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NUMBER 5653

PEL 5 AND PEL 6, TOOLACHEE BLOCK

EROMANGA AND COOPER BASINS

KIDMAN 3

TEST REPORTS

Submitted by

Delhi Petroleum Pty Ltd
1993

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MINES AND ENERGY
SOUTH AUSTRALIA

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ENVELOPE 5653

TENEMENT: PEL 5 and PEL 6, Toolachee Block; Eromanga and Cooper Basins

TENEMENT HOLDER: Delhi Petroleum Pty Ltd (operator), Santos Ltd, Vamgas Ltd and South Australian Oil and Gas Corporation Pty Ltd

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	Dove, K. and Giancaspro, G., 1987. Results of Toolachee Formation gas reservoir perforated interval 6485-6519 feet (Upper gas producing zone) 88 hour reservoir pressure buildup, bottom hole pressure (BHP) and static wellbore pressure gradient surveys conducted over the period 24-30/6/87 (Expertest Pty Ltd).	**5653 R 9** Pgs 84-110	
	Dove, K. and Giancaspro, G., 1987. Results of Patchawarra Formation gas reservoir perforated interval 7264-7384 feet (Lower gas producing zone) 47.5 hour buildup, BHP and static gradient surveys conducted over the period 24-30/6/87 (Expertest Pty Ltd).	**5653 R 10** Pgs 111-137	

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REPORTS:	**Soulmatis, G. and Robinson, P.A., 1987.** Interpretation of modified isochronal gas production test run over the Upper producing zone during the period 27/5/85 - 1/6/85 (Santos Ltd Reservoir Engineering Department report no. RE: 049/87, July 1987).	**5653 R 11** Pgs 138-182
	Smith, A. and Moore, R., 1989. Results of clean-up gas flow and flowing pressure gradient survey, plus 87.5 hour buildup survey, of the re-perforated Toolachee gas reservoir interval 6485-6772 feet, conducted over the period 14-27/7/89 (Expertest Pty Ltd).	**5653 R 12** Pgs 183-201
	Buckland, R., 1990. Results of 77.5 hour buildup, BHP and static pressure gradient surveys of the above Toolachee gas producing zone, conducted over the period 7-11/6/90 (Expertest Pty Ltd, June 1990).	**5653 R 13** Pgs 202-215
	Larkin, R., 1992. Results of multi-rate liquids evaluation test (LET) and flowing gradient survey (FGS), plus 85 hour buildup, BHP and static gradient surveys of the Toolachee producing zone, conducted over the period 2-13/2/92 (Expertest Pty Ltd, February 1992).	**5653 R 14** Pgs 216-266
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SEPARATELY HELD DATA

TRANSPARENCIES: (Held in Document Storage Centre)

Plans marked with +T on contents page are also held as transparencies in Cylinder 5653/1.

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HALLIBURTON
SERVICES

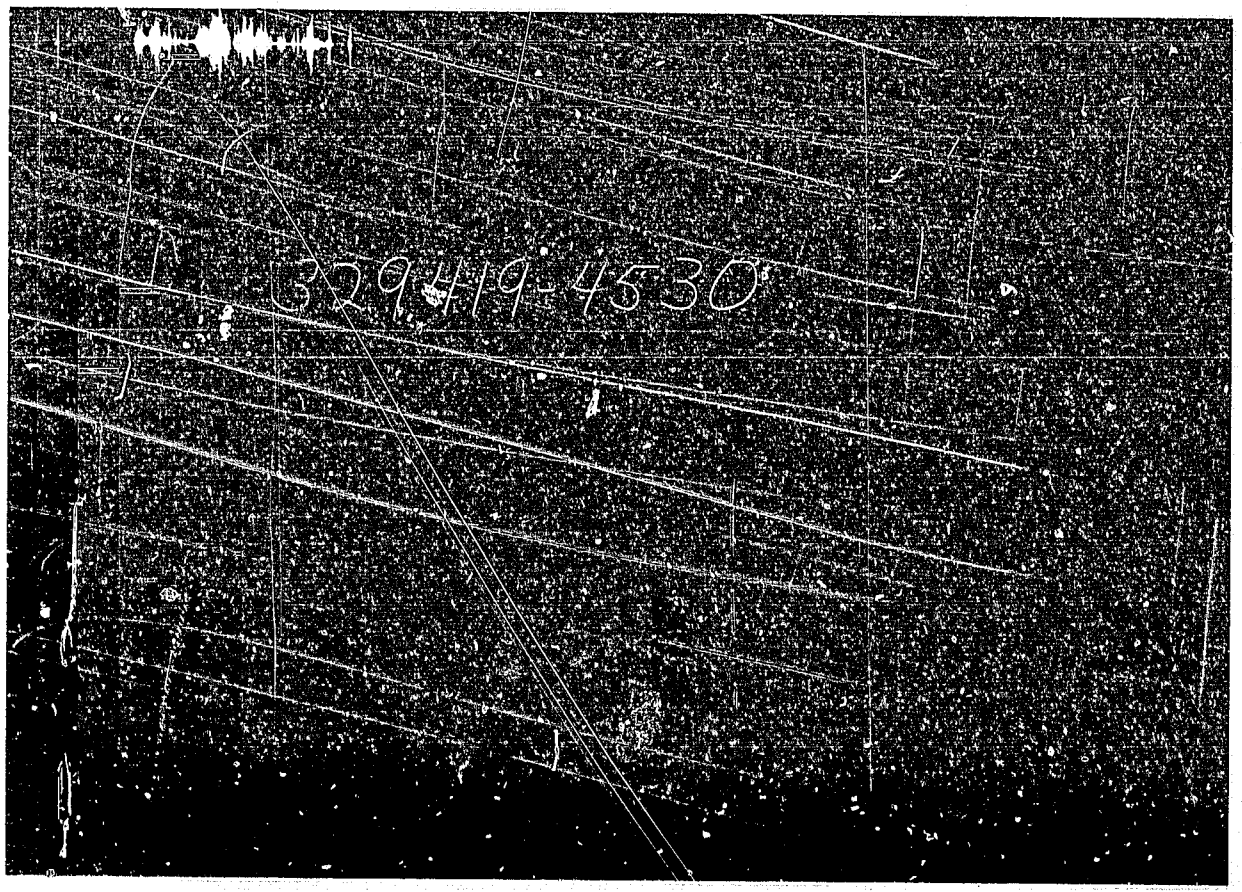
TICKET NO. 32941900
19-NOV-84
MOOMBA

FORMATION TESTING SERVICE REPORT

KIDMAN LEASE NAME	3 WELL NO.	1 TEST NO.	TESTED INTERVAL
LEGAL LOCATION SEC. - TWP. - RNG.	'SEE REMARKS	FIELD AREA	COOPER BASIN
COUNTY SOUTH AUSTRALIA	STATE AUSTRALIA BG		

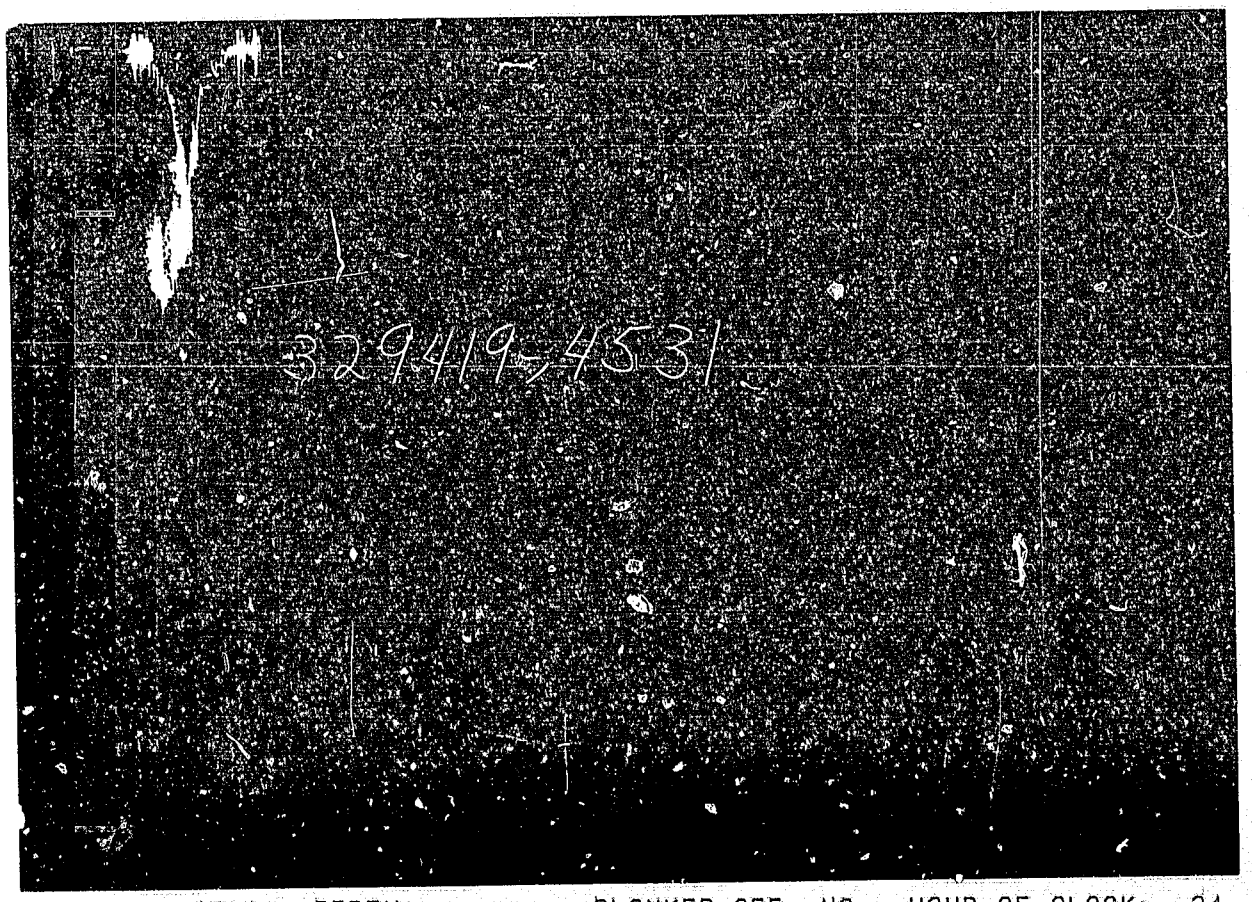
DELHI PETROLEUM PTY., LIMITED
LEASE OWNER/COMPANY NAME

00004



GAUGE NO: 4530 DEPTH: _____ BLANKED OFF: NO HOUR OF CLOCK: 24

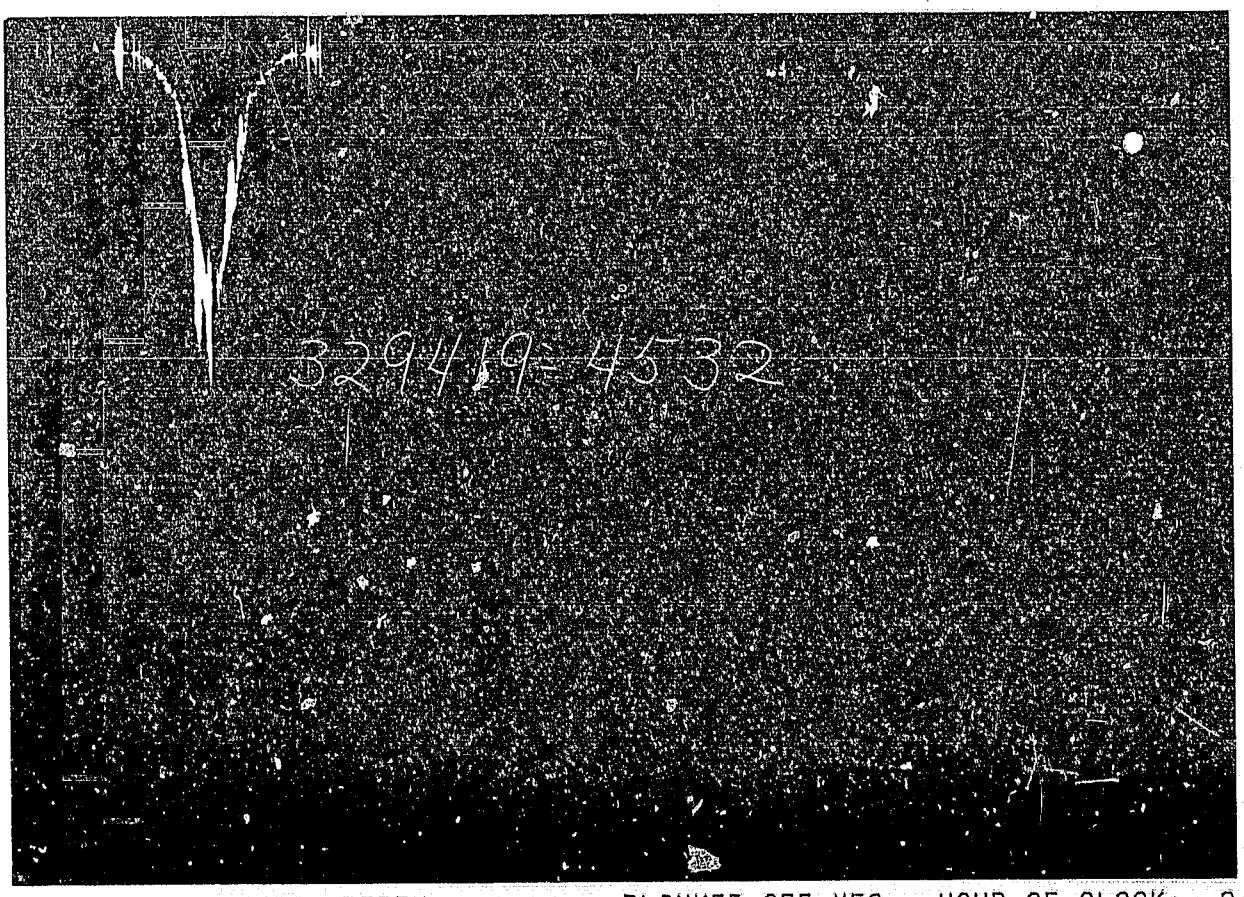
ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	FAILED TO REACH BOTTOM					



GAUGE NO: 4531 DEPTH: _____ BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	FAILED TO REACH BOTTOM					

01006



GAUGE NO: 4532 DEPTH: _____ BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	FAILED TO REACH BOTTOM					

00007

EQUIPMENT & HOLE DATA

FORMATION TESTED: TOOLACHEE
NET PAY (ft): 67.0
GROSS TESTED FOOTAGE:
ALL DEPTHS MEASURED FROM: KB
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 8.500
ELEVATION (ft): 254
TOTAL DEPTH (ft): 6522.0
PACKER DEPTH(S) (ft):
FINAL SURFACE CHOKE (in):
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.40
MUD VISCOSITY (sec): 35
ESTIMATED HOLE TEMP. (°F): 196
ACTUAL HOLE TEMP. (°F): ___ @ ___ ft

TICKET NUMBER: 32941900

DATE: 9-15-84 TEST NO: 1

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: MOOMBA

TESTER: COWLEY

WITNESS: OZOLINS ???

DRILLING CONTRACTOR: RITCHER #2

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm

SAMPLER DATA

Psig AT SURFACE:
cu.ft. OF GAS:
cc OF OIL:
cc OF WATER:
cc OF MUD:
TOTAL LIQUID cc:

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): @ °F
GAS/OIL RATIO (cu.ft. per bbl):
GAS GRAVITY:

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

MEASURED FROM TESTER VALVE

REMARKS:

MISRUN.....FAILED TO REACH BOTTOM.

ATTEMPTED TO TEST FROM 6455' TO 6522'.

LEGAL LOCATION = LAT. 28 DEGREES 15' 22.6" SOUTH
LONG. 140 DEGREES 48' 27.0" EAST.

00008

TYPE & SIZE MEASURING DEVICE: 6" CERAMIC CHOKE | TICKET NO: 32941900

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
9-15-84					
1300					MADE UP TOOL
1420					RAN IN HOLE
					TOOL AT 3,500' HIT A TIGHT SPOT.
					UNABLE TO WORK THROUGH IT.
					PULLED TOOL OUT TO DO A WIPER
					TRIP.
1630					TOOL AT FLOOR
1730					TOOL BROKEN DOWN, JOB COMPLETED.

00003

TICKET NO. 32941900

		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....				
4	FLEX WEIGHT.....	6.000	2.875	179.1	
3	DRILL COLLARS.....	6.250	2.937	392.7	
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	
3	DRILL COLLARS.....	6.250	2.937	28.3	
5	CROSSOVER.....	5.750		1.0	
80	AP RUNNING CASE.....	5.000	2.250	4.1	
5	CROSSOVER.....	5.000	2.200	1.0	
12	DUAL CIP VALVE.....	5.000	0.870	4.8	
97	SAMPLE CHAMBER.....	5.000	2.500	4.9	
33	DRAIN VALVE.....	5.000	2.5[illegible]	0.9	
60	HYDROSPRING TESTER.....	5.000	0.750	5.3	
80	AP RUNNING CASE.....	5.000	2.250	4.1	
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	2.8	
70	OPEN HOLE PACKER.....	5.000	1.530	5.8	
19	ANCHOR PIPE SAFETY JOINT.....	5.000	1.500	4.3	
5	CROSSOVER.....	5.750	2.250	1.0	
3	DRILL COLLARS.....	6.250	2.937	29.6	
5	CROSSOVER.....	5.750	2.250	1.0	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	25.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.1	
	TOTAL DEPTH				6522.0

EQUIPMENT DATA

803

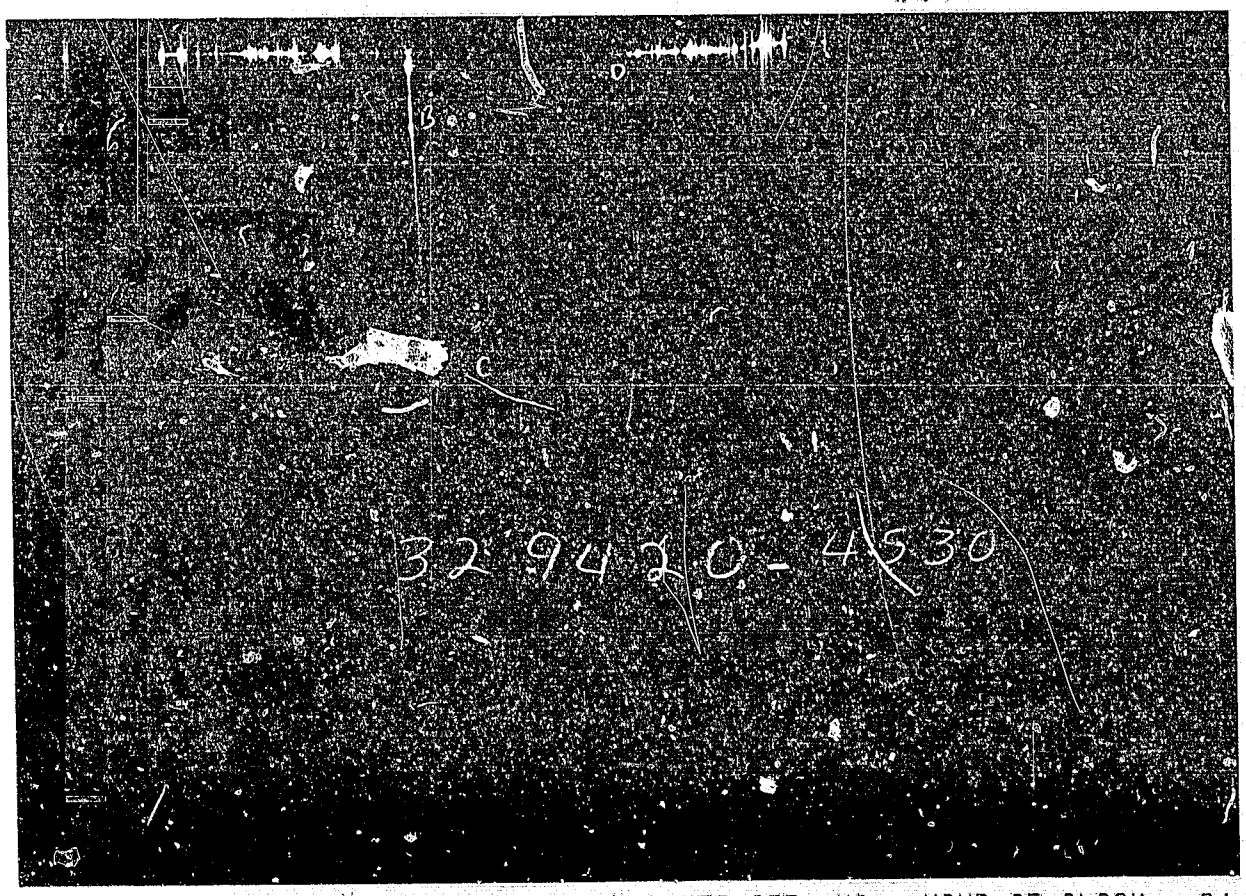
00010

HALLIBURTON
SERVICES

TICKET NO. 32942000
14-JAN-85
MOOMBA

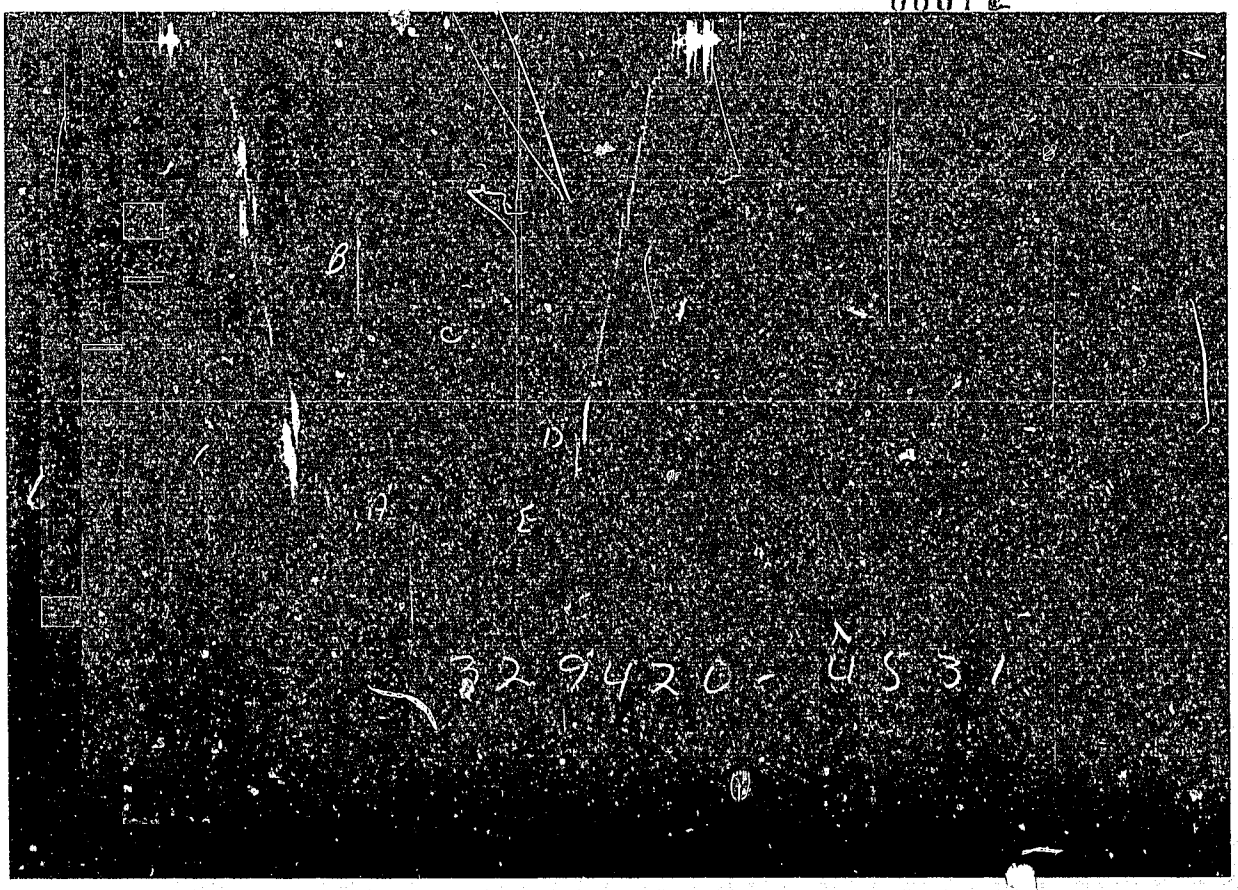
FORMATION TESTING SERVICE REPORT

KIDMAN	3	1 of 2	
LEASE NAME	WELL NO.	TEST NO.	
LEGAL LOCATION SEC. - TWP. - RNG.	SEE REMARKS	FIELD AREA	COOPER BASIN
6456.' - 6522.'	DELHI/SANTOS		
TESTED INTERVAL	LEASE OWNER/COMPANY NAME		
COOPER BASIN	SOUTH AUSTRALIA	STATE AUSTRALIA	DR/PW
COUNTY			



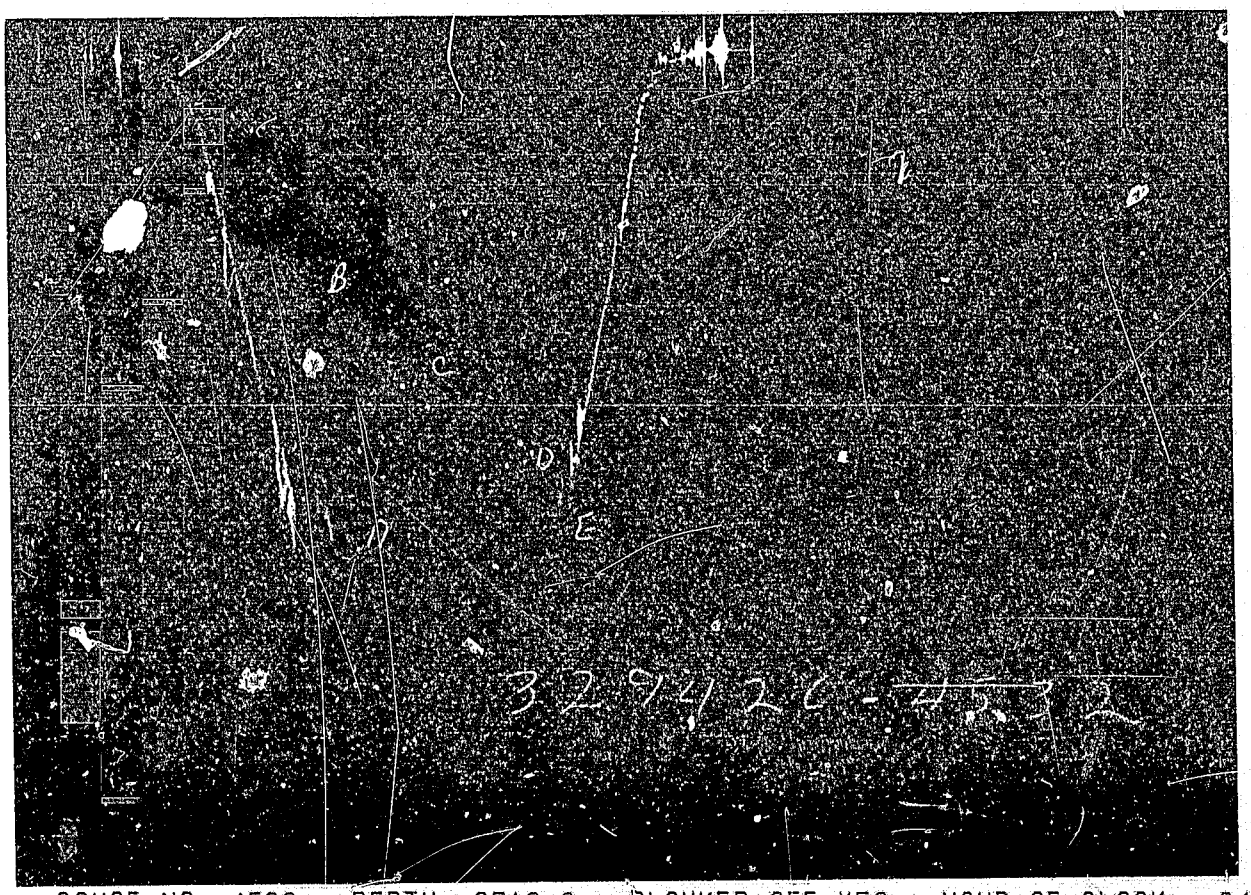
GAUGE NO: 4530 DEPTH: 6419.4 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC					
B	INITIAL FIRST FLOW		485.6	77.0	76.7	F
C	FINAL FIRST FLOW		1944.1			
C	INITIAL FIRST CLOSED-IN		1944.1	150.0	150.3	C
D	FINAL FIRST CLOSED-IN	39	37.3			
E	FINAL HYDROSTATIC					



GAUGE NO: 4531 DEPTH: 6440.4 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3128	3120.6			
B	INITIAL FIRST FLOW	1288	1325.2	77.0	76.7	F
C	FINAL FIRST FLOW	2065	2064.9			
C	INITIAL FIRST CLOSED-IN	2065	2064.9	150.0	150.3	C
D	FINAL FIRST CLOSED-IN	2816	2812.6			
E	FINAL HYDROSTATIC	3115	3105.0			



GAUGE NO: 4532 DEPTH: 6519.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3163	3166.2			
B	INITIAL FIRST FLOW	1451	1445.3	77.0	76.7	F
C	FINAL FIRST FLOW	2085	2098.4			
I	INITIAL FIRST CLOSED-IN	2085	2098.4	150.0	150.3	C
D	FINAL FIRST CLOSED-IN	2811	2813.5			
F	FINAL HYDROSTATIC	3127	3128.7			

00014

EQUIPMENT & HOLE DATA

FORMATION TESTED: TOOLACHEE
NET PAY (ft): _____
GROSS TESTED FOOTAGE: 66.3
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft): _____
HOLE OR CASING SIZE (in): 8.500
ELEVATION (ft): 254
TOTAL DEPTH (ft): 6522.0
PACKER DEPTH(S) (ft): 6456
FINAL SURFACE CHOKE (in): _____
BOTTOM HOLE CHOKE (in): 0.750
MUD WE[illegible] (gal): 9.40
MUD VIS[illegible] (sec): 44
ESTIMATED HOLE TEMP. (°F): _____
ACTUAL HOLE TEMP. (°F): 235 @ 6518.0 ft

TICKET NUMBER: 32942000

DATE: 9-17-84 TEST NO: 1-A

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: MOOMBA

TESTER: N. COWLEY

WITNESS: J.E. OZOLIN

DRILLING CONTRACTOR: RICHTER #2

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY		CHLORIDES
_____	_____ @	°F	_____ ppm
_____	_____ @	°F	_____ ppm
_____	_____ @	°F	_____ ppm
_____	_____ @	°F	_____ ppm
_____	_____ @	°F	_____ ppm
_____	_____ @	°F	_____ ppm

SAMPLER DATA

Psig AT SURFACE: _____
cu.ft. OF GAS: _____
cc OF OIL: _____
cc OF WATER: _____
cc OF MUD: _____
TOTAL LIQUID cc: _____

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): _____ @ ___°F
GAS/OIL RATIO (cu.ft. per bbl): _____
GAS GRAVITY: _____

CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

RECOVERED:

90 FEET OF CONDENSATE
30 FFET OF WATER
GAS AND CONDENSATE TO SURFACE

MEASURED FROM TESTER VALVE

REMARKS:

TEST DATE WAS 17-SEPT.-1984

LEGAL LOCATION: LAT. 28 DEGREES - 15' - 22.6" SOUTH
LONG. 140 DEGREES - 48' - 27.0" EAST

DIMENSIONS OF THE DRILL PIPE WERE NOT REPORTED

TYPE & SIZE MEASURING DEVICE: 6" CERAMIC CHOKE | TICKET NO: 32942000

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
9-17-84					
0130					PICKED-UP TOOL
0222					TOOL MADE-UP AND RUN IN HOLE
0626					HEAD UP TO MANIFOLD
0636					SEAT PACKER WITH 33,000#
0641	.50"				OPENED TOOL - WEAK BLOW
					INCREASING TO A STRONG BLOW
					VERY QUICKLY.
0642	.50"	20			
0643	.50"	60			
0644	.50"	200			GAS TO THE SURFACE
0648	.50"	800			RAT HOLE MUD TO THE SURFACE
0650	.50"	1000			
0652	.50"	1200			GAS FLOW - INTERMITTENT
0655	.50"	1500			CLOSED MASTER VALVE BECAUSE
					ONE UNION WAS LEAKING.
0656	.50"	1500			UNION FIXED - MASTER VALVE
					OPENED.
0658	.50"	1600			FLOW STILL FLUCTUATING
0700	.50"	1620			
0702	.50"	1610			GAS FLOW STEADY - FLUID HAS
					CLEANED UP.
0705	.50"	1610			PRESSURE HAS STABILIZED
					BUT FLOW VERY WET (CONDENSATE)
0710	.50"	1610			
0715	.50"	1610			
0720	.50"	1600			
0725	.50"	1600			
0730	.50"	1600			
0735	.50"	1600			
0745	.50"	1600			
0758		1600			CLOSED TOOL
1028					OPENED BYPASS
1035					PULLED PACKER LOOSE WITH
					15,000# OVERPULL - PULLED OUT
					OF HOLE - NO DRAG.
1335					TOOL AT FLOOR - STARTED

608

00016

TYPE & SIZE MEASURING DEVICE: 6" CERAMIC CHOKE | TICKET NO: 329-2000

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
					BREAKING DOWN.
1430					FINISHED

PT8

00017

TICKET NO: 32942000	GAUGE NO: 4530
CLOCK NO: C HOUR: 24	DEPTH: 6419.4

HALLIBURTON SERVICES

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log\frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	485.6			
	2	5.0	1215.4	729.8		
	3	10.0	1730.5	515.1		
	4	15.0	1991.4	260.9		
	5	20.0	2008.5	17.1		
[I]	6	25.0	2021.5	13.1		
	7	30.0	1975.0	-46.5		
	8	35.0	1974.4	-0.6		
	9	40.0	1958.5	-15.9		
	10	45.0	1953.8	-4.7		
	11	50.0	1949.1	-4.7		
	12	55.0	1951.7	2.6		
	13	60.0	1943.4	-8.3		
	14	65.0	1937.0	-6.5		
	15	70.0	1940.7	3.7		
	16	75.0	1944.7	4.1		
C	17	76.7	1944.1	-0.6		
			FIRST CLOSED-IN			
C	1	0.0	1944.1			
D	2	150.3	37.3	-1906.8	50.8	0.179

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log\frac{t+\Delta t}{\Delta t}$

LEGEND:
[I] MAXIMUM FLOW PRESSURE

REMARKS:

00018

TICKET NO: 32942000	GAUGE NO: 4531
CLOCK NO: 0 HOUR: 24	DEPTH: 6440.4

HALLIBURTON SERVICES

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	1325.2			
	2	5.0	1433.9	108.7		
	3	10.0	1810.4	376.4		
	4	15.0	2054.3	243.9		
	5	20.0	2102.3	48.0		
[T]	6	25.0	2104.3	2.0		
	7	30.0	2077.5	-26.8		
	8	35.0	2077.2	-0.3		
	9	40.0	2069.2	-7.9		
	10	45.0	2067.1	-2.2		
	11	50.0	2064.9	-2.2		
	12	55.0	2066.4	1.5		
	13	60.0	2064.1	-2.3		
	14	65.0	2059.3	-4.8		
	15	70.0	2060.3	1.0		
	16	75.0	2064.4	4.1		
C	17	76.7	2064.9	0.5		
			FIRST CLOSED-IN			
C	1	0.0	2064.9			
	2	1.0	2761.8	696.9	1.0	1.884
	3	2.0	2770.2	705.3	2.0	1.595
	4	3.0	2776.5	711.6	2.9	1.426
	5	4.0	2780.6	715.7	3.8	1.302
	6	5.0	2783.6	718.7	4.7	1.209
	7	6.0	2784.9	720.0	5.6	1.139
	8	7.0	2785.6	720.7	6.4	1.078
	9	8.0	2786.2	724.3	7.3	1.023
	10	9.0	2790.9	726.0	8.0	0.979
	11	10.0	2791.4	726.5	8.9	0.938
	12	12.0	2791.9	727.0	10.4	0.869
	13	14.0	2793.7	728.8	11.8	0.811
	14	16.0	2796.2	731.3	13.2	0.764
	15	18.0	2798.0	733.1	14.6	0.722
	16	20.0	2798.5	733.6	15.9	0.685
	17	22.0	2800.2	735.3	17.1	0.652
	18	24.0	2801.0	736.1	18.3	0.623
	19	26.0	2801.7	736.8	19.4	0.597
	20	28.0	2802.6	737.7	20.5	0.573
	21	30.0	2803.3	738.4	21.6	0.551
	22	35.0	2804.1	739.2	24.0	0.504
	23	40.0	2805.5	740.6	26.3	0.465
	24	45.0	2805.5	740.6	28.4	0.432
	25	50.0	2806.0	741.1	30.3	0.404
	26	55.0	2806.0	741.1	32.0	0.379
	27	60.0	2807.6	742.7	33.7	0.358
	28	70.0	2808.1	743.2	36.6	0.321
	29	80.0	2809.3	744.4	39.2	0.292
	30	90.0	2810.6	745.7	41.4	0.268

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST CLOSED-IN - CONTINUED			
	31	100.0	2810.6	745.7	43.4	0.247
	32	110.0	2810.6	745.7	45.2	0.230
	33	120.0	2811.6	746.7	46.8	0.215
	34	135.0	2812.4	747.5	48.9	0.195
D	35	150.3	2812.6	747.7	50.8	0.179

LEGEND:
[T] MAXIMUM FLOW PRESSURE

REMARKS:

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00019

TICKET NO: 32942000		GAUGE NO: 4532
CLOCK NO: 0 HOUR: 24	HALLIBURTON SERVICES	DEPTH: 6519.0

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	1445.3			
	2	5.0	1503.3	57.9		
	3	10.0	1829.0	325.7		
	4	15.0	2052.9	223.9		
	5	20.0	2111.0	58.7		
[]	6	25.0	2120.9	9.3		
	7	30.0	2110.6	-10.3		
	8	35.0	2107.3	-3.3		
	9	40.0	2105.9	-1.5		
	10	45.0	2102.3	-3.6		
	11	50.0	2100.7	-1.6		
	12	55.0	2100.0	-0.7		
	13	60.0	2099.2	-0.8		
	14	65.0	2094.3	-4.9		
	15	70.0	2095.8	1.5		
	16	75.0	2098.2	2.4		
C	17	76.7	2098.4	0.2		
			FIRST CLOSED-IN			
C	1	0.0	2098.4			
	2	1.0	2730.3	632.0	1.0	1.872
	3	2.0	2752.4	654.0	1.9	1.596
	4	3.0	2763.0	664.6	2.9	1.419
	5	4.0	2769.5	671.1	3.8	1.306
	6	5.0	2776.5	678.1	4.7	1.211
	7	6.0	2781.1	682.7	5.6	1.138
	8	7.0	2783.7	685.3	6.4	1.076
	9	8.0	2786.8	688.4	7.3	1.024
	10	9.0	2788.9	690.5	8.1	0.978
	11	10.0	2791.4	693.0	8.9	0.938
	12	12.0	2794.1	695.8	10.4	0.868
	13	14.0	2796.2	697.9	11.8	0.812
	14	16.0	2797.6	699.2	13.2	0.764
	15	18.0	2798.5	700.2	14.6	0.721
	16	20.0	2800.5	702.1	15.9	0.685
	17	22.0	2801.5	703.1	17.1	0.652
	18	24.0	2802.8	704.4	18.3	0.623
	19	26.0	2804.1	705.7	19.4	0.595
	20	28.0	2804.6	706.2	20.5	0.573
	21	30.0	2805.7	707.3	21.6	0.551
	22	35.0	2807.0	708.6	24.0	0.504
	23	40.0	2806.9	708.5	26.3	0.465
	24	45.0	2807.8	709.5	28.4	0.432
	25	50.0	2808.6	710.3	30.3	0.404
	26	55.0	2809.8	711.4	32.0	0.379
	27	60.0	2810.3	711.9	33.7	0.358
	28	70.0	2811.4	713.1	36.6	0.321
	29	80.0	2812.7	714.4	38.2	0.292
	30	90.0	2812.7	714.4	41.4	0.268

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST CLOSED-IN - CONTINUED			
	31	100.0	2812.7	714.4	43.4	0.247
	32	110.0	2812.7	714.4	45.2	0.230
	33	120.0	2812.7	714.4	46.8	0.215
	34	135.0	2814.4	716.0	48.9	0.195
D	35	150.3	2813.5	715.2	50.8	0.179

LEGEND:
[] MAXIMUM FLOW PRESSURE

REMARKS:

00020 813

TICKET NO. 32942000

		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....			5816.2	
4	FLEX WEIGHT.....	6.000	2.875	179.1	
3	DRILL COLLARS.....	6.250	2.937	392.7	
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	6387.9
3	DRILL COLLARS.....	6.250	2.937	28.3	
5	CROSSOVER.....	5.750	1.000	1.0	
80	AP RUNNING CASE.....	5.000	2.250	4.1	6419.4
5	CROSSOVER.....	5.000	2.200	1.0	
12	DUAL CIP VALVE.....	5.000	0.870	4.9	
97	SAMPLE CHAMBER.....	5.000	2.500	4.9	6428.3
33	DRAIN VALVE.....	5.000	2.870	0.9	
60	HYDROSPRING TESTER.....	5.000	0.750	5.3	6438.3
80	AP RUNNING CASE.....	5.000	2.250	4.1	6440.4
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	2.8	
70	OPEN HOLE PACKER.....	5.000	1.530	5.8	6455.7
19	ANCHOR PIPE SAFETY JOINT.....	5.000	1.500	4.3	
5	CROSSOVER.....	5.750	2.250	1.0	
3	DRILL COLLARS.....	6.250	2.937	29.6	
5	CROSSOVER.....	5.750	2.250	1.0	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	25.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.1	6519.0

