2549.70	130.63	03/03/02	08:29:41	66.411	2544.01	130.90



	<b>Electronic Memory Recorder</b>			
	Customer: Santos Ltd.	Well Name: Croft # 1		
	Perforations: 6642' - 6656' KB	Formation: Waarre C		
	Date Of Test: 28/02/02	Type Of Test: Flow Test		
Operator: N. Dover	Control No.: Croft 1 280202			

Data Filter: 12000 Secs; 7 PSI Window

Top EMP Q Serial Number: 2208 " Bottom EMP Q Serial Number: 2209 "

EMP Q Calibration I.D.: 2208-19244 " EMP Q Calibration I.D.: 2209-20196 "

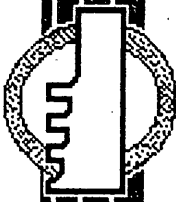
Full Scale Pressure: 10000 psi " Full Scale Pressure: 10000 psi "

Probe Started: 28/02/02 @ 14:05:00 Probe Started: 28/02/02 @ 14:07:00

TOP GAUGE					BOTTOM GAUGE				
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Date	Real Time	Elapsed Time (Hrs)	Top Pressure (PSIG)	Top Temp. (°F)	Date	Real Time	Elapsed Time (Hrs)	Bottom Pressure (PSIG)	Bottom Temp. (°F)
03/03/02	08:29:41	66.411	2542.66	129.59	03/03/02	08:35:41	66.511	2535.20	124.24
03/03/02	08:35:41	66.511	2533.57	123.07	03/03/02	08:36:21	66.522	2526.04	123.59
03/03/02	08:36:21	66.522	2524.27	122.14	03/03/02	08:37:01	66.534	2516.81	122.78
03/03/02	08:37:01	66.534	2515.10	121.22	03/03/02	08:37:41	66.545	2507.46	121.79
03/03/02	08:37:41	66.545	2505.72	120.10	03/03/02	08:38:11	66.553	2500.27	120.97
03/03/02	08:38:21	66.556	2496.14	118.83	03/03/02	08:38:51	66.564	2490.58	119.76
03/03/02	08:39:01	66.567	2486.41	117.37	03/03/02	08:39:31	66.575	2480.67	118.37
03/03/02	08:39:41	66.578	2476.48	115.71	03/03/02	08:40:11	66.586	2472.56	116.82
03/03/02	08:46:11	66.686	2468.97	104.29	03/03/02	08:46:41	66.695	2463.60	105.95
03/03/02	08:46:41	66.695	2461.26	103.53	03/03/02	08:47:11	66.703	2455.65	105.07
03/03/02	08:47:11	66.703	2453.45	102.59	03/03/02	08:47:41	66.711	2447.60	104.00
03/03/02	08:47:41	66.711	2445.43	101.37	03/03/02	08:48:11	66.720	2439.29	102.73
03/03/02	08:48:21	66.723	2434.99	99.87	03/03/02	08:48:51	66.731	2428.65	101.25
03/03/02	08:49:01	66.734	2424.33	98.13	03/03/02	08:49:31	66.742	2417.76	99.60
03/03/02	08:49:41	66.745	2413.46	96.21	03/03/02	08:50:41	66.761	2410.51	97.83
03/03/02	08:51:01	66.767	2404.36	92.36	03/03/02	08:51:31	66.775	2401.75	94.33
03/03/02	08:52:21	66.789	2397.16	88.76	03/03/02	09:09:11	67.070	2378.37	65.95
03/03/02	09:09:11	67.070	2351.82	64.67	03/03/02	09:09:21	67.073	2198.21	65.95
03/03/02	09:09:21	67.073	2109.60	64.67	03/03/02	09:09:31	67.075	1878.05	65.95
03/03/02	09:09:31	67.075	1779.03	64.67	03/03/02	09:09:41	67.078	1611.72	65.95
03/03/02	09:09:41	67.078	1511.91	64.67	03/03/02	09:09:51	67.081	1264.72	65.95
03/03/02	09:09:51	67.081	1143.36	64.67	03/03/02	09:10:01	67.084	912.57	65.95
03/03/02	09:10:01	67.084	798.33	64.67	03/03/02	09:10:11	67.086	495.50	65.95
03/03/02	09:10:11	67.086	385.60	64.67	03/03/02	09:10:21	67.089	157.72	65.95
03/03/02	09:10:21	67.089	32.07	64.67	03/03/02	09:10:31	67.092	5.68	65.95
03/03/02	09:10:31	67.092	8.52	64.67					
03/03/02	09:17:11	67.203	1.36	49.90					