TOTAL DEPTH 6522.0

EQUIPMENT DATA

639

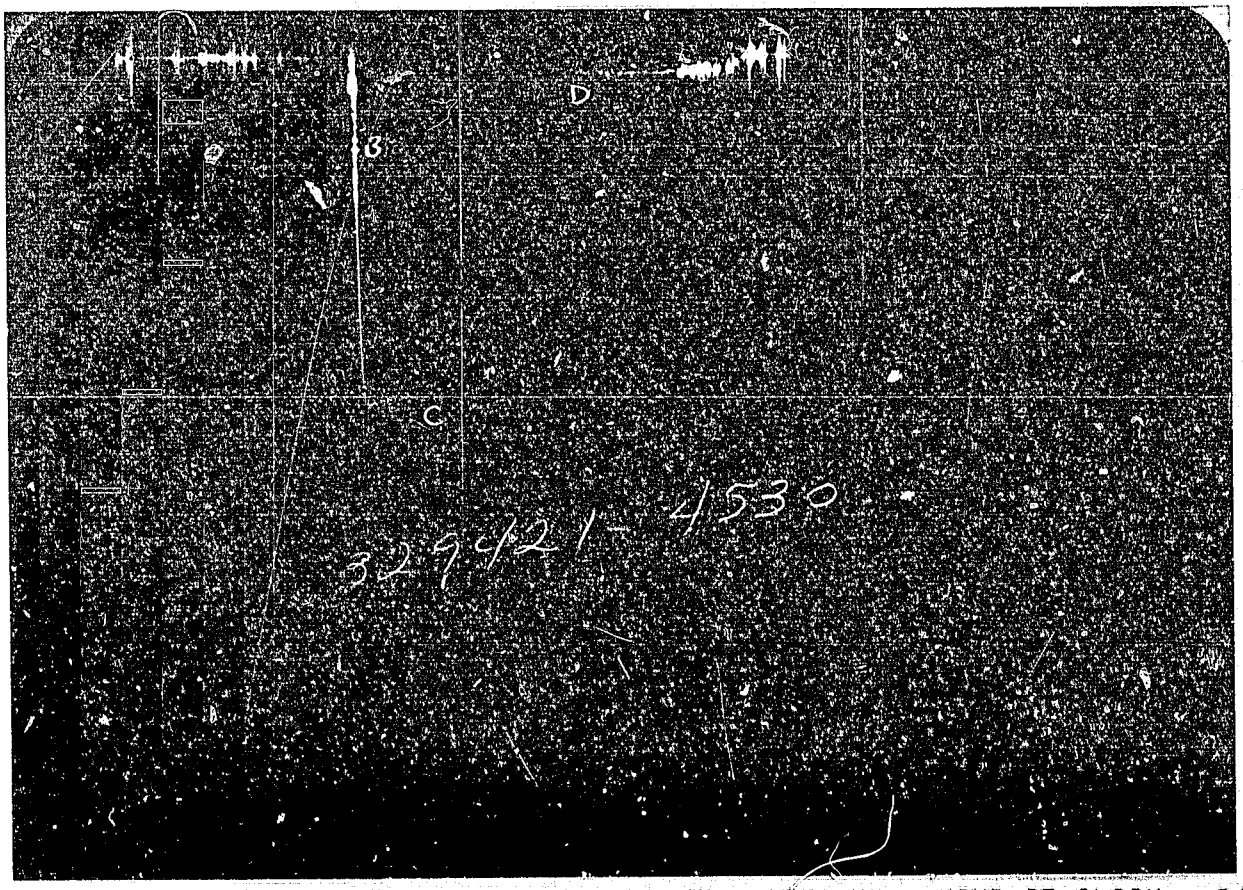
00021

HALLIBURTON
SERVICES

TICKET NO. 32942100
11-JAN-85
MOOMBA

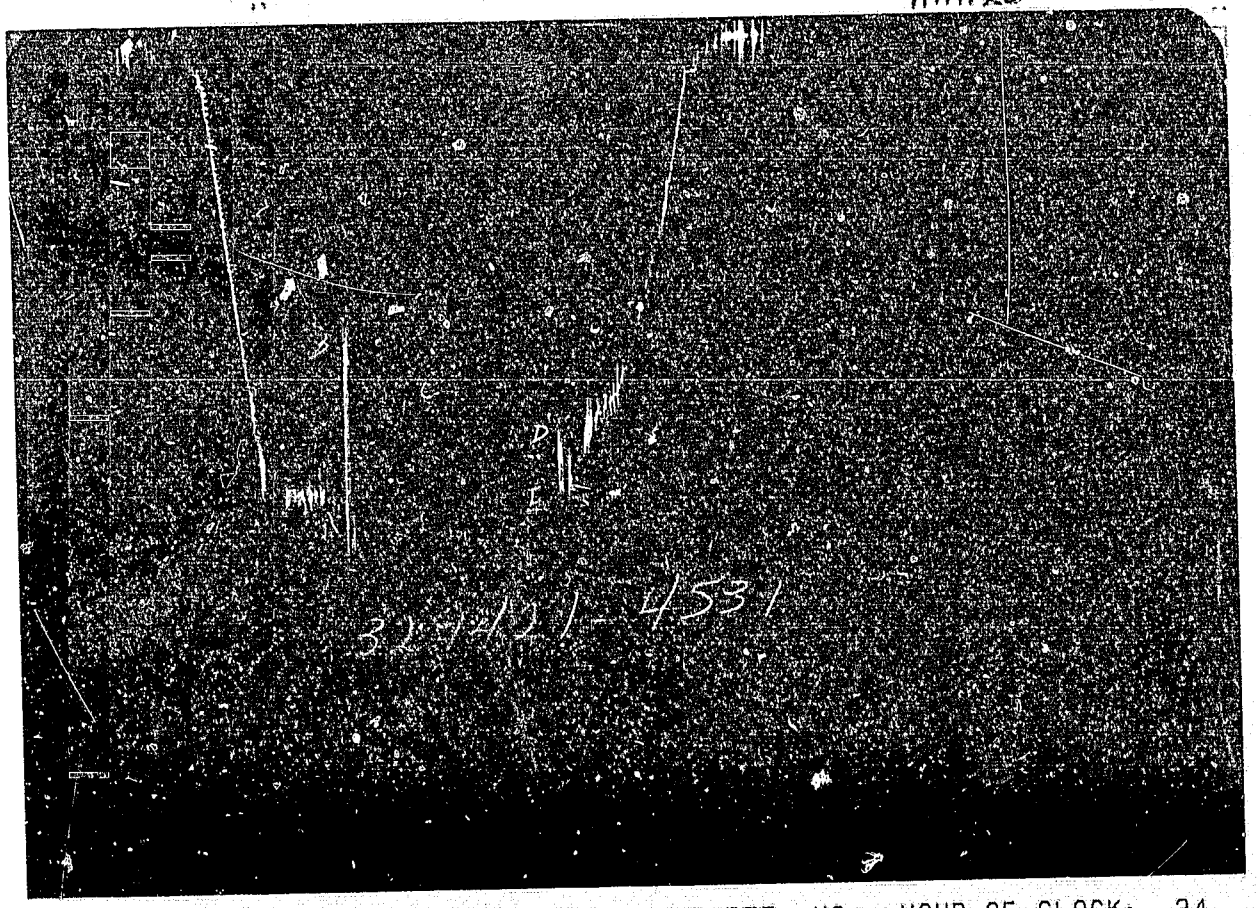
FORMATION TESTING SERVICE REPORT

LEASE NAME: KIDMAN	WELL NO.: 3	TEST NO.: 2/3	TESTED INTERVAL: 6680.' - 6777.'
LEASE OWNER/COMPANY NAME: DELHI/SANTOS			
LEGAL LOCATION SEC. _ TWP. _ RNG.: SEE REMARKS	FIELD AREA: COOPER BASIN	COUNTY: SOUTH AUSTRALIA	STATE: AUSTRALIA IC



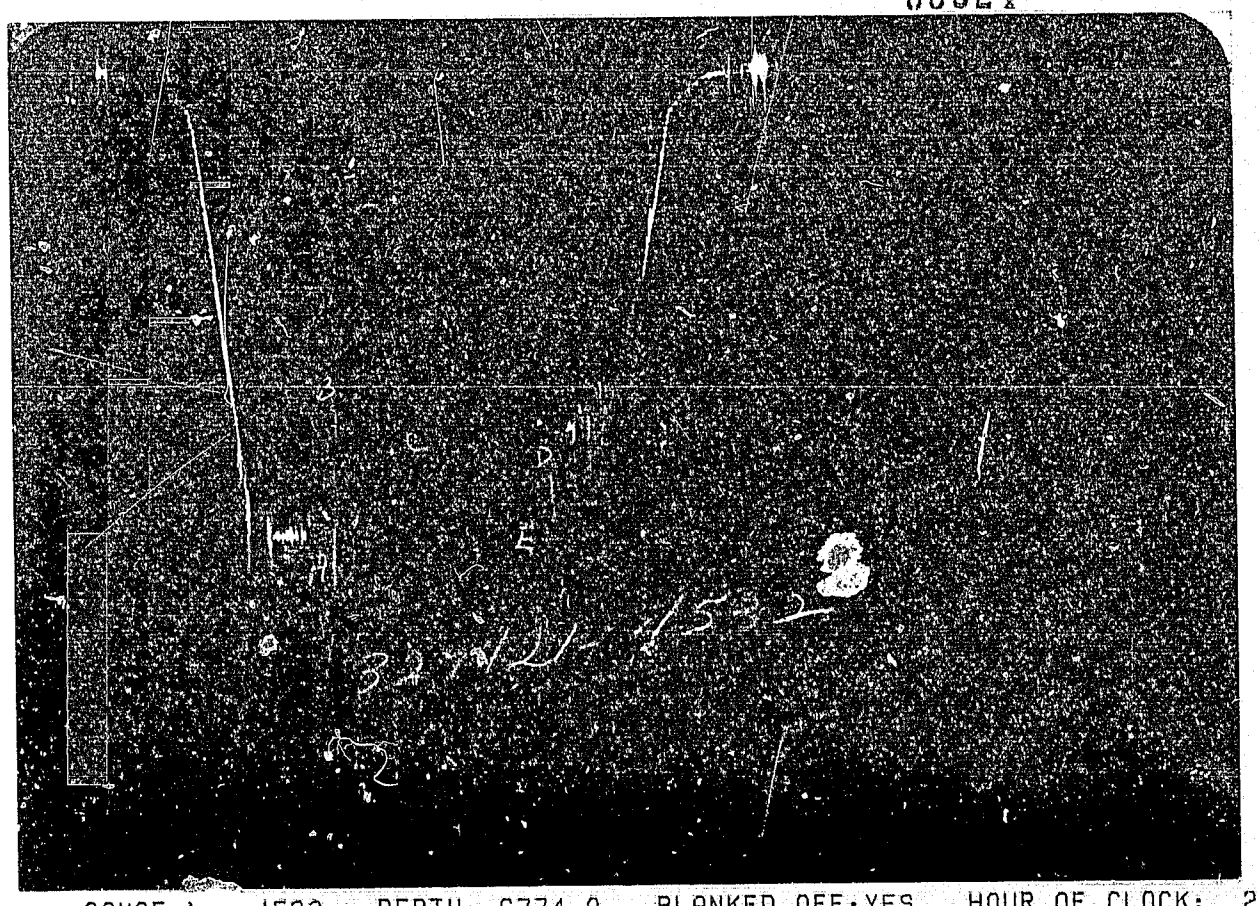
GAUGE NO: 4530 DEPTH: 6645.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC					
B	INITIAL FIRST FLOW	669.2		90.0	91.0	F
C	FINAL FIRST FLOW	2395.6				
C	INITIAL FIRST CLOSED-IN	2395.6		180.0	179.0	C
D	FINAL FIRST CLOSED-IN	108.3				
E	FINAL HYDROSTATIC					



GAUGE NO: 4531 DEPTH: 6666.1 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3127	3223.1			
B	INITIAL FIRST FLOW	2304	2078.8	90.0	91.0	F
C	FINAL FIRST FLOW	2586	2591.6			
C	INITIAL FIRST CLOSED-IN	2586	2591.6	180.0	179.0	C
D	FINAL FIRST CLOSED-IN	2968	2942.9			
E	FINAL HYDROSTATIC	3134	3206.8			



GAUGE # 1532 DEPTH: 6774.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3244	3258.4			
B	INITIAL FIRST FLOW	2607	2400.3	90.0	91.0	F
C	FINAL FIRST FLOW	2803	2791.0			
C	INITIAL FIRST CLOSED-IN	2803	2791.0	180.0	179.0	C
D	FINAL FIRST CLOSED-IN	2934	2932.1			
E	FINAL HYDROSTATIC	3146	3196.9			

643

00023

EQUIPMENT & HOLE DATA

FORMATION TESTED: TCOLACHEE
NET PAY (ft):
GROSS TESTED FOOTAGE: 96.6
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 8.500
ELEVATION (ft): 254
TOTAL DEPTH (ft): 6777.0
PACKER DEPTH(S) (ft): 6680
FINAL SURFACE CHOKE (in): 0.500
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.50
MUD VISCOSITY (sec): 41
ESTIMATED HOLE TEMP. (°F):
ACTUAL HOLE TEMP. (°F): 250 @ 6773.0 ft

TICKET NUMBER: 32942100

DATE: 9-18-84 TEST NO: 2

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: MOOMBA

TESTER: N. COWLEY

WITNESS: J. E. OZOLINAS

DRILLING CONTRACTOR: RICHTER #2

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm

SAMPLER DATA

Psig AT SURFACE:
cu.ft. OF GAS:
cc OF OIL:
cc OF WATER:
cc OF MUD:
TOTAL LIQUID cc:

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): @ °F
GAS/OIL RATIO (cu.ft. per bl
GAS GRAVITY:

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

200 FEET OF WATER
20 FEET OF CONDENSATE
GAS AND CONDENSATE TO SURFACE

MEASURED FROM TESTER VALVE

REMARKS:

TEST DATE WAS 18-SEPTEMBER-1984.

LEGAL LOCATION: LATITUDE-28 DEGREES, 15', 22.6"S; LONGITUDE-140 DEGREES, 48', 27.0"E.

DIMENSIONS ON THE DRILL PIPE WERE NOT REPORTED.

00826

TYPE & SIZE MEASURING DEVICE: 6" CERAMIC CHOKE | TICKET NO: 32942100

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
9 18 84					
1130					PICKED UP TOOL
1228					TOOL MADE UP & RAN IN HOLE
1530					VERY TIGHT HOLE 60' OFF BOTTOM
					HAD TO WORK DOWN SLOWLY
1636					HEAD UP TO MANIFOLD
1656					SET PACKERS WITH 36,000#
1700					OPENED TOOL-SKIDDED 25'-TOOL
					CLOSED INSTANTLY
1704	.50	30			OPENED TOOL AGAIN-HAD A WEAK
					BLOW INCREASING TO STRONG
					INSTANTLY
1705	.50	260			GAS TO SURFACE
1706	.50	600			
1707	.50	800			RAT HOLE MUD TO SURFACE
1708	.50	1100			
1709	.50	1300			HAD AN INTERMITTENT FLAME
1710	.50	1450			
1711	.50	1600			
1712	.50	1700			
1713	.50				FLUID FLUCTUATING PRESSURE
					BETWEEN 1700 AND 1800 PSI
1714	.50	1850			
1715	.50	1900			
1716	.50	1920			FLUID HAS CLEANED UP - FLAME
					CONTINUOUS
1717	.50	1930			
1718	.50				PRESSURE FLUCTUATING SLIGHTLY
1719	.50	1950			
1720	.50	1950			
1740	.50	1950			
1750	.50	1940			SLIGHT DECREASE IN PRESSURE
1800	.50	1940			
1815	.50	1940			
1830	.50	1940			
1834	.50	1940			CLOSED TOOL
2134					BYPASS OPENED AND STARTED OUT

645

00027

TYPE & SIZE MEASURING DEVICE: 6" CERAMIC CHOKE					TICKET NO: 32942100
TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
9-19-84					
0100					TOOL AT FLOOR
0230					TOOL OUT OF HOLE AND BROKEN
					DOWN
0318					TOOLS LOADED INTO TRUCK - JOB
					COMPLETED

00028

TICKET NO: 32942100		GAUGE NO: 4530
CLOCK NO: 6596 HOUR: 24	HALLIBURTON SERVICES	DEPTH: 6645.0

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	669.2			
	2	5.0	2077.7	1408.4		
	3	10.0	2449.8	372.1		
	4	15.0	2457.9	8.2		
	5	19.9	2439.2	-18.8		
	6	25.0	2434.3	-4.9		
	7	30.0	2438.0	3.8		
	8	35.0	2425.3	-12.7		
	9	40.0	2424.1	-1.1		
	10	45.0	2403.8	-20.4		
	11	50.0	2409.0	5.2		
	12	55.0	2413.9	4.9		
	13	60.0	2408.2	-5.7		
	14	65.0	2397.1	-11.1		
	15	70.0	2412.7	15.7		
	16	75.0	2412.4	-0.3		
	17	80.0	2404.2	-8.2		
	18	85.0	2393.1	-11.1		
C	19	91.0	2395.6	2.4		
			FIRST CLOSED-IN			
C	1	0.0	2395.6			
D	2	179.0	108.3	-2287.2	60.3	0.179

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$

REMARKS:

00029

TICKET NO: 32942100	GAUGE NO: 4531
CLOCK NO: 16139 HOUR: 24	DEPTH: 6666.1

HALLIBURTON SERVICES

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log\frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	2078.8			
	2	5.0	2359.9	281.1		
	3	10.0	2588.6	228.6		
	4	15.0	2640.4	51.8		
	5	20.0	2642.1	1.7		
	6	25.0	2633.6	-8.4		
	7	30.0	2635.4	1.8		
	8	35.0	2625.0	-10.4		
	9	40.0	2619.4	-5.6		
	10	45.0	2604.6	-14.7		
	11	50.0	2610.4	5.8		
	12	55.0	2611.4	1.0		
	13	60.0	2601.0	-10.4		
	14	65.0	2591.4	-9.6		
	15	70.0	2606.0	14.6		
	16	75.0	2605.8	-0.2		
	17	80.0	2598.7	-7.1		
	18	85.0	2592.1	-6.6		
C	19	91.0	2591.6	-0.5		
			FIRST CLOSED-IN			
C	1	0.0	2591.6			
	2	1.0	2918.9	327.3	1.0	1.947
	3	2.0	2922.0	330.5	2.0	1.664
	4	3.0	2923.8	332.3	2.9	1.496
	5	4.0	2925.3	333.8	3.8	1.375
	6	5.0	2927.2	335.6	4.7	1.284
	7	6.0	2928.1	336.6	5.6	1.211
	8	7.0	2929.1	337.6	6.5	1.146
	9	8.0	2930.5	338.9	7.3	1.093
	10	9.0	2931.8	340.2	8.2	1.045
	11	10.0	2932.3	340.7	9.0	1.003
	12	12.0	2932.6	341.1	10.6	0.935
	13	14.0	2933.4	341.9	12.2	0.874
	14	16.0	2933.8	342.2	13.6	0.826
	15	18.0	2935.1	343.5	15.0	0.782
	16	20.0	2935.6	344.0	16.4	0.745
	17	22.0	2935.8	344.2	17.7	0.711
	18	24.0	2936.1	344.5	19.0	0.680
	19	26.0	2936.8	345.2	20.2	0.653
	20	28.0	2937.3	345.7	21.4	0.629
	21	30.0	2937.3	345.7	22.6	0.605
	22	35.0	2937.6	346.0	25.3	0.556
	23	40.0	2938.2	346.7	27.8	0.515
	24	45.0	2938.4	346.9	30.1	0.480
	25	50.0	2938.7	347.2	32.3	0.450
	26	55.0	2939.4	347.8	34.5	0.424
	27	60.0	2939.6	348.0	36.2	0.401
	28	70.0	2940.2	348.7	39.6	0.362
	29	80.0	2940.4	348.8	42.6	0.330

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log\frac{t+\Delta t}{\Delta t}$
			FIRST CLOSED-IN - CONTINUED			
	30	90.0	2940.9	349.3	45.3	0.303
	31	100.0	2941.2	349.7	47.6	0.281
	32	110.0	2941.4	349.8	49.8	0.262
	33	120.0	2941.7	350.2	51.8	0.245
	34	135.0	2942.1	350.5	54.4	0.224
	35	150.0	2942.1	350.5	56.6	0.206
	36	165.0	2942.1	350.5	58.7	0.191
D	37	179.0	2942.9	351.3	60.3	0.179

REMARKS:

00030

TICKET NO: 32942100	GAUGE NO: 4532
CLOCK NO: 7023 HOUR: 24	DEPTH: 6774.0

HALLIBURTON SERVICES

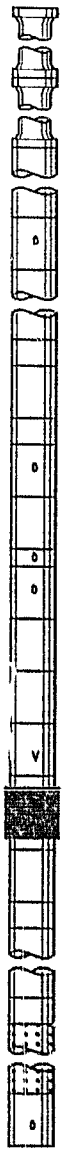
REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log\frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	2400.3			
	2	5.0	2655.6	255.3		
	3	10.0	2742.1	86.5		
	4	15.0	2770.0	27.9		
	5	20.0	2775.5	5.5		
	6	25.0	2775.2	-0.3		
	7	30.0	2774.6	-0.7		
	8	35.0	2775.2	0.7		
	9	40.0	2777.5	2.3		
	10	45.0	2779.4	2.0		
	11	50.0	2779.4	0.0		
	12	55.0	2780.4	1.0		
	13	60.0	2783.4	2.9		
	14	65.0	2788.6	5.2		
	15	70.0	2787.9	-0.7		
	16	75.0	2788.9	1.0		
	17	80.0	2790.2	1.3		
	18	85.0	2789.5	-0.7		
C	19	91.0	2791.0	1.5		
			FIRST CLOSED-IN			
C	1	0.0	2791.0			
	2	1.0	2895.3	104.2	1.0	1.960
	3	2.0	2904.4	113.4	2.0	1.658
	4	3.0	2908.3	117.3	2.9	1.497
	5	4.0	2911.7	120.7	3.8	1.376
	6	5.0	2913.2	122.2	4.7	1.283
	7	6.0	2914.7	123.7	5.6	1.208
	8	7.0	2916.6	125.6	6.5	1.145
	9	8.0	2917.3	126.3	7.4	1.093
	10	9.0	2918.8	127.7	8.2	1.047
	11	10.0	2919.6	128.5	9.0	1.005
	12	12.0	2920.6	129.5	10.6	0.933
	13	14.0	2921.9	130.8	12.1	0.875
	14	16.0	2922.5	131.5	13.6	0.825
	15	18.0	2923.2	132.1	15.0	0.782
	16	20.0	2923.7	132.6	16.4	0.744
	17	22.0	2924.0	133.0	17.7	0.711
	18	24.0	2924.8	133.8	19.0	0.680
	19	26.0	2925.1	134.1	20.2	0.653
	20	28.0	2925.6	134.6	21.4	0.628
	21	30.0	2925.6	134.6	22.6	0.606
	22	35.0	2926.1	135.1	25.3	0.556
	23	40.0	2927.1	136.1	27.8	0.516
	24	45.0	2927.9	136.9	30.1	0.480
	25	50.0	2928.5	137.5	32.3	0.450
	26	55.0	2929.0	138.0	34.3	0.424
	27	60.0	2929.0	138.0	36.2	0.401
	28	70.0	2929.5	138.5	39.6	0.362
	29	80.0	2930.5	139.5	42.6	0.330

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log\frac{t+\Delta t}{\Delta t}$
			FIRST CLOSED-IN - CONTINUED			
	30	90.0	2930.5	139.5	45.3	0.303
	31	100.0	2930.5	139.5	47.6	0.281
	32	110.0	2931.2	140.1	49.8	0.262
	33	120.0	2931.6	140.6	51.8	0.245
	34	135.0	2932.6	141.6	54.4	0.224
	35	150.0	2932.6	141.6	56.6	0.206
	36	165.0	2932.6	141.6	58.7	0.191
D	37	179.0	2932.1	141.1	60.3	0.179

REMARKS:

00031 549

TICKET NO. 32942100



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....			5984.4	
4	FLEX WEIGHT.....	6.000	2.875	179.1	
3	DRILL COLLARS.....	6.250	2.937	449.0	
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	6611.4
3	DRILL COLLARS.....	6.250	2.937	29.5	
5	CROSSOVER.....	5.750	1.000	1.0	
80	AP RUNNING CASE.....	5.000	2.250	4.1	6645.0
5	CROSSOVER.....	5.000	2.200	1.0	
12	DUAL CIP VALVE.....	5.000	0.870	4.9	
97	SAMPLE CHAMBER.....	5.000	2.500	4.9	6654.1
33	DRAIN VALVE.....	5.000	2.200	0.9	
60	HYDROSPRING TESTER.....	5.000	0.750	5.3	6664.1
80	AP RUNNING CASE.....	5.000	2.250	4.1	6666.1
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	2.8	
70	OPEN HOLE PACKER.....	5.000	1.590	5.0	6680.4
19	ANCHOR PIPE SAFETY JOINT.....	5.000	1.500	4.3	
5	CROSSOVER.....	5.750	2.250	1.0	
3	DRILL COLLARS.....	6.250	2.937	59.9	
5	CROSSOVER.....	5.750	2.250	1.0	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	25.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.1	6774.0
	TOTAL DEPTH				6777.0

EQUIPMENT DATA

295

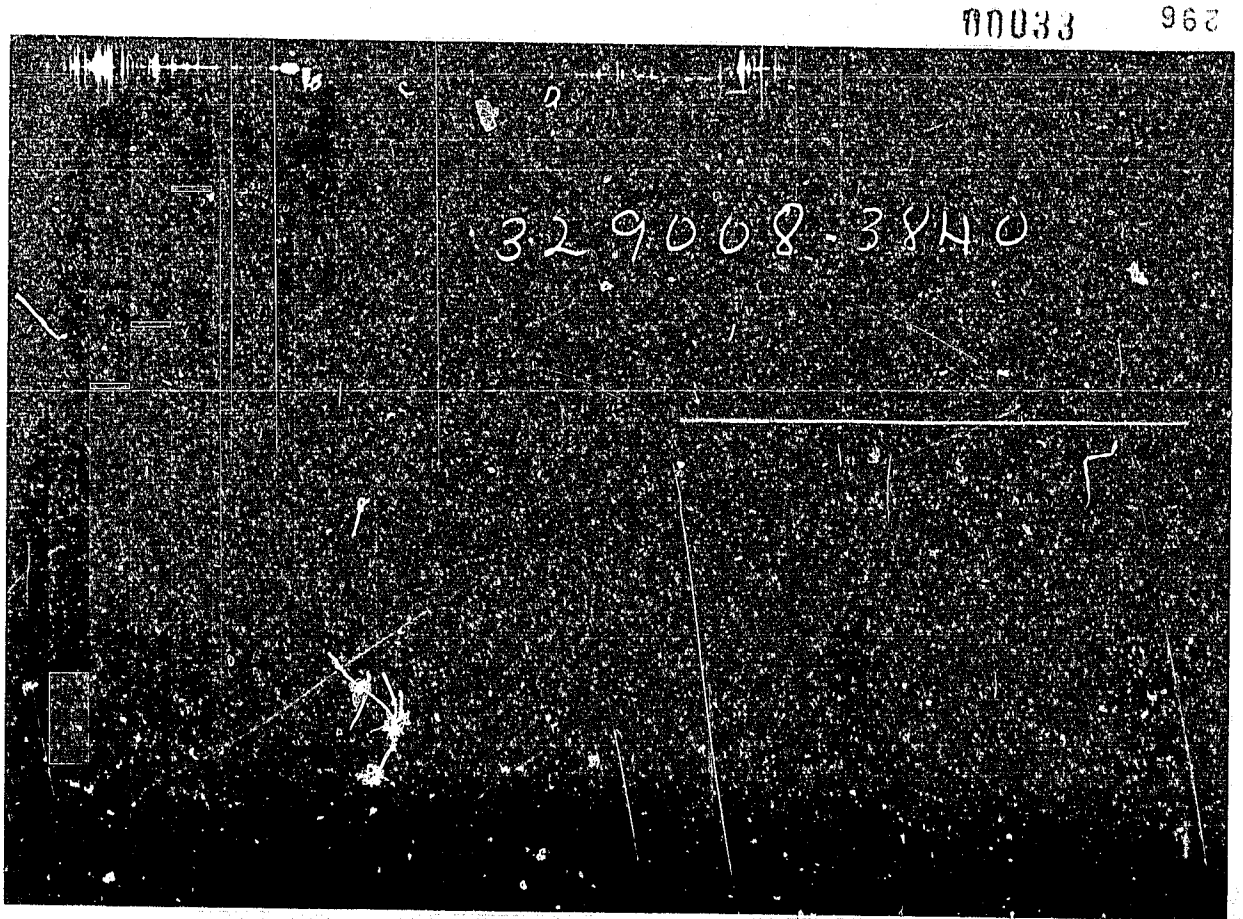
00032

HALLIBURTON
SERVICES

TICKET NO. 32900800
08-JAN-85
MOOMBA

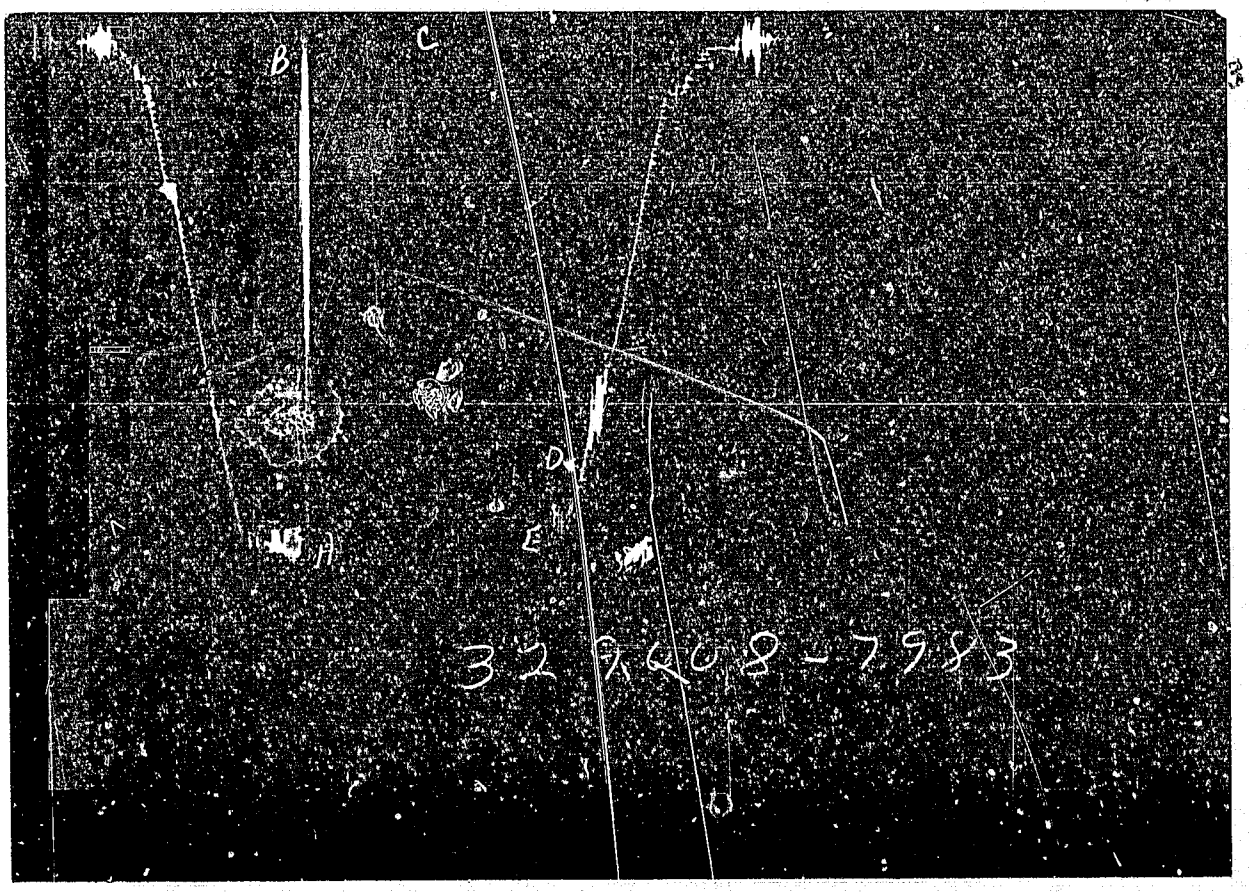
FORMATION TESTING SERVICE REPORT

KIOMA% LEASE NAME	3 WELL NO.	3/4 TEST NO.	7240.' - 7286.' TESTED INTERVAL
DELHI/SANTOS LEASE OWNER/COMPANY NAME			
LEGAL LOCATION SEC. - TWP. - RNG.	SEE REMARKS	FIELD AREA	COOPER BASIN
COUNTY	SOUTH AUSTRALIA	STATE	AUSTRALIA OR/IC



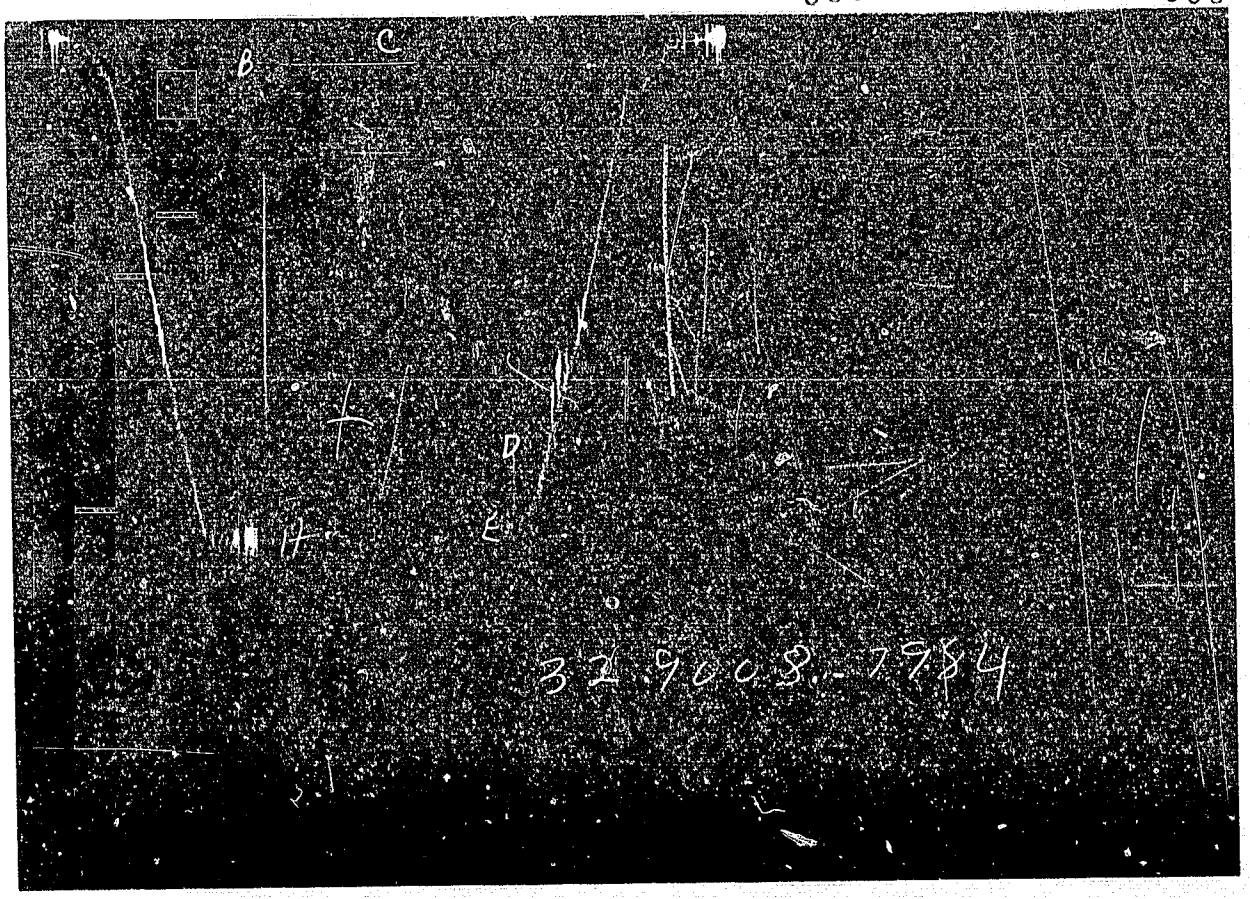
GAUGE NO: 3840 DEPTH: 7207.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC					
B	INITIAL FIRST FLOW	9.3		120.0	121.2	F
C	FINAL FIRST FLOW	32.8				
D	INITIAL FIRST CLOSED-IN	32.8		183.0	181.8	C
E	FINAL FIRST CLOSED-IN	31.8				
F	FINAL HYDROSTATIC					



GAUGE NO: 7983 DEPTH: 7228.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3514	3524.7			
B	INITIAL FIRST FLOW	41	75.6	120.0	121.2	F
C	FINAL FIRST FLOW	48	48.1			
D	INITIAL FIRST CLOSED-IN	48	48.1	183.0	181.8	C
E	FINAL FIRST CLOSED-IN	3000	3091.1			
F	FINAL HYDROSTATIC	3497	3496.2			



GAUGE NO: 7984 DEPTH: 7283.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
H	INITIAL HYDROSTATIC	3560	3556.5			
B	INITIAL FIRST FLOW	127	141.6	120.0	121.2	F
C	FINAL FIRST FLOW	79	77.5			
D	INITIAL FIRST CLOSED-IN	79	77.5	183.0	181.8	C
E	FINAL FIRST CLOSED-IN	3070	3063.6			
H	FINAL HYDROSTATIC	3522	3514.6			

00036

EQUIPMENT & HOLE DATA

FORMATION TESTED: PATCHAWARRA
NET PAY (ft):
GROSS TESTED FOOTAGE: 46.0
ALL DEPTHS MEASURED FROM: R. KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 8.500
ELEVATION (ft): 254
TOTAL DEPTH (ft): 7286.0
PACKER DEPTH(S) (ft): 7240
FINAL SURFACE CHOKE (in): 0.500
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.50
MUD VISCOSITY (sec): 45
ESTIMATED HOLE TEMP. (°F):
ACTUAL HOLE TEMP. (°F): 155 @ 7282.0 ft

TICKET NUMBER: 32900800

DATE: 9-21-84 TEST NO: 3

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: MOOMBA

TESTER: P. UNWIN

WITNESS:

DRILLING CONTRACTOR: TRICHTER DRILLING RIG #2

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY		CHLORIDES
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm

SAMPLER DATA

Psig AT SURFACE:
cu.ft. OF GAS:
cc OF OIL:
cc OF WATER:
cc OF MUD:
TOTAL LIQUID cc:

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): @ °F
GAS/OIL RATIO (cu.ft. per bbl):
GAS GRAVITY:

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

120 FEET OF GAS CUT MUD

MEASURED FROM TESTER VALVE

REMARKS:

LEGAL LOCATION: LATITUDE-28 DEGREES, 15', 22.6"S; LONGITUDE-140 DEGREES, 48', 27.0"E.

300

00037

TYPE & SIZE MEASURING DEVICE: 6" CERAMIC CHOKE (SURFACE MANIFOLD) | TICKET NO: 32900800

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
[illegible] 84					
[illegible]					MADE UP TOOLS
1015					STARTED B.T. 3840
1018					STARTED B.T. 7983
1037					STARTED B.T. 7984
1100					DCIP VALVE THROUGH TABLE
1410					MADE UP TEST HEAD & MANIFOLD
1415					WORKED SINGLE TO BOTTOM
1450					SET TOOL WITH 30000#
1500					OPENED TOOL-SKIDDED TO BOTTOM
1505	.5				WEAK BLOW
1506	.5				STRONG BLOW
1507	.5				BLOW DECREASED TO WEAK
1510	.5				VERY WEAK BLOW
1515	.5				BUBBLE DIED OUT-CLOSED FLOOR
					MANIFOLD TO FLARE LINE
1518	.5				WEAK BLOW-OPENED MANIFOLD TO
					FLARE
1520	.5				WEAK FLUCTUATING BLOW
1530	.5				WEAK BLOW
1540	.5				SAME
1550	.5				VERY WEAK BLOW
1600	.5				WEAK BLOW
1610	.5				WEAK BLOW
1612	.5				GAS TO SURFACE-ZERO PRESSURE
1620	.5				WEAK BLOW
1630	.5				WEAK BLOW
1640	.5				WEAK TO MODERATE BLOW--NOT STEADY
1650	.5				WEAK TO MODERATE BLOW- 0 PSI
1700					CLOSED TOOL BLED OFF DRILL PIPE
2000					PULLED TOOL
2003					BYPASS OPENED
2005					LAID DOWN TEST HEAD
2010					PULLED OUT OF HOLE
2240					PICKED UP TEST HEAD & BROKE OUT
2345					DCIP THROUGH TABLE-BROKE OUT
					TOOLS AND LAID DOWN

00038

TYPE & SIZE MEASURING DEVICE: 6" CERAMIC CHOKE (SURFACE MANIFOLD) | TICKET NO: 32900800

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
24:					JOB COMPLETED

302

00039

TICKET NO: 32900800	GAUGE NO: 3840
CLOCK NO: 26294 HOUR: 24	DEPTH: 7207.0

HALLIBURTON SERVICES

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	9.3			
	2	20.0	3.7	-5.6		
	3	40.0	12.5	8.8		
	4	60.0	14.7	2.3		
	5	80.0	7.4	-7.4		
	6	100.0	27.7	20.4		
C	7	121.2	32.8	5.1		
			FIRST CLOSED-IN			
C	1	0.0	32.8			
D	2	181.8	31.8	-1.1	72.7	0.222

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$

REMARKS:

00040

TICKET NO: 32900800	GAUGE NO: 7983
CLOCK NO: 7773 HOUR: 24	DEPTH: 7228.0

HALLIBURTON SERVICES

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	75.6			
	2	20.0	16.4	-59.2		
	3	40.0	28.0	11.6		
	4	60.0	26.5	-1.6		
	5	80.0	26.0	-0.5		
	6	100.0	41.9	15.9		
C	7	121.2	48.1	6.2		
			FIRST CLOSED-IN			
C	1	0.0	48.1			
	2	10.0	1309.0	1260.9	9.2	1.119
	3	20.0	1941.0	1892.9	17.2	0.849
	4	30.0	2340.2	2292.1	24.1	0.702
	5	40.0	2553.8	2505.7	30.1	0.605
	6	50.0	2706.9	2658.8	35.4	0.534
	7	60.0	2810.1	2762.0	40.1	0.480
	8	70.0	2882.0	2833.9	44.4	0.436
	9	80.0	2933.7	2885.6	48.2	0.401
	10	90.0	2973.0	2924.9	51.6	0.370
	11	100.0	2999.3	2951.2	54.8	0.345
	12	110.0	3020.4	2972.3	57.7	0.323
	13	120.0	3038.0	2989.9	60.3	0.303
	14	130.0	3053.4	3005.3	62.7	0.286
	15	140.0	3062.0	3013.9	64.9	0.271
	16	150.0	3072.5	3024.2	67.0	0.257
	17	160.0	3082.1	3034.0	68.8	0.245
	18	170.0	3089.2	3041.1	70.7	0.234
D	19	181.8	3091.1	3043.0	72.7	0.222

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$

REMARKS:

00041

TICKET NO: 32900800	GAUGE NO: 7984
CLOCK NO: 7499 HOUR: 24	DEPTH: 7283.0

HALLIBURTON SERVICES

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	141.6			
	2	20.0	55.7	-85.9		
	3	40.0	70.4	14.8		
	4	60.0	65.6	-4.8		
	5	80.0	68.2	2.6		
	6	100.0	69.6	1.4		
C	7	121.2	77.5	7.9		
			FIRST CLOSED-IN			
C	1	0.0	77.5			
	2	10.0	1130.6	1053.1	9.2	1.118
	3	20.0	1833.7	1756.2	17.2	0.849
	4	30.0	2259.2	2181.7	24.0	0.702
	5	40.0	2517.6	2440.1	30.1	0.605
	6	50.0	2684.8	2607.3	35.4	0.534
	7	60.0	2794.3	2716.8	40.1	0.480
	8	70.0	2844.6	2767.1	44.4	0.436
	9	80.0	2924.0	2846.5	48.2	0.400
	10	90.1	2961.1	2883.6	51.7	0.370
	11	100.0	2963.6	2886.1	54.8	0.345
	12	110.0	31.7	2904.2	57.7	0.323
	13	120.0	3000.2	2922.7	60.3	0.303
	14	130.0	3017.9	2940.4	62.7	0.286
	15	140.0	3027.7	2950.2	65.0	0.271
	16	150.0	3039.5	2962.0	67.0	0.257
	17	160.0	3052.9	2975.4	69.0	0.245
	18	170.0	3060.8	2983.3	70.7	0.234
D	19	181.8	3063.6	2986.1	72.7	0.222

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$

REMARKS:

00042 305

TICKET NO. 32900800

		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	6488.0	
4	FLEX WEIGHT.....	4.500	2.764	179.1	
3	DRILL COLLARS.....	6.813	3.000	457.1	
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	7117.0
3	DRILL COLLARS.....	6.813	3.000	37.4	
5	CROSSOVER.....	5.750	1.500	1.0	
80	AP RUNNING CASE.....	5.000	2.250	4.1	7207.0
5	CROSSOVER.....	5.000	2.200	1.0	
12	DUAL CIP VALVE.....	5.000	0.860	4.9	
97	SAMPLE CHAMBER.....	5.000	2.500	4.9	7220.0
33	DRAIN VALVE.....	5.000	2.200	0.9	
60	HYDROSPRING TESTER.....	5.000	0.750	5.3	7226.0
80	AP RUNNING CASE.....	5.000	2.250	4.1	7228.0
15	JAR.....	5.000	1.750	5.0	
15	VR SAFETY JOINT.....	5.000	1.000	2.8	
70	EN HOLE PACKER.....	7.750	1.680	5.8	7240.0
13	ANCHOR PIPE SAFETY JOINT.....	5.000	1.500	4.3	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	37.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.1	7283.0
	TOTAL DEPTH				7286.0