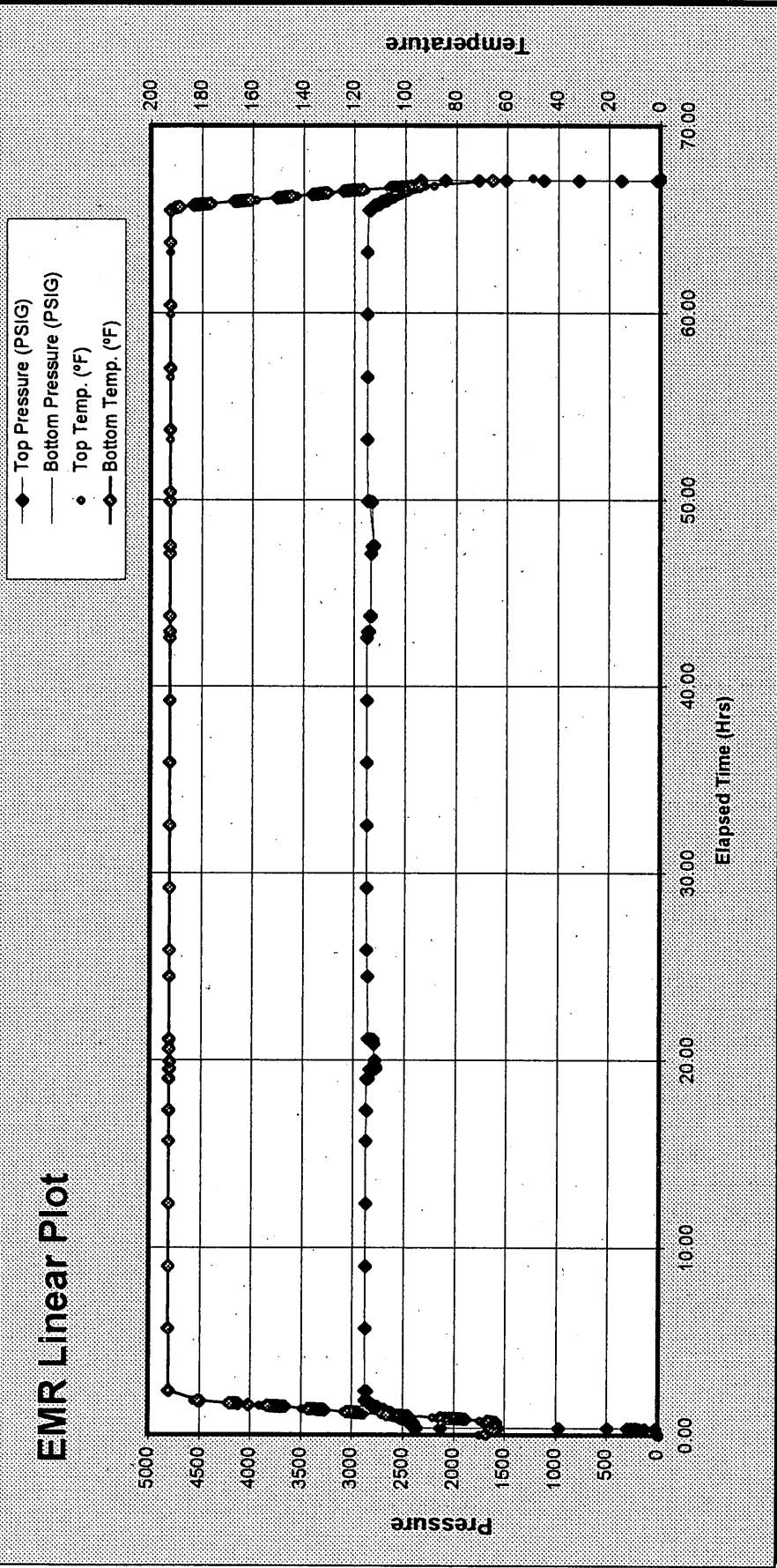
EXPERTEST PTY. LTD.



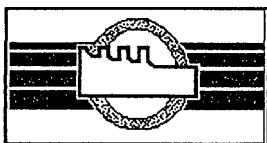
### Electronic Memory Recorder - Linear Plot

Customer:	Santos Ltd.	Well Name:	Croft # 1	Formation:	Waarre C
Perforations:	6642' - 6656' KB	Type Of Test:	Flow Test	Operator:	N. Dover
Date Of Test:	28/02/02			Control No.:	Croft 1 280202
	Top EMP Q Serial Number: 2208 "				Bottom EMP Q Serial Number: 2209 "
	EMP Q Calibration I.D.: 2208-19244 "				EMP Q Calibration I.D.: 2209-20196 "
	Full Scale Pressure: 10000 psi "				Full Scale Pressure: 10000 psi "

### EMR Linear Plot





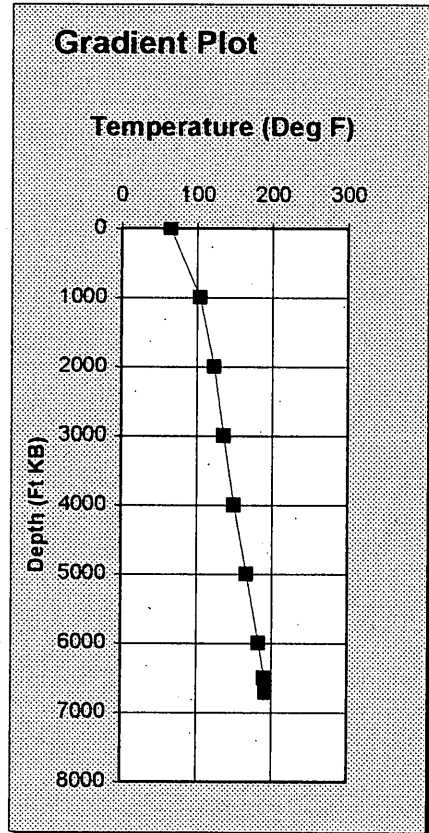
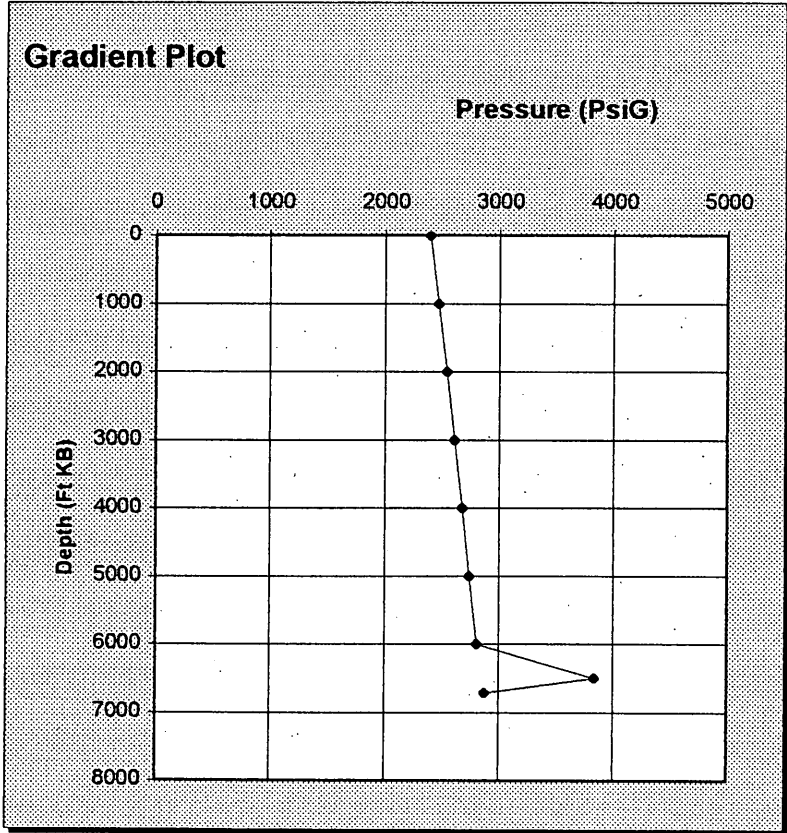


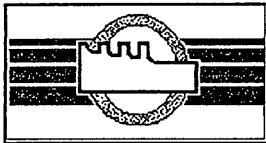
# Static Gradient Report

Well Name Croft 1  
Formation Waare 'C'

Representative	N Dover	Control No.:	Croft 1 280202
Test Type	SGS/BHP	Recorder Depth (KB)	6710 ft
Test Date	28/02/02	Recorder Position	Top
		Serial Number	2208

Reading Time		Depth Ft KB	Pressure PsiG	Temp. Deg F	Gradient Psi/ft	Remarks
MM/DD	hh:mm:ss					
03/03	09:35:00	6710	2873.88	192.30		
		6500	3838.24	190.30	-4.592	
		6000	2807.13	183.10	2.062	
		5000	2742.27	166.50	0.065	
		4000	2675.87	149.70	0.066	
		3000	2608.67	136.00	0.067	
		2000	2540.10	123.50	0.069	
		1000	2470.76	104.30	0.069	
		0	2394.11	65.00	0.077	



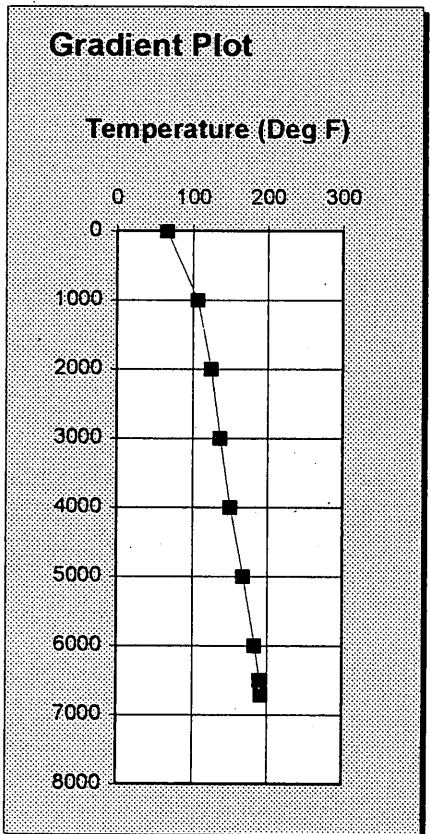
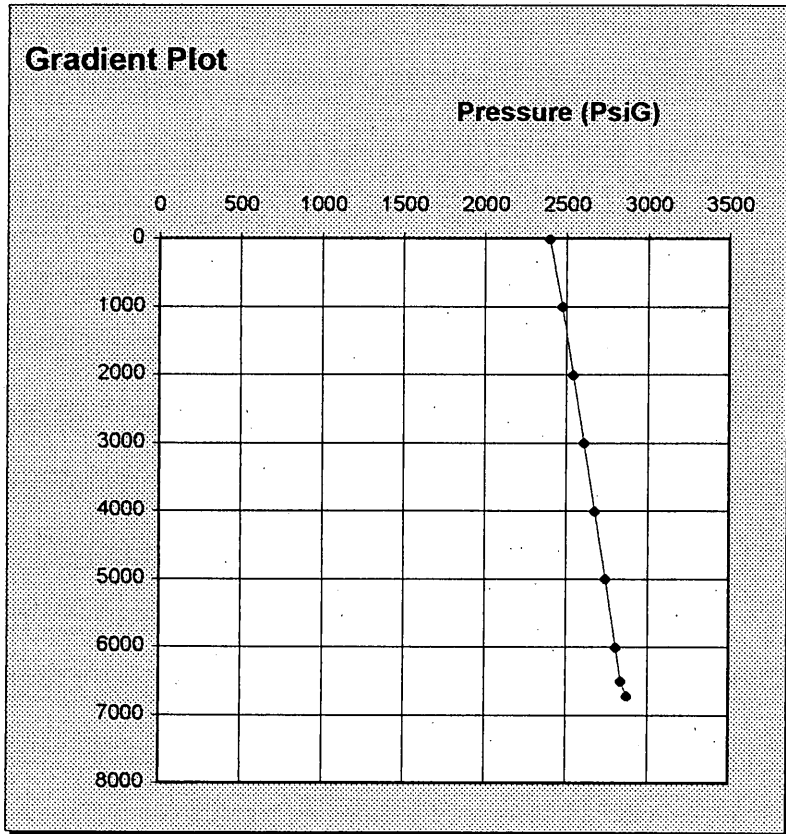