EQUIPMENT DATA

C96

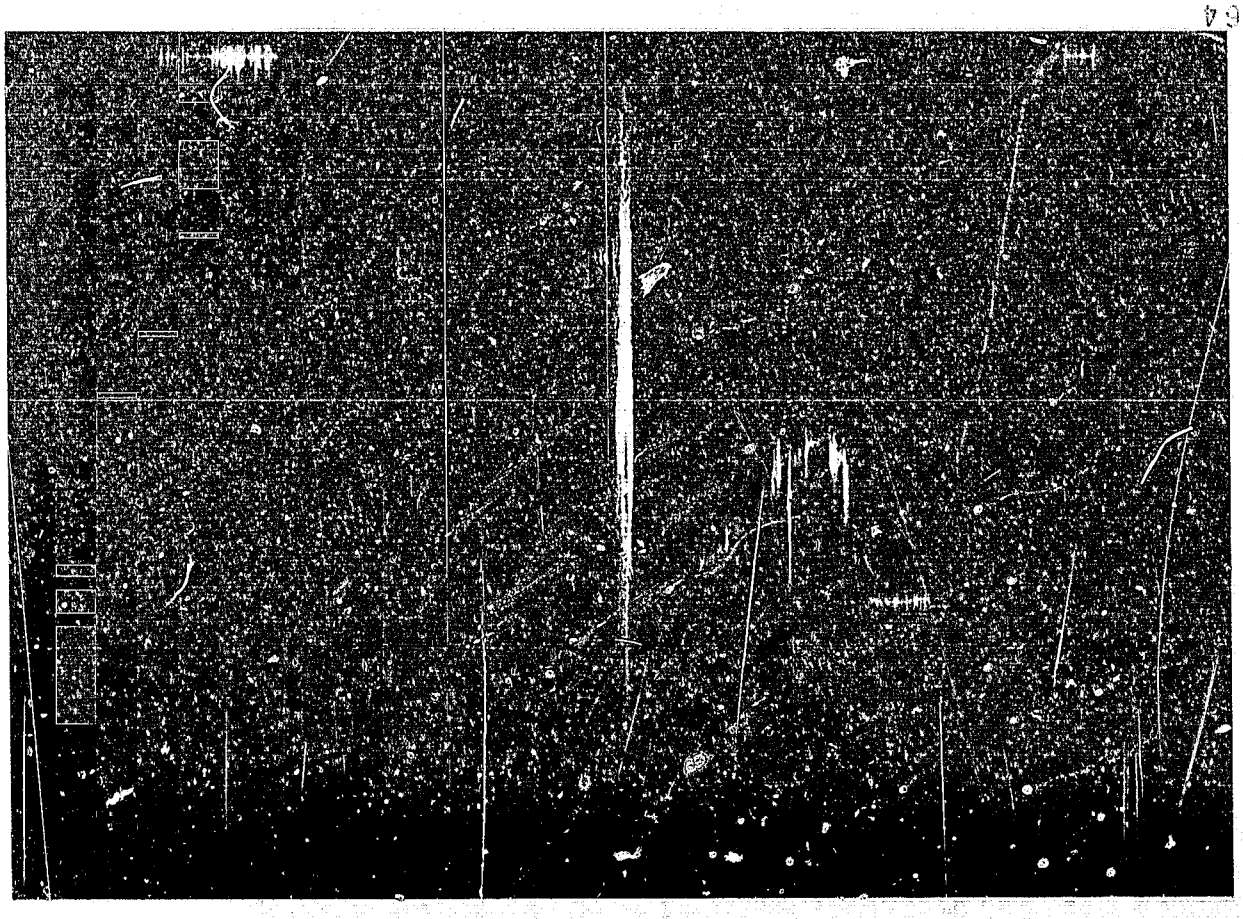
00043

HALLIBURTON
SERVICES

TICKET NO. 32936500
08-JAN-85
MOOMBA

FORMATION TESTING SERVICE REPORT

KIDMAN	3	86	
LEASE NAME	WELL NO.	TEST NO.	
LEGAL LOCATION SEC. - TWP. - RNG.	SEE REMARKS	FIELD AREA	COOPER BASIN
COUNTY	SOUTH AUSTRALIA	STATE	AUSTRALIA SM/IC
7398.' - 7450.'		DELHI/SANTOS	
TESTED INTERVAL		LEASE OWNER/COMPANY NAME	



GAUGE NO: 8014 DEPTH: 7353.0 BLANKED OFF: NO HOUR OF CLOCK: 24

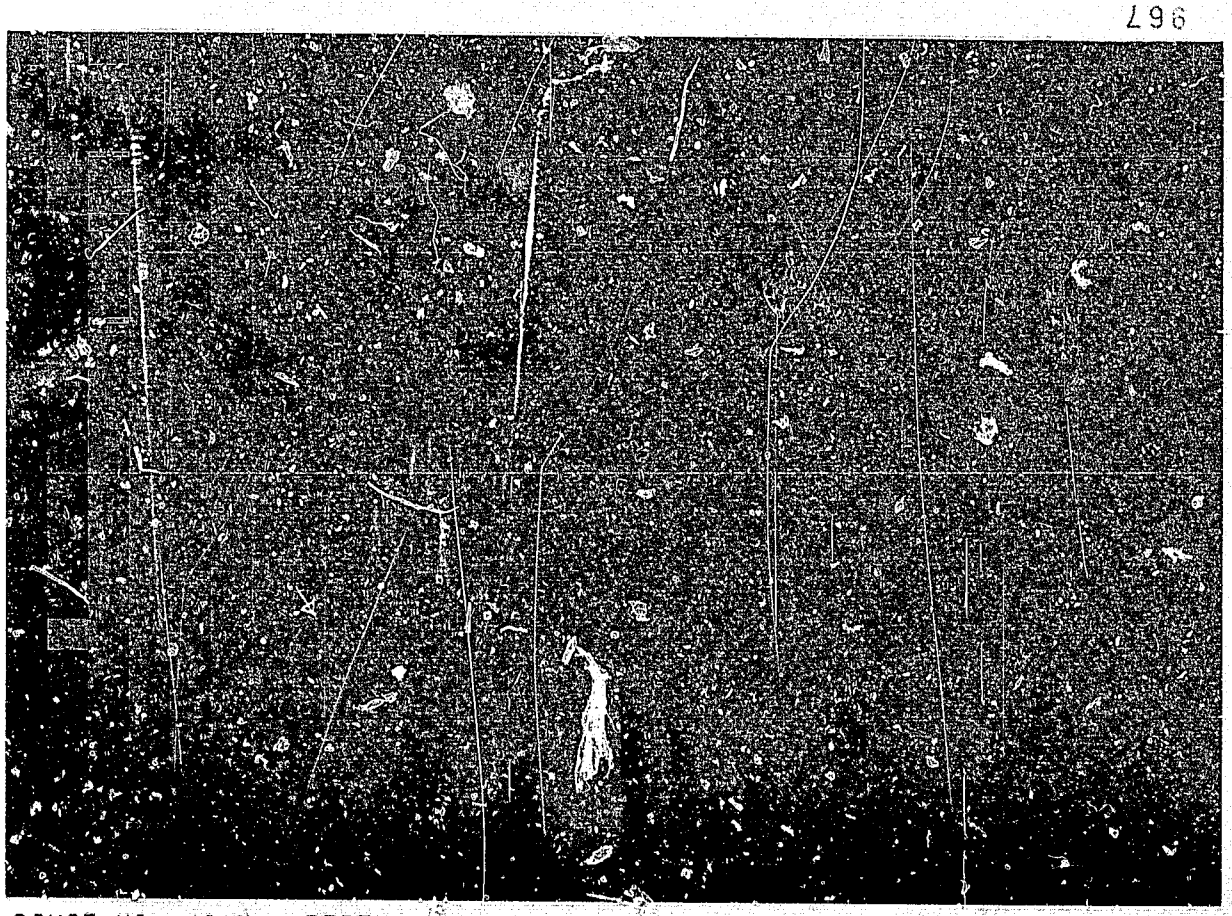
ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC					
B	INITIAL FIRST FLOW		7.9	122.0	121.7	F
C	FINAL FIRST FLOW		1382.5			
L	INITIAL FIRST CLOSED-IN		1382.5	240.0	240.3	C
D	FINAL FIRST CLOSED-IN	1372	1386.7			
E	FINAL HYDROSTATIC		3708.3			
F	HYDROSTATIC RELEASE					

GAUGE NO: 4530 DEPTH: 7374.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3752	3756.9			
B	INITIAL FIRST FLOW	131	118.5	122.0	121.7	F
E	FINAL FIRST FLOW	1423	1442.6			
C	INITIAL FIRST CLOSED-IN	1423	1442.6	240.0	240.3	C
D	FINAL FIRST CLOSED-IN	3116	3130.5			
E	FINAL HYDROSTATIC	3703	3713.1			
F	HYDROSTATIC RELEASE					

GAUGE NO: 4531 DEPTH: 7412.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3799	3751.7			
B	INITIAL FIRST FLOW	165	162.5	122.0	121.7	F
[illegible]	FINAL FIRST FLOW	1432	1440.7			
[illegible]	INITIAL FIRST CLOSED-IN	1432	1440.7	240.0	240.3	C
[illegible]	FINAL FIRST CLOSED-IN	3118	3120.4			
[illegible]	FINAL HYDROSTATIC	3766	3704.5			
[illegible]	HYDROSTATIC RELEASE					



47

GAUGE NO: 4315 DEPTH: 7632.0 BLANKED OFF: YES HOUR OF CLOCK: 48

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3870	3801.0			
B	INITIAL FIRST FLOW			122.0		F
C	FINAL FIRST FLOW					
C	INITIAL FIRST CLOSED-IN			240.0		C
D	FINAL FIRST CLOSED-IN					
E	FINAL HYDROSTATIC		3734.7			
F	HYDROSTATIC RELEASE		3726.4			

EQUIPMENT & HOLE DATA

FORMATION TESTED: PATCHAWARRA
NET PAY (ft): _____
GROSS TESTED FOOTAGE: 52.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft): _____
HOLE OR CASING SIZE (in): 8.500
ELEVATION (ft): 254
TOTAL DEPTH (ft): 7635.0
PACKER DEPTH(S) (ft): 7390, 7398, 7450, 7458
FINAL SURFACE CHOKE (in): 0.500
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.60
MUD VISCOSITY (sec): 50
ESTIMATED HOLE TEMP. (°F): _____
ACTUAL HOLE TEMP. (°F): 250 @ 7631.0 ft

TICKET NUMBER: 32936500

DATE: 9-27-84 TEST NO: 5

TYPE DST: ON BTM. STRADDLE

HALLIBURTON CAMP: MOOMBA

TESTER: D. BURT

WITNESS: _____

DRILLING CONTRACTOR: RICHTER DRILLING #2

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
_____	_____ @ ___°F	_____ ppm
_____	_____ @ ___°F	_____ ppm
_____	_____ @ ___°F	_____ ppm
_____	_____ @ ___°F	_____ ppm
_____	_____ @ ___°F	_____ ppm
_____	_____ @ ___°F	_____ ppm

SAMPLER DATA

Psig AT SURFACE: _____
cu.ft. OF GAS: _____
cc OF OIL: _____
cc OF WATER: _____
cc OF MUD: _____
TOTAL LIQUID cc: _____

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): _____ @ ___°F
GAS/OIL RATIO (cu.ft. per bbl): _____
GAS GRAVITY: _____

CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

RECOVERED:

42 BARRELS OF WATER
4.7 BARRELS OF MUD

MEASURED FROM TESTER VALVE

REMARKS:

LEGAL LOCATION: LATITUDE-28 DEGREES, 15', 22.6"S; LONGITUDE-140 DEGREES, 48', 27.0"E.

00049

TYPE & SIZE MEASURING DEVICE: 6" CERAMIC CHOKE (SURFACE MANIFOLD)					TICKET NO: 32936500
TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
9-27-84					
0614					LOADED B.T. 4315
0720					LOADED B.T. 4531
0745					LOADED B.T. 4530
0750					LOADED B.T. 8014
0800					RAN IN HOLE
1030					HEAD UP AND RIGGED MANIFOLD
1036					SET PACKERS
1043	.5	0			OPENED TOOL-NO BUBBLE
1048		0			SHUT LINE TO FLARE PIT-NO BLOW
1049	.5	0			OPENED TO FLARE LINE-NO BUBBLE
1058		0			CLOSED FLARE LINE-STILL NOTHING
1059	.5	0			OPENED TO FLARE LINE
1100	.5	0			VERY, VERY WEAK BLOW
1101	.5	0			INCREASING BLOW TO VERY WEAK
1125	.5	0			INCREASING TO MODERATE
1130	.5	0			INCREASING TO STRONG
1135	.5	0			STRONG BLOW
1140	.5	0			STRONG BLOW
1145	.5	0			STRONG BLOW
1150	.5	0			DECREASED TO MODERATE
1155	.5	0			MODERATE BLOW
1200	.5	0			DECREASING SLIGHTLY
1215	.5	0			WEAK TO MODERATE BLOW
1230	.5	0			MODERATE BLOW
1245	.5	0			CLOSED TOOL
1645					OPENED BYPASS AND PULLED FREE
1715					RIGGED HEAD AND MANIFOLD TO
					REVERSE CIRCULATE
1718					RELEASED DROP BAR
1720					STARTED TO REVERSE CIRCULATE
1845					RIGGED DOWN - PULLED OUT OF
					HOLE SWABBING WHILE TRIPPING OUT
9-28-84					
0200					BROKE DOWN TOOLS
0420					OUT OF HOLE

00050

TICKET NO: 32936500	GAUGE NO: 8014
CLOCK NO: 16139 HOUR: 24	DEPTH: 7353.0

HALLIBURTON SERVICES

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
		FIRST FLOW			
B 1	0.0	7.9			
2	20.0	473.9	466.0		
3	40.0	705.2	231.3		
4	60.0	894.4	189.2		
5	80.0	1061.6	167.1		
6	100.0	1216.5	154.9		
C 7	121.7	1382.5	166.1		
		FIRST CLOSED-IN			
C 1	0.0	1382.5			
D 2	240.3	1386.7	4.2	80.8	0.178

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$

REMARKS:

T.26

00051

TICKET NO: 32936500	GAUGE NO: 4530
CLOCK NO: 6596 HOUR: 24	DEPTH: 7374.0

HALLIBURTON SERVICES

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	118.5			
	2	20.0	503.9	385.4		
	3	40.0	753.5	249.6		
	4	60.0	947.6	194.1		
	5	80.0	1119.0	171.3		
	6	100.0	1278.3	159.3		
C	7	121.7	1442.6	164.3		
			FIRST CLOSED-IN			
C	1	0.0	1442.6			
	2	15.0	2833.3	1390.7	13.4	0.959
	3	30.0	2927.4	1484.8	24.0	0.704
	4	45.0	2979.6	1537.0	32.9	0.568
	5	60.0	3013.5	1570.9	40.2	0.481
	6	75.0	3037.8	1595.2	46.4	0.418
	7	90.0	3056.0	1613.3	51.7	0.371
	8	105.0	3070.0	1627.4	56.4	0.334
	9	120.0	3082.2	1639.6	60.4	0.304
	10	135.0	3092.7	1650.0	64.0	0.279
	11	150.0	3099.7	1657.0	67.2	0.258
	12	165.0	3106.7	1664.1	70.0	0.240
	13	180.0	3111.7	1669.1	72.6	0.224
	14	195.0	3117.5	1674.8	74.9	0.211
	15	210.0	3122.0	1679.4	77.0	0.198
	16	225.0	3125.9	1683.3	79.0	0.188
D	17	240.3	3130.5	1688.0	80.8	0.178

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$

REMARKS:

00052

TICKET NO: 32936500	GAUGE NO: 4531
CLOCK NO: 9394 HOUR: 24	DEPTH: 7412.0

HALLIBURTON SERVICES

	REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	162.5			
	2	20.0	547.1	384.6		
	3	40.0	752.9	205.7		
	4	60.0	956.8	203.9		
	5	80.0	1129.3	172.5		
	6	100.0	1283.5	154.2		
C	7	121.7	1440.7	157.2		
			FIRST CLOSED-IN			
C	1	0.0	1440.7			
	2	15.0	2815.4	1374.7	13.4	0.959
	3	30.0	2919.9	1479.2	24.0	0.704
	4	45.0	2972.7	1532.0	32.8	0.569
	5	60.0	3006.8	1566.1	40.2	0.481
	6	75.0	3031.2	1590.5	46.4	0.419
	7	90.0	3049.8	1609.1	51.7	0.371
	8	105.0	3063.8	1623.1	56.3	0.334
	9	120.0	3075.6	1634.9	60.4	0.304
	10	135.0	3084.9	1644.2	64.0	0.279
	11	150.0	3091.7	1651.0	67.2	0.258
	12	165.0	3097.8	1657.1	70.0	0.240
	13	180.0	3104.7	1664.0	72.6	0.224
	14	195.0	3108.8	1668.1	74.9	0.211
	15	210.0	3113.5	1672.8	77.0	0.199
	16	225.0	3117.1	1676.4	79.0	0.188
D	17	240.3	3120.4	1679.7	80.8	0.178

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$

REMARKS:

00053 973

TICKET NO. 32936500

		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	6718.0	
4	FLEX WEIGHT.....	4.500	2.764	179.1	
3	DRILL COLLARS.....	6.250	2.87[illegible]	421.1	
51	PUMP OUT REVERSING SUB.....	6.000	3.000	1.0	7319.[illegible]
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	7320.0
3	DRILL COLLARS.....	6.250	2.875	30.0	
5	CROSSOVER.....	5.750	1.500	1.0	
80	AP RUNNING CASE.....	5.000	2.250	4.1	7353.0
5	CROSSOVER.....	5.000	2.200	1.0	
12	DUAL CIP VALVE.....	5.000	0.870	4.9	
33	DRAIN VALVE.....	5.000	2.200	5.7	
60	HYDROSPRING TESTER.....	5.000	0.750	5.3	7372.0
80	AP RUNNING CASE.....	5.000	2.250	4.1	7374.0
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	2.8	
17	PRESSURE EQUALIZING CROSSOVER...	4.875	3.00[illegible]	1.0	
70	OPEN HOLE PACKER.....	5.000	1.530	5.8	7390.0
18	DISTRIBUTOR VALVE.....	5.000	1.680	2.0	
70	OPEN HOLE PACKER.....	5.000	1.530	5.8	7398.0
20	FLUSH JOINT ANCHOR	5.000	2.370	11.0	
5	CROSSOVER.....	4.500	2.750	1.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.1	7412.0
5	CROSSOVER.....	4.625	1.625	0.7	
5	CROSSOVER.....	6.500	2.250	1.0	
3	DRILL COLLARS.....	6.250	2.875	29.5	
5	CROSSOVER.....	6.250	2.250	1.0	
5	CROSSOVER.....	4.625	2.750	0.7	
70	OPEN HOLE PACKER.....	6.000	1.530	5.3	7450.0
18	DISTRIBUTOR VALVE.....	5.000	1.680	2.0	

CONTINUED

EQUIPMENT DATA

00054 TICKET NO. 32936500

		O.D.	I.D.	LENGTH	DEPTH
70	OPEN HOLE PACKER.....	6.000	1.530	5.8	7458.0
5	CROSSOVER.....	4.500	1.625	0.9	
19	ANC' . PIPE SAFETY JOINT.....	5.000	1.500	4.3	
20	FLUSH JOINT ANCHOR.....	5.000	2.370	14.0	
5	CROSSOVER.....	6.250	2.250	1.0	
3	DRILL COLLARS.....	6.250	2.875	148.0	
5	CROSSOVER.....	6.250	2.250	1.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.1	7632.0
	TOTAL DEPTH				7635.0

EQUIPMENT DATA

T18

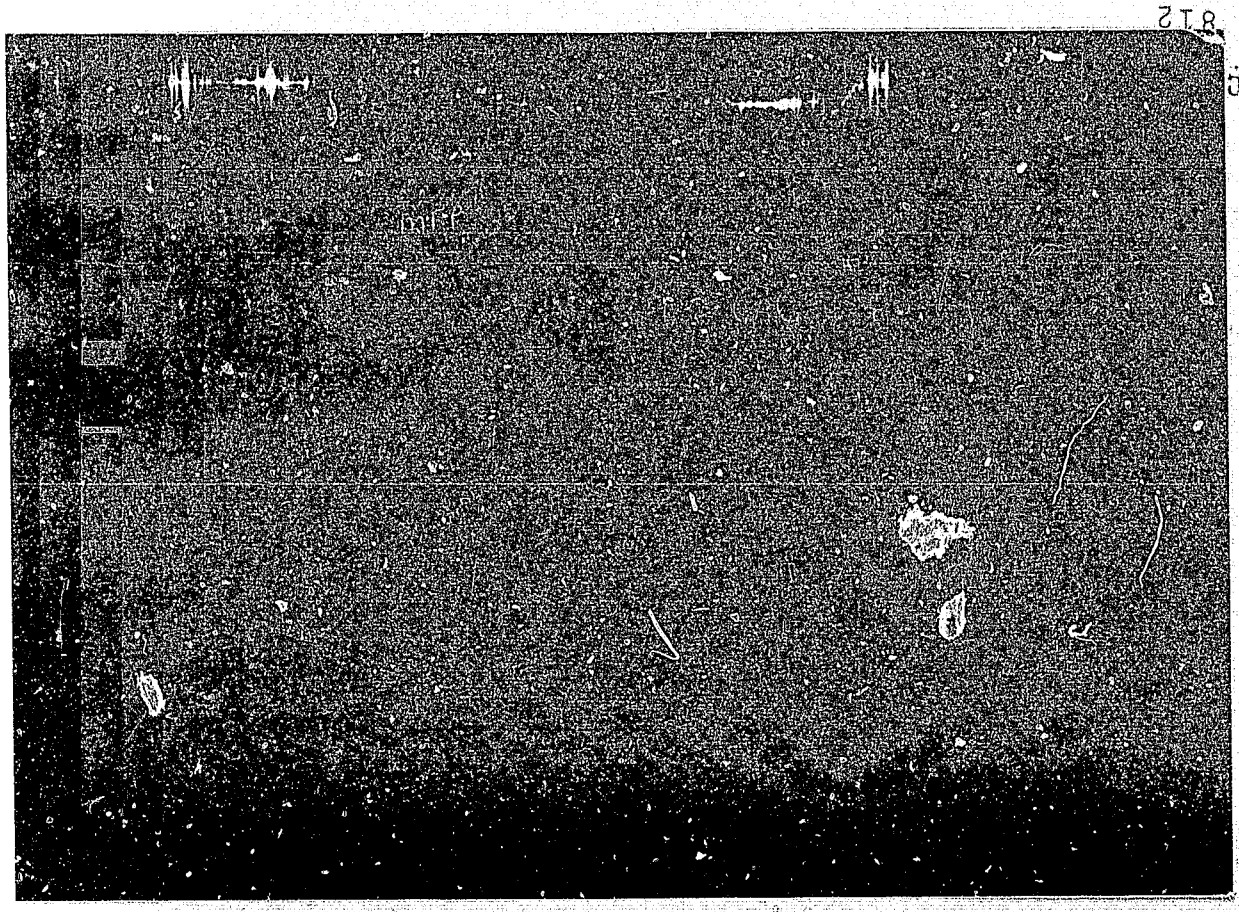
00055

HALLIBURTON
SERVICES

TICKET NO. 32936600
08-JAN-85
MOOMBA

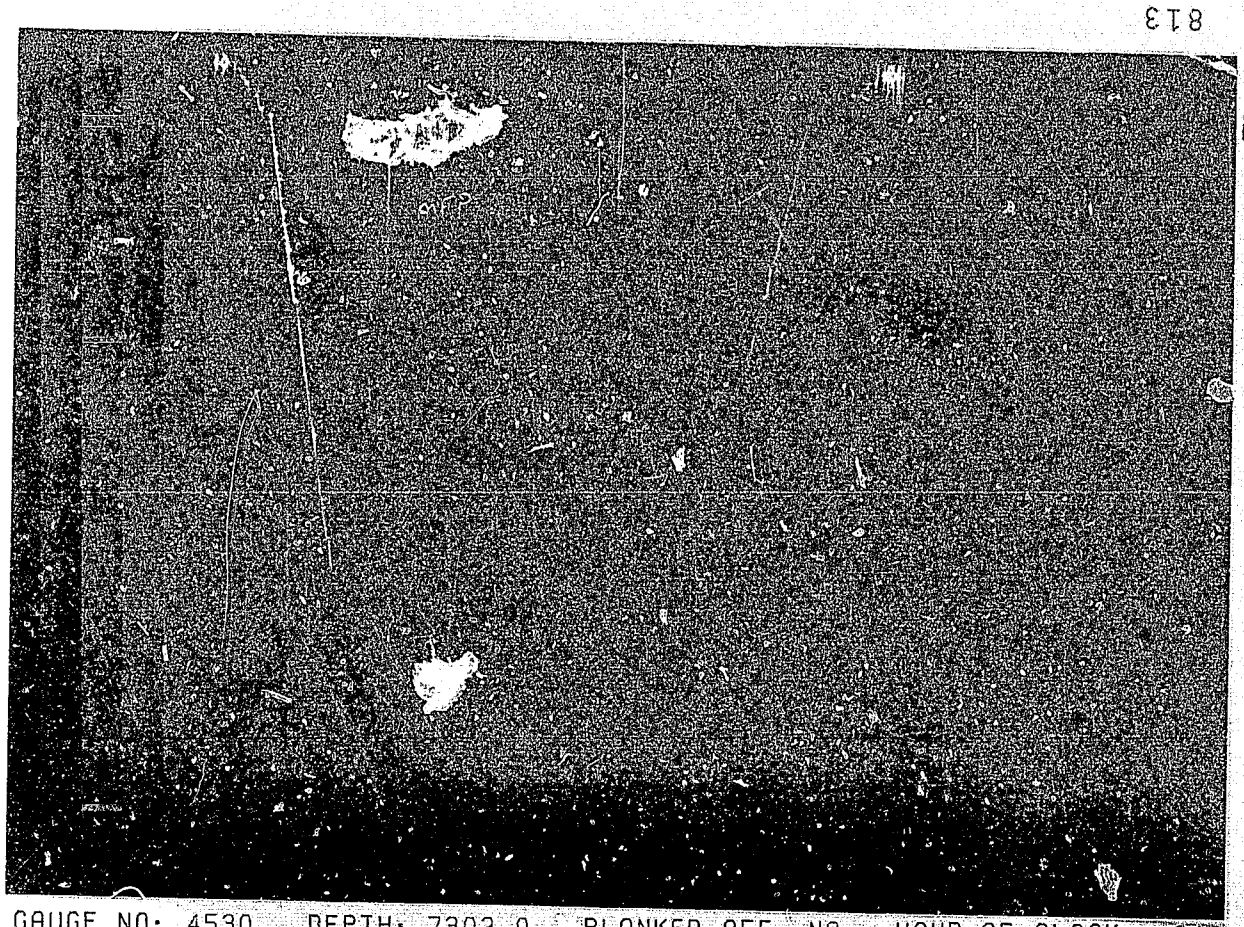
FORMATION TESTING SERVICE REPORT

KIDMAN	3	7	732
LEASE NAME	WELL NO.	TEST NO.	T
LEGAL LOCATION SEC. _ TWP. _ RNG.	SEE REMARKS	FIELD AREA	COOPER BASIN
7326. ' - 7388. '		DELHI/SANTOS	
TESTED INTERVAL		LEASE OWNER/COMPANY NAME	
COUNTY	SOUTH AUSTRALIA	STATE	AUSTRALIA BM/IC



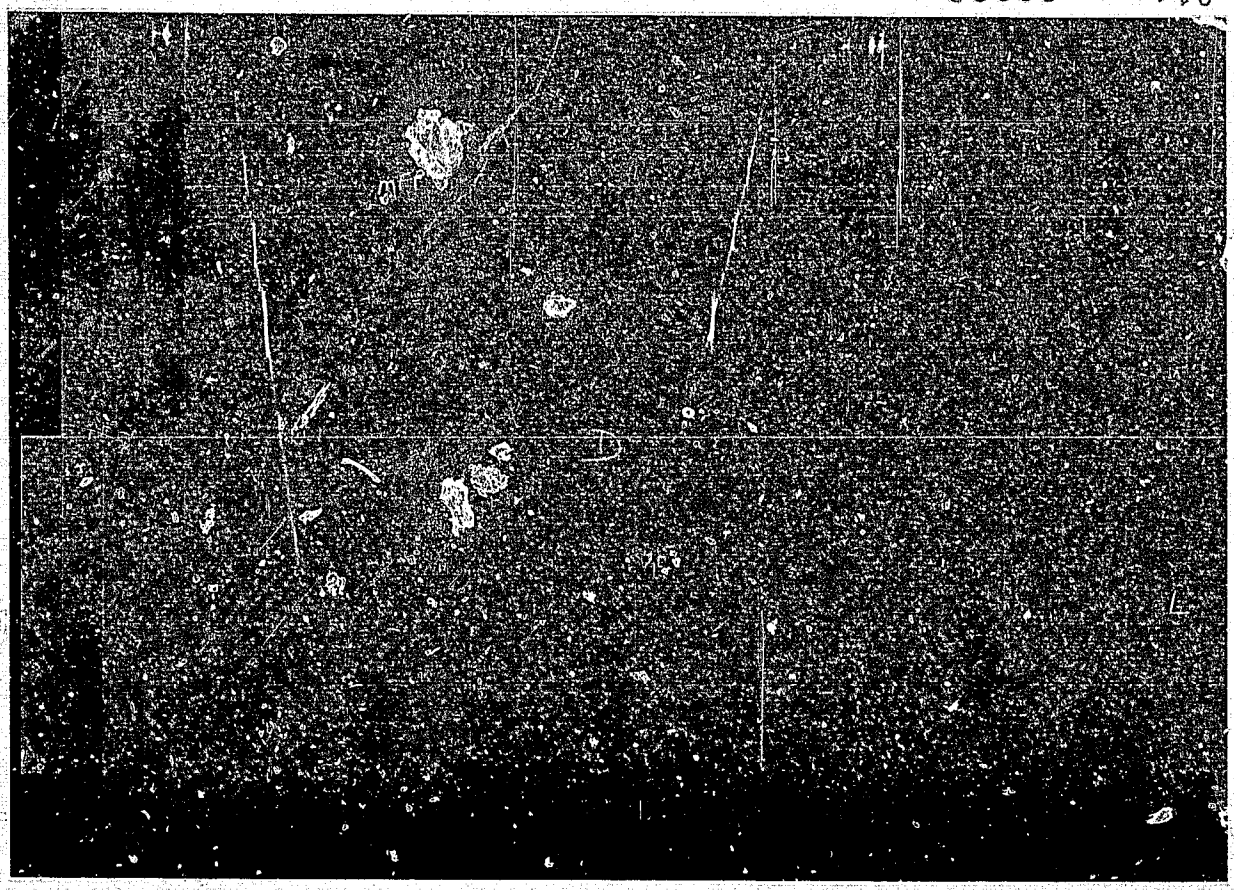
GAUGE NO: 8014 DEPTH: 7281.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC					
B	INITIAL FIRST FLOW		202.4	120.0	120.0	F
C	FINAL FIRST FLOW		716.8			
C	INITIAL FIRST CLOSED-IN		716.8	240.0	234.3	C
D	FINAL FIRST CLOSED-IN		166.8			
E	FINAL HYDROSTATIC					
F	HYDROSTATIC RELEASE					



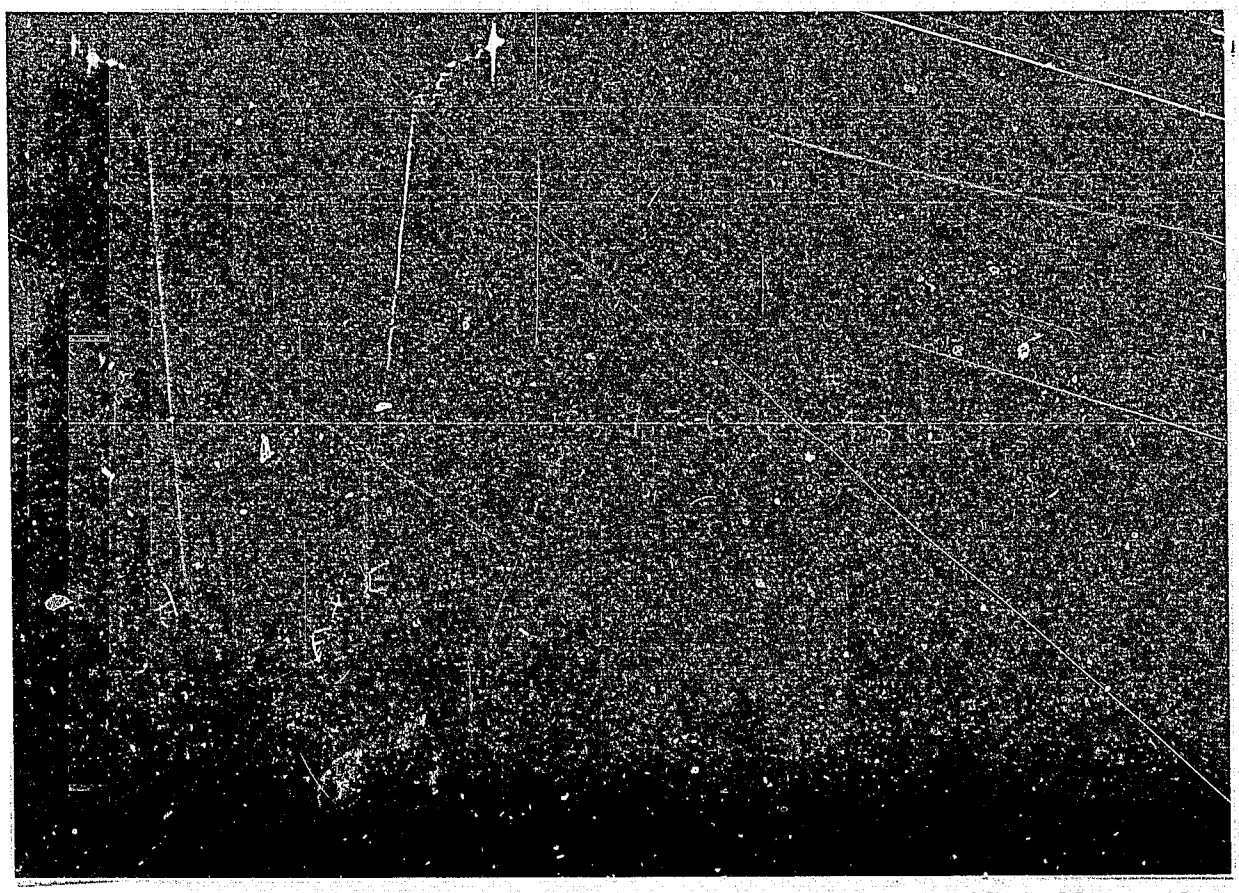
GAUGE NO: 4530 DEPTH: 7302.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3273	3595.8			
B	INITIAL FIRST FLOW	328	437.5	120.0	120.0	F
C	FINAL FIRST FLOW	705	713.3			
C	INITIAL FIRST CLOSED-IN	705	713.3	240.0	234.3	C
D	FINAL FIRST CLOSED-IN	2937	2946.5			
E	FINAL HYDROSTATIC	3524	3566.7			
F	HYDROSTATIC RELEASE					



GAUGE NO: 4531 DEPTH: 7350.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3716	3740.0			
B	INITIAL FIRST FLOW	479	541.1	120.0	120.0	F
C	FINAL FIRST FLOW	759	764.5			
C	INITIAL FIRST CLOSED-IN	759	764.5	240.0	234.3	C
D	FINAL FIRST CLOSED-IN	3035	3052.3			
E	FINAL HYDROSTATIC	3683	3693.2			
F	HYDROSTATIC RELEASE					



GAUGE NO: 4315 DEPTH: 7632.0 BLANKED OFF: YES HOUR OF CLOCK: 48

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3886	3920.1			
B	INITIAL FIRST FLOW			120.0		F
C	FINAL FIRST FLOW					
C	INITIAL FIRST CLOSED-IN			240.0		C
D	FINAL FIRST CLOSED-IN					
E	FINAL HYDROSTATIC		3805.6			
F	HYDROSTATIC RELEASE		3826.4			

00060

EQUIPMENT & HOLE DATA

FORMATION TESTED: PATCHAWARRA
NET PAY (ft):
GROSS TESTED FOOTAGE: 62.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 8.500
ELEVATION (ft): 254
TOTAL DEPTH (ft): 7635.0
PACKER DEPTH(S) (ft): 7318, 7326, 7388, 7396
FINAL SURFACE CHOKE (in): 0.500
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.60
MUD VISCOSITY (sec): 50
ESTIMATED HOLE TEMP. (°F): 260
ACTUAL HOLE TEMP. (°F): 250 @ 7631.0 ft

TICKET NUMBER: 32936600

DATE: 9-29-84 TEST NO: 6

TYPE DST: ON BTM. STRADDLE

HALLIBURTON CAMP: MOOMBA

TESTER: D. BURT

WITNESS:

DRILLING CONTRACTOR: RICHTER DRILLING #2

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm

SAMPLER DATA

Psig AT SURFACE:
cu.ft. OF GAS:
cc OF OIL:
cc OF WATER:
cc OF MUD:
TOTAL LIQUID cc:

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): @ °F
GAS/OIL RATIO (cu.ft. per bbl):
GAS GRAVITY:

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

300 FEET OF CONDENSATE

MEASURED FROM TESTER VALVE

REMARKS:

LEGAL LOCATION: LATITUDE - 28 DEGREES, 15', 22.6"S; LONGITUDE - 140 DEGREES, 48', 27.0"E.

ALL READINGS ON B.T. 4531 ARE QUESTIONABLE DUE TO CHART BEING IMPROPERLY INSTALLED IN B.T. CASE.