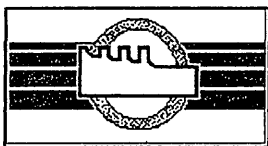
# Static Gradient Report

Well Name Croft 1  
Formation Waare 'C'

Representative	N Dover	Control No.:	Croft 1 280202
Test Type	SGS/BHP	Recorder Depth (KB)	6710 ft
Test Date	28/02/02	Recorder Position	Bottom
		Serial Number	2209

Reading Time		Depth	Pressure	Temp.	Gradient	Remarks
MM/DD	hh:mm:ss	Ft KB	PsiG	Deg F	Psi/ft	
3/3	09:36:00	6720	2876.08	192.40		
		6505	2838.97	190.50	0.173	
		6005	2808.19	183.80	0.062	
		5005	2743.56	167.90	0.065	
		4005	2677.00	150.90	0.067	
		3005	2609.74	137.30	0.067	
		2005	2541.16	124.80	0.069	
		1005	2472.68	106.80	0.068	
		5	2395.73	66.30	0.077	



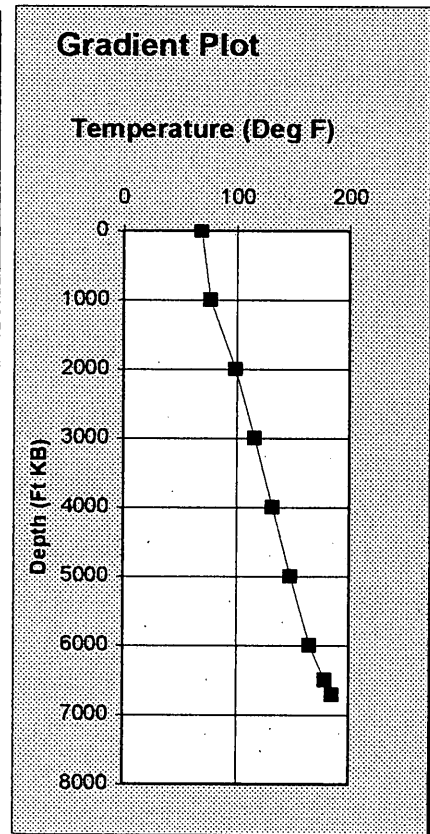
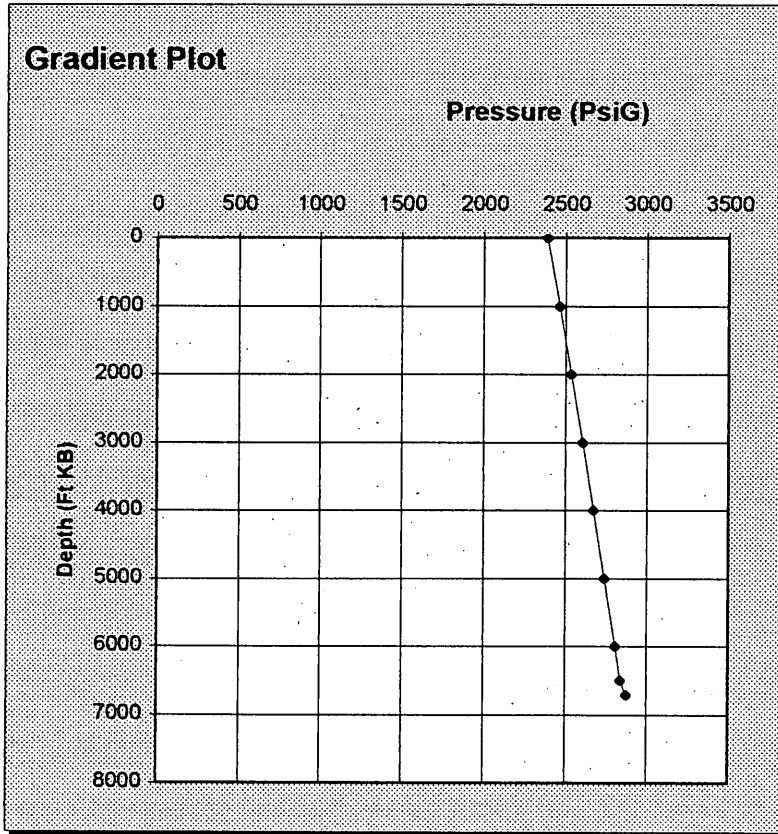


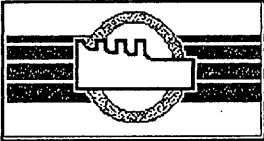
# Static Gradient Report

Well Name Croft 1  
Formation Waare 'C'

Representative	N Dover	Control No.:	Croft 1 280202
Test Type	SGS/BHP	Recorder Depth (KB)	6710 ft
Test Date	28/02/02	Recorder Position	Top
		Serial Number	2208

Reading Time		Depth Ft KB	Pressure PsiG	Temp. Deg F	Gradient Psi/ft	Remarks
MM/DD	hh:mm:ss					
28/02	14:05:00	0	2389.50	68.90		
		1000	2466.84	77.20	0.077	
		2000	2537.24	99.00	0.070	
		3000	2608.00	116.50	0.071	
		4000	2676.41	132.20	0.068	
		5000	2743.13	148.10	0.067	
		6000	2808.01	165.40	0.065	
		6500	2839.69	179.20	0.063	
		6710	2876.35	185.10	0.175	