00061

TYPE & SIZE MEASURING DEVICE: 6" CERAMIC CHOKE (SURFACE MANIFOLD) | TICKET NO: 32936600

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
9-29-84					
0001					LOADED B.T. 4315
0111					LOADED B.T. 4531
0140					LOADED B.T. 4530
0147					LOADED B.T. 8014
0200					RAN IN HOLE
0500					HEAD UP AND RIGGED MANIFOLD
0528					SET PACKERS
0532	.5	0			OPENED TOOL WITH A WEAK
					INCREASING BLOW
0533	.5	0			STRONG BLOW
0534	.5	10			STRONG BLOW
0535	.5	25			STRONG BLOW
0536	.5	50			GAS TO SURFACE
0540	.5	110			
0545	.5	190			
0550	.5	230			
0555	.5	260			
0600	.5	270			
0605	.5	283			
0610	.5	289			
0614	.5	300			MUD TO SURFACE-SLUGGING
0615	.5	330			SLUGGING-MUD CUT GAS
0620	.5	400			WET GAS
0625	.5	435			SLUGGING
0630	.5	480			
0645	.5	510			
0700	.5	430			
0715	.5	420			
0730	.5	400			
0732					CLOSED TOOL
1132					OPENED BYPASS AND PULLED FREE
1500					HEAD UP AND RIGGED MANIFOLD TO
					REVERSE CIRCULATE
1506					DROPPED BAR AND REVERSED
1515					RIGGED DOWN-PULLED OUT OF HOLE
1606					BROKE DOWN TOOLS

818

00062

TYPE & SIZE MEASURING DEVICE: 6" CERAMIC CHOKE (SURFACE MANIFOLD) | TICKET NO: 32936600

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
1730					OUT OF HOLE

TICKET NO: 32936600

CLOCK NO: 16139 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 8014

DEPTH: 7281.0

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	202.4			
	2	5.0	238.2	35.9		
	3	10.0	354.2	116.0		
	4	15.0	451.2	97.0		
	5	20.0	525.6	74.4		
	6	25.0	575.9	50.3		
	7	30.0	615.8	39.9		
	8	35.0	642.8	26.9		
	9	40.0	669.2	26.4		
	10	45.0	755.9	86.7		
	11	50.0	806.2	50.3		
	12	55.0	846.0	39.7		
	13	60.0	843.1	-2.9		
[1]	14	64.5	854.2	11.1		
	15	65.0	848.3	-5.9		
	16	70.0	811.4	-36.9		
	17	75.0	784.0	-27.4		
	18	80.0	749.3	-34.7		
	19	85.0	732.3	-17.0		
	20	90.0	720.0	-12.3		
	21	95.0	719.2	-0.8		
	22	100.0	718.7	-0.5		
	23	105.0	717.2	-1.5		
	24	110.0	712.0	-5.2		
	25	115.0	705.1	-6.9		
C	26	120.0	716.8	11.8		
			FIRST CLOSED-IN			
C	1	0.0	716.8			
D	2	234.3	166.8	-550.0	79.4	0.180

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$

LEGEND:
[1] MAXIMUM FLOW PRESSURE

REMARKS:

028

00864

TICKET NO: 32936600	GAUGE NO: 4530
CLOCK NO: 6596 HOUR: 24	DEPTH: 7302.0

HALLIBURTON SERVICES

	REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	437.5			
	2	5.0	372.2	-65.3		
	3	10.0	445.0	72.8		
	4	15.0	532.6	87.6		
	5	20.0	561.7	29.1		
	6	25.0	598.4	36.7		
	7	30.0	629.6	31.3		
	8	35.0	651.7	22.1		
	9	40.0	675.0	23.2		
	10	45.0	743.2	68.2		
	11	50.0	779.2	36.0		
	12	55.0	816.9	37.6		
	13	60.0	823.6	6.7		
☐1	14	64.5	828.8	5.2		
	15	65.0	827.2	-1.6		
	16	70.0	804.4	-22.7		
	17	75.0	786.9	-17.5		
	18	80.0	753.4	-33.6		
	19	85.0	739.1	-14.2		
	20	90.0	726.2	-12.9		
	21	95.0	724.5	-1.6		
	22	100.0	723.9	-0.7		
	23	105.0	722.4	-1.5		
	24	110.0	717.5	-4.9		
	25	115.0	711.8	-5.7		
C	26	120.0	713.3	1.5		
			FIRST CLOSED-IN			
C	1	0.0	713.3			
	2	1.0	2490.4	1777.1	1.0	2.088
	3	2.0	2632.3	1919.0	2.0	1.777
	4	3.0	2684.2	1970.9	3.0	1.609
	5	4.0	2712.1	1998.8	3.9	1.493
	6	5.0	2726.8	2013.5	4.8	1.400
	7	6.0	2737.2	2023.9	5.7	1.321
	8	7.0	2746.5	2033.2	6.7	1.256
	9	8.0	2754.8	2041.6	7.5	1.204
	10	9.0	2760.4	2047.1	8.4	1.157
	11	10.0	2764.9	2051.7	9.2	1.115
	12	12.0	2773.9	2060.6	10.9	1.040
	13	14.0	2779.8	2066.5	12.5	0.982
	14	16.0	2786.1	2072.9	14.1	0.929
	15	18.0	2790.4	2077.1	15.6	0.885
	16	20.0	2794.5	2081.2	17.1	0.845
	17	22.0	2797.7	2084.5	18.6	0.810
	18	24.0	2801.5	2088.2	20.0	0.779
	19	26.0	2804.4	2091.1	21.4	0.750
	20	28.0	2807.8	2094.6	22.7	0.723
	21	30.0	2811.4	2098.2	24.0	0.699

	REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
		FIRST CLOSED-IN - CONTINUED				
	22	35.0	2817.3	2104.0	27.1	0.646
	23	40.0	2823.3	2110.1	30.0	0.602
	24	45.0	2828.5	2115.3	32.7	0.564
	25	50.0	2833.9	2120.7	35.3	0.531
	26	55.0	2838.3	2125.1	37.7	0.502
	27	60.0	2843.3	2130.0	40.0	0.477
	28	70.0	2852.4	2139.1	44.2	0.434
	29	80.0	2860.0	2146.8	48.0	0.398
	30	90.0	2868.5	2155.3	51.4	0.368
	31	100.0	2875.0	2161.8	54.5	0.343
	32	110.0	2882.1	2168.8	57.4	0.320
	33	120.0	2888.9	2175.6	60.0	0.301
	34	135.0	2898.5	2185.3	63.5	0.276
	35	150.0	2906.7	2193.4	66.7	0.255
	36	165.0	2914.7	2201.4	69.5	0.237
	37	180.0	2922.7	2209.4	72.0	0.222
	38	195.0	2929.9	2216.6	74.3	0.208
	39	210.0	2936.4	2223.1	76.4	0.196
	40	225.0	2941.9	2228.7	78.3	0.186
D	41	234.3	2946.5	2233.2	79.4	0.180

LEGEND:
☐1 MAXIMUM FLOW PRESSURE

REMARKS:

821

00065

TICKET NO: 32936600	GAUGE NO: 4531
CLOCK NO: 9394 HOUR: 24	DEPTH: 7350.0

HALLIBURTON SERVICES

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	541.1			
	2	5.0	476.1	-65.0		
	3	10.0	520.3	44.2		
	4	15.0	595.3	75.0		
	5	20.0	612.8	17.5		
	6	25.0	650.2	37.5		
	7	30.0	679.2	29.0		
	8	35.0	702.1	22.9		
	9	40.0	722.4	20.3		
	10	45.0	779.9	57.4		
	11	50.0	826.0	46.2		
	12	55.0	861.0	35.0		
	13	60.0	878.1	17.0		
☐1	14	64.5	882.2	4.1		
	15	65.0	881.0	-1.1		
	16	70.0	865.0	-16.0		
	17	75.0	846.5	-18.5		
	18	80.0	806.7	-39.8		
	19	85.0	794.4	-12.3		
	20	90.0	779.5	-14.9		
	21	95.0	776.6	-2.9		
	22	100.0	776.4	-0.2		
	23	105.0	773.3	-3.1		
	24	110.0	768.4	-4.9		
	25	115.0	764.2	-4.3		
C	26	120.0	764.5	0.3		
			FIRST CLOSED-IN			
C	1	0.0	764.5			
	2	1.0	2392.7	1628.2	1.0	2.101
	3	2.0	2652.3	1887.8	2.0	1.777
	4	3.0	2739.1	1974.6	2.9	1.613
	5	4.0	2790.1	2025.6	3.9	1.490
	6	5.0	2816.2	2051.7	4.8	1.397
	7	6.0	2826.3	2061.8	5.7	1.325
	8	7.0	2841.1	2076.6	6.7	1.256
	9	8.0	2851.2	2086.7	7.5	1.205
	10	9.0	2858.6	2094.1	8.4	1.157
	11	10.0	2864.7	2100.3	9.2	1.113
	12	12.0	2874.3	2109.9	10.9	1.041
	13	14.0	2881.6	2117.1	12.5	0.982
	14	16.0	2888.1	2123.6	14.1	0.930
	15	18.0	2892.7	2128.2	15.6	0.885
	16	20.0	2897.8	2133.4	17.1	0.846
	17	22.0	2901.8	2137.3	18.6	0.809
	18	24.0	2905.0	2140.5	20.0	0.778
	19	26.0	2908.4	2144.0	21.4	0.749
	20	28.0	2911.4	2146.9	22.7	0.723
	21	30.0	2914.4	2149.9	24.0	0.699
			FIRST CLOSED-IN - CONTINUED			
	22	35.0	2920.5	2156.0	27.1	0.646
	23	40.0	2927.0	2162.5	30.1	0.602
	24	45.0	2932.0	2167.5	32.7	0.564
	25	50.0	2937.9	2173.4	35.3	0.531
	26	55.0	2942.5	2178.1	37.7	0.502
	27	60.0	2947.5	2183.0	40.0	0.477
	28	70.0	2956.3	2191.8	44.2	0.434
	29	80.0	2965.6	2201.1	48.0	0.398
	30	90.0	2972.7	2208.2	51.4	0.368
	31	100.0	2980.3	2215.8	54.5	0.342
	32	110.0	2987.7	2223.3	57.4	0.320
	33	120.0	2995.0	2230.5	60.0	0.301
	34	135.0	3004.3	2239.4	63.5	0.276
	35	150.0	3013.1	2248.6	66.7	0.255
	36	165.0	3021.4	2256.9	69.5	0.237
	37	180.0	3028.9	2264.4	72.0	0.222
	38	195.0	3035.4	2270.9	74.3	0.208
	39	210.0	3042.2	2277.7	76.4	0.196
	40	225.0	3048.5	2284.0	78.3	0.186
D	41	234.3	3052.3	2287.8	79.4	0.180

LEGEND:
☐1 MAXIMUM FLOW PRESSURE

REMARKS:

00066 TICKET NO. 32936600

			O.D.	I.D.	LENGTH	DEPTH
1		DRILL PIPE.....	4.500	3.826	6706.0	
4		FLEX WEIGHT.....	4.500	2.764	179.1	
3		DRILL COLLARS.....	6.250	2.875	300.3	
51		PUMP OUT REVERSING SUB.....	6.000	3.000	1.0	7186.0
50		IMPACT REVERSING SUB.....	6.000	3.000	1.0	7187.0
3		DRILL COLLARS.....	6.250	2.875	90.9	
5		CROSSOVER.....	5.750	1.500	1.0	
80		AP RUNNING CASE.....	5.000	2.250	4.1	7281.0
5		CROSSOVER.....	5.000	2.200	1.0	
12		DUAL CIP VALVE.....	5.000	0.870	4.0	
33		DRAIN VALVE.....	5.000	2.500	5.7	
60		HYDROSPRING TESTER.....	5.000	0.750	5.8	7300.0
60		AP RUNNING CASE.....	5.000	2.250	4.1	7302.0
15		JAR.....	5.000	1.750	5.0	
16		VR SAFETY JOINT.....	5.000	1.000	2.8	
17		PRESSURE EQUALIZING CROSSOVER...	4.875	3.000	1.0	
70		OPEN HOLE PACKER.....	6.000	1.530	5.8	7318.0
18		DISTRIBUTOR VALVE.....	5.000	1.680	2.0	
70		OPEN HOLE PACKER.....	6.000	1.530	5.8	7326.0
20		FLUSH JOINT ANCHOR.....	5.000	2.370	21.0	
5		CROSSOVER.....	4.625	2.750	1.0	
81		BLANKED-OFF RUNNING CASE.....	5.000		4.1	7350.0
5		CROSSOVER.....	4.500	1.625	0.7	
5		CROSSOVER.....	6.500	2.250	1.0	
3		DRILL COLLARS.....	6.250	2.875	30.0	
5		CROSSOVER.....	6.250	2.250	1.0	
5		CROSSOVER.....	4.625	2.500	0.7	
70		OPEN HOLE PACKER.....	5.000	1.530	5.8	7388.0
18		DISTRIBUTOR VALVE.....	5.000	1.680	2.0	

CONTINUED

EQUIPMENT DATA

00067 823

TICKET NO. 32936600

		O.D.	I.D.	LENGTH	DEPTH
70	OPEN HOLE PACKER.....	5.000	1.530	5.8	7396.0
5	CROSSOVER.....	4.500	1.625	0.9	
19	ANCHOR PIPE SAFETY JOINT.....	5.000	1.500	4.3	
20	[illegible] JOINT ANCHOR.....	5.000	2.370	16.0	
5	CROSSOVER.....	6.250	2.250	1.0	
3	DRILL COLLARS.....	6.250	2.875	207.5	
5	CROSSOVER.....	6.250	2.250	1.0	
81	BLANKED-OFF RUNNING CASE.....	5.000		4.1	7632.0
	TOTAL DEPTH				7635.0

EQUIPMENT DATA

DELHI PETROLEUM PTY. LTD.

VELOCITY SURVEY - TIME/DEPTH CALIBRATION

KIDMAN 3

DISTRIBUTION (7)

DELHI (3) - J.T. Frazer/Library
B. Jensen-Schmidt
S.W. Jones

SANTOS
VAMGAS
SAOG
SADME

by S.W. Jones
Geophysicist

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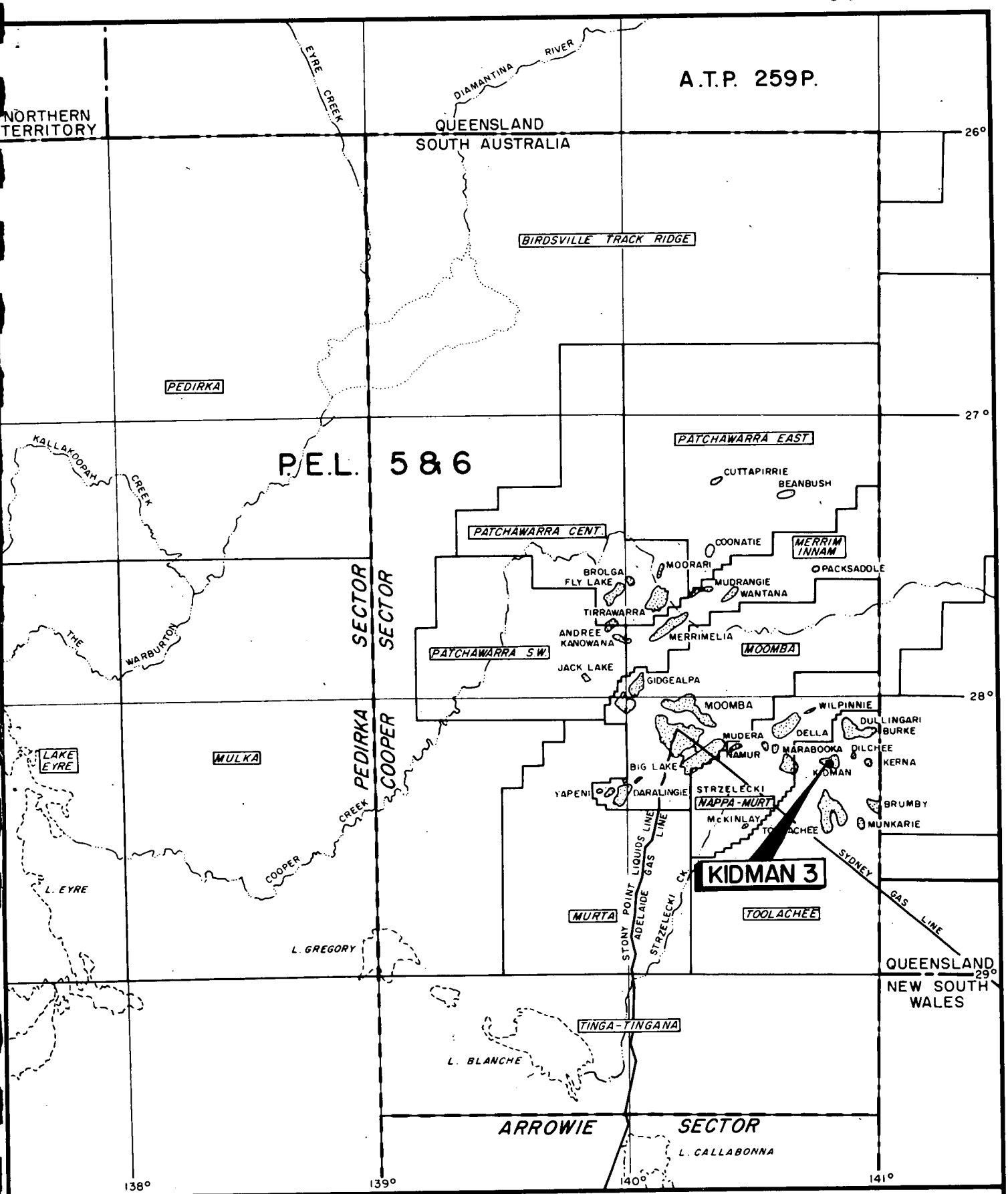
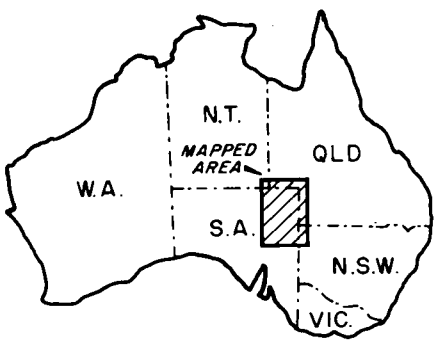




DELHI PETROLEUM PTY. LTD.

LOCATION MAP

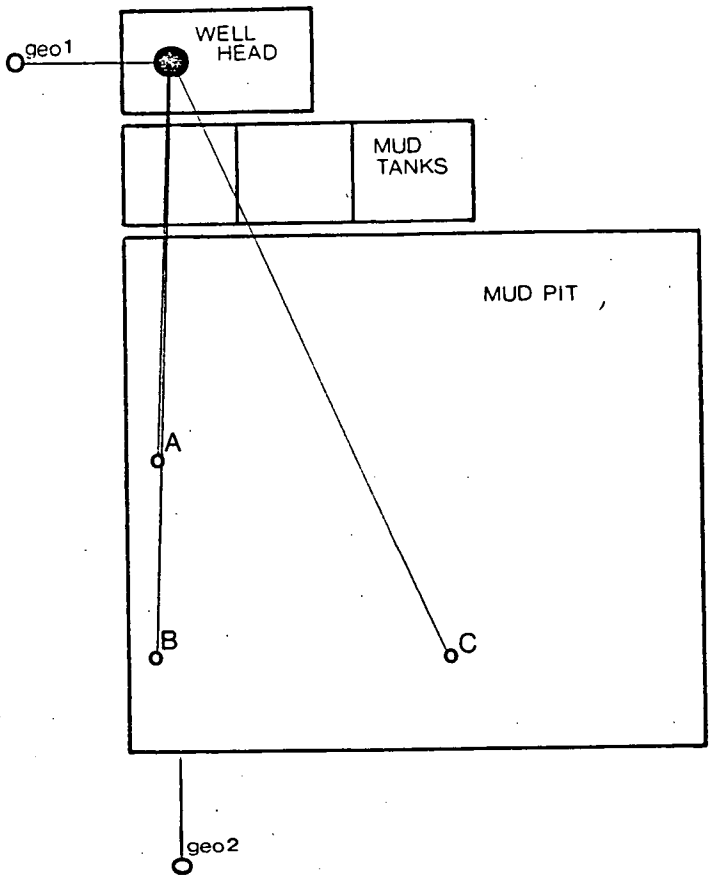
KIDMAN 3

P.P.L. 24 SOUTH AUSTRALIA

SCALE 1 2000000

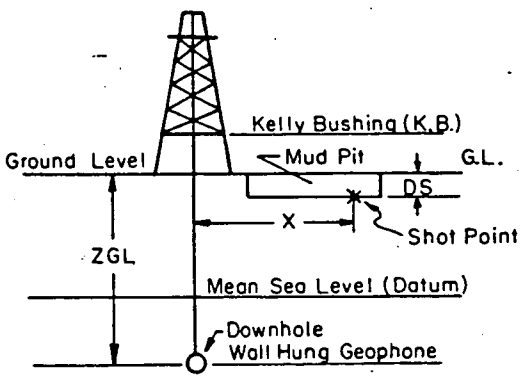
KILOMETRES 20 0 20 40 60 80 100 120 KILOMETRES

Author : A. MILLS		Dwg. No. : 84 XG – 4011
Date : AUGUST 1984		Fig. 1
Drafted : C. BLACKMAN		File : SG – 25



• SHOT POINT

o REFERENCE GEOPHONE



$T = T_o \cos\left[\tan^{-1}\left(\frac{x}{ZGL - DS}\right)\right]$

$T_o \equiv$ Time from Shot Point to downhole geophone. (record time)

$T \equiv$ Time for vertical ray path from shot point level at well-head to downhole geophone level.

SHOT POINT	A	B	C	D
Depth Relative to G.L. at K.B. ft.	10	10	10	
Horizontal Distance from K.B. ft.	69	141	160	

DELHI PETROLEUM PTY. LTD.

LOCATION DIAGRAM

KIDMAN 3

WELL VELOCITY SURVEY

DATE: 6-11-84

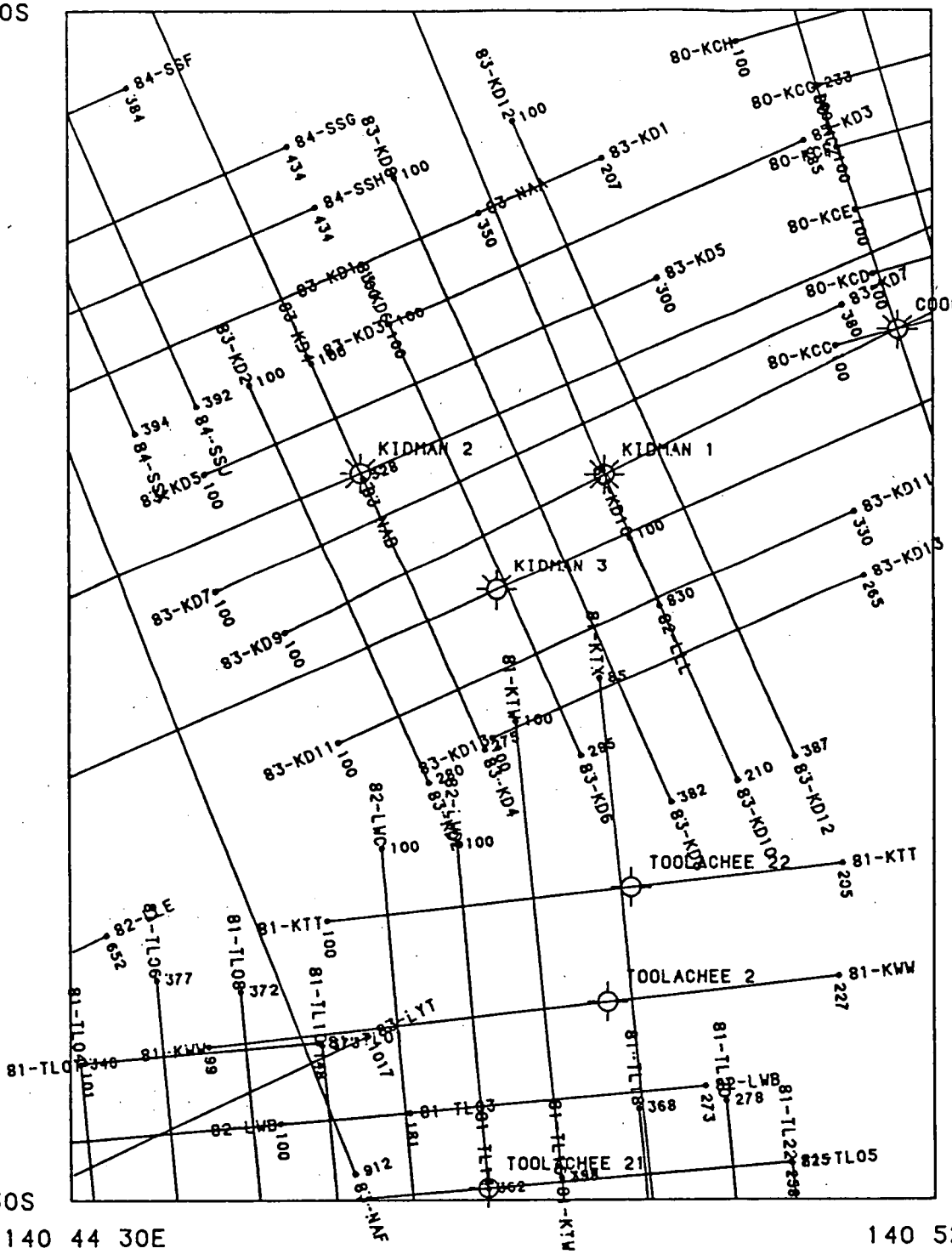
DRAFTED: SWJ DWG. No. FIGURE 2

Base RD-33 File

DELHI

KIDMAN 3

1 : 100000



SEISMIC LOCATION DIAGRAM

KIDMAN 3

VELOCITY SURVEY-TIME/DEPTH CALIBRATION

KIDMAN 3

1.0 INTRODUCTION

A well velocity survey was conducted by Delhi Petroleum Pty. Ltd. at the Kidman 3 wellsite on 25 September, 1984.

Velocity Data Pty. Ltd., of Brisbane were the recording contractors, providing the recording equipment and down-hole tool used in the survey.

24 good quality records were obtained at 22 different levels using ANZOMEX boosters detonated in the mud pit as the energy source. The down-hole tool was a wall-locking vertical motion geophone device.

Check shots at datum (254 ft*) were taken to confirm the static correction used in the processing of the line 82-LLD.

A Time/Depth curve was computed by fitting the integrated sonic time curve to the check-shot data by the least squares method.

* Note: all depths are below K.B. unless otherwise specified.

2.0 KIDMAN 3 DEPTH PROGNOSES

Prognoses of formation tops at Kidman were based on an interpretation of the 1982 Diamond Bog Seismic Survey recorded in the Kidman area.

The average velocities used in the depth prognoses were derived from velocity information from Murteree A-1. The two-way travel times used were seismic section times at the well location.

TABLE 1

COMPARISON OF WELLTOP AND PROGNOSED DEPTHS

DEPTH (feet below M.S.L.)

Horizon	C	E	P	Z
Prognosis	4439	5638	6401	7621
Well top	4433	5567	6373	7473
Difference	6	71	27	148

3.0 DATUM STATIC DETERMINATION

4 shots at datum were taken at different shot locations (Figure 2) with the down-hole tool locked in casing at mean sea level, 10ft below KB. Ground level was surveyed at 254ft above mean sea level. The last datum shot was recorded at the end of the survey.

The mean vertical one-way time from surface to datum after geometrical offset correction was 52ms (Enclosure 1). A shot depth corrections of 3 msecs was added due to the shots being 10ft below the seismic the seismic elevation of 236ft. A LVL velocity of 2000ft/sec was used in the correction calculation.

TABLE 2

DATUM STATIC DETERMINATION

SHOT No	SHOT LOC	SHOT DEPTH (ft)	SHOT OFFSET (ft)	ARRIVAL TIME (ms)	SHOT DATUM (ms)	SURFACE -DATUM (ms)
1	A	10	69	53	51	54
2	B	10	141	59	50	53
3	C	10	160	64	52	55
30	C	10	160	66	54	57
				average	52	55

3.0 DATUM STATIC DETERMINATION (Cont.)

The seismic static and velocity survey static are compared below.

TABLE 3

COMPARISON OF SEISMIC AND VELOCITY SURVEY STATIC

	SEISMIC LINE 82-LDD	VELOCITY SURVEY	DIFFERENCE
SEISMIC AND VELOCITY SURVEY (ft)	223	233	-
DATUM STATIC (ms)	48	55	7
INTERVAL VELOCITY GROUND LEVEL TO DATUM (ft/sec)	4854	4236	618

4.0 WELLSHOOT OPERATIONS

Shots were taken at 22 levels down the hole. 9 levels were chosen to coincide with formation tops picked from electric logs by the well site geologist. Several intermediate shots were taken to ensure that subsurface sampling did not exceed 500 feet.

The hole condition was generally good, allowing the tool to couple satisfactorily thus keeping noise levels to a minimum. Record quality was good to excellent.

The explosive type used was ANZOMEX boosters. Various charge sizes were used according to the depth below the surface. These provided adequate energy returns.

5.0 TIME/DEPTH CALIBRATION

The digital sonic (SLS) was integrated, summed and plotted against depth to produce an uncalibrated sonic T/Z curve.

The checkshot times were corrected for geometric offset and shot-to-datum static. The uncalibrated sonic T/Z curve was initially tied to the C horizon checkshot to allow drift-curve calculation. The sonic T/Z curve was then bulk shifted in time so as to provide the least-square error between the checkshots and the sonic values below the C horizon. Inclusion of checkshots above the C horizon leads to a bias in the least-squares error due to the large negative drift which occur above this level.

Drift corrections were then calculated by fitting two linear functions to the check-sonic drift values. The two linear functions were calculated by the least-squares method.

The calibrated sonic T/Z curve was corrected for drift with the values derived from the drift curve.

Table 4 lists the travel time and drift values at the successive stages of the process as well as the final rms errors in time of the T/Z curve. An rms error in equivalent depth is calculated using the interval velocities shown in Enclosure 1. A "worst case" error in depth interpretation from the T/Z curve was computed.

TABLE 4

SONIC SHOT - SONIC TIME DIFFERENCES

DEPTH (ft)		TRAVEL-TIME to DATUM (ms)			CHECK - SONIC		
Below K.B. (ft)	Below M.S.L. (ft)	Check-Shot (ms)	Tied Sonic (ms)	Drift Corr. Sonic (ms)	Tied Sonic (ms)	Drift Corr. Sonic (ms)	Depth Diff. (ft)
900	646	110	136	103	-16	-2	-12
1400	1146	186	201	187	-15	-1	-7
1900	1646	250	268	245	-18	5	37
2400	2146	320	330	320	-10	0	0
2900	2646	380	388	379	-8	1	8
3400	3146	444	447	446	-3	-2	-16
3900	3646	501	502	503	-1	-2	-18
*4433	4179	561	561	561	0	0	0
4638	4384	583	579	587	4	-4	-38
4841	4587	602	596	603	6	-6	-72
5568	5314	653	655	650	-2	3	36
5651	5362	658	658	658	0	0	0
5668	5414	663	662	664	1	-1	-15
5977	5723	681	685	686	-4	5	75
6374	6120	714	714	714	0	0	0
6728	6474	744	744	744	0	0	0
6773	6519	749	745	753	4	-4	-48
6926	6672	760	758	761	2	-1	-12
7064	6810	772	768	775	4	-3	-45
7229	6975	779	779	778	0	1	16
7466	7212	796	796	794	0	2	32
7637	7383	805	806	802	-1	3	54
				rms values	7	27	83

* NOTE - All figures derived using the C Horizon as the tie point.

TABLE 5

SURVEY RESULTS

DEPTH (feet below M.S.L.)

Horizon	C	E	P	Z
Prognosis	4439	5638	6401	7621
Well top	4433	5567	6373	7473
Difference	6	71	27	148

TWO-WAY TIME* (msecs)

Horizon	C	E	P	Z
Prognosis	562	660	715	805
Well top	561	653	714	796
Difference	1	7	1	9

AVERAGE VELOCITY (ft/sec)

Horizon	C	E	P	Z
Prognosis	7899	8542	8952	9467
Well top	7902	8525	8925	9388
Difference	-3	17	27	79

6.0 RESULTS

After calibration, the T/Z curve had a rms depth error of 33ft and a rms time error of 2.7 ms. Table 5 indicates the results against prognoses. The prognoses were derived from the interpretation of the line 82-LLD which was part of the Diamond Bog Seismic Survey.

The datum static indicates a OWT difference of 7 ms.

The well top depths came in high compared with prognosis varying from 6 ft at the C to 148 ft at the Z.

The velocity survey time compared well with the section times for the C and the P levels with 2 ms TWT differences. The E and Z horizons were originally picked half a leg deep.

The choice average of velocities contributed slightly to the depth prognoses errors.

TABLE 6

SURVEY DATA

Personnel Present

Observer - Well shoot	A. Viersma - Velocity Data Pty. Ltd.
Shooter	J. Coveny - Velocity Data Pty. Ltd.

Recording Parameters

Energy Source	Explosive - BOOSTERS
Shot Offset and Depth (B.G.L.)	Location A : 103 feet, 6 feet Location B : 190 feet, 4 feet Location C : 179 feet, 6 feet
Production Shooting:	Location B
Datum Shooting :	Location A, B, C

Equipment

Recorder	E.I.E. RS 44W
Reference Geophone	Hall Sears HS 1
Downhole Geophone	Geospace WLS-100 Wall-locking type
Elements	6 HS 1 4.5 Hz 215 ohm high temperature elements series parallel connection Frequency response: 8-300 Hz within 3db Pre-amplifier - 48 db fixed gain Frequency response: 5-200 Hz within 3db

Monitor Traces

1	Instrument time break
2-4	Analogue down-hole geophone signal - low, medium and high gain
5	Digital down-hole geophone signal IFP gain
6	Confirmation time break geophone signal

KIDMAN 3

25-9-84

DELHI PETROLEUM PTY. LTD.

SHOT RECORD TABLE

DATUM SHOTS (DATUM=MSL)

Z (KB) = 254 FT Z (GL) = 236 FT

SHOT NUMBER	LOCAL TIME	SHOT LOCATION	AMP. GAIN	CHARGE SIZE	CHARGE DEPTH	OFFSET (ft)	ARRIVAL TIME ms	CORR. TIME ms	REMARKS
1	00.02	A	15	1XA	10	69	53	51	
2	00.09	B	25	1XA	10	141	59	50	
3	00.15	C	25	1XA	10	160	64	52	
30	03.52	C	30	1XA	10	160	66	54	

The shot to datum static used is 52 msec

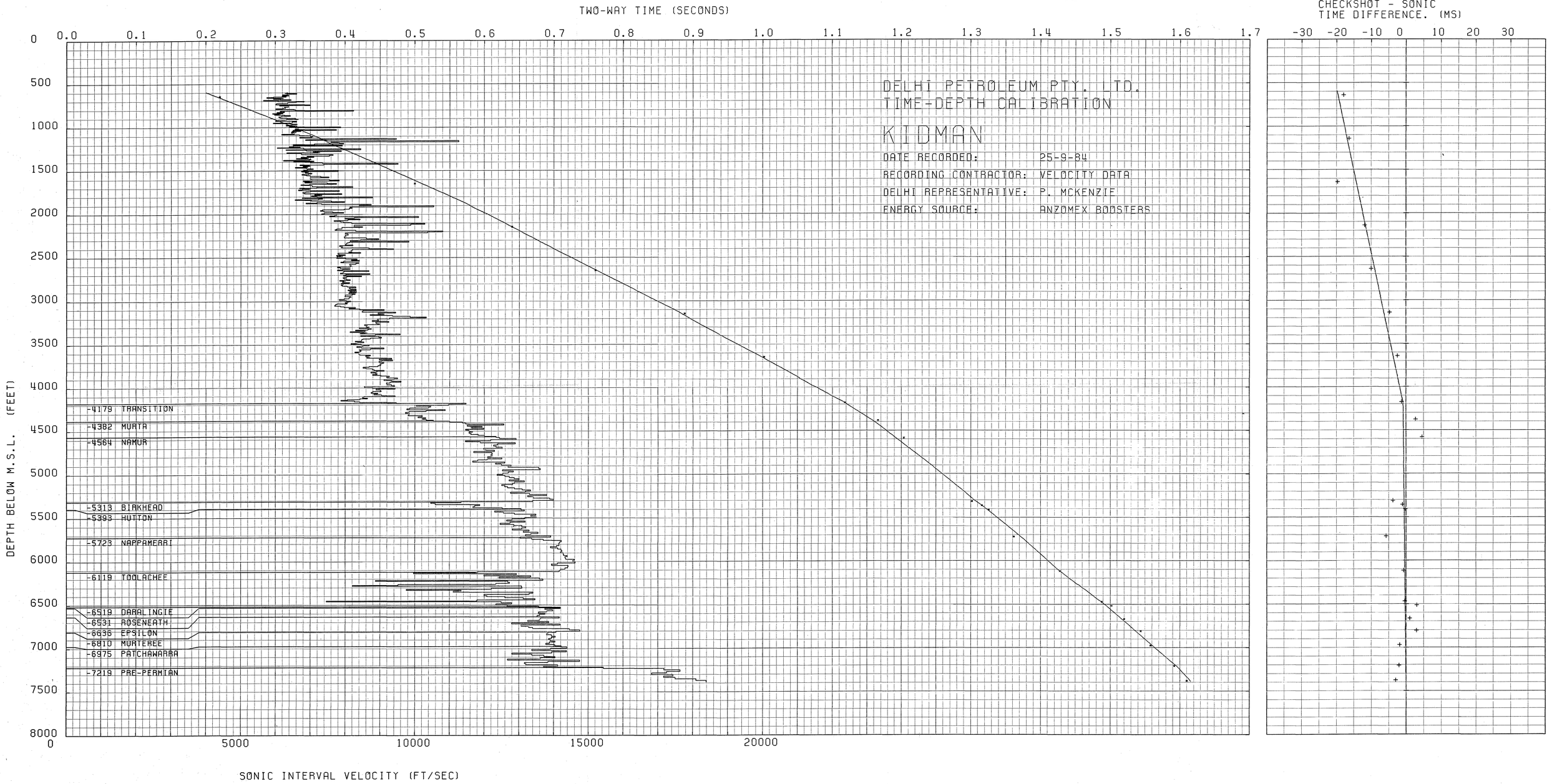
SURVEY SHOTS

SHOT NUMBER	LOCAL TIME	CHARGE SIZE	AMP. GAIN	OFFSET (ft)	CHARGE DEPTH	KB DEPTH	RECORD TIME	MSL DEPTH	CORR. TIME	INTERVAL VELOCITY	RMS VELOCITY	REMARKS
29	03.43	1XD	30	160	10	900	165	646	110	5873	5873	
28	03.36	1XD	35	160	10	1400	240	1146	186	6579	6171	
27	03.32	1XD	30	160	10	1900	303	1646	250	7813	6630	
26	03.15	1XD	40	160	10	2400	373	2146	320	7143	6746	
25	03.08	1XD	30	160	10	2900	433	2646	380	8333	7020	
24	03.04	1XQ	30	160	10	3400	497	3146	444	7813	7140	
23	02.58	1XQ	25	160	10	3900	553	3646	501	8772	7344	
4	00.35	1XD	35	160	10	4433	613	4179	561	9034	7540	TRANSITION
22	02.51	1XQ	40	160	10	4433	611	4179	559	9034	7540	TRANSITION
21	02.46	1XQ	30	160	10	4638	635	4384	583	8913	7599	MURTA
20	02.41	1XQ	20	160	10	4841	654	4587	602	10684	7715	
19	02.32	1XQ	35	160	10	5568	705	5314	653	14255	8411	BIRKHEAD
18	02.28	1XQ	35	160	10	5616	710	5362	658	9600	8421	
17	02.22	1XQ	25	160	10	5668	715	5414	663	10400	8437	
5	00.48	1XQ	40	160	10	5977	---	5723	---	----	----	NAPPAMERRI-NOISEY
6	00.53	1XQ	40	160	10	5977	733	5723	681	17167	8780	NAPPAMERRI
16	02.16	1XQ	40	160	10	5977	733	5723	681	17167	8780	NAPPAMERRI
15	02.10	1XQ	45	160	10	6374	766	6120	714	12030	8957	TOOLACHEE
14	02.05	1XQ	35	160	10	6728	796	6474	744	11800	9088	
13	01.58	1XQ	40	160	10	6773	801	6519	749	9000	9088	DARALINGIE
12	01.54	1XQ	45	160	10	6926	812	6672	760	13909	9176	
11	01.47	1XQ	40	160	10	7064	824	6810	772	11500	9216	MURTEREE
9	01.30	1XQ	45	160	10	7228	---	6974	---	----	----	
10	01.35	1XQ	40	160	10	7229	831	6975	779	23571	9443	PATCHAWARRA
8	01.22	1XQ	40	160	10	7466	848	7212	796	13941	9561	PRE-PERMIAN
7	01.13	1XQ	45	160	10	7637	857	7383	805	19000	9718	T.D.

5653-1

ENCLOSURE 1

5356-2


TWO-WAY TIME (SECONDS)
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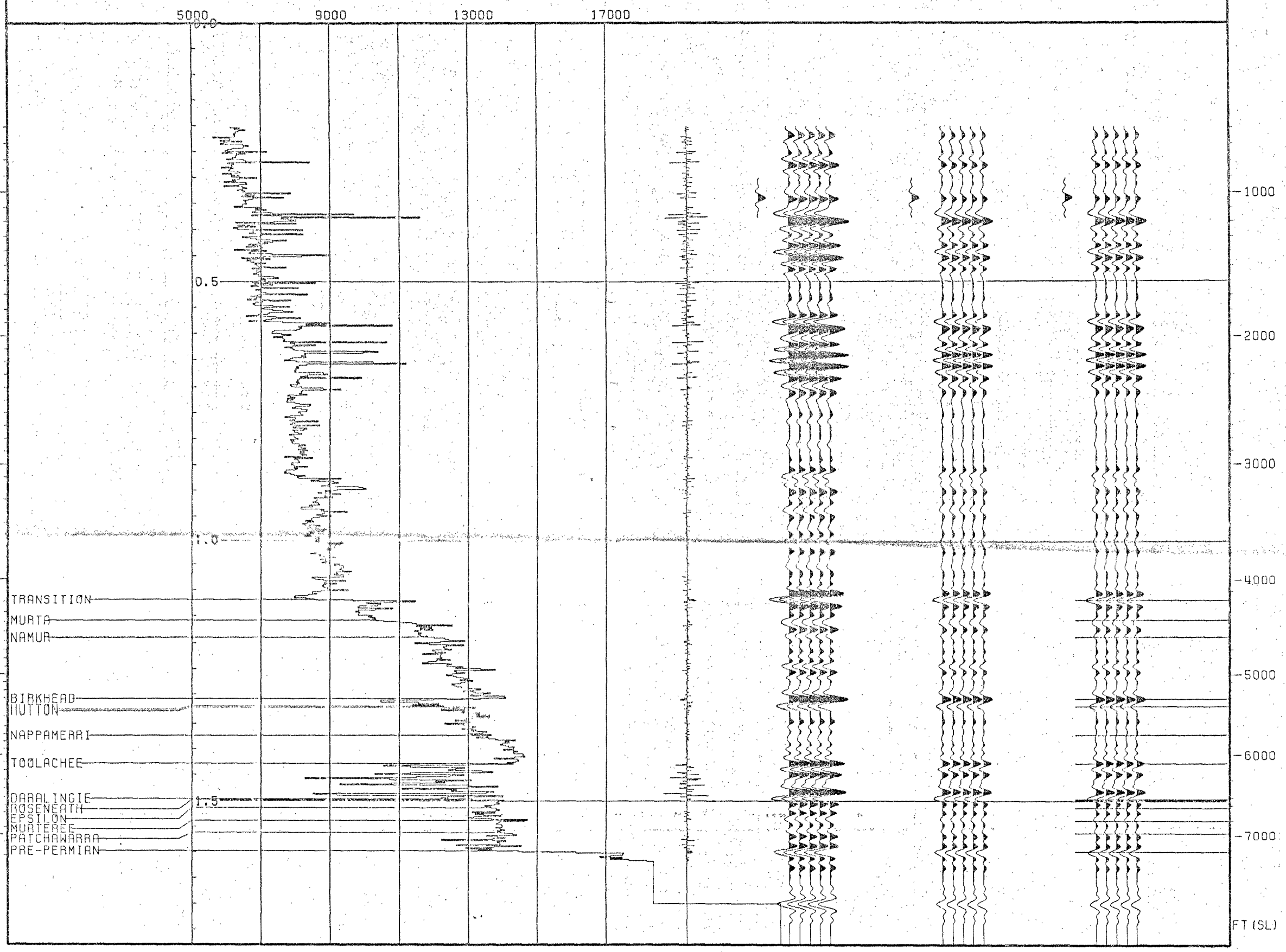
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
DEPTH BELOW M.S.L. (FEET)
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
7000
7500
8000
-4179 TRANSITION
-4382 MURTA
-4564 NAMUR
-5313 BIRKHEAD
-5393 HUTTON
-5723 NAPPAMERRI
-6119 TOOLACHEE
-6519 DARALINGIE
-6531 ROSENEATH
-6636 EPSILON
-6810 MURTEREE
-6975 PATCHAWARRA
-7219 PRE-PERMIAN
0
5000
10000
15000
20000
SONIC INTERVAL VELOCITY (FT/SEC)
DELHI PETROLEUM PTY. LTD.
TIME-DEPTH CALIBRATION
KIDMAN
DATE RECORDED: 25-9-84
RECORDING CONTRACTOR: VELOCITY DATA
DELHI REPRESENTATIVE: P. MCKENZIE
ENERGY SOURCE: ANZOMEX BOOSTERS
CHECKSHOT - SONIC
TIME DIFFERENCE. (MS)
-30
-20
-10
0
10
20
30

11-OCT-84

KIDMAN 3

SYNTHETIC SEISMOGRAM



REFLECTIVITY COMPUTED USING :

1. VELOCITY
2. VELOCITY AND DENSITY
3. VELOCITY AND CORRECTED DENSITY
4. SAME AS (1) WITH DRIFT APPLIED
5. SAME AS (2) WITH DRIFT APPLIED
6. SAME AS (3) WITH DRIFT APPLIED

BANDPASS WAVELET

NO. OF FILTER POINTS	39
LOW CUT FREQUENCY	10
HIGH CUT FREQUENCY	55
PHASE SHIFT	0
ZERO PHASE	
NORMAL POLARITY	

FORMATION TOP KB (FT) = 254	DEPTH (SL)	TIME	VEL (INT)	VEL (AV)	VEL (RMS)
TRANSITION	4179	1120	10410	7463	7463
MURTA	4382	1159	11375	7562	7580
NAMUR	4564	1191	12695	7664	7707
BIRKHEAD	5313	1309	11429	8118	8281
HUTTON	5393	1323	12941	8153	8320
NAPPAMERRI	5723	1374	14400	8330	8536
TOOLACHEE	6119	1429	11940	8564	8834
DARALINGIE	6519	1496	12000	8715	8997
ROSENEATH	6531	1498	14000	8720	9001
EPSILON	6636	1513	13385	8772	9064
MURTEREE	6810	1539	14348	8850	9154
PATCHAWARRA	6975	1562	13556	8931	9252
PRE-PERMIAN	7219	1598		9035	9371

5653-3

SANTOS EXPLORATION DATA BASE

WATER ANALYSIS

WELL: KIDMAN 3 LAB: AMDEL

TEST: PROD DATE: 01/04/1986

SAMPLE: .