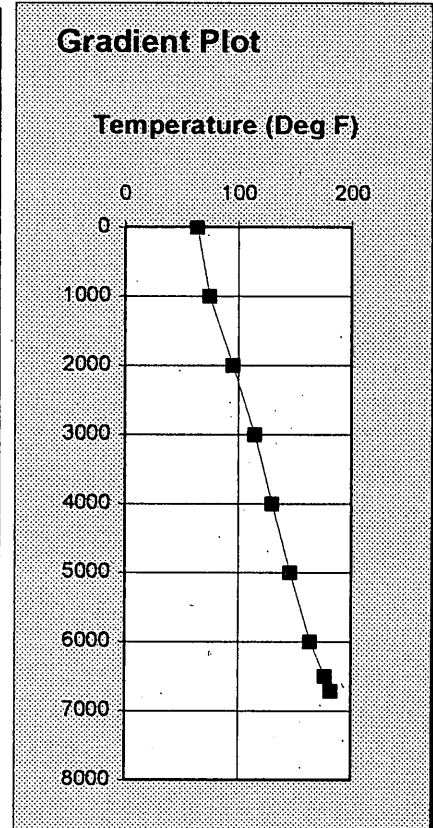
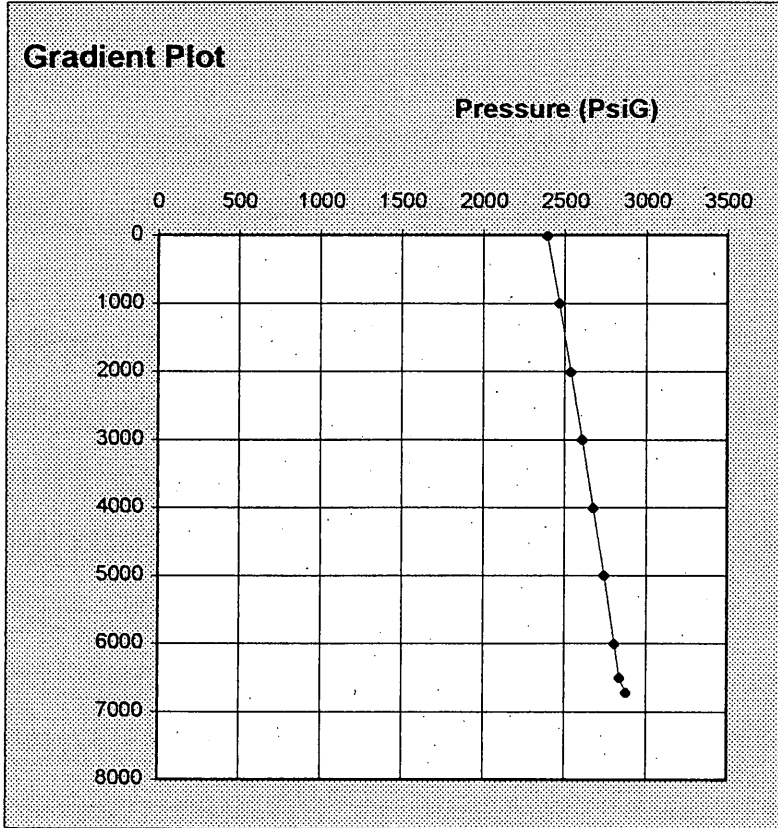


# Static Gradient Report

Well Name Croft 1  
Formation Waare 'C'

Representative	N Dover	Control No.:	Croft 1 280202
Test Type	SGS/BHP	Recorder Depth (KB)	6710 ft
Test Date	28/02/02	Recorder Position	Bottom
		Serial Number	2209

Reading Time		Depth Ft KB	Pressure PsiG	Temp. Deg F	Gradient Psi/ft	Remarks
MM/DD	hh:mm:ss					
28/02	14:07:00	5	2390.43	63.90		
		1005	2466.91	74.60	0.076	
		2005	2537.82	95.70	0.071	
		3005	2608.08	114.60	0.070	
		4005	2676.26	130.00	0.068	
		5005	2743.13	146.30	0.067	
		6005	2807.78	163.90	0.065	
		6505	2839.47	177.40	0.063	
		6720	2877.48	182.40	0.177	



**EXPERTEST PTY. LTD.**



**GAUGE RUN SHEET**

CUSTOMER: **SANTOS LTD.**  
 WELL NAME: **CROFT # 1**  
 TEST TYPE: **FLOW TEST**

PERFORMATIONS: **6642 - 6656 LB**  
 FORMATIONS: **WARRIE 'C'**  
 PAGE: **1** OF **1**  
 DATE: **28/02/02**  
 OPR: **N. DOWER**


GAUGE DATA		TOP GAUGE	BOTTOM GAUGE
ELEMENT SERIAL NO.		2208	2209
ELEMENT RANGE	PSI	10000	10000
ELEMENT TYPE		EMP-G	EMP-G
DATE OF CALIBRATION:		1/09/99	14/07/00
LOGK SERIAL NO.	BATT		
CLOCK RANGE	HOURS	N/A	N/A
ENGAGE BATTERY/STYLUS DATE:	28/02/02	TIME 14:05	14:07
DISENGAGE BATTERY/STYLUS DATE:	03/03/02	TIME 09:35	09:36
GAUGE RUN TIME AGGREGATE	HOURS	416	2535
TEST DURATION	HOURS	69	69

RUN DATA		TIME (HOURS)	TUBING PRESSURE (PSI/KPa)	GAUGE RESPONSE (PSI/KPa)
DATE	28/02/02			
PRESSURE LUBRICATOR		14:27	2390	2398
RUN IN HOLE		14:42	2390	2398
ON DEPTH AT	6710 FT/#	15:56	2389	
MAX. RECORDED BHP	PSIA			2892.28
MAX. RECORDED BHT	φ/F			192.3
DATE	03/03/02			
PULL OUT OF HOLE		07:34	2395	
DEPRESSURE LUBRICATOR		09:09	2394	2398

NB: ALL DEPTHS ARE MEASURED FROM KB.

GAUGE CHECKS	LAB	TOP GAUGE	LAB	BOTTOM GAUGE
DATE/PERFORMED BY	27/02/02			
PRE-JOB CHECK	PRESS PSI A/F	14.5	14.75	19.98
	TEMP φ/F	60.66	64.4	60.44
DATE/PERFORMED BY	03/03/02			
POST-JOB CHECK	PRESS PSI A/F	14.5	14.75	19.34
	TEMP φ/F	60	60	60.20
DATE/PERFORMED BY	15/11/01			
CAL. CHECK	PRESS PSI A/F	7967.4	7967.4	7969
	TEMP φ/F	266	266	267

BATTERY DATA	TOP SERIAL NO.	BOTTOM SERIAL NO.	DATE
	RZ-150-07	RZ-150-08	
PRE-JOB PBU/BHP CYCLES:	1	1	28/02/02
PRE-JOB SGS/FGS CYCLES:	1	1	28/02/02
PRE-JOB LOADED VOLTS:	10.7	10.7	03/03/02
POST-JOB LOADED VOLTS:	10.77	10.77	03/03/02

OPERATOR'S SIGNATURE  
  
 This sheet is submitted as 'Original' and is Not typed

COMMENTS: TOP GAUGE ZEROED @ TUBING HANGAR, SGS SURVEYS PERFORMED ON RIN AND POOL