DEPTH: - FT (KB) - FT (SUBSEA)

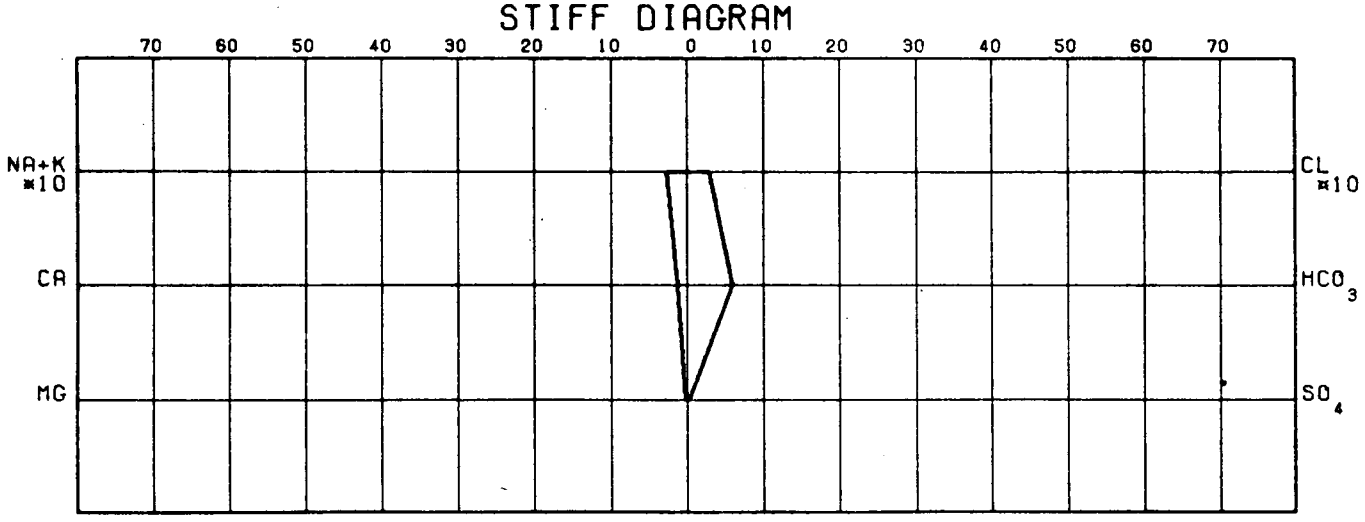
FORMATION:

COMMENT: LOWER: IMBALANCE DUE TO PRESENCE OF AMMONIA (NESSLER REAGENT SPOT TEST)

CATIONS	MG/L	MEQ/L	ANIONS	MG/L	MEQ/L
SODIUM	620.0	27.0	CHLORIDE	1020.0	28.7
POTASSIUM	13.0	0.3	BICARBONATE	363.0	6.0
CALCIUM	27.0	1.3	CARBONATE		
MAGNESIUM	3.9	0.3	SULPHATE	10.0	0.2
IRON			NITRATE	4.0	0.1
			HYDROXIDE		
TOTAL CATIONS	663.9	29.0	TOTAL ANIONS	1397.0	35.0

ION BALANCE:	-9.4	%
TOTAL DISSOLVED SOLIDS:	1880.0	MG/L
MEASURED RESISTIVITY:	2.860	OHM-M AT TEMP 77. F 25. C
SODIUM TO TOTAL CATION RATIO:	93.1	%
PH:	8.3	
SODIUM CHLORIDE EQUIVALENT:	1809.	
EQUIVALENT RW AT 75 F:	3.01	

STIFF DIAGRAM



ENV-5633 Rec. 13/11/86

PLOTTED: 10/11/86

ROLLING BOTTOMHOLE PRESSURE SURVEY GAS CALCULATION SHEET

WELL: Kidman # 3 Upper

ORIFICE SIZE: 50.800 mm 2.000 " ✓

LINE SIZE: 97.180 mm 3.826 " ✓

Pf = 5000 kPa

T = 78 °C

Diff = 9.8 kPa

Cumulative Production to end of May = 99.113 $m^3 \times 10^6$

Number of hours online in May = 633

Production in May = 2.880 $m^3 \times 10^6$

Average flow rate in May = (2.889/633) x 24 = 0.109 $m^3 \times 10^6/d$

Number of days online in June before Shut In 2015 hrs 26/ 6 /87
= 24.01 days ✓

Production up to 2015 hrs 26/ 6 /87 = 24.01 x 0.109 = 2.62 $m^3 \times 10^6$

Total cumulative production = 2.62 + 99.113
= 101.730 $m^3 \times 10^6$
= 3610.805 mmscf ✓

Flow rate just prior to Shut In = 0.102 $m^3 \times 10^6$ ✓
= 3.615 mmscf/d ✓

WP 2946G(13)
LGA/jfs : 8/12/86

5653

14/9/87

SANTOS LTD
39 GRENFELL ST
ADELAIDE

SUB-SURFACE PRESSURE SURVEY

CO.	SANTOS		RUN 01 FIELD	KIDMAN	WELL 03U
EFF DEPTH			WELL STAT		TOOL HUNG 6386'
CASING 7"		-	CASING PRESS		ON BOTTOM 1234 25/6
LINER		-	TUBING PRESS		OFF BOTTOM 1150 30/6
DATE	870630		ELEMENT RANGE	0 - 3139	ZERO POINT
ELEVATION			ZONE		SHUT-IN 2015 26/6
MAX TEMP	256		PICK-UP		ON-PROD
PERF	6485'-6519'		CAL SER NO.	56428	MPP
TUBING	2-7/8"	-			
UNITS	ENGLISH		PURPOSE	FLOW TEST	

SURVEY DATA

CO. SANTOS			RUN 01 FIELD KIDMAN			WELL 03U	
TIME	P-T	DP-DT	DTIME	TIME	P-T	DP-DT	DTIME
B.O.L. 13:45	1708.1	0.0	0.0	18:47	1124.0	-584.0	5.0
13:46	1576.7	-131.4	.0	19:55	1122.2	-585.9	6.2
13:44	1277.9	-430.2	-.0	20:49	1114.6	-593.5	7.1
13:47	1123.8	-584.3	.0	21:18	1121.9	-586.1	7.6
13:54	1137.4	-570.6	.2	0:16	1109.1	-598.9	10.5
14:02	1107.6	-600.5	.3	3:30	1105.2	-602.9	13.7
14:10	1096.8	-611.2	.4	6:32	1085.7	-622.3	16.8
14:29	1094.0	-614.0	.7	7:43	1060.8	-647.2	18.0
15:20	1105.8	-602.2	1.6	9:04	1040.4	-667.6	19.3
16:03	1110.1	-597.9	2.3	12:49	1038.0	-670.0	23.1
16:25	1115.8	-592.2	2.7	16:15	1045.8	-662.2	26.5
16:25	1087.9	-620.1	2.7	16:19	1096.6	-611.5	26.6
16:30	1064.3	-643.8	2.7	16:25	1111.2	-596.9	26.7
16:37	1092.1	-616.0	2.9	16:31	1116.3	-591.7	26.8
16:44	1096.6	-611.4	3.0	18:41	1119.7	-588.3	28.9
17:21	1113.6	-594.5	3.6	S.I. 20:15	1121.3	-586.7	30.5
17:31	1118.8	-589.2	3.8	0:00	0.0	0.0	0.0

SANTOS LTD
39 GRENFELL ST
ADELAIDE

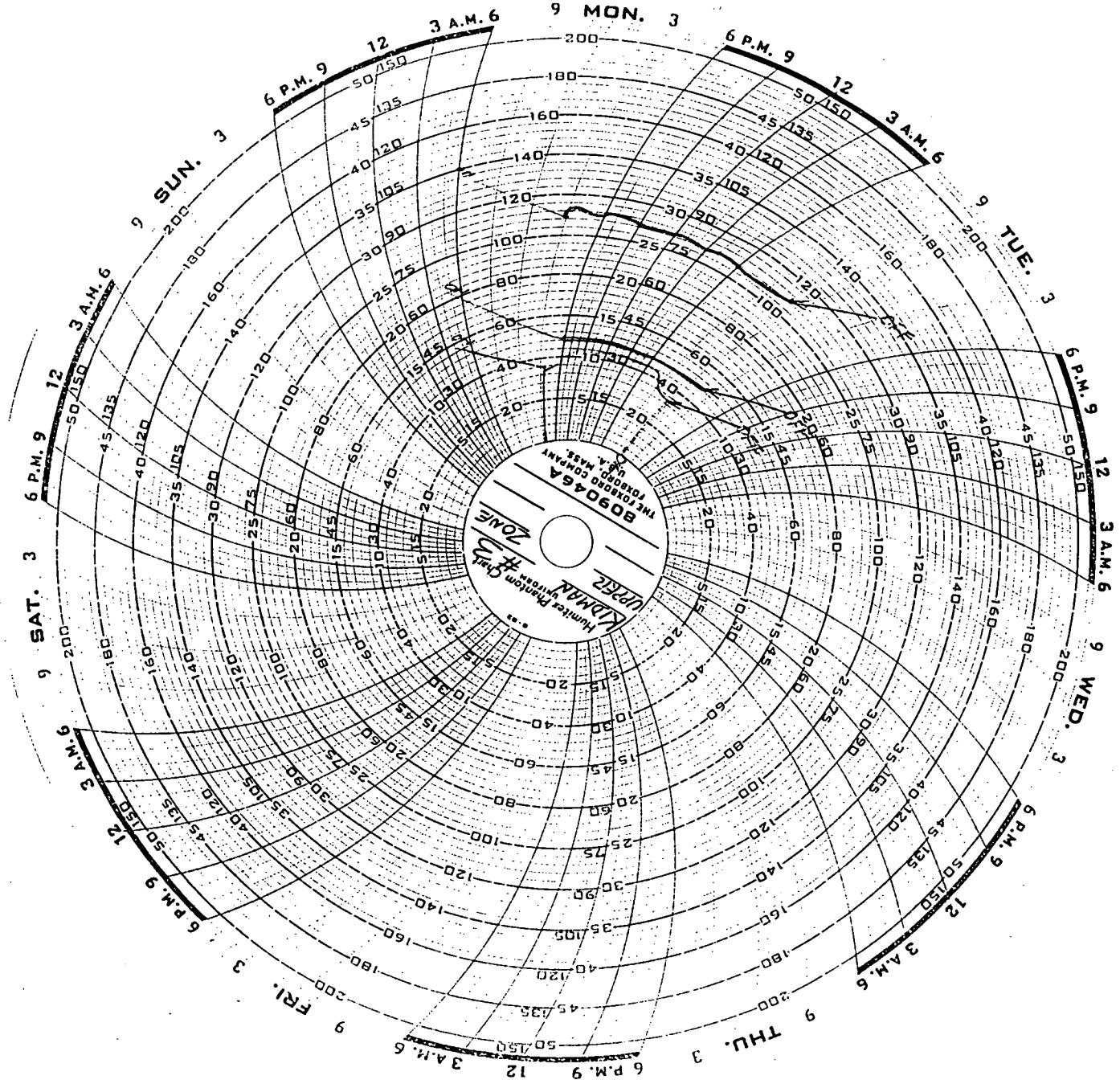
SUB-SURFACE PRESSURE SURVEY

CO. SANTOS		RUN 01 FIELD KIDMAN		WELL 03U	
EFF DEPTH		WELL STAT		TOOL HUNG	6386'
CASING 7"	-	CASING PRESS		ON BOTTOM	1234 25/6
LINER	-	TUBING PRESS		OFF BOTTOM	1150 30/6
DATE	870630	ELEMENT RANGE	0 - 3139	ZERO POINT	
ELEVATION		ZONE		SHUT-IN	2015 26/6
MAX TEMP	256	PICK-UP		ON-PROD	
PERF	6485'-6519'	CAL SER NO.	56428	MPP	
TUBING 2-7/8"	-				
UNITS	ENGLISH	PURPOSE	BUILD-UP		

SURVEY DATA

CO. SANTOS			RUN 01 FIELD KIDMAN			WELL 03U	
TIME	P-T	DP-DT	DTIME	TIME	P-T	DP-DT	DTIME
S.I. 20:15	1119.9	0.0	0.0	4:10	1689.7	569.8	7.9
20:18	1202.6	82.7	.1	7:00	1693.1	573.2	10.7
20:20	1308.0	188.0	.1	11:06	1694.3	574.4	14.9
20:24	1426.5	306.5	.2	16:58	1697.8	577.8	20.7
20:29	1564.0	444.1	.2	0:27	1701.4	581.4	28.2
20:32	1596.1	476.1	.3	5:29	1729.5	609.5	33.2
20:35	1614.2	494.3	.3	9:04	1747.1	627.2	36.8
20:37	1621.6	501.6	.4	14:42	1767.7	647.7	42.5
20:38	1627.2	507.2	.4	22:55	1789.3	669.4	50.7
20:40	1631.4	511.5	.4	8:02	1808.5	688.5	59.8
20:41	1634.5	514.6	.4	18:08	1823.7	703.7	69.9
20:43	1638.6	518.6	.5	18:22	1807.3	687.4	70.1
20:45	1643.1	523.2	.5	18:35	1884.8	764.8	70.3
20:50	1647.1	527.2	.6	18:45	1928.2	808.3	70.5
20:55	1650.2	530.3	.7	18:59	1987.1	867.2	70.7
21:01	1653.8	533.9	.8	19:10	1991.1	871.2	70.9
21:08	1658.8	538.8	.9	19:28	1985.2	865.3	71.2
21:18	1662.1	542.2	1.0	19:38	1983.7	863.8	71.4
21:29	1666.0	546.0	1.2	20:04	1956.7	836.7	71.8
21:46	1669.8	549.8	1.5	20:59	1910.7	790.7	72.7
22:11	1674.3	554.4	1.9	22:16	1877.4	757.5	74.0
22:45	1676.8	556.9	2.5	0:01	1850.4	730.4	75.8
23:25	1680.3	560.4	3.2	2:25	1831.7	711.7	78.2
0:23	1684.1	564.1	4.1	6:43	1818.0	698.1	82.5
2:19	1687.1	567.2	6.1	P.O.O.H. 11:50	1805.4	685.5	87.6

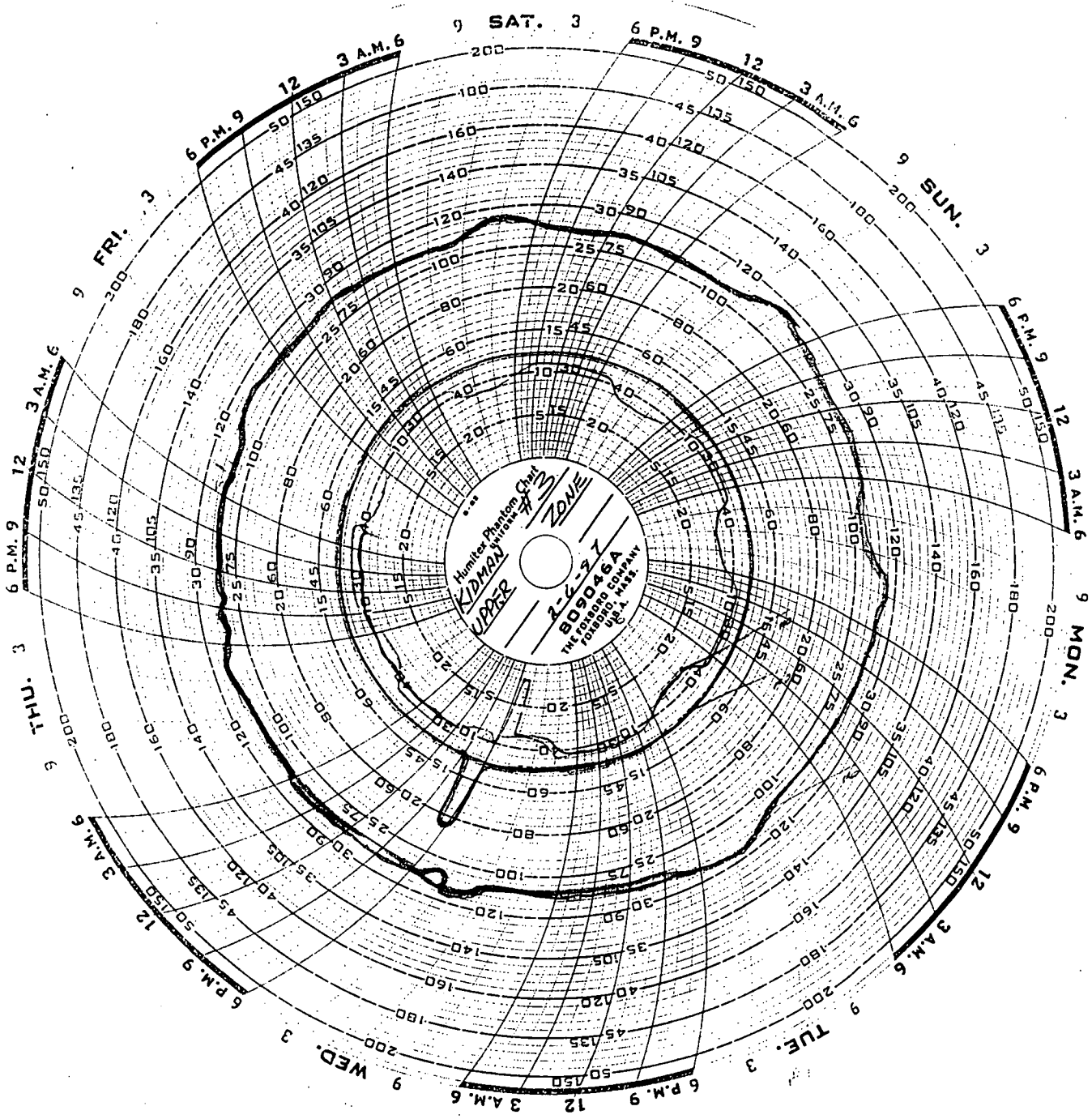
LUB IN DWT = 1395 PSI / OUT = 1466 PSI
LUB IN AMERADA = 1414 PSI



1.6.87. 1524 hrs.
2.6.87. 1130 hrs.

meter run diam 97.180 mm.
Orifice plate " 50.800 mm.

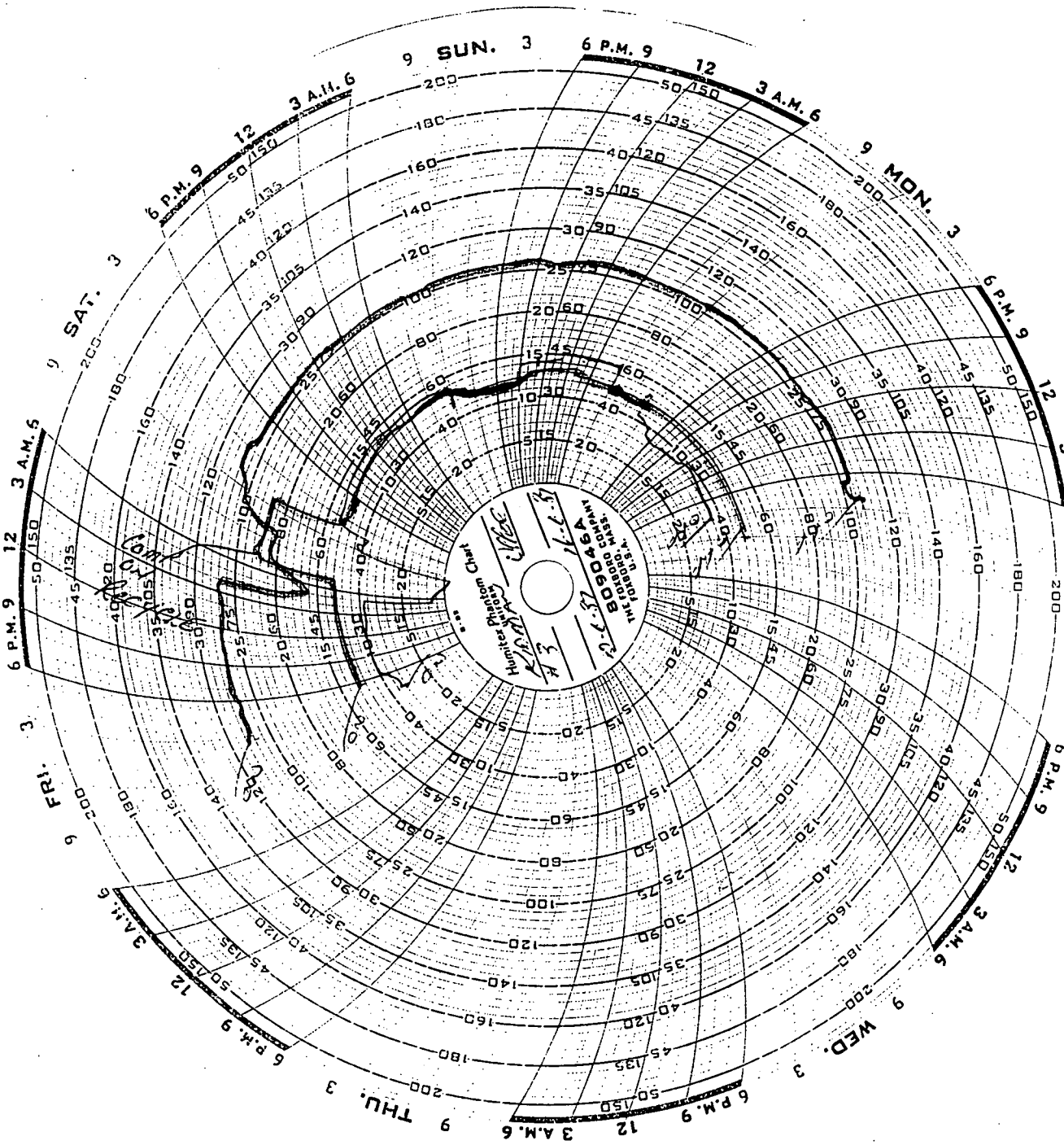
00087

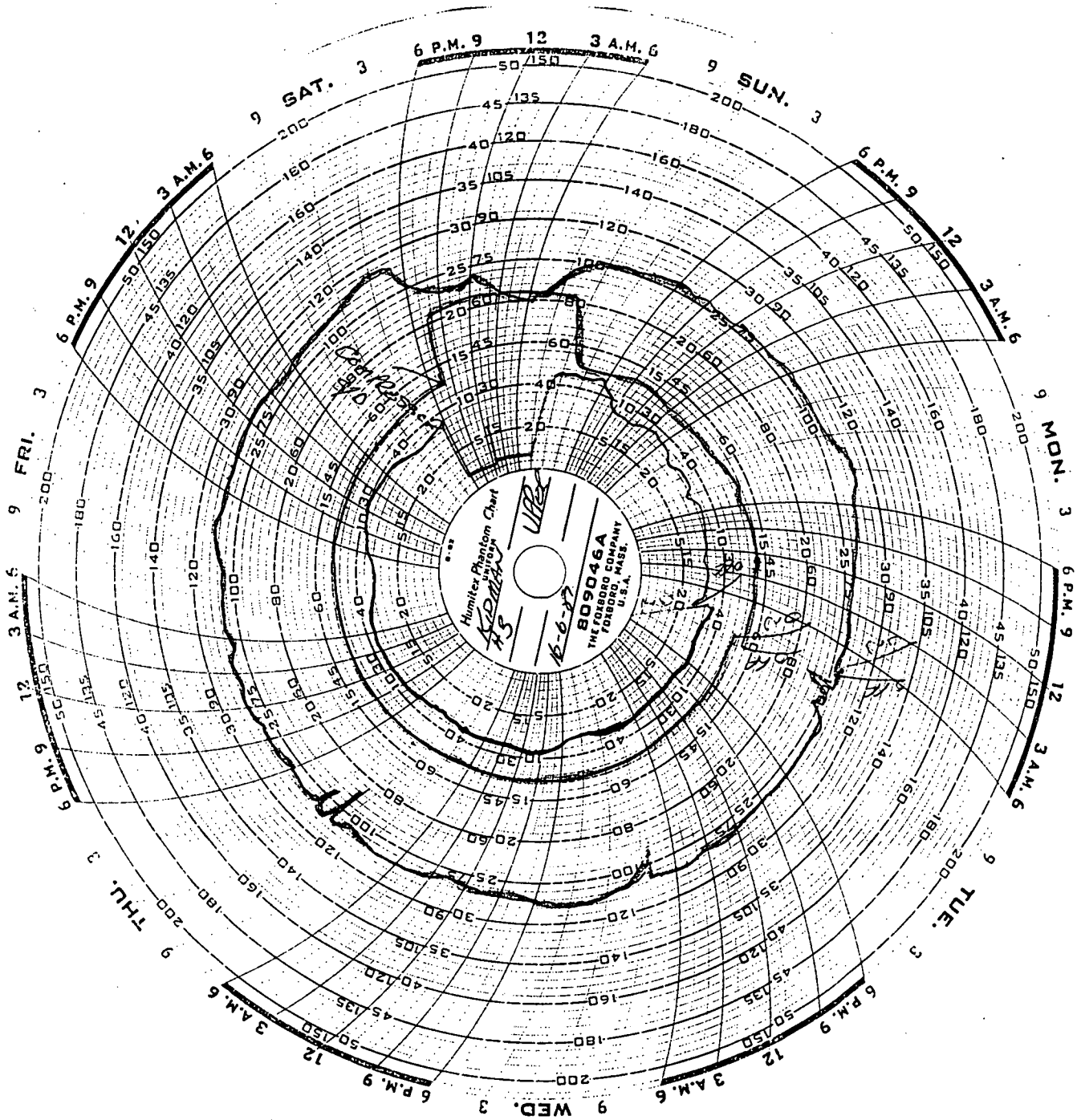


2.6.87
12.6.87

1130 hrs.
1448 hrs.

00088

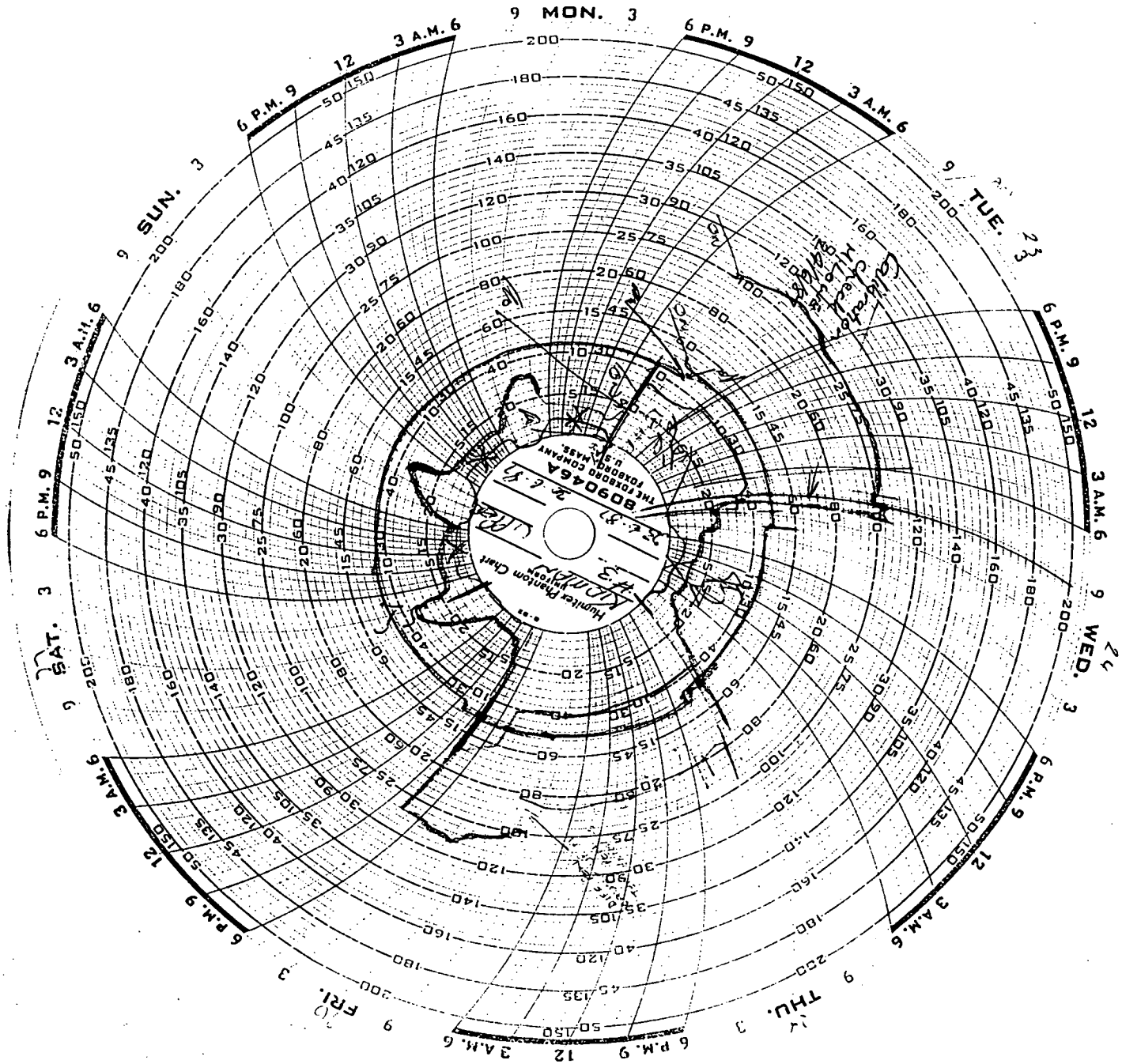

SUN.
MON.
TUE.
WED.
THU.
FRI.
SAT.
3 A.M. 6
6 P.M. 9
12
3
6
9
Hunter Phantom Chart
BB0946A
U.S. Government
Property
12.6.87
16.6.87
1505 hrs
0935 hrs.



16.6.87.
23.6.87.

0832 hrs
0915 hrs.

06000



23.6.87 0945 hrs

30.6.87 1155 hrs

44

~~32~~ hours S/I prior to.

2015 hrs 26/6/87.

00091

SANTOS LTD. 00092

BUILD-UP SURVEY

Well: KIDMAN #3 UPPER Date: 25TH JUNE 1987

Lubricator Data: ① 1414 ② Element failed

Pressure with D.W.T. IN 1395PSI 25·6·87 OUT 1466PSI 30·6·87

Time Pressured 12·04 25·6·87 Time Depressured 12·05 30·6·87

Time Run in Hole 12·07 25·6·87 Time off Bottom 11·50 30·6·87

	Bomb No. 1 Data	Bomb No. 2 Data
Element No. and Range	56428 × 3000PSI	56431 × 3000PSI
Recorder No.	14620	14929
Clock and Lead Screw Data	F-15306×120hr 15TLS.	F-15307×120hr
Engage Stylus	Date: 25·6·87 Time: 11·58	Date: 25·6·87 Time: 11·58
Disengage	Date: 30·6·87 Time: 12·11	Date: 30·6·87 Time: 12.11.

Remarks: TEST RUN SIMULTANEOUSLY WITH LOWER ZONE TO CONDUCT B.H.P.S OF BOTH ZONES AT ONCE DUE TO PRESENCE OF COMMUNICATION BETWEEN STRINGS.

M.B.H.T 256°F.

Well-Head Data for Final Build-up

Date	Time	Hours shut-in Time	Wellhead P.S.I.G.	Casing P.S.I.G.	Wellhead Temp. °F	Remarks
25TH JUNE 1987						
	12·34		1396	11		SET BOMBS IN 'N' NIPPLE @ 6392'KB
						WELL S/I IN ORDER TO SET LOCK.
						WELL LEFT S.I TO RECORD S.I B.H.P.
	13·45		1397	11		OPEN WELL TO 100% CHOKE - IN LINE.
	14·00		718	11	138	
	14·15		716	11	140	
	14·30		713	11	144	
	15·00		728	11	151	N.B - VAETRIX GAUGE CHANGED.
	16·00		729	11	153	
	17·00		732	11	154.	
	19·00		735	11	158	
	23·00		735	14	163.	FLOW WELL O/NIGHT ON 100% CHOKE
						TO ENSURE STABLE FLOW.
26TH JUNE 1987						
	20·15					S.W.I - COMMENCE BUILD UP.
30TH JUNE 1987						
	11·50		1466	8		BOMBS OFF BOTTOM - END OF BUILD UP.
	12·33		1466	8		R.I.H FOR STATIC GRADIENT
	14·26		1464	8		DEP LUB - END OF SURVEY.

00093

WIRELINE REPORT

WELL: KIDMAN #3 UPPER PAGE THREE

DATE: 26TH JUNE 1987

PROGRAM: BOTTOM HOLE PRESSURE SURVEY

PURPOSE OF WORK: CONDUCT A B.H.P.S ON #3 UPPER AND #3 LOWER SIMULTANEOUSLY

REPORT OF WORK PERFORMED:

26TH JUNE 1987

14:15 - #3 LOWER S/I DOWNHOLE - MONITOR BOTH TUBING STRING PRESSURES.

16:15 - #3 LOWER S/I AT SURFACE ON WING VALVE.

20:15 - S.W.I. (#3 UPPER) ON WING VALVE - COMMENCE BUILD UP.

30TH JUNE 1987

11:50 - P.O.O.H WITH B.H.P GAUGES ON N LOCK

12:05 - DEPRESSURE LUB.

12:33 - R.I.H WITH B.H.P/B.H.T GAUGES FOR STATIC GRADIENT AS PER PROGRAM

14:26 - DEPRESSURE LUB. - RIG DOWN

OPERATOR'S SIGNATURE

WORK PERFORMED BY: K. DOVE / G. GIANCASPRO OF EXPERTEST

WELL DATA:

Tubing Size: 2 7/8" A.B. FWHP: 735 PSI 26.6.87 SIWHP: 1464 PSI 30.6.87

Sub Surface S.V./Landing Nipple @ ..... S.S.D. @: .....

"X" Nipple @ 6380'KB "N"/~~"X"~~ Nipple @ 6392'KB other .....

Min I.D. 1.791" @ 6392'KB Packer @ 6368'KB

Perforated Interval: 6485' - 6519'KB TOOLACHEE

Forward to: Petroleum Engineering — Adelaide
Production Department — Moomba

WIRELINE REPORT

WELL: KIDMAN #3 UPPER

DATE: 25TH JUNE 1987

PROGRAM: BOTTOM HOLE PRESSURE SURVEY

PURPOSE OF WORK: CONDUCT A B.H.P.S. ON #3 UPPER AND #3 LOWER SIMULTANEOUSLY

REPORT OF WORK PERFORMED:

25TH JUNE 1987

12:04 - PRESSURE LUB. - WELL S/I TO ENABLE SETTING OF 'N' LOCK MANDREL WITH B.H.P GAUGES.

12:07 - R.I.H. WITH B.H.P. GAUGES ON 'N' LOCK - BOMBS TO BE HUNG OFF IN 'N' NIPPLE.

12:34 - SET 'N' PLUG WITH B.H.P. GAUGES IN 'N' NIPPLE @ 6392'KB.

12:36 - P.O.O.H.

12:45 - ARRIVE LUB. AND RIG OFF #3 UPPER - RIG INTO #3 LOWER - #3 LOWER LEFT SHUT IN.

13:45 - OPEN WELL TO 100% CHOKE TO FLOW TR. LINE. MONITOR TUBING PRESSURES ON BOTH STRINGS.

FLOW WELL OVERNIGHT.

26TH JUNE 1987

08:35 - #3 LOWER S/I DOWNHOLE WITH OTIS DOWNHOLE SHUT IN TOOL (D.H.S.I.T.) - MONITOR TUBING PRESSURES

ON BOTH STRINGS FOR 4 HRS. - REPORT TO MOOMBA.

12:55 - OPEN D.H.S.I.T. IN #3 LOWER - MONITOR #3 LOWER AND #3 UPPER TUBING PRESSURES.

OPERATOR'S SIGNATURE

WORK PERFORMED BY: K. DOVE / G. GIANCASPRO OF EXPERTEST

WELL DATA:

Tubing Size: 2⅞ O.D. FWHP: 735 PSI 26:6:87. SIWHP: 1464 PSI 30.6.87.

Sub Surface S.V./Landing Nipple @ ..... S.S.D. @: .....

"X" Nipple @ 6380'KB "N"/"~~XN~~" Nipple @ 6392'KB other .....

Min I.D. 1.791" @ 6392'KB Packer @ 6368'KB

Perforated Interval: 6485' - 6519' TOOLACHEE

Forward to: Petroleum Engineering — Adelaide
Production Department — Moomba

WIRELINE REPORT

WELL: KIOMAN 3 UPPER

DATE: 24-6-87

PROGRAMME: BOTTOM HOLE PRESSURE SURVEY PROGRAM

PURPOSE OF WORK: TO OBTAIN TRUE B.H.P.

REPORT OF WORK PERFORMED

13:50 R.I.H. 1.75 BLIND BOX TO 6,369' WLM JARRED THROUGH TIGHT SPOT CONTINUED DOWN TO 6,385 UNABLE TO JAR THROUGH P.O.O.H. (C SCALE ON BLIND BOX).

14:30 CALLED MOOMBA WAITING ON REAMING TOOLS.

16:00 R.I.H. 1.75 REAMER TO 6,385' JARRED DOWN WENT OUT END OF TUBING. P.O.O.H

— NOTE : NO COLLAR BAR ON BOTTOM OF TUBING.

16:40 R.I.H. W LOCK TO 6,369' WLM SET IN NO GO P.O.O.H.

Keith Dove

Operator's Signature

WORKED PERFORMED BY K. DOVE & G. GIANCASPRO OF EXPERTEST.

WELL DATA:

Tubing Size 2 7/8" FWHP — SIWHP —

Subsurface S.V./Landing Nipple @ — S.S.D. @ —

'X' Nipple @ 6,380' 'N'/~~XR~~ Nipple @ 6,392' Other — @ —

Min. I.D. 1.791 @ 6392' Packer @ 6,368'

Perforated Interval 6,485' - 6,519'

EXPERTEST PTY LTD
WIRELINE & WELL TESTING SERVICE

** KIDMAN #3 UPPER. **

STATIC PRESSURE GRADIENT

TEST DATE: 30.6.87

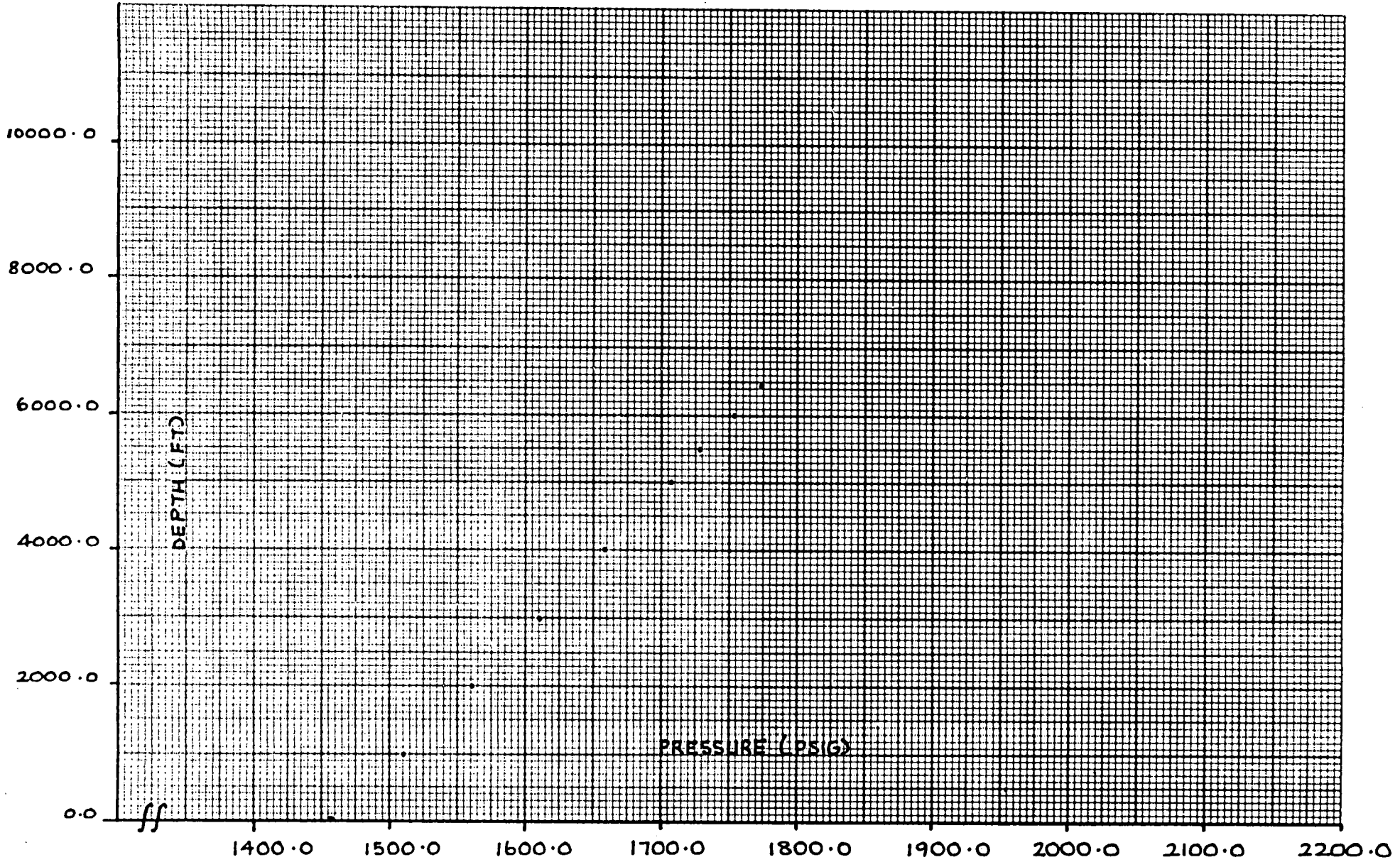
	TOP PRESSURE ELEMENT 57413/3000			BOTTOM PRESSURE ELEMENT 24708/3300		
DEPTH (FT.)	DEFLECTION (INCHES)	PRESSURE (PSIG)	GRADIENT (PSI/FT)	DEFLECTION (INCHES)	PRESSURE (PSIG)	GRADIENT (PSI/FT)
LUB	0.9475	1471.9	----	0.8915	1458.7	----
1000	0.9798	1522.3	0.0504	0.9225	1510.0	0.0513
2000	1.0115	1571.7	0.0495	0.9532	1560.8	0.0508
3000	1.0420	1619.3	0.0476	0.9830	1610.1	0.0493
4000	1.0720	1666.2	0.0468	1.0120	1658.1	0.0480
5000	1.1025	1713.8	0.0476	1.0410	1706.1	0.0480
5500	1.1175	1737.2	0.0468	1.0552	1729.7	0.0471
6000	1.1325	1760.6	0.0468	1.0700	1754.2	0.0491
6410	1.1450	1780.1	0.0476	1.0820	1774.1	0.0485
LUB	0.9470	1471.1	----	0.8970	1467.8	----

GENERAL REMARKS:
BHPS ON #3 UPPER RUN SIMULTANEOUSLY WITH BHPS ON #3LOWER. WELL ALSO HAS COMMUNICATION BETWEEN UPPER AND LOWER ZONES.

DWT IN: 1466 ELEMENT 57413/3000 CALIBRATED 4.6.87
DWT OUT: 1464 ELEMENT 24708/3300 CALIBRATED 4.6.87
MAX BHT: TEMP ELEMENT USED IN SURVEY 27793/132-445F.
262.0°F

KIDMAN # 3 UPPER — STATIC PRESSURE GRADIENT — 30/6/87

ELEMENT # 24708/3300 (BOT)



00097

Fm 5030

WELL NAME: KIDMAN #3 UPPER

STATIC GRADIENT SURVEY

DATE: 30TH JUNE 1987

TOP BOMB No. 1 DATA

ELEMENT No. 57443 ELEMENT RANGE: 3000 PSI

RECORDER No: 61127 15715 CLOCK DATA: 25509 x 3hr

ENGAGE STYLUS: 12:15 DISENGAGE: 14:32

MID. BOMB No. 2 DATA

ELEMENT No. 24708 ELEMENT RANGE: 3300 PSI.

RECORDER No: 70545 15715 CLOCK DATA: A-15013 x 3hr

ENGAGE STYLUS: 12:15 DISENGAGE: 14:32

LUBRICATOR DATA

PRESSURE WITH D.W.T: IN 1466 PSI OUT 1464 PSI.

TIME PRESSURED: 12.18

TIME DEPRESSURED: 14:26

DATE	TIME	DEPTH'	DEFLECTION	PRESSURE TEMP.	GRADIENT psi/ft	DEPTH'	DEFLECTION	PRESSURE TEMP.	GRADIENT psi/ft	REMARKS
30TH JUNE 1987										
	12.18	LUB	.9475	1471.9		LUB	.8915	1458.7		15 MINUTES.
	12.33	R.I.H				R.I.H				
	12.37	1000	.9798	1522.3	.0504	1000	.9225	1510.0	.0513	5 MINUTES.
	12.45	2000	1.0115	1571.7	.0495	2000	.9532	1560.8	.0508	" "
	12.54	3000	1.042	1619.3	.0476	3000	.983	1610.1	.0493	" "
	13.03	4000	1.072	1666.2	.0468	4000	1.012	1658.1	.0480	" "
	13.12	5000	1.1025	1713.8	.0476	5000	1.041	1706.1	.0480	" "
	13.19	5500	1.1175	1737.2	.0468	5500	1.0552	1729.7	.0471	" "
	13.26	6000	1.1325	1760.6	.0468	6000	1.070	1754.2	.0491	" "
	13.33	6410	1.145	1780.1	.0476	6410	1.082	1774.1	.0485	15 MINUTES.
	13.48	P.O.O.H.				P.O.O.H				
	14.11	LUB.	.947	1471.1		LUB.	.897	1467.8		15 MINUTES.

General Comments: M.G.H.T. — TEMP ELEMENT USED: ELE 27793 x 132°-445°F
REC 61374 x 15715
CLOCK A-16086 x 3hr.

G010

00098

WELL: KIPMAN #3 UPPER

OPERATOR: G. GIANCASPRO

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 24TH JUNE 1987

PAGE No: ONE

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
24TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY - RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 LOWER							
09.30							ARRIVE LOCATION, SHUT IN UPPER AND LOWER STRINGS, RIG IN W/LINE UNIT AND							
							ASSOCIATED EQUIPMENT TO WELL HEAD PRIOR TO RUNNING BLIND BOX RUNS AND DUMMY							
							'N' LOCK AND 'X' LOCK EQUIPMENT. - SEE ATTACHED W/LINE REPORT.							
25TH JUNE 1987														
12.04.	11	76	1395	9619			PRESSURE LUBRICATOR - WELL S/I TO ENABLE SETTING OF S LOCK WITH B.H.P. GAUGES.							
12.07	11	76	1396	9625			R.I.H WITH B.H.P GAUGES ON 'S' LOCK MANDREL							
12.34							SET 'S' LOCK AND B.H.P GAUGES IN N NIPPLE @ 6376' KB AS PER PROGRAM.							
12.38							P.O.O.H.							
12.47							DEPRESSURE LUB AND RIG OFF SHORT STRING. - PREPARE TO FLOW WELL TO LINE							
13.00	11	76	1396	9625										
13.30	11	76	1397	9632										

CONVERSION FACTORS:

- BBL'S x 0.15899 = M3
- MMSCF x 28.174 = 10³ M3
- Cu/FT PER BBL x 0.1773 = M3/M3
- PSI x 6.895 = KPA
- °C x 9 ÷ 5 + 32 = °F

66099

PETENG 007

WELL: ...KIDMAN..#3 UPPER.....

OPERATOR: ..G.GIANCOTTI.....

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: ..25TH JUNE 1987.....

PAGE No:..TWO.....

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
25TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY – RUN SIMULTANEOUSLY WITH B.H.P'S ON #3 LOWER.							
13·45	11	76	1397	9632			OPEN WELL TO 100% CHOKE TO LINE.							
14·00	11	76	718	4951	138	59								
14·15	11	76	716	4937	140	60								
14·30	11	76	713	4916	144	62								
15·00	11	76	728	5020	151	66	N.B. VARTRIX GAUGE CHANGED OUT DUE TO FLAT BATTERIES.							
15·30	11	76	727	5013	153	67								
16·00	11	76	729	5026	153	67								
16·30	11	76	730	5033	154	68	OPEN #3 LOWER TO LINE ON 100% CHOKE, WITH B.H.P/B.H.T GAUGES OTIS DHSIT SET ON 'X' LOCK.							
16·45	11	76	733	5054	154	68								
17·00	11	76	732	5047	154	68								
19·00	11	76	735	5068	158	70								

CONVERSION FACTORS:

- BBL'S. x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00100

PETENG 007

WELL: KIDMAN #3 UPPER

OPERATOR: G.G.INGATSRP

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 25TH JUNE 1987

PAGE No: THREE

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
25TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY - RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 LOWER.							
23·00	14	97	735	5068	163	73	FLOW WELL OVERNIGHT TO LINE ON 100% CHOKE TO ENSURE STABLE FLOW.							
26TH JUNE 1987														
07·00	15	103	726	5006	169	76								
08·30	15	103	725	4999	169	76								
08·35	15	103	725	4999	169	76	#3 LOWER SHUT IN DOWN HOLE WITH OTIS DOWNHOLE SHUT IN TOOL - TAKE 5 MIN READINGS ON #3 UPPER.							
08·40	15	103	725	4999	169	76								
08·45	16	110	726	5006	171	77								
08·50	17	117	726	5006	169	76								
08·55	17	117	730	5033	171	77								
09·00	17	117	730	5033	171	77								
09·05	15	103	725	4999	169	76								

CONVERSION FACTORS:

- BBL'S x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

001101

PETENG 007

WELL: KIDMAN #3 UPPER

OPERATOR: G. GIANCOSPRO

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 26TH JUNE 1987

PAGE No: FOUR

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
26TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY - RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 LOWER.							
09·20	14	97	726	5006	160	71	#3 UPPER FLOWING ON 100% CHOKE — #3 LOWER S/I DOWN HOLE @ 08·35 hrs 26·6·87. — TAKA							
09·35	14	97	725	4999	172	78	15 MINUTE READINGS IN CONJUNCTION WITH BUILD UP ON #3 LOWER.							
09·50	14	97	726	5006	172	78								
10·05	14	97	726	5006	171	77								
10·20	14	97	727	5013	172	78								
10·35	14	97	725	4999	172	78								
10·50	15	103	726	5006	172	78								
11·05	15	103	727	5013	171	77								
11·20	15	103	727	5013	171	77								
11·35	14	97	726	5006	172	78								
11·50	14	97	727	5013	171	77								

CONVERSION FACTORS:

- BBL'S x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00102

WELL: ..KIDMAN..#3 UPPER.....

OPERATOR: ..G. GIANCASPRO.....

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 26TH JUNE 1987.....

PAGE No:. FIVE.....

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
26TH JUNE 1987.							BOTTOM HOLE PRESSURE SURVEY - RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 LOWER							
12.05	15	103	726	5006	172	78	CONTINUE 15 MINUTE READINGS IN CONJUNCTION WITH BUILD UP ON #3 LOWER							
12.20	14	97	726	5006	171	77								
12.35	14	97	726	5006	169	76	REPORT RESULTS OF FLOW AND BUILD UP READINGS TO MOOMBA. - PULL PRONG IN #3 LOWER & INSPECT							
12.55							BACK OFF BIND ON PRONG IN #3 LOWER TO FLOW WELL THROUGH D.H.S.I.T.							
13.05	14	97	727	5013	171	77	MONITOR TUBING WHILE EQUALISING ACROSS D.H.S.I.T IN #3 LOWER. - PRONG PULLED OUT							
13.20	14	97	727	6013	172	78	OF D.H.S.I.T @ 13.10 HRS.							
13.55	14	97	727	5013	171	77								
14.10	14	97	733	5054	171	77								
14.15	14	97	727	5013	171	77	#3 LOWER S/I DOWN HOLE WITH D.H.S.I.T - MONITOR TUBING WHILE RECORDING BUILD UP ON #3 LOWER.							
14.20	14	97	728	5020	169	76								
14.25	14	97	727	5013	169	76								

CONVERSION FACTORS:

- BBL'S x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00103

PETENG 007

WELL: KIDMAN #3 UPPER

OPERATOR: G. GIANCASPRO

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 26TH JUNE 1987

PAGE No: SIX

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
26TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY – RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 LOWER.							
14.30	14	97	727	5013	167	75	TAKE READINGS EVERY 5 MINUTES IN CONJUNCTION WITH				BUILD UP ON #3 LOWER.			
14.35	14	97	726	5006	167	75								
14.40	14	97	725	4999	167	75								
14.45	14	97	726	5006	167	75	COMMENCE 15 MINUTE READINGS ON BOTH STRINGS.							
15.00	14	97	725	4999	165	74								
15.15	14	97	731	5040	165	74								
15.30	14	97	732	5047	167	75	REPORT READINGS TO MOOMBA – AWAIT INSTRUCTIONS							
15.45	14	97	732	5047	167	75								
16.00	14	97	731	5040	169	76								
16.15	14	97	733	5054	167	75	S.I #3 LOWER AT WING VALVE TO SHUT WELL IN COMPLETELY.							
16.20	14	97	730	5033	165	74	TAKE 5 MINUTE READINGS IN CONJUNCTION WITH BUILD UP				READINGS ON #3 LOWER			

CONVERSION FACTORS:

- BBL'S x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00104

PETENG 007

WELL: KIDMAN #3 UPPER

OPERATOR: G. GIANCASPRO

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 26TH JUNE 1987

PAGE No: SEVEN

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
26TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY - RUN SIMULTANEOUSLY WITH				B.H.P.S ON	#3 LOWER.		
16.25	14	97	730	5033	163	73								
16.30	14	97	729	5026	165	74								
16.35	14	97	730	5033	169	76								
16.40	14	97	731	5040	169	76								
16.45	14	97	732	5047	167	75								
17.00	14	97	732	5047	167	75								
17.15	14	97	731	5040	167	75								
17.30	14	97	732	5047	167	75								
17.45	14	97	732	5047	165	74								
18.00	14	97	733	5054	167	75								
18.15	14	97	735	5068	167	75								

CONVERSION FACTORS:

- BBL'S x 0.15899 = M^3
- MMSCF x 28.174 = $10^3 M^3$
- Cu/FT PER BBL x 0.1773 = M^3/M^3
- PSI x 6.895 = KPA
- °C x 9 ÷ 5 + 32 = °F

WELL: KIDMAN #3 UPPER

OPERATOR: G. GIANFRANCO

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 26TH JUNE 1987

PAGE No: EIGHT

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
26TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY - RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 LOWER							
19·15	14	97	736	5075	167	75								
20·15	14	97	735	5068	167	75	S.W.I - COMMENCE BUILD UP						HRS SHUT IN.	
20·20	14	97	1228	8467			TAKE 5 MINUTE READINGS ON BOTH STRINGS.							
20·25	14	97	1323	9122										
20·30	14	97	1353	9329			COMMENCE 15 MINUTE READINGS ON BOTH STRINGS.							
20·45	14	97	1375	9481										
21:00	14	97	1381	9522										
21·15	14	97	1387	9563										1
21·30	14	97	1390	9584										
21·45	14	97	1391	9591										
22·00	12	83	1393	9605										

CONVERSION FACTORS:

- BBL'S x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00106

WELL: ..KIDMAN. #3 UPPER.....

OPERATOR: .G. GIANCASPRO.....

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: .26TH JUNE 1987.....

PAGE No:. NINE.....

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
26TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY — RUN SIMULTANEOUSLY WITH				B.H.P.S ON #3 LOWER		HRS SHUT IN.	
22.15	12	83	1393	9605			CONTINUE 15 MINUTE READINGS ON BOTH STRINGS.							2
22.30	12	83	1396	9625										
22.45	11	76	1397	9632										
23.00	10	69	1397	9632										
23.15	10	69	1398	9639										3
23.30	11	76	1398	9639										
23.45	11	76	1400	9653										
24.00	10	69	1399	9646										
27TH JUNE 1987														
00.15	10	69	1400	9653			COMMENCE 4 HRLY READINGS ON BOTH TUBING STRINGS							4
04.15	10	69	1404	9681										8

CONVERSION FACTORS:

- BBL'S. x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00107

PETENG 007

WELL: KIPMAN #3 UPPER

OPERATOR: G. GIANCASPRO

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 27TH JUNE 1987

PAGE No: TEN

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
27TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY - RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 LOWER						HRS SHUT IN	
08·15	10	69	1404	9681			CONTINUE BUILD UP							12
13·30	10	69	1404	9681										
16·15	10	69	1406	9694										20
20·15	10	69	1407	9701										24
28TH JUNE 1987														
00·15	9	62	1408	9708										28
04·15	9	62	1407	9701			N.B. VAETRIX GAUGE SHOWING FLAT BATTERIES - UNABLE TO ZERO GAUGE							32
08·15	8	55	1451	10005										36
12·15	8	55	1455	10032										40
16·45	8	55	1455	10032			RETURN FROM MOOMBA WITH NEW VAETRIX							44
20·15	8	55	1461	10074										48

CONVERSION FACTORS:

- BBL'S. x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00108

PETENG 007

WELL: KIDMAN #3 UPPER

OPERATOR: G. GIANCASPRO

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 29TH JUNE 1987

PAGE No: ELEVEN

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
29TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY - RUN SIMULTANEOUSLY WITH BHPS ON #3 LOWER						HES SHUT IN.	
00·15	8	55	1466	10108										52
04·15	8	55	1473	10156										56
08·15	8	55	1480	10205										60
12·15	8	55	1485	10239										64.
14·45	8	55	1486	10246			RELEASE BIND ON D.H.S.I.T PRONG AND OPEN TOOL IN #3 LOWER.							
15·55	8	55	1492	10287										
16·15	8	55	1518	10467										68
20·15	8	55	1525	10515										72
30TH JUNE 1987														
00·15	8	55	1493	10294										76
04·15	8	55	1480	10205										80

CONVERSION FACTORS:

- BBL'S. x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00109

PETENG 007

WELL: KIPMAN #3 UPPER

OPERATOR: G. GIBRALTAR

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 30TH JUNE 1987

PAGE No: TWELVE

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M^3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M^3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M^3/M^3
30TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY - RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 LOWER						HRS SHUT IN.	
08·15	8	55	1472	10149										84
10·15	8	55	1467	10115										86
11·50	8	55	1466	10108.			LATCH B.H.P GAUGES ON N LOCK - P.O.O.H. - END OF BUILD UP.							
12·05	8	55	1466	10108			DEPRESSURE LUB							
12·33	8	55	1466	10108			R.I.H FOR STATIC GRADIENT AS PER PROGRAM.							
19·26	8	55	1464	10094.			DEPRESSURE LUB - RIG DOWN.							

CONVERSION FACTORS:

- BBL'S x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00110

ROLLING BOTTOMHOLE PRESSURE SURVEY GAS CALCULATION SHEET

WELL: Kidman # 3 Lower

ORIFICE SIZE: 31.750 mm 1.250 "

LINE SIZE: 97.180 mm 3.826 "

Pf = 5100 kPa

T = 57 °C

Diff = 8.9 kPa

Cumulative Production to end of May = 30.236 $m^3 \times 10^6$

Number of hours online in May = 721

Production in May = 0.761 $m^3 \times 10^6$

∴ Average flow rate in May = (0.761 / 721) x 24 = 0.025 $m^3 \times 10^6/d$

Number of days online in June before Shut In 1615 hrs 26 / 6 /87
= 22.30 hrs

∴ Production up to 1615 hrs 26/ 6 /87 = 0.025 x 22.30 = 0.558 $m^3 \times 10^6$

Total cumulative production = 0.558 + 30.236
= 30.794 $m^3 \times 10^6$ ✓
= 1092.986 mmscf ✓

Flow rate just prior to Shut In = 0.038 $m^3 \times 10^6$ /
= 1.364 mmscf/d ✓

5653

WP 2946G(13)
LGA/jfs : 8/12/86

pmcD 14/9/87

SANTOS LTD
39 GRENFELL ST
ADELAIDE

SUB-SURFACE PRESSURE SURVEY

CO.	SANTOS	RUN 01	FIELD KIDMAN	WELL	03L
EFF DEPTH		WELL STAT		TOOL HUNG	7166'
CASING 7"	-	CASING PRESS		ON BOTTOM	
LINER	-	TUBING PRESS		OFF BOTTOM	
DATE	870629	ELEMENT RANGE	0 - 3083	ZERO POINT	
ELEVATION		ZONE		SHUT-IN	1615 26/6
MAX TEMP		PICK-UP		ON-PROD	
PERF	7264'-7384'	CAL SER NO.	28514	MPP	7324'
TUBING	2-3/8" -				
UNITS	ENGLISH	PURPOSE	BUILD-UP		

SURVEY DATA

CO. SANTOS — RUN 01 FIELD KIDMAN — WELL 05L

TIME	P-T	DP-DT	DTIME	TIME	P-T	DP-DT	DTIME
16:15	1030.5	0.0	0.0	20:21	1541.3	510.9	4.1
16:17	1076.0	45.6	.0	20:25	1614.9	584.5	4.2
16:20	1123.7	93.3	.1	20:37	1675.1	644.7	4.4
16:23	1142.4	112.0	.1	20:46	1690.7	660.2	4.5
16:26	1153.4	123.0	.2	21:00	1701.3	670.9	4.7
16:29	1156.0	125.6	.2	21:24	1710.2	679.8	5.2
16:32	1157.7	127.2	.3	22:59	1724.2	693.8	6.7
16:35	1159.1	128.6	.3	1:55	1743.2	712.7	9.7
16:40	1157.3	126.9	.4	4:52	1753.1	722.6	12.6
16:46	1156.0	125.6	.5	10:01	1768.4	737.9	17.8
16:53	1157.8	127.4	.6	16:43	1790.7	760.2	24.5
17:04	1158.5	128.1	.8	0:30	1818.4	788.0	32.2
17:26	1163.0	132.5	1.2	6:28	1866.5	836.1	38.2
18:41	1173.5	143.0	2.4	13:25	1902.4	872.0	45.2
19:29	1179.1	148.7	3.2	22:19	1931.5	901.1	54.1
*20:15	1181.7	151.2	4.0	7:58	1954.2	923.7	63.7
20:16	1304.6	274.1	4.0	15:33	1965.4	934.9	71.3
20:17	1421.4	391.0	4.0	0:00	0.0	0.0	0.0

LUB IN DWT = 975 PSI / OUT = 1539 PSI
LUB IN AMERADA = 974 PSI

* 30 SI @ 2015 hours

SANTOS LTD. 00113

- BUILD-UP SURVEY

Well: KIAMAN #3 LOWER Date: 25TH JUNE 1987

Lubricator Data: ① Element failed ② 974 —

Pressure with D.W.T. In 975 PSI 25.6.87 Out 1539 PSI 29.6.87

Time Pressured 14:05 25.6.87 Time Depressured 16:00 29.6.87

Time Run in Hole 14:10 25.6.87 Time off Bottom 15:33 29.6.87

	TOP. Bomb No. 1 Data	MID. Bomb No. 2 Data
Element No. and Range	29387 × 2975 PSI	28514 × 3000 PSI
Recorder No.	59791	14631
Clock and Lead Screw Data	F-15308 × 120HR 15 TLS	F-15309 × 120HR 15TLS.
Engage Stylus	Date: 25.6.87 Time: 13.56	Date: 25.6.87 Time: 13.56.
Disengage	Date: 29.6.87 Time: 16.02	Date: 29.6.87 Time: 16.02

Remarks: TEST RUN SIMULTANEOUSLY WITH UPPER ZONE TO CONDUCT B.H.P.S OF BOTH ZONES AT ONCE. BOTTOM BOMB - 22821 × 148°-441°F; RECORDER - 12977 × 15TLS; CLOCK - F-15690 × 120HR. BOMBS RUN BELOW DTS. DOWNHOLE SHUT IN TOOL.

Well-Head Data for Final Build-up

Date	Time	Hours shut-in Time	Wellhead P.S.I.G.	Casing P.S.I.G.	Wellhead Temp. °F	Remarks
25TH JUNE 1987						
	14.10		975	11		R.I.H WITH B.H.P GAUGES - SET
						B.H.P/B.H.T GAUGES IN X NIPPLE
						@ 7172'KB
	15.15					P.O.O.H. - WELL S/I TO ENABLE
	15.30		979	11		SETTING OF X-LOCK AND GAUGES.
	16.00		990	11		
	16.30		1000	11		OPEN WELL TO 100% CHOKE - IN LINE.
	16.45		724	11	131	
	17.00		724	11	129.	
	19.00		726	11	138	
	23.00		727	14	142	FLOW WELL O/NIGHT ON 100% CHOKE
						TO ENSURE STABLE FLOW.
26TH JUNE 1987						
	08.35		722	15	156	S.W.I DOWNHOLE WITH D.H.S.I.T
27/6	1615					- COMMENCE BUILD UP.
29TH JUNE 1987						
	14.45		1539	8		RELEASE BIND ON D.H.S.I.T PROBE
						AND OPEN TOOL.
	15.33		1539	8		BOMBS OFF BOTTOM - END OF BUILDU
30TH JUNE 1987						
	09.24		1561	8		R.I.H FOR STATIC GRADIENT AS PER PROG
	11.27		1573	8		DEF LUB - END OF SURVEY.

EXPERTEST PTY LTD
WIRELINE & WELL TESTING SERVICE

** KIDMAN #3 LOWER **

STATIC PRESSURE GRADIENT

TEST DATE: 30.6.87

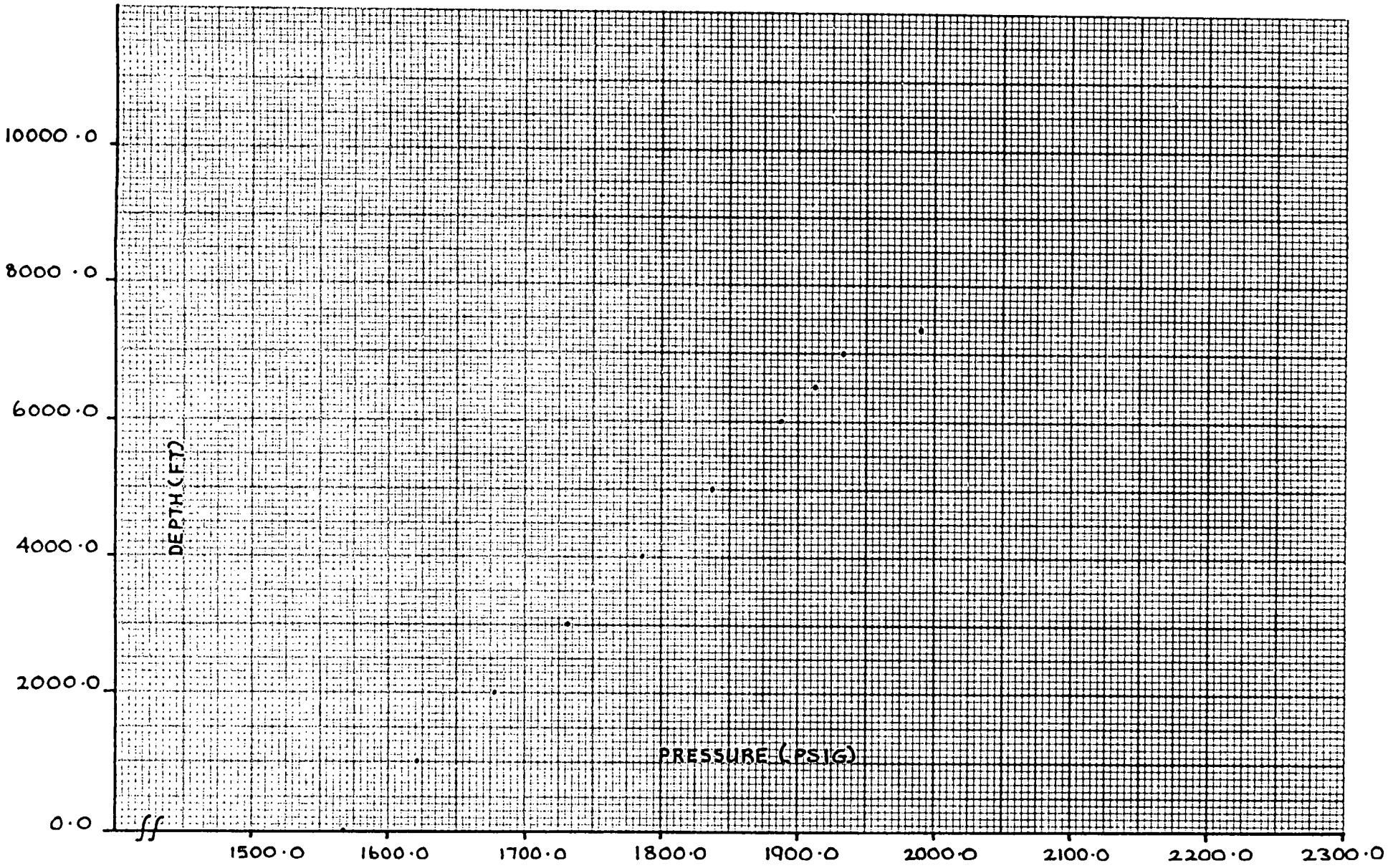
	TOP PRESSURE ELEMENT 57413/3000			BOTTOM PRESSURE ELEMENT 24708/3300		
DEPTH (FT.)	DEFLECTION (INCHES)	PRESSURE (PSIG)	GRADIENT (PSI/FT)	DEFLECTION (INCHES)	PRESSURE (PSIG)	GRADIENT (PSI/FT)
LUB	1.0150	1577.2	----	0.9570	1567.1	----
1000	1.0490	1630.3	0.0531	0.9900	1621.7	0.0546
2000	1.0830	1683.3	0.0531	1.0234	1677.0	0.0553
3000	1.1170	1736.4	0.0531	1.0560	1731.0	0.0540
4000	1.1500	1787.9	0.0515	1.0890	1785.7	0.0547
5000	1.1823	1838.3	0.0504	1.1200	1837.1	0.0514
6000	1.2150	1889.4	0.0511	1.1500	1886.9	0.0498
6500	1.2310	1914.4	0.0500	1.1650	1911.8	0.0498
7000	1.2460	1937.8	0.0469	1.1780	1933.4	0.0432
7324	1.2820	1994.0	0.1736	1.2120	1989.8	0.1743
LUB	1.0190	1583.4	----	0.9670	1583.6	----

GENERAL REMARKS:
BHPS ON#3 LOWER RUN SIMULTANEOUSLY WITH BHPS ON #3UPPER. WELL ALSO HAS COMMUNICATION BETWEEN UPPER AND LOWER ZONES.

DWT IN: 1561 ELEMENT 57413/3000 CALIBRATED 4.6.87
DWT OUT: 1573 ELEMENT 24708/3300 CALIBRATED 4.6.87
MAX BHT: TEMP ELEMENT USED IN SURVEY 27793/132-445 F.
280.1°F

KIDMAN # 3 LOWER — STATIC PRESSURE GRADIENT — 30/6/87

ELEMENT # 24708 / 3300 (BOT)



00115

WELL NAME: KIDMAN #3 LOWER

STATIC GRADIENT SURVEY

DATE: 30TH JUNE 1987

TOP BOMB No. 1 DATA

ELEMENT No. 5743 ELEMENT RANGE: 3000 PSI

RECORDER No. 61127 CLOCK DATA: 25509 x 3hr 15TS.

ENGAGE STYLUS: 09:05 DISENGAGE: 11:38

MID BOMB No. 2 DATA

ELEMENT No. 24708 ELEMENT RANGE: 3300 PSI

RECORDER No. 70545 15TS CLOCK DATA: A-16086 x 3hr

ENGAGE STYLUS: 09:05 DISENGAGE: 11:38

LUBRICATOR DATA

PRESSURE WITH D.W.T: IN 1561 PSI OUT 1573 PSI

TIME PRESSURED: 09:09

TIME DEPRESSURED: 11:27

DATE	TIME	DEPTH'	DEFLECTION	PRESSURE TEMP.	GRADIENT psi/ft	DEPTH'	DEFLECTION	PRESSURE TEMP.	GRADIENT psi/ft	REMARKS
30TH JUNE 1987.										
	09·09	LUB	1·015	1577·2		LUB	·957	1567·1		15 MINUTES.
	09·24	R.I.H				R.I.H				
	09·28	1000	1·049	1630·3	·0531	1000	·990	1621·7	·0546	5 MINUTES.
	09·37	2000	1·083	1683·3	·0531	2000	1·0234	1677·0	·0553	" "
	09·46	3000	1·117	1736·4	·0531	3000	1·056	1731·0	·0540	" "
	09·55	4000	1·150	1787·9	·0515	4000	1·089	1785·7	·0547	" "
	10·04	5000	1·1823	1838·3	·0504	5000	1·120	1837·1	·0514	" "
	10·13	6000	1·215	1889·4	·0511	6000	1·150	1886·9	·0498	" "
	10·20	6500	1·231	1914·4	·0500	6500	1·165	1911·8	·0498	" "
	10·27	7000	1·246	1937·8	·0469	7000	1·178	1933·4	·0432	" "
	10·34	7324	1·282	1994·0	·1736	7324	1·212	1989·8	·1743	15 MINUTES
	10·49	P.O.O.H				P.O.O.H				
	11·12.	LUB.	1·019	1583·4		LUB	·987	1583·6		15 MINUTES.

General Comments: Bottom Bomb: ELE: 27793 x 132°-445°F
REC: 61374 x 15TS
CLOCK: A-15013 x 3hr

G010

·00116·

WELL: KIDMAN #3 LOWER

OPERATOR: G. GIANGAPPA

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 24TH JUNE 1987

PAGE No: ONE

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
24TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY - RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 UPPER							
09.30							ARRIVE LOCATION - SHUT IN UPPER AND LOWER STRINGS, RIG IN W/LINE UNIT AND							
							ASSOCIATED EQUIPMENT TO WELLHEAD PRIOR TO RUNNING BLIND BOX RUNS AND DUMMY							
							'N' LOCK AND 'X' LOCK EQUIPMENT - SEE ATTACHED WIRELINE REPORT.							
25TH JUNE 1987														
14.05	11	76	975	6722			PRESSURE LUBRICATOR - WELL S/I TO ENABLE SETTING OF 'X' LOCK WITH BHP/BHT GAUGES AND OTIS							
							DOWN HOLE SHUT-IN TOOL (D.H.S.I.T.)							
14.10	11	76	975	6722			R.I.H WITH B.H.P/B.H.T GAUGES - TO BE HUNG OFF IN 'X' NIPPLE.							
15.15							B.H.P/B.H.T GAUGES SET IN 'X' NIPPLE @ 7172'KB - N.B 'X' LOCK ZEROED AT TUBING HANGER.							
15.15							P.O.O.H.							
15.25	11	76	977	6736			DEPRESSURE LUB - ATTACH D.H.S.I.T PRONG TO TOOLSTRING.							
15.35	11	76	979	6750										

CONVERSION FACTORS:

- BBL'S x 0.15899 = M^3
- MMSCF x 28.174 = $10^3 M^3$
- Cu/FT PER BBL x 0.1773 = M^3/M^3
- PSI x 6.895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00117

PETENG 007

WELL: ..KIDMAN #3 LOWER.....

OPERATOR: .G.GIANCASPRO.....

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: .25TH JUNE 1987.....

PAGE No:.Two.....

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
25TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY - RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 UPPER.							
16·00	11	76	990	6826										
16·30	11	76	1000	6895			OPEN WELL TO 100% CHOKE AND FLOW IN LINE.							
16·45	11	76	724	4992	131	55								
17·00	11	76	725	4999	129	54								
19·00	11	76	726	5006	138	59								
23·00	14	97	727	5013	142	61	FLOW WELL OVERNIGHT TO ENSURE STABLE FLOW.							
26TH JUNE 1987.														
07·00	14	97	722	4978	160	71								
08·15	15	103	723	4985	156	69	R.I.H WITH D.H.S.I.T PRONG							
08·35	15	103	722	4978	156	69	S.W.I WITH D.H.S.I.T - TAKE 5 MINUTE READINGS IN CONJUNCTION WITH FLOW SURVEY ON #3 UPPER							
08·40	15	103	723	4985	160	71								

CONVERSION FACTORS:

- BBL'S x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

001118

WELL: ..KIDMAN #3 LOWER.....

OPERATOR: .G.GIANCASPRO.....

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 26TH JUNE 1987.....

PAGE No: THREE.....

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M^3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M^3/D	MMSCF/D	Mm^3/D	G.O.R. Cu/FT BBL	G.O.R. M^3/M^3
26TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY - RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 UPPER.						HRS SHUT IN	
08·45	16	110	726	5006	158	70	CONTINUE 5 MINUTE READINGS ON TUBING - TAKE 5 MINUTE READINGS ON #3 UPPER TO MONITOR COMMUNICATION							
08·50	17	117	727	5013	158	70								
08·55	17	117	732	5047	158	70								
09·00	17	117	725	4999	160	71								
09·05	15	103	723	4985	158	70	START 15 MINUTE READINGS IN CONJUNCTION WITH FLOWING SURVEY ON #3 UPPER.							
09·20	14	97	726	5006	160	71								
09·35	14	97	735	5068	167	75								1
09·50	14	97	726	5006	172	78								
10·05	14	97	726	5006	171	77								
10·20	14	97	727	5013	172	78								
10·35	14	97	725	4999	172	78	N.B - WELL S/I DOWN HOLE BUT CONTINUED TO FLOW DUE TO COMMUNICATION BETWEEN STRINGS.							2.

CONVERSION FACTORS:

- BBL'S x 0·15899 = M^3
- MMSCF x 28·174 = 10^3 M^3
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00119

PETENG 007

WELL: ..KIPMAN..#3 UPPER.....

OPERATOR: ..G.GIANCASPRO.....

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 26TH JUNE 1987.....

PAGE No:. FOUR.....

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
26TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY – RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 UPPER.						HRS SHUT IN	
10.50	15	103	726	5006	162	72	CONTINUE 15 MINUTE READINGS IN CONJUNCTION WITH FLOWING SURVEY ON #3 UPPER							
11.05	15	103	725	4999	160	71								
11.20	15	103	726	5006	162	72								
11.35	14	97	727	5013	162	72								3
11.50	14	97	726	5006	160	71								
12.05	15	103	726	5006	162	72								
12.20	14	97	726	5006	162	72								
12.35	14	97	726	5006	163	73	REPORT RESULTS OF BUILD-UP AND FLOW READINGS TO MOOMBA – PULL PRONG AND INSPECT.							4.
12.55	14	97	725	4999	165	74	BACK OFF BIND ON PRONG TO OPEN D.H.S.I.T. AND FLOW THROUGH TOOL.							
13.05	14	97	726	5006	160	71	MONITOR TUBING WHILE EQUALISING ACROSS D.H.S.I.T.							
13.10	14	97	726	5006	162	72	PULL PRONG FROM D.H.S.I.T. – WELL FLOWING THROUGH TOOL.							

CONVERSION FACTORS:

- BBL'S x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00120

PETENG 007

WELL: KIDMAN #3 LOWER

OPERATOR: G. GIANCOSPRO

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 26TH JUNE 1987

PAGE No: FIVE

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
26TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY — RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 UPPER							
13·35	14	97	724	4992	158	70								
13·55	14	97	725	4999	158	70	R.I.H WITH REDRESSED D.H.S.I.T PRONG.							
14·10	14	97	726	5006	162	72								
14·15	14	97	725	4999	162	72	PULL BIND ON PRONG AND S.W.I WITH D.H.S.I.T. — TAKE 5 MINUTE BUILD UP READINGS AND							
14·20	14	97	724	4992	162	72	RECORD #3 UPPER FLOWING SURVEY PRESSURES.						HRS SHUT IN	
14·25	14	97	729	5026	162	72								
14·30	14	97	724	4992	163	73								
14·35	14	97	724	4992	165	74								
14·40	14	97	724	4992	165	74								
14·45	14	97	726	5006	165	74	COMMENCE 15 MINUTE BUILD UP READINGS IN CONJUNCTION WITH FLOWING SURVEY ON #3 UPPER							
15.00	14	97	728	5020	165	74								

CONVERSION FACTORS:

- BBL'S x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

001121

WELL: KIDMAN #3 LOWER

OPERATOR: G. GIANCASPRO

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 26TH JUNE 1987

PAGE No: SIX

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
26TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY — RUN SIMULTANEOUSLY WITH				B.H.P.S ON #3 UPPER.		HRS SHUT IN	
15.15	14	97	730	5033	162	72	CONTINUE 15 MINUTE BUILD UP READINGS IN CONJUNCTION WITH FLOWING SURVEY ON #3 UPPER							1
15.30	14	97	732	5047	162	72	REPORT READINGS TO MOOMBA — AWAIT INSTRUCTIONS.							
15.45	14	97	730	5033	162	72								
16.00	14	97	731	5040	162	72								
16.15	14	97	732	5047	163	73	S.W.I AT WING VALVE TO SHUT WELL IN COMPLETELY.							2
16.20	14	97	925	6378			TAKE 5 MINUTE BUILD UP READINGS IN CONJUNCTION WITH FLOWING SURVEY ON #3 UPPER							
16.25	14	97	944	6509										
16.30	14	97	948	6536										
16.35	14	97	951	6557										
16.40	14	97	951	6557										
16.45	14	97	952	6564										

CONVERSION FACTORS:

- BBL'S x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00122

WELL: ..KIPMAN..#3 UPPER.....

OPERATOR: ..G.GIANCASPRO.....

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 26TH JUNE 1987.....

PAGE No: SEVEN.....

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
26TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY – RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 UPPER.						HRS	SHUT IN
17.00	14	97	954	6578			COMMENCE 15 MINUTE BUILD UP READINGS IN CONJUNCTION WITH FLOWING SURVEY ON #3 UPPER.							
17.15	14	97	955	6585										3
17.30	14	97	956	6592										
17.45	14	97	957	6599										
18.00	14	97	957	6599										
18.15	14	97	958	6605			COMMENCE HRLY READINGS ON BOTH TUBING STRINGS.							4
19.15	14	97	956	6592										5
20.15	14	97	961	6626			SHUT IN #3 UPPER AND TAKE 5 MINUTE READINGS ON BOTH STRINGS							6
20.20	14	97	1209	8336										
20.25	14	97	1322	9115										
20.30	14	97	1360	9377										

CONVERSION FACTORS:

- BBL'S x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00123

WELL: KIPMAN #3 LOWER

OPERATOR: G.G.PINCASTRO

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 26TH JUNE 1987

PAGE No: EIGHT

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
26TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY—RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 UPPER						HRS SHUT IN.	
20.45	14	97	1383	9536			CONTINUE 15 MINUTE READINGS ON BOTH STRINGS.							
21.00	14	97	1390	9584										
21.15	14	97	1397	9632										7
21.30	14	97	1402	9667										
21.45	14	97	1405	9687										
22.00	12	83	1406	9694										
22.15	12	83	1406	9694										8
22.30	12	83	1409	9715										
22.45	11	76	1409	9715										
23.00	10	69	1408	9708										
23.15	10	69	1410	9722										9

CONVERSION FACTORS:

- BBL'S x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00124

PETENG 007

WELL: KIDMAN #3 UPPER

OPERATOR: G. GIANCASPRO

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 26TH JUNE 1987

PAGE No: NINE

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
26TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY – RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 UPPER.						HRS SHUT IN.	
23.30	11	76	1410	9722			CONTINUE 15 MINUTE BUILD UP READINGS ON BOTH STRINGS.							
23.45	11	76	1411	9729										
24.00	10	69	1411	9729										
27TH JUNE 1987														
00.15	10	69	1411	9729			COMMENCE 4 HRLY READINGS ON BOTH STRINGS.							10
04.15	10	69	1414	9750										14
08.15	10	69	1433	9881										18
13.30	10	69	1433	9881										
16.15	10	69	1434	9887										26
20.15	10	69	1436	9901										30

CONVERSION FACTORS:

- BBL'S x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00125

WELL: KIDMAN #3 LOWER

OPERATOR: G. GIANCASPRO

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: 28TH JUNE 1987

PAGE No: TEN

DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
28TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY — RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 UPPER.						HRS SHUT IN.	
00·15	9	62	1438	9915										34
04·15	9	62	1436	9901			N.B. VAETRIX GAUGE SHOWING FLAT BATTERIES — UNABLE TO ZERO GAUGE.							38
08·15	8	55	1492	10287										42
12·15	8	55	1504	10370										46
16·45	8	55	1504	10370			RETURN FROM MOOMBA WITH NEW VAETRIX.							
20·15	8	55	1511	10418										54
29TH JUNE 1987														
00·15	8	55	1519	10474										58
04·15	8	55	1525	10515										62
08·15	8	55	1530	10549										66
12·15	8	55	1537	10598										70

CONVERSION FACTORS:

- BBL'S x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00126

PETENG 007

WELL: ..KIDMAN..#3 LOWER.....

OPERATOR: .G.G.IANCASPRO.....

SANTOS LTD
WELL TEST DATA
METRIC SUMMARY SHEET

DATE: .29TH JUNE 1987.....

PAGE No: .ELEVEN.....

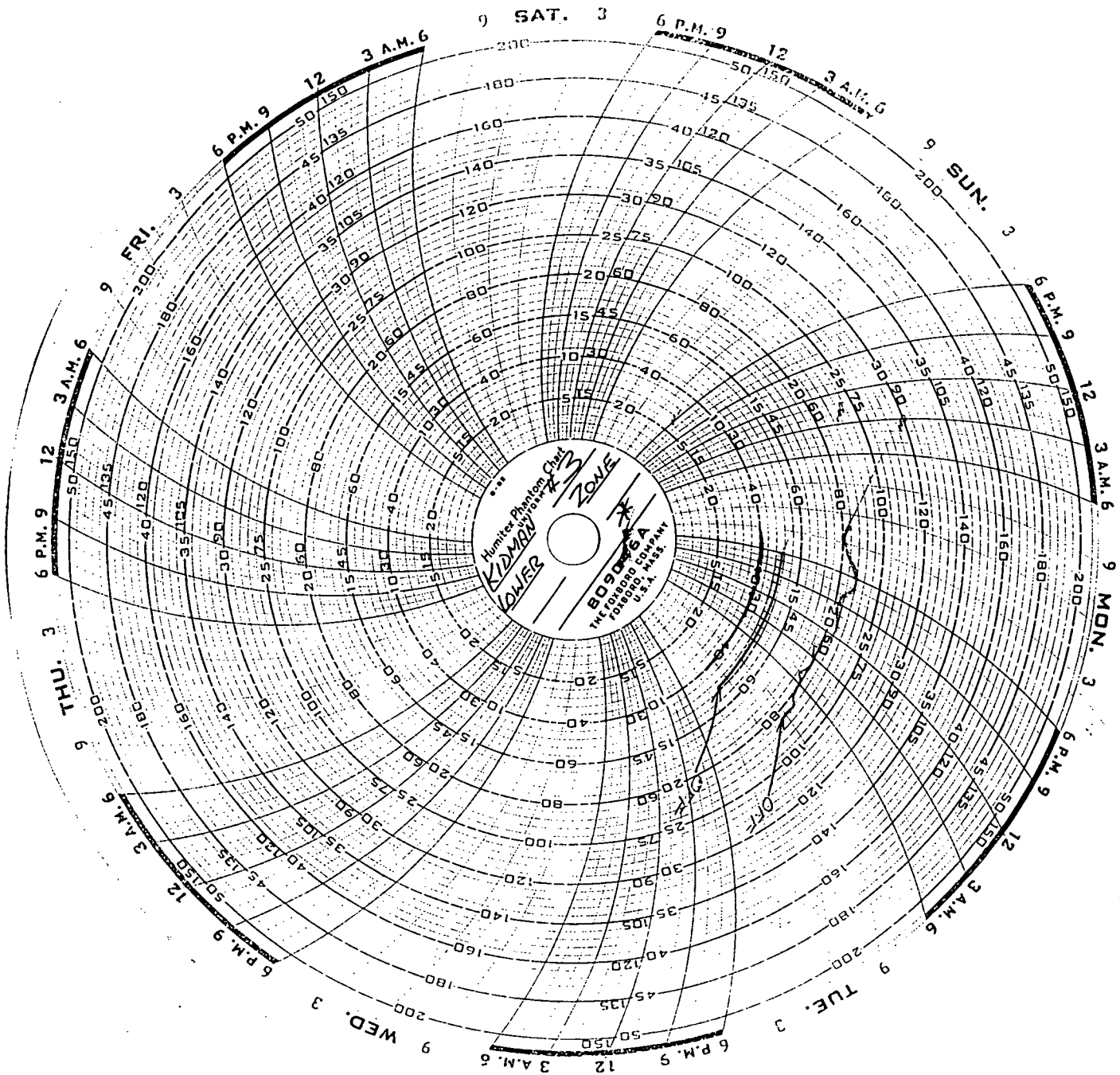
DATE / TIME	WELLHEAD						FLUID PRODUCTION				GAS PRODUCTION			
	CASING PSI	CASING KPA	TUBING PSI	TUBING KPA	TEMP °F	TEMP °C	FLOWRATE OIL-COND BBL'S/D	FLOWRATE OIL-COND M3/D	FLOWRATE H20 BBL'S/D	FLOWRATE H20 M3/D	MMSCF/D	Mm3/D	G.O.R. Cu/FT BBL	G.O.R. M3/M3
29TH JUNE 1987							BOTTOM HOLE PRESSURE SURVEY - RUN SIMULTANEOUSLY WITH B.H.P.S ON #3 UPPER						HRS SHUT IN.	
14.15	8	55	1539	10611										72.
14.45	8	55	1539	10611			RELEASE BIND ON D.H.S.I.T PRONG - OPEN TOOL AND ALLOW TO EQUALISE.							
14.50							P.O.O.H WITH D.H.S.I.T PRONG.							
15.33	8	55	1537	10598			P.O.O.H WITH B.H.P/B.H.T GAUGES AND D.H.S.I.T				- END OF BUILD UP.			
15.55	8	55	1535	10584			ARRIVE LUB. - SECURE LEASE OVERNIGHT.							
30TH JUNE 1987														
09.24	8	55	1561	10763			R.I.H WITH B.H.P/B.H.T GAUGES FOR STATIC GRADIENT AS PER PROGRAM.							
11.27	8	55	1573	10846			DEPRESSURE LUB - END OF SURVEY.							