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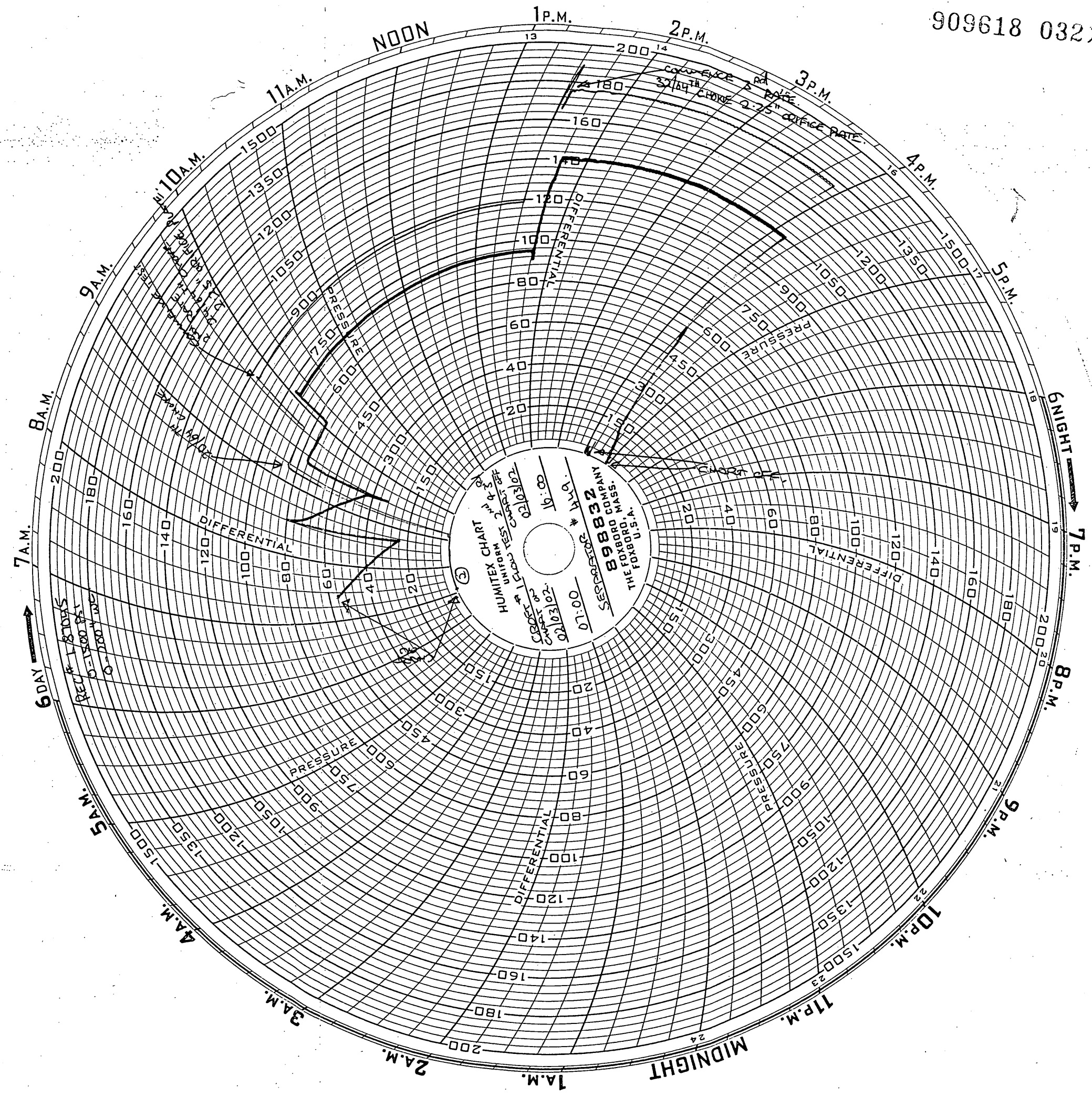
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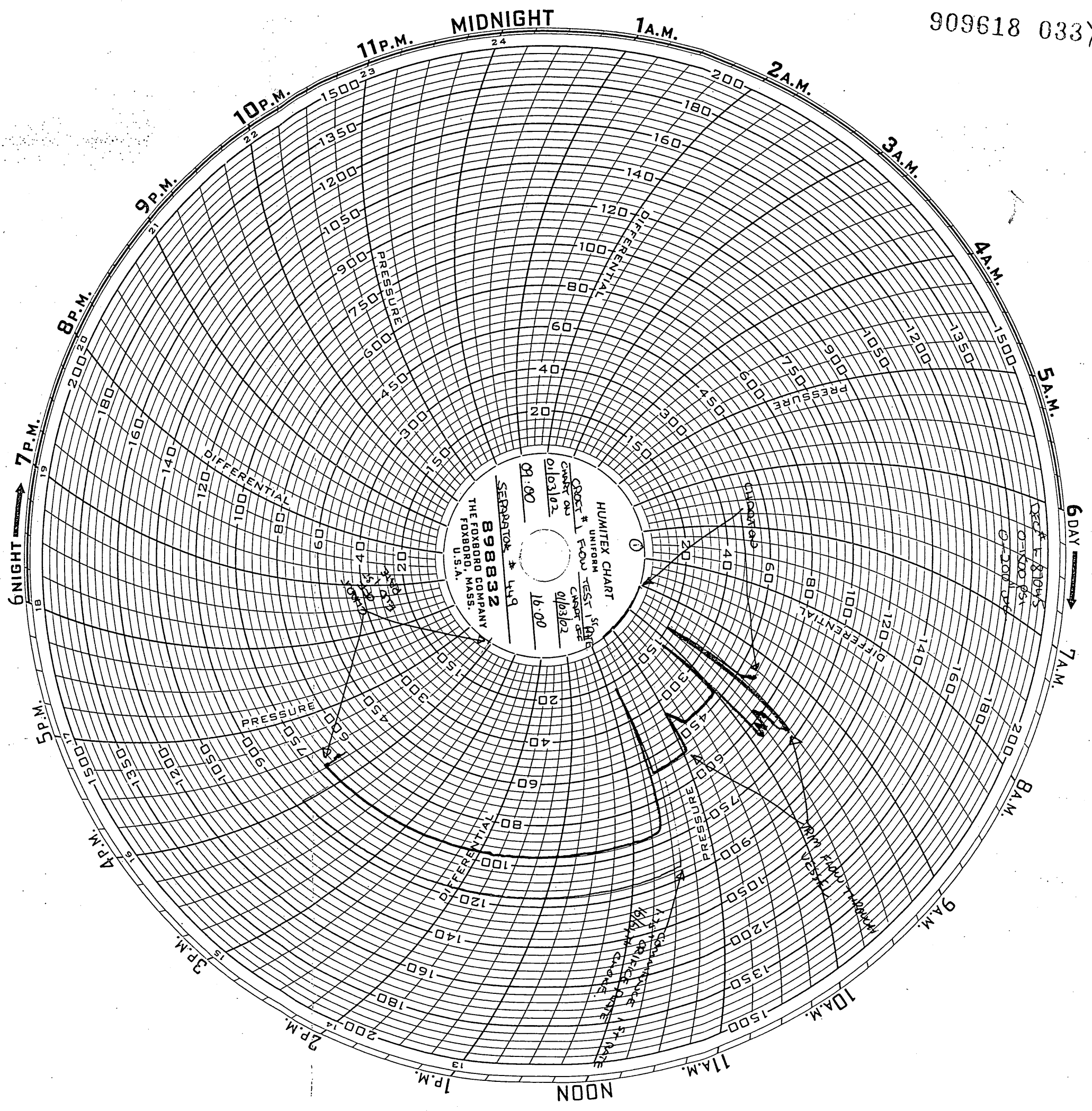
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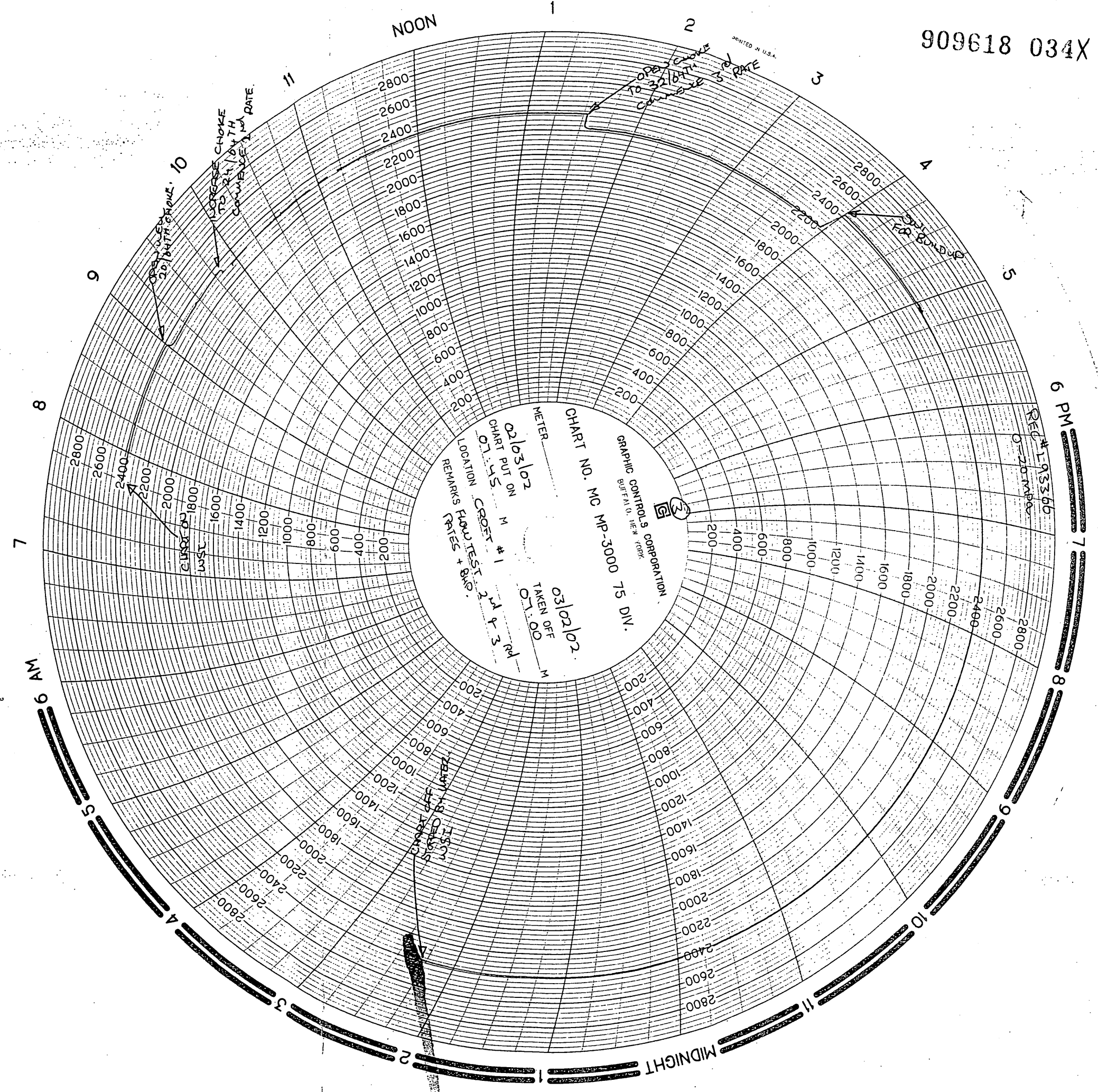
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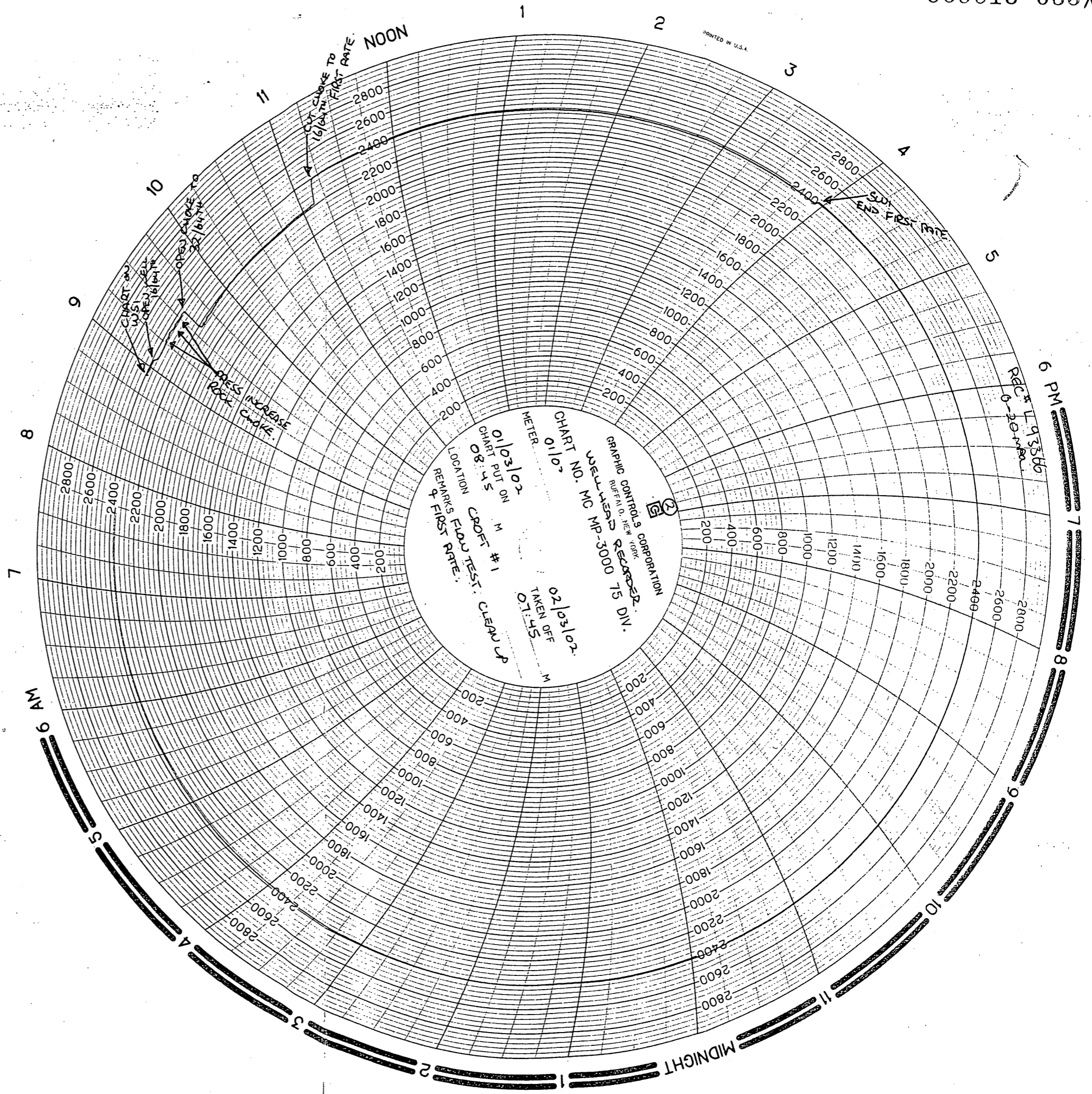
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