CONVERSION FACTORS:

- BBL'S x 0·15899 = M^3
- MMSCF x 28·174 = $10^3 M^3$
- Cu/FT PER BBL x 0·1773 = M^3/M^3
- PSI x 6·895 = KPA
- °C x 9 ÷ 5 + 32 = °F

00127

PETENG 007



1530 hrs. 1.6.87

1130 hrs. 2.6.87

meter run diam 97.180

Orifice plate 39.750

00128

1129 hrs 26.87

1450 hrs 12.6.87

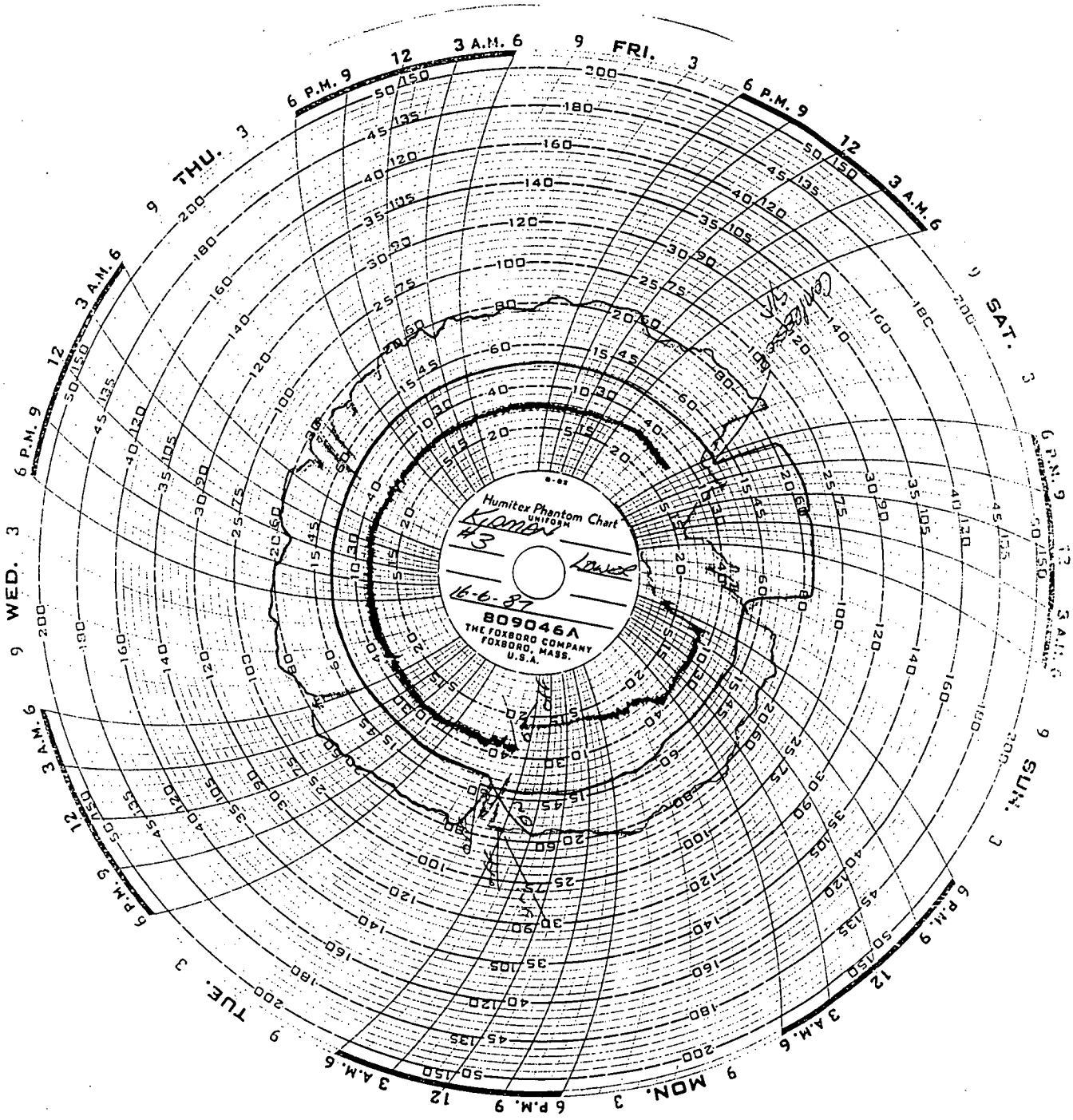
00129

1500 hrs. 12.6.87

0855 hrs. 16.6.87

39

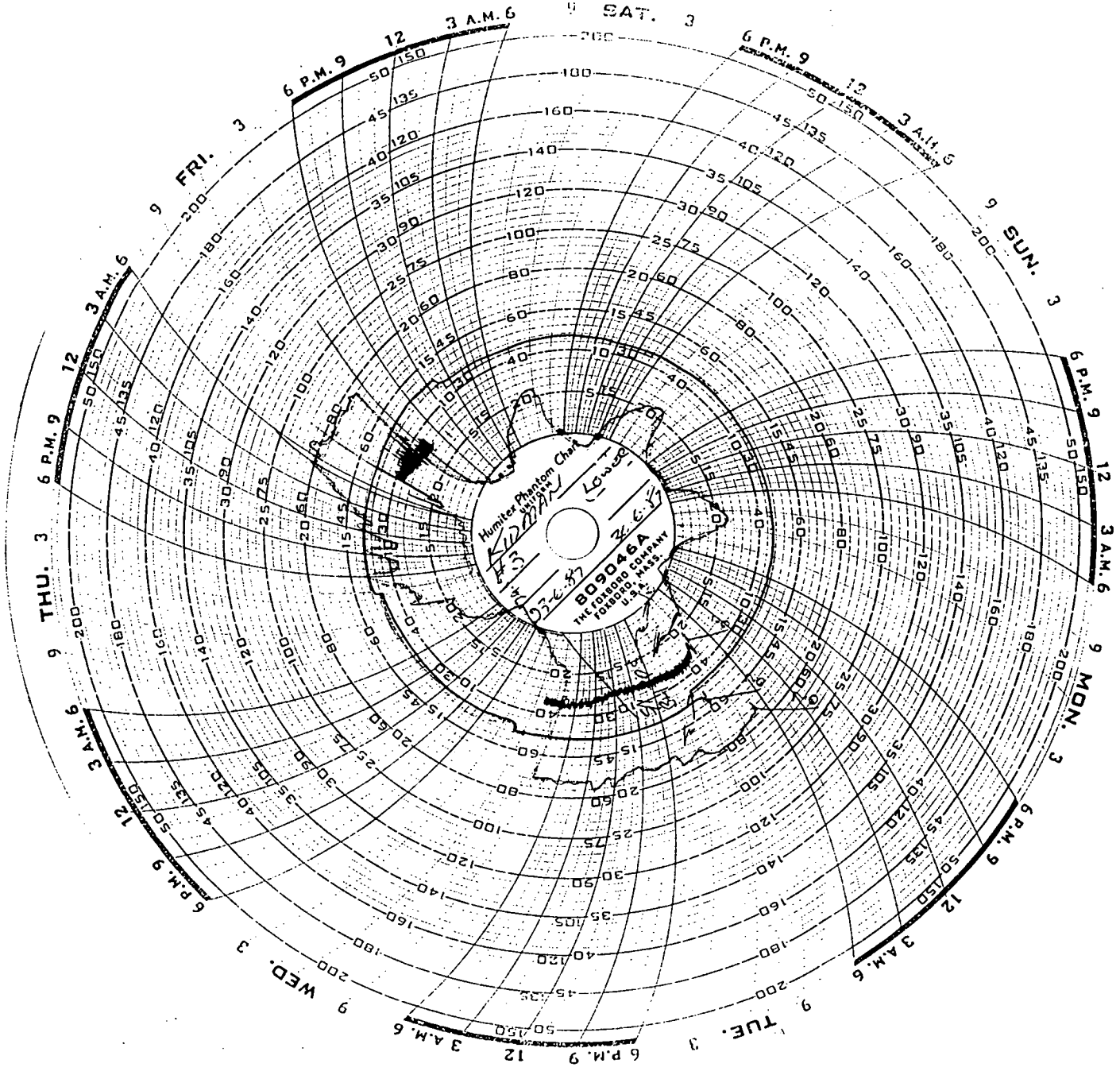
00130



C833
C816

16.6.87
23.6.87

13



0916 hrs 23.6.87

1155 hrs. 30.6.87

29

001132

SANTOS

WIRELINE REPORT

WELL: KIDMAN #3 LOWER

DATE: 25TH JUNE 1987

PROGRAM: BOTTOM HOLE PRESSURE SURVEY

PURPOSE OF WORK: CONDUCT A.B.H.P.S. ON #3 LOWER AND #3 UPPER SIMULTANEOUSLY.

REPORT OF WORK PERFORMED:

25TH JUNE 1987.

14:05 - PRESSURE LUB - WELL S/I TO ENABLE SETTING OF 'X' LOCK MANDREL AND ASSOCIATED TOOLS.

14:10 - R.I.H WITH B.H.P/B.H.T. GAUGES - GAUGES RUN BELOW OTIS DOWNHOLE SHUT IN TOOL (D.H.S.I.T) AND X LOCK MANDREL. B.H.P/B.H.T GAUGES TO BE HUNG OFF IN X NIPPLE @ 7171'KB. AS PER PROGRAM.

14:37 - SIT DOWN IN S.S.D. - JAR ON TOOLS TO RUN THROUGH S.S.D @ 7106'KB - RUN VERY TIGHT THROUGH SSD.

15:05 - LOCATE X NIPPLE @ 7152'KB, JAR TOOLS THROUGH NIPPLE AND PULL BACK THROUGH NIPPLE TO SET RUNNING TOOL.

15:15 - SET X LOCK AND ASSOCIATED TOOLS - P.O.O.H.

15:25 - DEPRESSURE LUB AND PREPARE TO RUN D.H.S.I.T PRONG.

16:30 - OPEN WELL TO 100% CHOKE TO FLOW TO LINE - FLOW WELL OVERNIGHT TO ENSURE STABLE FLOW.

26TH JUNE 1987.

08:15 - R.I.H WITH D.H.S.I.T PRONG

OPERATOR'S SIGNATURE

WORK PERFORMED BY: K. DOVE / G. GIANCASPRO OF EXPERTEST

WELL DATA:

Tubing Size: 2 3/8" O.D. FWHP: 725 PSI 26.6.87. SIWHP: 1573 PSI 30.6.87

Sub Surface S.V./Landing Nipple @ ..... S.S.D. @: 7113'KB

"X" Nipple @ 7171'KB "N"/"~~XN~~" Nipple @ 7182'KB other .....

Min I.D. 1.791" @ 7182'KB Packer @ 7147'KB

Perforated Interval: 7264' - 7384'KB PATCHAWARRA

Forward to: Petroleum Engineering — Adelaide
Production Department — Moomba

SANTOS

WIRELINE REPORT

WELL: KIDMAN #3 UPPER PAGE THREE.

DATE: 26TH JUNE 1987.

PROGRAM: BOTTOM HOLE PRESSURE SURVEY.

PURPOSE OF WORK: CONDUCT A B.H.P.S. ON #3 LOWER AND #3 UPPER SIMULTANEOUSLY.

REPORT OF WORK PERFORMED:

26TH JUNE 1987.

08:33 - SIT DOWN ON D.H.S.I.T AND LOCATE PRONG IN D.H.S.I.T.

08:35 - PICK UP TOOLSTRING AND PULL BIND ON PRONG - S.W.I - DOWNHOLE - COMMENCE BUILD UP AND MONITOR PRESSURES ON BOTH STRINGS FOR 4 HRS.

12:35 - REPORT READINGS TO MOOMBA AND AWAIT INSTRUCTIONS - PULL PRONG AND INSPECT O-RINGS.

12:55 - SIT DOWN ON PRONG IN D.H.S.I.T AND WAIT FOR TOOL TO EQUALISE.

13:10 - PULL PRONG OUT OF D.H.S.I.T AND P.O.O.H.

13:20 - DEPRESSURE LUB, INSPECT AND REDRESS PRONG - PREPARE TO RE-RUN.

13:55 - R.I.H WITH D.H.S.I.T PROBE.

14:10 - CHECK PICK UP WEIGHT AND LATCH PRONG INTO D.H.S.I.T.

14:15 - S.W.I - PULL BIND ON PRONG TO CLOSE TOOL - MONITOR TUBING PRESSURES ON #3 UPPER AND #3 LOWER.

OPERATOR'S SIGNATURE

WORK PERFORMED BY: K. DOVE / G. GINNIGOPRA OF EXPERTEST

WELL DATA:

Tubing Size: 2 3/8" A.B. FWHP: 725PSI 26.6.87 SIWHP: 1573PSI 30.6.87

Sub Surface S.V./Landing Nipple @ ..... S.S.D. @: 7113'KB

"X" Nipple @ 7171'KB "N"/"~~XN~~" Nipple @ 7182'KB other .....

Min I.D. 1.791" @ 7182'KB Packer @ 7147'KB

Perforated Interval: 7264' - 7384'KB PATCHAWARRA.

Forward to: Petroleum Engineering — Adelaide
Production Department — Moomba

WIRELINE REPORT

WELL: KIDMAN #3 LOWER PAGE FOUR

DATE: 26TH JUNE 1987

PROGRAM: BOTTOM HOLE PRESSURE SURVEY

PURPOSE OF WORK: CONDUCT A B.H.P.S. ON #3 UPPER AND #3 LOWER SIMULTANEOUSLY.

REPORT OF WORK PERFORMED:

26TH JUNE 1987

15:30 - REPORT BUILD UP READINGS TO MOOMBA AND AWAIT INSTRUCTIONS.

16:15 - S.W.I. AT WING VALVE AND MONITOR BUILD UP ON BOTH STRINGS.

20:15 - SHUT IN #3 UPPER AT WING VALVE AND RECORD BUILD UP ON BOTH STRINGS.

29TH JUNE 1987

14:45 - RELEASE BIND ON D.H.S.I.T PRONGS TO OPEN TOOL - ALLOW TOOL TO EQUALISE.

14:50 - P.O.O.H WITH D.H.S.I.T PRONG.

15:15 - R.I.H WITH 2" GS PULLING TOOL.

15:31 - LATCH X LOCK MANDREL AND JAR UP TO PULL LOCK MANDREL.

15:33 - P.O.O.H WITH X LOCK MANDREL, D.H.S.I.T AND B.H.P/B.H.T GAUGES.

15:37 - X LOCK HANGING UP IN S.S.D - JAR TOOLS THROUGH.

16:00 - DEPRESSURE LUB AND SECURE LEASE OVERNIGHT.

OPERATOR'S SIGNATURE

WORK PERFORMED BY: K. DOVE / G. GIANCASPRO OF EXPERTEST.

WELL DATA:

Tubing Size: 2 3/8" A.B. FWHP: 725 PSI 26.6.87 SIWHP: 1573 PSI 30.6.87

Sub Surface S.V./Landing Nipple @ ..... S.S.D. @: 7113'KB

"X" Nipple @ 7171'KB "N"/"~~XN~~" Nipple @ 7182'KB other .....

Min I.D. 1.791" @ 7182'KB Packer @ 7147'KB

Perforated Interval: 7264 - 7384'KB PATCHAWARRA

Forward to: Petroleum Engineering — Adelaide
Production Department — Moomba

WIRELINE REPORT

WELL: KIDMAN #3 LOWER PAGE FIVE.

DATE: 30TH JUNE 1987.

PROGRAM: BOTTOM HOLE PRESSURE SURVEY

PURPOSE OF WORK: CONDUCT A B.H.P.S. SURVEY ON #3 UPPER AND #3 LOWER SIMULTANEOUSLY.

REPORT OF WORK PERFORMED:

30TH JUNE 1987.

09:24 - R.I.H. WITH B.H.P/B.H.T GAUGES FOR STATIC GRADIENT AS PER PROGRAM.

11:27 - DEPRESSURE LUB, RIG OFF LONG STRING AND ONTO #3 UPPER

OPERATOR'S SIGNATURE

WORK PERFORMED BY: K. DOVE / G. GIANCASPRO OF EXPERTEST.

WELL DATA:

Tubing Size: 2 3/8" A.B. FWHP: 725PSI 26.6.87 SIWHP: 1573 PSI 30.6.87

Sub Surface S.V./Landing Nipple @ ..... S.S.D. @: 7113' KB

"X" Nipple @ 7171' KB "N"/"~~XN~~" Nipple @ 7182' KB other .....

Min I.D. 1.791" @ 7182' KB Packer @ 7147' KB

Perforated Interval: 7264' - 7384' KB PATCHAWARRA

Forward to: Petroleum Engineering — Adelaide
Production Department — Moomba

SANTOS

WIRELINE REPORT

WELL: KIDMAN 3 LOWER PAGE ONE

DATE: 24-6-87

PROGRAMME BOTTOM HOLE PRESSURE SURVEY PROGRAM

PURPOSE OF WORK TO OBTAIN TRUE B.H.P.

REPORT OF WORK PERFORMED

09:30 ARRIVED LOCATION. RIGED UP

12:30 R.I.H. 1.75 BLIND BOX TO 7,541' WLM TAGED BOTTOM POO.H

13:15 R.I.H. 187 GAUGE RING TO 7,154' WLM TAGED NO GO POO.H.

13:45 RIGED OFF 3 LOWER & RIGED UP ON 3 UPPER.

Keith Dove

Operator's Signature

WORKED PERFORMED BY K. DOVE & G. GIANCASPRO OF EXPERTEST.

WELL DATA:

Tubing Size 2 3/8" EUE FWHP – SIWHP 1,384 psi

Subsurface S.V./Landing Nipple @ – S.S.D. @ 7,113'

'X' Nipple @ 7,171' 'N'/'XN' Nipple @ 7,182' Other – @ –

Min. I.D. 1.791 @ 7,182' Packer @ 7,147

Perforated Interval: 7,264' - 7384'

RECEIVED
25 AUG 1987
DEPT. OF MINES AND ENERGY SECURITY
5653

SANTOS LIMITED
RESERVOIR ENGINEERING DEPARTMENT
KIDMAN #3 UPPER MODIFIED ISOCHRONAL
TOOLACHEE FORMATION
27TH MAY - 1ST JUNE 1985

Report No. RE:049/87
Author: G. Soulmatis/P.A. Robinson
Date: July, 1987

C O N T E N T S

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1.	INTRODUCTION	1
2.	RESULTS SUMMARY	2
3.	RECOMMENDATIONS	3
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	4.2 Horner Data	
	4.3 Modified Isochronal	
5.	GAS COMPOSITION AND FWS RECOMBINATION	7

FIGURES

APPENDIX

1. INTRODUCTION

Kidman #3 was drilled in September 1984 to a TD of 7635'KB to appraise the Toolachee Formation. Secondary objectives were to evaluate the Murta Member/Mooga Formation, Epsilon Formation and (Upper) Patchawarra Sands. The Toolachee Formation flowed 8.8 MMscfd @ 1615 psia and 10.9 MMscfd @ 1955 psia on DSTs #1A and #2 respectively. The Patchawarra Formation flowed 2.2 MMscfd @ 415 psia on DST#6. The well was completed as a dual gas producer from the Toolachee and Patchawarra Formations in March 1985 and was commissioned in July 1985.

This Modified Isochronal test was conducted between the 27th May and 1st June 1985 on the (Upper) Toolachee Formation for the purpose of determining reservoir parameters and to obtain representative fluid samples for full wellstream recombination.

The following are the perforated intervals and geological parameters pertinent to the test:

Peforated Interval ('KB)	Sand	Net Pay (ft)	Porosity (%)	Gas Saturation (%)
6485-6519	64-5	33	12.8	70.8
Not perforated	65-4	26	10.9	53.3
Not perforated	67-3	26	15.0	75.1

NOTE: All perforations were shot with 4" casing guns at 4 spf.

2. RESULTS SUMMARY

The pressure data was analysed using the Laminar Inertial Turbulence LIT (Ψ) method, giving the results below:-

Reservoir Pressure (psia)			
@ datum depth 6594' KB (6340' SS)		2764	
Flow Capacity (md-ft)		1006	
Permeability (md)		30.5	
Apparent Skin		25.1	
Turbulence Coefficient (D/MMSCF)		0.04	
True Skin		24.9	
Damage Ratio		4.3	
LIT Absolute Open Flow Potential (MMSCF/D)		15.1	
Stabilised Flow Constants: ($psia^2$/cp/MMSCF/D)	a	32.6	$\times 10^6$
($psia^2$/cp/MMSCF/D)	b	0.04	$\times 10^6$
Back Pressure Coefficients: (MMSCF/D/$psia^2$)	c	1.8	$\times 10^{-6}$
	n	1.0	
Completion Efficiency (%)		23	
Simplified Analysis AOF (MMSCF/D)		14.0	

EXTENDED FLOW

Gas rate (MMSCF/D)	6.14
Condensate rate (BCPD)	140
Water rate (BWPD)	22
Choke (inches)	30/64
FTP (psia)	1480

3. RECOMMENDATIONS

(1) The well should be worked over to remedy the communication problem between the Patchawarra and Toolachee Formations.

(2) At the time of the workover, the Toolachee Formation should be stimulated to remove wellbore damage and to improve deliverability.

(3) Following (1) and (2), the well should be Modified Isochronal Tested and samples taken for FWS recombination.

4. DISCUSSION

4.1 Communication Problem

Communication between the Upper and Lower zones of the dual completion in Kidman #3 was observed from the wellhead pressures. Kidman #3L was shut in during the Modified Isochronal and the following wellhead pressures were observed:-

	KIDMAN #3U (psig)	KIDMAN #3L (psig)
Initial shut-in	2223	2262
First flow	1967	2088
Shut in	2247	2292
Second flow	1737	1914
Shut in	2263	2320
Third flow	1527	1914
Shut in	2250	2292
Extended flow	1444	1740

Further investigations led to the conclusion that the point of communication exists somewhere between the top packer and the 'X' profile in the long string sliding sleeve assembly (Figure 7a & 7b).

Despite the fact that communication was evident, the Modified Isochronal Test has been interpreted assuming zero contribution from the Patchawarra Formation. This seems a reasonable assumption, in view of:

(1) the comparative flow rates from the DST results (see Introduction)

(2) the final build-up pressure was indicative of the Toolachee Formation and not the Patchawarra Formation, and

(3) the calculated reservoir parameters from this Modified Isochronal were in excellent agreement with the results from DST#1A.

4.2 Horner Data

Figure 1 is a log ΔP versus log Δt plot used to determine the valid data for the semi-log straight line portion of the Horner build-up. Figure 2 is the Horner build-up. It appears from Figure 2 that some "roll-over" or boundary effects are evident at late Horner time, but this is exaggerated by the chosen scale of the pseudo pressure axis. The extrapolated reservoir pressure is 2764 psia at the datum depth of 6594'KB which is in reasonable agreement with the virgin reservoir pressure of the Toolachee Formation in Kidman Field (@ 2890 psia at datum). The small amount of depletion is probably due to the production from Kidman #1 and #2 which are located 2½km to the N.E. and N.W. respectively. The wells had produced 3.8 Bcf and 2.3 Bcf respectively, by May 1985. The virgin reservoir pressure of the Patchawarra Formation is around 3100 psia at datum and it does not appear that the communiation with the Patchawarra Formation had a significant effect on the build-up pressure of the Toolachee Formation.

The flow capacity and permeability were estimated as around 1000 md-ft and 30 md respectively which compares with the estimates from the DST#1A test on the 64-5 Sand of 960 md-ft and 28md respectively. The apparent skin effect was estimated as 25 and this compares with the DST#1A result of 19.

It is recommended that the communication problem should be resolved in order to obtain reliable production estimates, material balance estimates and samples for FWS recombination. It is also recommended that the well should be stimulated to remove the skin effect and improve the deliverability.

4.3 Modified Isochronal Data

The deliverability plot (Figure 4) provides a measure of the quality of the data. The points should always plot on a straight line of unit slope. Figure 4 has unit slope, but the straight line 'fit' is only moderately good. The extended flow point plots below the transient line, indicating that the well is cleaning up. All four points were used in the LIT and simplified analyses and resulted in Absolute Open Flow (AOF) Potential estimates of 15.1 and 14.0 MMscf/d respectively. The slope of the Back Pressure plot is 1.0 (and therefore 'n' = 1.0) and this indicates fully laminar conditions in the well formation system. 'n' may vary between 0.5 for turbulent conditions and 1.0 for laminar conditions. The low turbulence coefficient calculated from the LIT analysis 0.04 D/MMscf is also indicative of laminar conditions.

The Jones, Blount and Glaze Data (Appendix) provided a very poor straight line fit (Figure 6) and the plot should only be used as a qualitative guide. The intercept ratio b'/b = 1.0 which is less than 2.0 and demonstrates that turbulence effects within the wellbore are negligible. The intercept b, however, is approximately 0.7 which is much greater than 0.05 and this demonstrates that stimulation is necessary. Note that the calculated apparent skin is 25.1, whereas the true skin is 24.9. These results confirm those of the LIT analysis.

5. GAS COMPOSITION AND FWS RECOMBINATION

Separator gas and condensate samples were taken during the Modified Isochronal and sent to AMDEL for analysis. A recombination was not possible as the High Pressure gas sample was contaminated with air (88%). The Kidman Toolachee average FWS composition from May 1984 was used to generate the GASPAC PVT data for the Horner analysis.

FIGURES

- Figure 1 log $\Delta\Psi$ Versus log Δt plot
- Figure 2 Horner Plot
- Figue 3 Back Pressure Plot
- Figue 4 Deliverability Plot
- Figure 5 Static Gradient Plot
- Figure 6 Jones Blount and Glaze Plot

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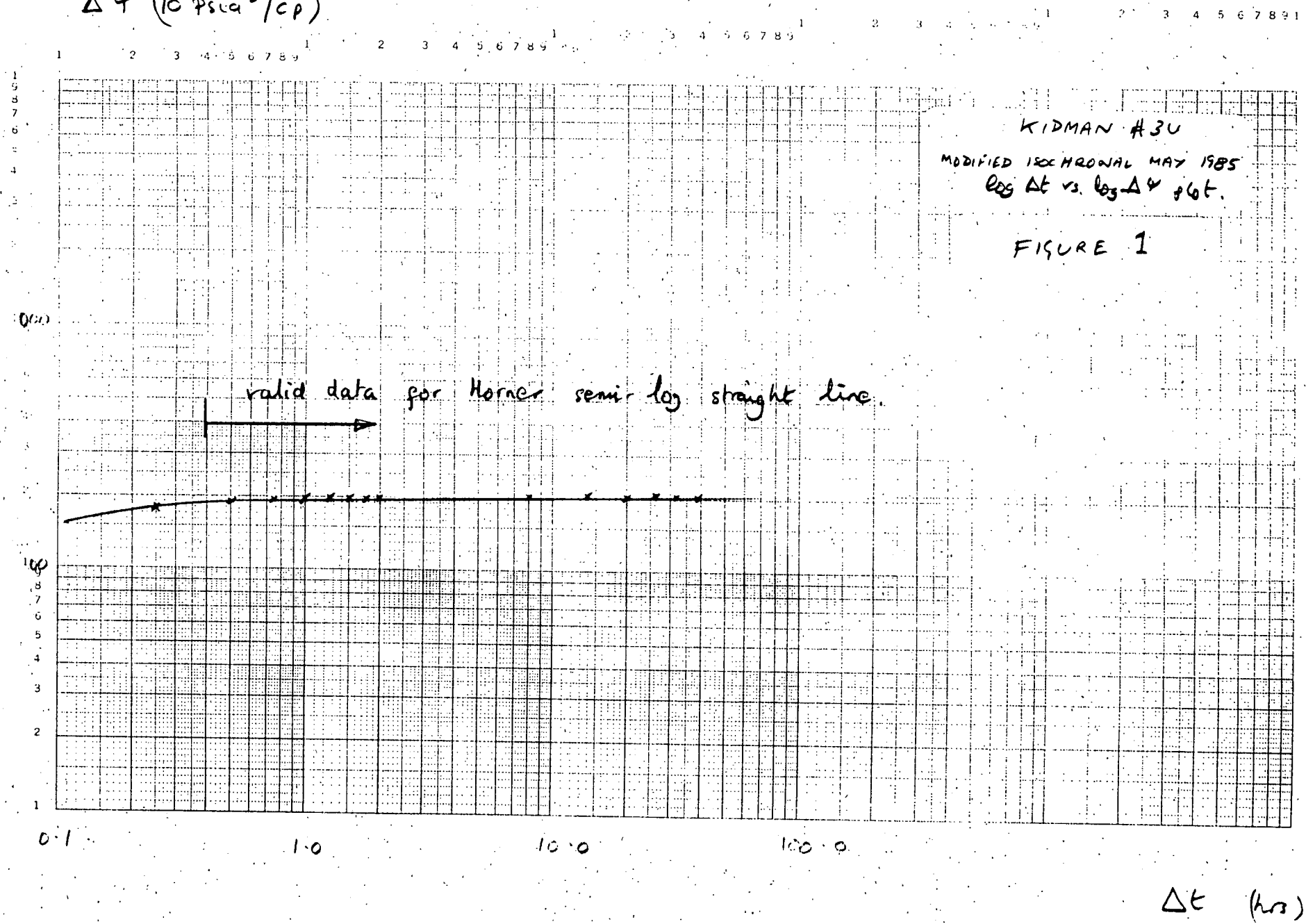

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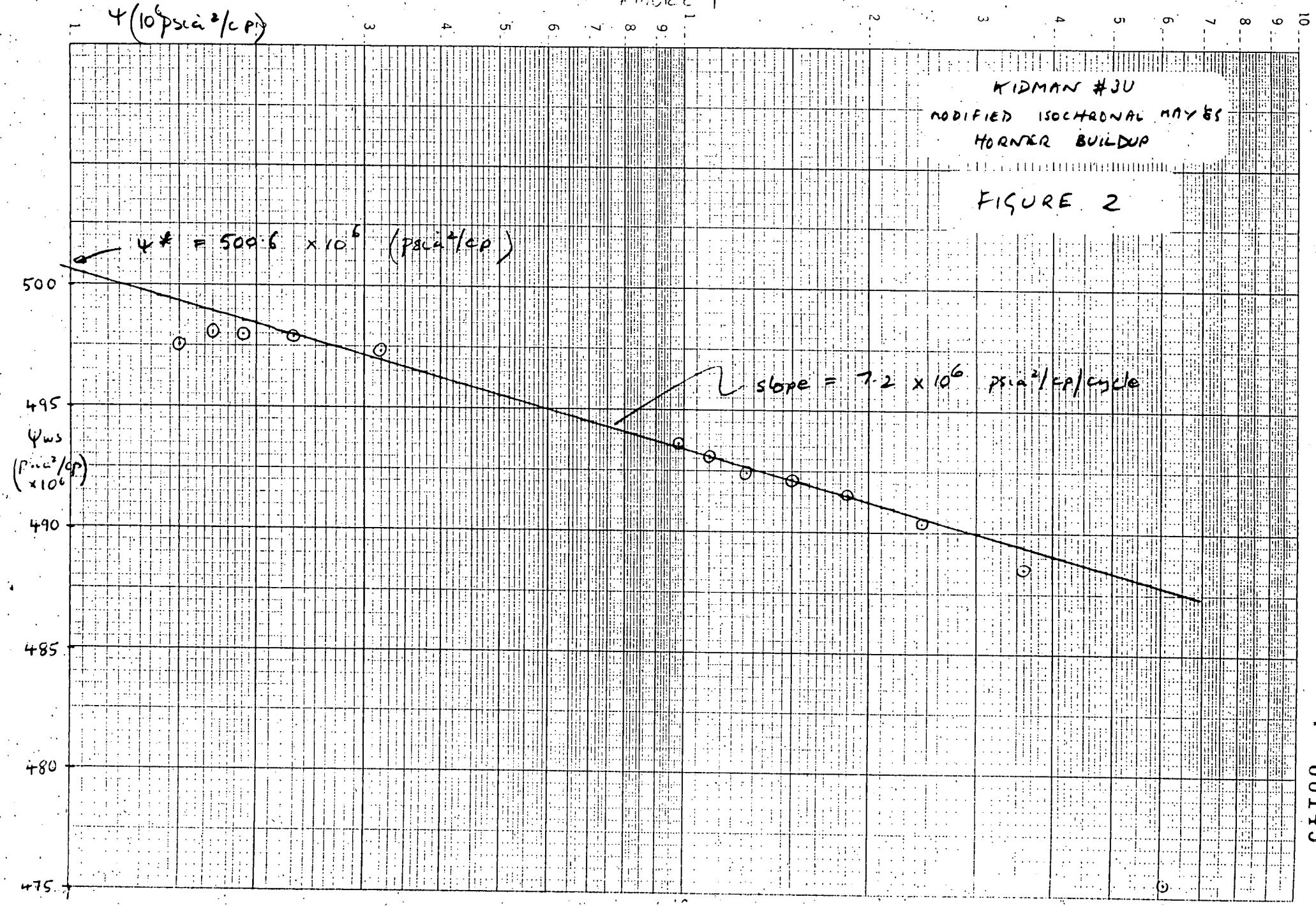
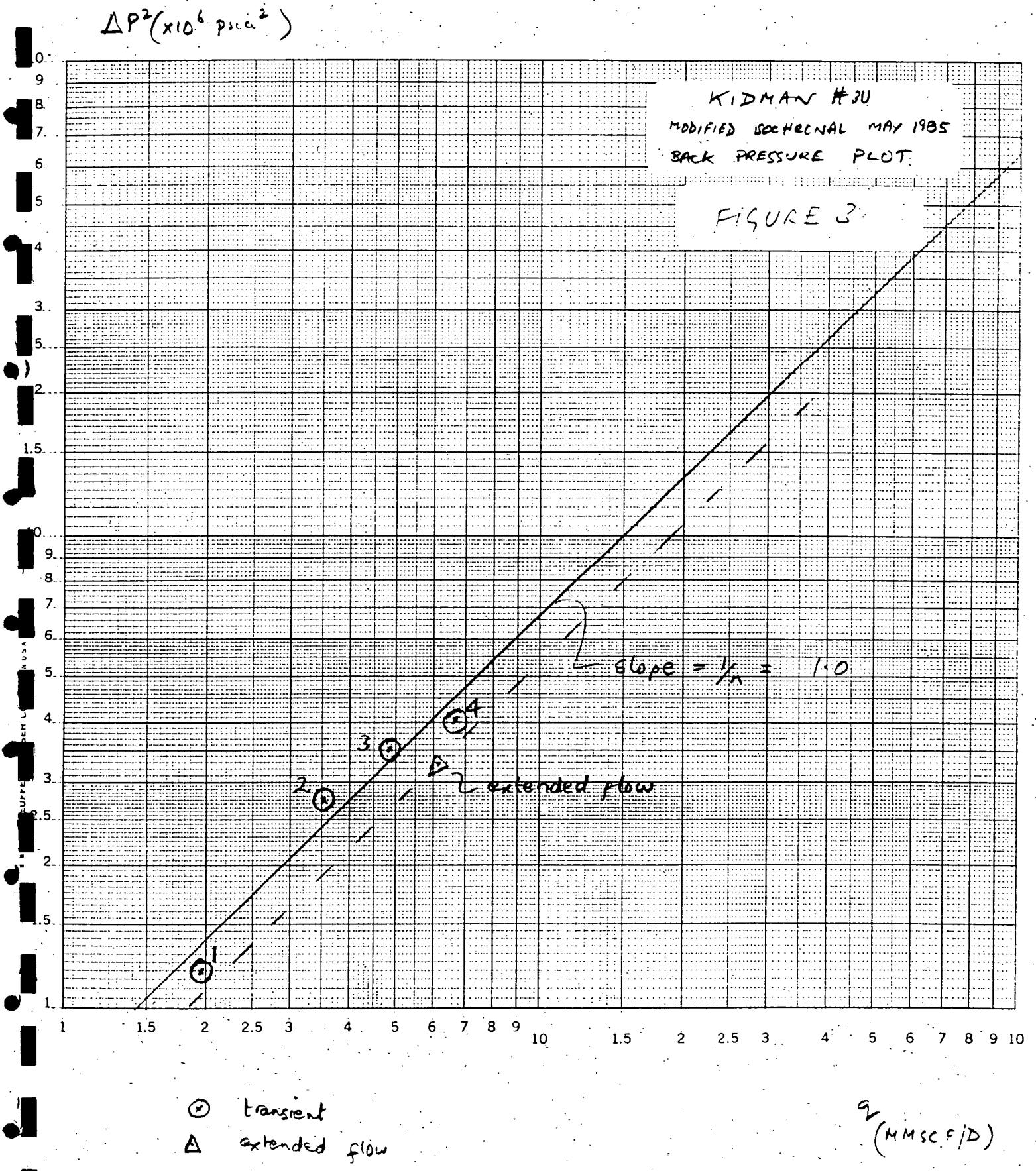
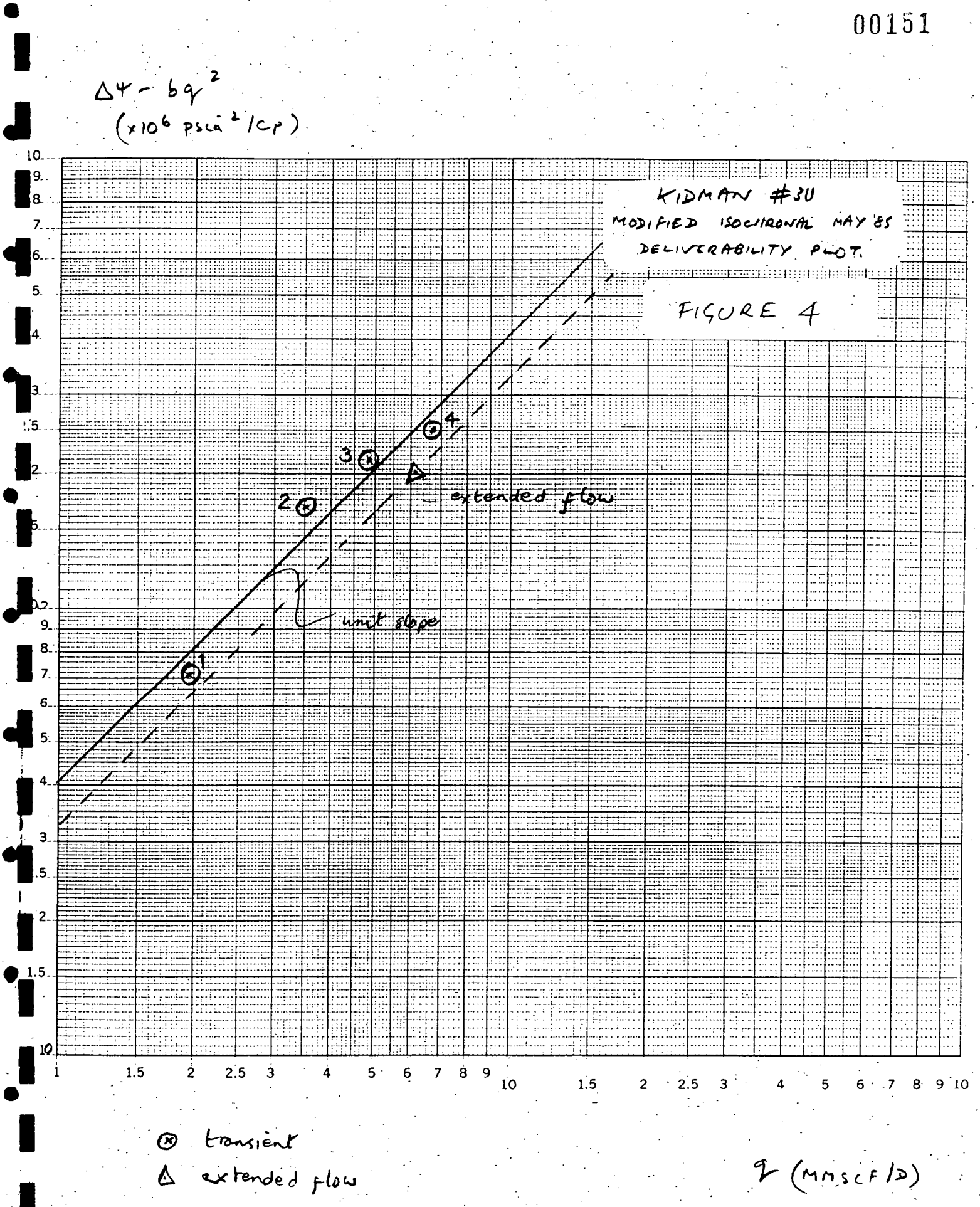
46 4970

Figure 1



00169


$\Delta P^2 (\times 10^6\ psia^2)$
KIDMAN #3U
MODIFIED ISOCHRONAL MAY 1985
BACK PRESSURE PLOT
FIGURE 3
slope = 1/n = 1.0
extended flow
1
2
3
4
transient
extended flow
q (MMSCF/D)


$\Delta\Psi - bq^2$
$(\times 10^6\ psia^2/cp)$
KIDMAN #3U
MODIFIED ISOCHRONAL MAY '85
DELIVERABILITY PLOT.
FIGURE 4
extended flow
unit slope
1
2
3
4
10
9
8
7
6
5
4
3
2
1.5
1
1.5
2
2.5
3
4
5
6
7
8
9
10
⊗ transient
△ extended flow
q (MMSCF/D)

KIDMAN #3 UPPER - STATIC PRESSURE GRADIENT - 29/5/85

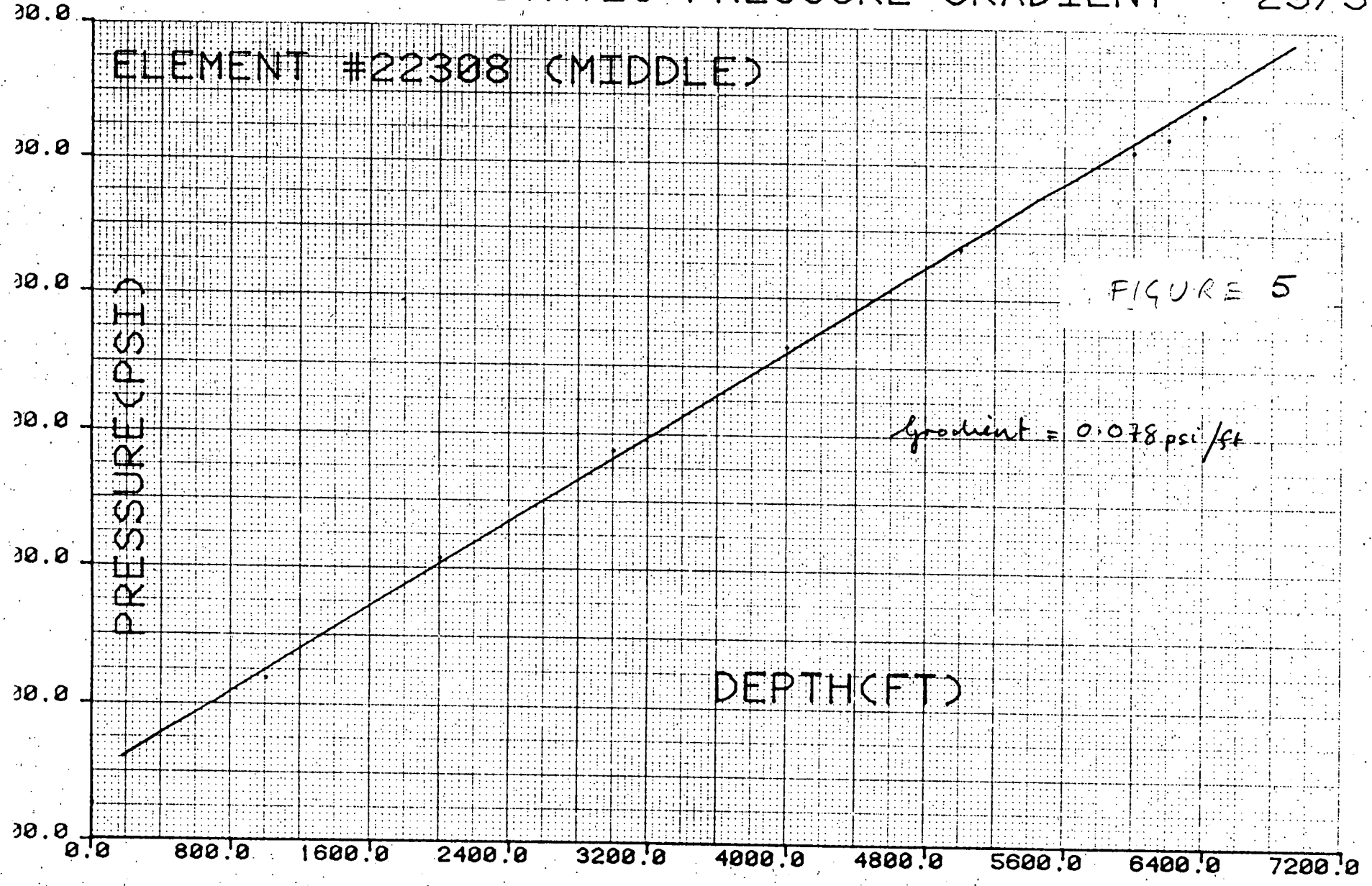


FIGURE 5

Gradient = 0.078 psi/ft

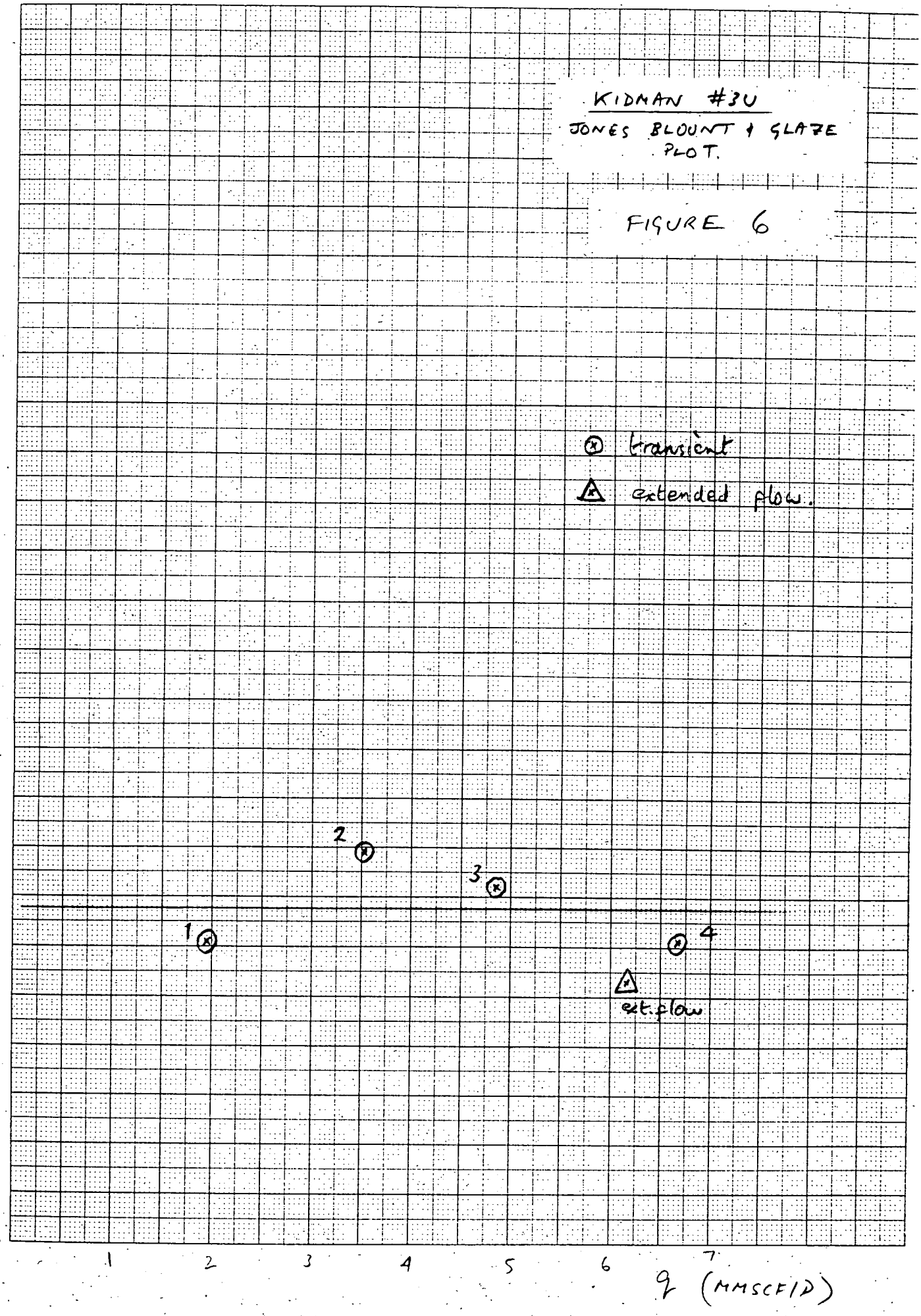
00152

$\frac{P^2 - P_{wf}^2}{q}$ $(10^6\ psia^2/MMSCFID)$

KIDMAN #3U

JONES BLOUNT & GLAZE PLOT.

FIGURE 6



K&E 10 X 10 TO THE CENTIMETER 18 X 25 CM.
KEUFFEL & ESSER MADE IN U.S.A.
1510

FIGURE 7a

DOWNHOLE INSTALLATION

00154

Well: KIDMAN-3

K.B to top of tubinghead spool

REMARKS

BAKER A5 packer set 6369.85'

2⅞" Short string landed with 4,000# compression

Annulus fluid: 9.3parts/gallon 2% KCl inhibited brine

Hanging string weight : 35,400lbs

Trip sub pressured to 3,200# to set A-5 packer

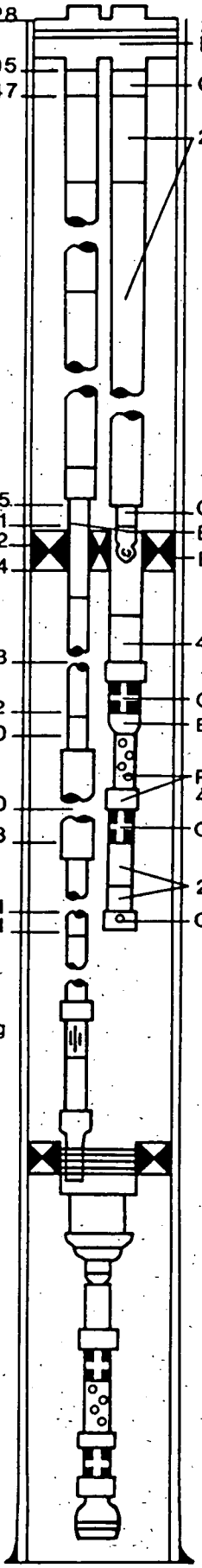
PBTD 7581'

PERFORATIONS

TOOLACHEE 6485'-6519'

PATCHAWARRA 7264'-7272'
7302'-7310'
7324'-7348'
7360'-7384'

All perforations: 4shots/foot @ 90° phasing with 4" CSG Guns by Schlumberger



17.28	2⅞" CIW CS Hydril B/U split hanger segment
17.95	
18.47	Crossover 2⅞" ABDSS pin x pin
	206 joints 2⅞" 6.5# L80 ABDSS tubing
6366.85	Crossover 2⅞" ABDSS x 2⅜" EUE pin
6367.71	BAKER 'S' snap latch ass'y 2⅜" EUE
6368.02	BAKER 7" A-5 dual 47C-2 ret packer
6376.14	
	4' Pup joint 2⅜" EUE 4.7# J55 & collar
6380.23	
6381.02	Otis landing nipple 11X1 2⅜" EUE
6382.20	Baker hydrotrip sub 'E' 2⅜" EUE
	Perforated pup joint 10' x 2⅜" 4.7# J55 EUE
6392.70	
6393.33	Otis 11N12 no. go nipple 2⅜" EUE
	2 pup joints 2⅜" 4.7# J55 EUE 4', 12'
6409.61	
6410.01	Catcher sub (collar w/bar) 2⅜" J55 EUE

PROPOSED RE/COMPLETION	
RE/COMPLETION AS RUN	X
NOT TO SCALE	

DESIGNED	V. OZOLINS
DRAFTED	B. McGOVERN
DATE	24/6/85

FIGURE 76

00155

DOWNHOLE INSTALLATION

Well: KIDMAN-3

K.B to top of tubinghead spool

REMARKS

BAKER A-5 packer set at 6369.85'

BAKER 'DB' packer set at 7150' by Schlumberger

2⅜" long string landed w/5,000# compression

Annulus fluid 9.3ppg 2% KCl inhibited brine

Hanging string weight: 28,500 lbs

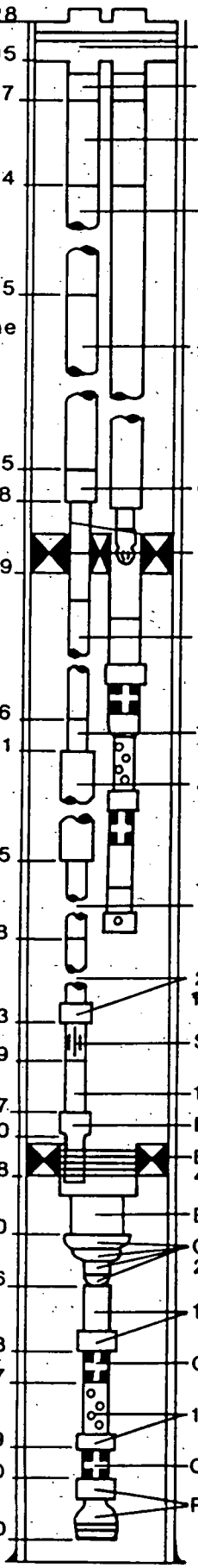
Weatherford TBG crew utilized

PBTD 7581'

See page 1

PERFORATIONS

See page 1



17.28	C.I.W. 2⅜" CS Hydril B/U split hanger segment
17.95	Crossover 2⅜" ABDSS pin x pin
18.47	1 joint 2⅜" 4.7# L80 ABDSS tubing
49.54	3 pup joints 2⅜" 4.7# L80 AB 6', 10', 4'
69.25	203 joints 2⅜" 4.7# L80 ABDSS tubing
6364.15	
6364.98	Crossover 2⅜" ABDSS box-2⅜" EUE pin
6374.89	BAKER 7" A-5 dual ret 47C-2 packer
	3 joints 2⅜" 4.7# J55 EUE tubing
6470.26	
6478.31	1 pup joint 2⅜" 4.7# J55 EUE 8'
	3 blast joints 2⅜" EUE 20', 10', 20'
6527.45	
	18 joints 2⅜" 4.7# J55 EUE tubing
7098.58	
	2 pup joints 2⅜" 4.7# J55 EUE 10', 4' w/collar
7113.23	
7115.69	Sliding sleeve Otis 121X2
	1 joint 2⅜" 4.7# J55 EUE tubing
7147.47	
7147.80	BAKER G-22 locator seal 81-32 2⅜" EUE
7151.68	BAKER 7" 84DB32 ret packer 4½" LTC B/D
7157.40	BAKER 4½" LT&C Millout extension pin x pin
	Crossovers 4½" LT&C - 3½" EUE, 3½" EUE - 2⅞", 2⅞" - 2⅜" EUE
7159.26	
	1 pup joint 2⅜" 4.7# J55 EUE 12' w/collar
7171.68	
7172.47	Otis 11X1 landing nipple-2⅜" EUE
	1 pup joint 2⅜" 4.7# J55 EUE 10' w/collar
7182.89	
7183.50	Otis 11N12 No.go nipple 2⅜" EUE
	Re-entry swage 2⅜"-2⅜" EUE w/collar
7184.40	
	PBTD 7581'

PROPOSED RE/COMPLETION	
RE/COMPLETION AS RUN	X
NOT TO SCALE	

DESIGNED	V. OZOLINS
DRAFTED	B. McGOVERN
DATE	24/6/85

APPENDIX

- PVT properties of FWS composition
- Pressure Buildup Evaluation
- Pressure Data
- Jones, Blount and Glaze Data
- Well Test Summary Sheets
- Amdel Analysis of separator gas and condensate

```
1
2
3
4
5   LIST  FALSE
6   HEADNG KIDMAN TUBING Z AND VISCOSITY VALUES
7   GAS
8   TITLE [redacted] AVG FWS MAY 1984 COMPOSITION[redacted]
9   CNCCO2  8.845
10  CNCN2   1.417
11  CNCHC   10
12  71.655,9.737,4.112,0.650,1.132,0.345,0.370,0.336,0.230,1.171
13  FRPHCF  129.1,1001.9,353.2
14  TEMRES  262
15  TEMTUB  210
16  TEMGAT  210
17  ENDSUB
18  END
19
20  1
21  GASPAC PACKAGE - MAIN
22
23  LIST  FALSE
24  1 KIDMAN TUBING Z AND VISCOSITY VALUES
25  GASPAC PACKAGE - GAS                KIDMAN TOOLACHEE AVG FWS MAY 1984 COMPO
26
27  OPTIONS
28
29  CALCULATE SPECIFIC GRAVITY, PSEUDO-CRITICAL TEMPERATURE AND PRESSURE?
30  USE DEFAULT VALUES FOR FINAL HYDROCARBON PROPERTIES?
31  USE RESERVOIR TEMPERATURE FOR FIRST PVT TABLE?
32  USE AVERAGE TUBING TEMPERATURE FOR SECOND PVT TABLE?
33  USE GATH. SYSTEM TEMPERATURE FOR THIRD PVT TABLE?
34  CALCULATE PVT TABLE(S)?
35  PRINT PVT TABLE(S)?
36  PLOT POTENTIAL?
37
38
39
40  GAS PROPERTIES
41
42          ----------------------------
43          CONSTITUENTS      MOLE
44                            PERCENT
45          ----------------------------
46          NITROGEN          1.417
47          CO2               8.845
48          H2S               0.000
49          METHANE           71.655
50          ETHANE            9.737
51          PROPANE           4.112
52          I-BUTANE          0.650
53          N-BUTANE          1.132
54          I-PENTANE         0.345
55          N-PENTANE         0.370
56          HEXANE            0.336
57          HEPTANE           0.230
58          OCTANE            1.171
59          +                 +
60          ----------------------------
```

TOTAL 100.000

MOLECULAR WEIGHT OF OCTANE +		=	129.100
PSEUDO-CRITICAL TEMPERATURE OF OCTANE +		=	1001.90 DEG. R
PSEUDO-CRITICAL PRESSURE OF OCTANE +		=	353.2 PSIA
MOLECULAR WEIGHT		=	24.11
SPECIFIC GRAVITY		=	0.8323
PSEUDO-CRITICAL TEMPERATURE		=	414.8 DEG. R
PSEUDO-CRITICAL PRESSURE		=	694.2 PSIA
RESERVOIR TEMPERATURE =	262.0 DEG. F	=	721.7 DEG. R
TUBING HEAD TEMPERATURE =	210.0 DEG. F	=	669.7 DEG. R
GATH. SYSTEM TEMPERATURE =	210.0 DEG. F	=	669.7 DEG. R
MAXIMUM PRESSURE FOR PVT TABLES		=	5000. PSIA
PRESSURE INCREMENT FOR PVT TABLES		=	100. PSI

1 KIDMAN TUBING 7 AND VISCOSITY VALUES 11/02/85 PAGE
GASPAC PACKAGE - GAS KIDMAN TOOLACHEE AVG FWS MAY 1984 COMPOSITIONAL DATA

PVT TABLE AT RESERVOIR TEMPERATURE = 262. DEG. F = 722. DEG. R

PRESSURE PSIA	Z	COMPRESS PSIA(-1) X 10(-3)	VISCOSITY CP	POTENTIAL PSIA(2)/CP X 10(6)	PRESSURE GRADIENT PSI/FT	P/Z PSIA
14.65	0.99878	68.34235	0.01339			
100.00	0.99178	10.08199	0.01342	0.750	0.00218	100.83
200.00	0.98374	5.08063	0.01351	3.007	0.00440	203.31
300.00	0.97592	3.41239	0.01362	6.769	0.00665	307.40
400.00	0.96832	2.57723	0.01377	12.029	0.00894	413.09
500.00	0.96097	2.07517	0.01389	18.774	0.01126	520.31
600.00	0.95388	1.73951	0.01409	26.995	0.01362	629.01
700.00	0.94708	1.49882	0.01427	36.685	0.01600	739.12
800.00	0.94058	1.31738	0.01452	47.674	0.01841	850.54
900.00	0.93441	1.17534	0.01473	60.070	0.02085	963.18
1000.00	0.92858	1.06082	0.01491	73.829	0.02331	1076.91
1100.00	0.92312	0.96622	0.01507	88.959	0.02580	1191.61
1200.00	0.91804	0.88652	0.01526	105.436	0.02830	1307.13
1300.00	0.91336	0.81824	0.01546	123.207	0.03081	1423.32
1400.00	0.90909	0.75889	0.01567	142.243	0.03334	1540.00
1500.00	0.90525	0.70667	0.01590	162.498	0.03587	1656.99
1600.00	0.90185	0.66023	0.01612	183.929	0.03841	1774.12
1700.00	0.89897	0.61856	0.01635	206.505	0.04094	1891.20
1800.00	0.89640	0.58088	0.01657	230.191	0.04347	2008.03
1900.00	0.89431	0.54657	0.01680	254.953	0.04599	2124.42
2000.00	0.89276	0.51517	0.01703	280.758	0.04850	2240.20
2100.00	0.89165	0.48628	0.01727	307.564	0.05099	2355.18
2200.00	0.89098	0.45960	0.01757	335.260	0.05345	2469.20
2300.00	0.89075	0.43489	0.01787	363.762	0.05590	2582.10
2400.00	0.89096	0.41193	0.01818	393.029	0.05832	2693.74
2500.00	0.89159	0.39056	0.01848	423.021	0.06070	2803.98
2600.00	0.89263	0.37063	0.01879	453.700	0.06306	2912.73
2700.00	0.89408	0.35202	0.01909	485.027	0.06538	3019.86
2800.00	0.89591	0.33462	0.01940	516.962	0.06766	3125.31
2900.00	0.89811	0.31834	0.01973	549.442	0.06990	3229.01
3000.00	0.90066	0.30308	0.02006	582.420	0.07211	3330.88
3100.00	0.90355	0.28878	0.02039	615.861	0.07427	3430.90
3200.00	0.90678	0.27537	0.02071	649.731	0.07640	3529.03

1

3300.00	0.91028	0.26278	0.02104	684.000	0.07848	3625.25
3400.00	0.91409	0.25095	0.02137	718.636	0.08052	3719.56
3500.00	0.91817	0.23983	0.02170	753.611	0.08252	3811.94
3600.00	0.92251	0.22938	0.02203	788.897	0.08448	3902.41
3700.00	0.92709	0.21954	0.02236	824.467	0.08640	3990.97
3800.00	0.93191	0.21028	0.02268	860.297	0.08828	4077.65
3900.00	0.93694	0.20155	0.02301	896.363	0.09011	4162.46
4000.00	0.94219	0.19332	0.02334	932.641	0.09191	4245.44
4100.00	0.94763	0.18556	0.02367	969.111	0.09367	4326.62
4200.00	0.95324	0.17823	0.02399	1005.753	0.09538	4406.02
4300.00	0.95903	0.17131	0.02431	1042.562	0.09707	4483.69
4400.00	0.96499	0.16476	0.02463	1079.522	0.09871	4559.65
4500.00	0.97109	0.15857	0.02494	1116.616	0.10032	4633.96
4600.00	0.97734	0.15272	0.02526	1153.828	0.10189	4706.63
4700.00	0.98373	0.14717	0.02558	1191.143	0.10343	4777.72
4800.00	0.99025	0.14191	0.02589	1228.544	0.10494	4847.27
4900.00	0.99689	0.13692	0.02621	1266.020	0.10641	4915.31
5000.00	1.00364	0.13218	0.02653	1303.556	0.10785	4981.88

GAS WELL DELIVERABILITY TEST
RESULTS OF ISOCHRONAL 'LIT' ANALYSIS

WELL NAME: KIDMAN #3U FORMATION: TOOLACHEE DATE OF TEST 26/5 - 1/6/85

DATUM DEPTH: 6594'KB / 6340 SS DEPTH TESTED: 6393' K.B.

PRESSURE BUILD-UP INFORMATION

EXTRAPOLATED PRESSURE p^* = — x 10^3 psia²

= 2749 psia

ψ^* = 500.6 x 10^6 psia²/cp

HORNER BUILD-UP SLOPE m = — x 10^3 psia²/cycle

$m(\psi)$ = 7.2 x 10^6 psia²/cp/cycle

WELL AND TEST PARAMETERS

Porosity ϕ = 0.128 Viscosity μ = .0192 cp

Compressibility C_t = 0.248×10^{-3} well radius r_w = 0.354 ft.

Well drainage r_e = — thickness h = 33 ft.

Final flow rate q = 6.1 MMcfd Temperature T = 722 °R

Sandface press. P_{wf} = 2056.5 psia Press 1 hr P_1 = 2720 psia

ψ_{wf} = 295.9 x 10^6 psia²/cp ψ_1 = 491.5 x 10^6 psia/cp

BACK PRESSURE COEFFICIENTS

$\Delta\psi = aq + bq^2$

a = 32.6 x 10^6 psia²/cp/MMcfd

b = 0.039 x 10^6 psia²/cp/MMcfd

FLOW CAPACITY

$kh = \frac{1.632 \times 10^6}{m}$ qT = 1006 md-ft

PERMEABILITY

$k = \frac{kh}{h}$ = 30.5 md

APPARENT SKIN

$$S' = 1.151\left[\frac{\psi_1 - \psi_o}{m} - \log\left(\frac{k}{\phi\mu C_t r_w^2}\right) + 3.23\right] = 25.1$$

TURBULENCE COEFFICIENT

$$D = \frac{b\,kh}{1.417 \times 10^6 T} = .04 \text{ MMcfd}^{-1}$$

TRUE SKIN

$S = S' - Dq$ = 24.9

EXTENDED BUILD UP PRESSURE DATA

Well Name: KIDMAN #3 Upper.

Date Tested: 27th May - 1st JUNE 1985

Pressure Element: 25531

Depth Tested: 6393 'KB

Lubricator Pressure (psia)	In	Out
Amerada	2230.1	2236.8
Deadweight	2231.7	2231.7

t = 17.53 hours.

Δt hours	PRESSURE psia	PSEUDO PRESSURE $psia^2/cp \times 10^6$	Δ Ψ	$\frac{t+\Delta t}{\Delta t}$
0	2056.5	295.9	0	—
0.25	2669.8	475.6	179.7	71.1
0.50	2710.9	488.5	192.6	36.1
0.75	2716.5	490.3	194.4	24.4
1.00	2720.4	491.5	195.6	18.5
1.25	2722.1	492.1	196.2	15.0
1.50	2723.2	492.4	196.5	12.7
1.75	2725.3	493.1	197.2	11.0
2.00	2726.8	493.6	197.7	9.8
8.00	2738.5	497.3	201.4	3.2
14.00	2740.4	497.9	202.0	2.3
20.00	2740.6	498.0	202.1	1.9
26.00	2741.0	498.1	202.2	1.7
32.00	2739.4	497.6	201.7	1.5
38.00	2739.4	497.6	201.7	1.5

EXPERTEST PTY LTD
WIRELINE & WELL TESTING SERVICE

** KIDMAN #3 UPPER **

STATIC PRESSURE GRADIENT

TEST DATE: 29/5/85

	TOP PRESSURE ELEMENT 25531/4050			BOTTOM PRESSURE ELEMENT 22308/4100		
DEPTH (FT.)	DEFLECTION (INCHES)	PRESSURE (PSIG)	GRADIENT (PSI/FT)	DEFLECTION (INCHES)	PRESSURE (PSIG)	GRADIENT (PSI/FT)
LUB	1.0820	2217.9	----	1.0630	2226.4	----
1000	1.1280	2312.5	0.0946	1.1080	2320.3	0.0938
2000	1.1720	2402.9	0.0905	1.1510	2409.9	0.0897
3000	1.2120	2485.2	0.0823	1.1900	2491.2	0.0813
4000	1.2490	2561.3	0.0761	1.2270	2568.4	0.0772
5000	1.2850	2635.4	0.0741	1.2620	2641.4	0.0730
6000	1.3200	2707.4	0.0720	1.2970	2714.4	0.0730
6200	1.3260	2719.8	0.0618	1.3020	2724.8	0.0521
6405	1.3320	2732.1	0.0602	1.3100	2741.5	0.0814
LUB	1.0850	2224.1	----	1.0640	2228.5	----

NERAL REMARKS:

DWT IN: 2223
DWT OUT: 2223
MAX BHT: N/A

ELEMENT 25531/4050 CALIBRATED 12/5/85
ELEMENT 22308/4100 CALIBRATED 12/5/85

JONES, BLOUNT AND GLAZE DATA

	$Pr^2 - Pwf^2$ ($psia^2 \times 10^6$)	q MMscf/d	$\frac{Pr^2 - Pwf^2}{q}$ (10^6 $psia^2$/MMscf/d)
q_1	1.198	1.95	0.61
q_2	2.769	3.52	0.79
q_3	3.523	4.86	0.72
q_4	4.061	6.67	0.61
ext flow	3.275	6.15	0.53

LIT AOF = 15.1 MMscf/d

$$\frac{Pr^2 - Pwf^2}{q} = \frac{2749^2}{15.1} = 0.5 \times 10^6$$

WP:4979N(12)
PAR/jbf
21/4/87

WP: 3372N

SANTOS LTD.
WELL TEST SUMMARY

WELL: KIDMAN #3 Upper
TESTED BY: R. Yates (Expertest)
CASING SIZE: 7 ins
TUBING SIZE: 2-7/8 ins

LOCATION: Lat.: 28° 15' 22.6" S
Long: 140° 48' 27,0" E
PERFORATIONS: 6485-6519 ft
WEIGHT: 23 and 26 lb/ft
WEIGHT: 6.5 lb/ft

DATE: May 27th - June 1st, 1985 **FIELD** TOOLACHEE
PRODUCING THROUGH: Tubing FORMATION
GRADE: J55
GRADE: L80

DESCRIPTION OF TEST

INITIAL SHUT IN PERIOD

Time of Observations			Observed Pressures			REMARKS
Date	Time	Shut In Time (Hours)	Tubing psig	Casing psig	Temp. °F	
27.5.85	0900	0	1305	1050		Shut Well in
29.5.85	0840	47.67	2227			Ran Static Gradient Survey
29.5.85	1600	55.0	2217	0		Opened well on 1st rate

Flow Period
Run No.: 1 **Duration of Run:** 2 **Hours.** **Orifice Size:** 1.500 ins
Flow Well On: 14/64" **Choke.** **Meter Run:** 5.761 ins

Date	Time	Flow Time (Hours)	Wellhead Readings			Meter or Prover Data			Condensate Production	Water Production
			Tubing psig	Casing psig	Temp. °F	Pf psig	Hw inches	Temp. °F	Bbls /d	Bbls /d
29.5.85	1600	0	2217	0						
	1700	1	1942	0	94	350	70	84	40.3	40.3
	1800	2	1967	0	95	350	70	82	60.4	Nil

00163

2ND SHUT IN PERIOD

Time of Observations			Observed Pressures			REMARKS
Date	Time	Shut In Time (Hours)	Tubing psig	Casing psig	Temp. °F	
29.5.85	1800	0	1967	0	95	Shut well in
	1815	0.25	2180	0		
	1830	0.50	2197	0		
	1845	0.75	2213	0		
	1900	1	2223	0		
	1930	1.5	2238	0		
	2000	2	2247	0		Opened well on 2nd rate

Run No.: 2 Duration of Run: 2 Hours. Orifice Size: 2.000 ins
Flow Well On: 20/64" Choke. Meter Run: 5.761 ins

Date	Time	Flow Time (Hours)	Wellhead Readings			Meter or Prover Data			Condensate Production	Water Production
			Tubing psig	Casing psig	Temp. °F	Pf psig	Hw inches	Temp. °F	Bbls/d	Bbls /d
29.5.85	2000	0	2247	0						
	2100	1	1671	0	99	370	60	84	181.1	40.3
	2200	2	1737	0	102	370	66	75	80.5	40.3

3RD SHUT IN PERIOD

Time of Observations			Observed Pressures			REMARKS
Date	Time	Shut In Time (Hours)	Tubing psig	Casing psig	Temp. °F	
29.5.85	2200	0	1737	0	102	Shut well in
	2215	0.25	2195	0		
	2230	0.50	2218	0		
	2245	0.75	2230	0		
	2300	1.00	2237	0		
	2330	1.50	2260	0		
	2400	2.00	2263	0		Opened well on 3rd rate

Run No.: 3 Duration of Run: 2 Hours. Orifice Size: 2.250 ins
Flow Well On: 26/64" Choke. Meter Run: 5.761 ins

Date	Time	Flow Time (Hours)	Wellhead Readings			Meter or Prover Data			Condensate Production	Water Production
			Tubing psig	Casing psig	Temp. °F	Pf psig	Hw inches	Temp. °F	Bbls /d	Bbls /d
29.5.85	2400	0	2263	0						
30.5.85	0100	1	1483	50	102	350	80	81	120.8	40.3
	0200	2	1527	150	108	350	80	64	161.0	40.3

00165

4TH SHUT IN PERIOD

Time of Observations			Observed Pressures			REMARKS
Date	Time	Shut In Time (Hours)	Tubing psig	Casing psig	Temp. °F	
30.5.85	0200	0	1527	150	108	Shut well in
	0215	0.25	2200	250		
	0230	0.50	2227	245		
	0245	0.75	2237	240		
	0300	1.00	2250	200		
	0330	1.50	2253	100		
	0400	2.00	2250	130		Opened well on 4th rate

Run No.: 4 Duration of Run: 2 Hours. Orifice Size: 2.500 ins
Flow Well On: 34/64" Choke. Meter Run: 5.761 ins

Date	Time	Flow Time (Hours)	Wellhead Readings Tubing psig	Casing psig	Temp. °F	Meter or Prover Data Pf psig	Hw inches	Temp. °F	Condensate Production Bbls/d	Water Production Bbls/d
30.5.85	0400	0	2250	130						
	0500	1	1213	200	108	390	.88	77	201.2	40.3
	0600	2	1250	340	115	390	92	86	161.0	40.3

00166

SANTOS LTD.
WELL TEST SUMMARY
FINAL STABILIZATION FLOW PERIOD

Run No.: 5 Duration of Run: 12 Hours. Orifice Size: 2.500 ins
Flow Well On: 30/64" Choke. Meter Run: 5.761 ins

Date	Time	Flow Time (Hours)	Wellhead Readings			Meter or Prover Data			Condensate Production	Water Production
			Tubing	Casing	Temp.	Pf	Hw	Temp.		
			psig	psig	°F	psig	inches	°F	Bbls /d	Bbls /d
30.5.85	0600	0	1250	340	115					
	0700	1	1433	650	120	390	80	86	181.1	20.1
	0800	2	1438	700	124	360	80	90	120.7	20.1
	0900	3	1444	800	136	360	79	91	161.0	20.1
	1000	4	1448	860	131	390	80	93	140.9	20.1
	1100	5	1455	920	135	390	83	97	181.1	Nil
	1200	6	1457	980	135	390	82	99	120.7	40.3
	1300	7	1460	1000	135	390	83	100	161.0	20.1
	1400	8	1462	1040	140	390	87	102	140.9	20.1
	1500	9	1462	1060	138	380	86	102	140.9	20.1
	1600	10	1463	1080	138	370	87	99	140.9	40.3
	1700	11	1465	1090	133	360	88	95	100.6	20.1
	1800	12	1467	1090	133	360	88	102	100.6	20.1
			Shut well in for final build-up survey							

00167

SANTOS LTD.
WELL TEST SUMMARY
FINAL BUILD-UP PERIOD

Date	Time	Shut in Period (Hours)	Tubing Pressure psig	Casing Pressure psig	Wellhead Temp. °F	REMARKS
30.5.85	1800	0	1467	1090	133	Shut well in
	1815	0.25	2222	1100		
	1830	0.50	2235	930		
	1845	0.75	2235	890		
	1900	1.00	2235	800		
	1915	1.25	2237	700		
	1930	1.50	2237	650		
	1945	1.75	2237	600		
	2000	2.00	2237	500		
31.5.85	0200	8.00	2231	0		
	0800	14.00	2225	0		
	1400	20.00	2220	0		
	2000	26.00	2217	0		
1.6.85	0200	32.00	2217	0		
	0800	38.00	2217	0		P.O.H. - End of Test

SANTOS LTD.
WELL TEST SUMMARY
FINAL BUILD-UP, SUBSURFACE PRESSURES

ELEMENT NO. 25531

BOMB DEPTH 6393 'KB

DWT in = 2217 psig/out = 2217 psig
LUB. in = 2215.4 psig/out = 2222.1 psig

Date	Time	Shut In Time (Hours)	PRESSURE psig	PRESSURE psia ^{2} x 10^3	$\frac{T+\theta}{\theta}$	REMARKS
30.5.85	1800	0	2041.8	4229	-	Shut well in
	1815	0.25	2655.1	7128	71.1	
	1830	0.50	2696.2	7349	36.1	
	1845	0.75	2701.8	7379	24.4	
	1900	1.00	2705.7	7400	18.5	
	1915	1.25	2707.4	7410	15.0	
	1930	1.50	2708.5	7416	12.7	
	1945	1.75	2710.6	7427	11.0	
	2000	2.00	2712.1	7435	9.8	
31.5.85	0200	8.00	2723.8	7499	3.2	
	0800	14.00	2725.7	7510	2.3	
	1400	20.00	2725.9	7511	1.9	
	2000	26.00	2726.3	7513	1.7	
1.6.85	0200	32.00	2724.7	7504	1.5	
	0800	38.00	2724.7	7504	1.5	P.O.H. - End of Test
						T = Cumulative Prod./Last Prod. rate before shut in
						= 4.491 MMSCF/6.147 MMSCFD
						= 17.53 hours

00169

Taken from Kidman Toolachee Gaspac -:

CASE 1: FLOW THROUGH METER RUN

Run No.	Hw (inches in water)	Pf (psig)	Size Orifice Plate (inches)	Ft (°F)
1	70	350	1.500	82
2	66	370	2.000	75
3	80	350	2.250	64
4	92	390	2.500	86
5	88	360	2.500	102

Specific Gravity = 0.8323
TC = 414.8 °R
PC = 694.2 psia
CO2 CONTENT = 8.845 mole %

Meter Run = 5.761 ins

FLOW THROUGH METER RUN (Continued)

Run No.	Q (MMscfd)
1	1.950
2	3.521
3	4.855
4	6.674
5	6.147

001170

SANTOS LTD.

GAS WELL DELIVERABILITY TEST CALCULATIONS
(Base Conditions = 14.65 psia and 60°F)

WELL NAME: KIDMAN #3 UPPER

DATE: May 27th - June 1st, 1985

ELEMENT NO: 25531
DWT IN: 2217 psig
LUB IN: 2215.4 psig

DEPTH TESTED: 6393' KB
OUT: 2217 psig
OUT: 2222.1 psig

SIMPLIFIED ANALYSIS

	Duration (hours)	Sandface Pressure (psia)	Cal.	Meas.	Δp^2 ($\times 10^6$ psia^2)	Flow Rate (Mmscfd)	H/Carbon Prod. (BBLS/D)	Water Prod. (BBLS/D)
Initial Shut In	55	2754.8		X	/	/	/	/
Flow 1	2	2528.0		X	1.198	1.950	50.4	20.2
Shut In	2	2787.2		X	/	/	/	/
Flow 2	2	2235.9		X	2.769	3.521	130.8	40.3
Shut In	2	2793.9		X	/	/	/	/
Flow 3	2	2069.5		X	3.523	4.855	140.9	40.3
Shut In	2	2766.2		X	/	/	/	/
Flow 4	2	1894.9		X	4.061	6,674	181.1	40.3
Extended Flow	12	2056.5		X	3.275	6.147	140.9	21.8
Final Shut In	38	2739.4		X	/	/	/	/

REMARKS

$q = C(\bar{p}_R^2 - p_{wf}^2)^n$

slope n = 1.0

$\bar{p}_R$ = 2749 psia

$C = \dfrac{q}{(\bar{p}_R^2 - p_{wf}^2)^n}$

$= 1.8 \times 10^{-6}$

AOF (MMscfd)

= 14.0

00171

SANTOS LTD.

GAS WELL DELIVERABILITY TEST CALCULATIONS
(Base Conditions = 14.65 psia and 60°F)

LIT (ψ) ANALYSIS

	Duration (hours)	Sandface Pressure (psia)	ψ ($\times 10^6$ psia^2/cp)	$\Delta\psi$ ($\times 10^6$ psia^2/cp)	Flow Rate (q) (MMscfd)	$\Delta\psi/q$	q^2	$\Delta\psi - bq^2$
Initial Shut In	55	2754.8	502.5	/	/	/	/	
Flow 1	2	2528.0	431.6	70.9	1.950	36.4	3.803	70.8
Shut In	2	2787.2	512.9	/	/	/	/	
Flow 2	2	2235.9	345.5	167.4	3.521	47.5	12.397	166.9
Shut In	2	2793.9	515.0	/	/	/	/	
Flow 3	2	2069.5	299.4	215.6	4.855	44.4	23.571	214.7
Shut In	2	2766.2	506.2	/	/	/	/	
Flow 4	2	1894.9	253.7	252.5	6.674	37.8	44.542	250.8
Total=	/	/	/	706.4	17.000	166.1	84.313	703.1
Extended Flow	12	2056.5	295.9	201.7	6.147	32.8	37.786	200.2
Final Shut In	38	2739.4	497.6	/	/	/	/	

SANTOS LTD.

GAS WELL DELIVERABILITY TEST CALCULATIONS

L.I.T. ($\bar{\Psi}$) ANALYSIS

DISCARDED POINT —

N = 4 $\bar{\Psi}_R$ = 500.6 MMpsia²/cp

$$a, a_t = \frac{\Sigma\frac{\Delta\Psi}{q}\,\Sigma q^2 - \Sigma q\,\Sigma\Delta\Psi}{N\,\Sigma q^2 - \Sigma q\,\Sigma q} = 41.4$$

$$b = \frac{N\Sigma\,\Delta\Psi - \Sigma q\,\Sigma\frac{\Delta\Psi}{q}}{N\,\Sigma q^2 - \Sigma q\,\Sigma q} = .039$$

(EXTENDED FLOW)

$\Delta\Psi$ = 201.7 q = 6.147 b = 0.039

$$a = \frac{\Delta\Psi - bq^2}{q} = 32.6$$

A.O.F. = 15.1 MMSCFD n = 1.0

Total Volume of Gas Produced During Test = 4.49 MMSCF

Condensate = 112 Bbls

Water = 23 Bbls

REMARKS AOF includes prod from Patchawarra Formation.

RESULTS

TRANSIENT FLOW: $\bar{\Psi}_R - \Psi_{wf} = a_t q + bq^2$

i.e. 500.6 $- \Psi_{wf} =$ 41.4 $q +$ .039 q^2

STABLIZED FLOW: $\bar{\Psi}_R - \Psi_{wf} = aq + bq^2$

i.e. 500.6 $- \Psi_{wf} =$ 32.6 $q +$ .039 q^2

DELIVERABILITY:

$$q = \frac{1}{2b}\left[-a + \sqrt{a^2 + 4b\,(\bar{\Psi}_R - \Psi_{wf})}\right]$$

FOR $\Psi_{wf} = 0$, q = AOF = 15.1 MMscfd

00173

WP 2548G

Interpreted by SS/PAB APRIL '87

The Australian
Mineral Development
Laboratories

Flemington Street, Frewville,
South Australia 5063
Phone Adelaide (08) 79 1662
Telex AA82520

Please address all
correspondence to
P.O. Box 114 Eastwood
SA 5063
In reply quote:

amdel

12 July 1985

PS 3/520/0

Santos Limited
39 Grenfell Street
ADELAIDE SA 5000

Attention: Mr A. Wenk

REPORT PS 5188/85

YOUR REFERENCE:	000262
IDENTIFICATION:	Kidman No. 3 Upper
MATERIAL:	Gas, condensate, HP condensate
DATE RECEIVED:	19 June 1985
WORK REQUIRED:	R1.1, 2.1, 2.2, 2.3, 2.5

Investigation and Report by: Andrew Koutrouzas, David Fawcett

Chief, Petroleum Services Section: Dr Brian G. Steveson

Brian G. Steveson

for Dr William G. Spencer
Manager, Mineral and Materials Sciences Division

ba

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Telephone (077) 75 1377

Kidman No. 3 Upper

6485-6519 Toolachee Fm

360 psi 95 deg F

1700 hrs 30/5/85 Bomb PE 014

	Mol. %
Carbon dioxide	0.65
Methane	4.80
Ethane	1.00
Propane	0.58
i-Butane	0.11
n-Butane	0.22
i-Pentane	0.12
n-Pentane	0.18
Hexanes	0.55
Heptanes	1.85
Octanes and higher	1.65
Oxygen plus nitrogen	Balance = 88.29 %

AMDEL

LIQUID HYDROCARBON ANALYSIS

KIDMAN NO.3 UPPER
TOOLACHEE FM. 6485-6519 FT.
360 PSI 95 DEG F.
30/5/85
-

BOILING POINT RANGE (DEG.C)	CARBON NUMBER	% BY WEIGHT	MOL %
-88.6	ETHANE	0.19	0.66
-42.1	PROPANE	1.35	3.20
-11.7	I-BUTANE	1.05	1.90
-0.5	N-BUTANE	3.27	5.85
27.9	I-PENTANE	3.08	4.45
36.1	N-PENTANE	4.54	6.55
36.1-68.9	C-6	9.98	12.10
80.0	BENZENE	0.32	0.43
68.9-98.3	C-7	14.90	15.50
100.9	METHYLCYCLOHEXANE	8.74	9.30
110.6	TOLUENE	2.01	2.30
98.3-125.6	C-8	13.70	12.50
136.1-144.4	ETHYLBENZ.+ XYLENES	2.18	2.15
125.6-150.6	C-9	9.88	8.05
150.6-173.9	C-10	7.80	5.70
173.9-196.1	C-11	4.73	3.15
196.1-215.0	C-12	2.83	1.75
215.0-235.0	C-13	2.36	1.35
235.0-252.2	C-14	1.68	0.89
252.2-270.6	C-15	1.39	0.68
270.6-287.8	C-16	1.01	0.47
287.8-302.8	C-17	0.83	0.36
302.8-317.2	C-18	0.69	0.28
317.2-330.0	C-19	0.44	0.17
330.0-344.4	C-20	0.34	0.13
344.4-357.2	C-21	0.23	0.08
357.2-369.4	C-22	0.16	0.05
369.4-380.0	C-23	0.11	0.03
380.0-391.1	C-24	0.08	0.02
391.1-401.7	C-25	0.05	0.01
401.7-412.2	C-26	0.04	0.01
412.2-422.2	C-27	0.03	0.01
>422.2	C-28 + HIGHER H'CARBONS	0.01	0.00

0 = LESS THAN 0.01%

THE ABOVE BOILING POINT RANGES REFER TO THE NORMAL PARAFFIN HYDROCARBON BOILING IN THAT RANGE.
AROMATICS, BRANCHED HYDROCARBONS, NAPHTHENES AND OLEFINS MAY HAVE HIGHER OR LOWER CARBON NUMBERS BUT ARE GROUPED AND REPORTED ACCORDING TO THEIR BOILING POINTS.

Average molecular weight of C-8 plus fraction (calc)= 31 gm/mol

Specific gravity of C-8 plus fraction (calc)= .806 at 15.6 deg.c)

PHYSICAL PROPERTIES

KIDMAN NO.3 UPPER
TOOLACHEE FM. 6485-6519 FT.
360 PSI 95 DEG F.
30/5/85

Kinematic viscosity = 0.68 centistokes at 37.8 deg.c)

Pour point = <-25 (deg.c)

B.S. & W. = TRACE %

SPECIFIC GRAVITY (15.6 DEG.C)= 0.735

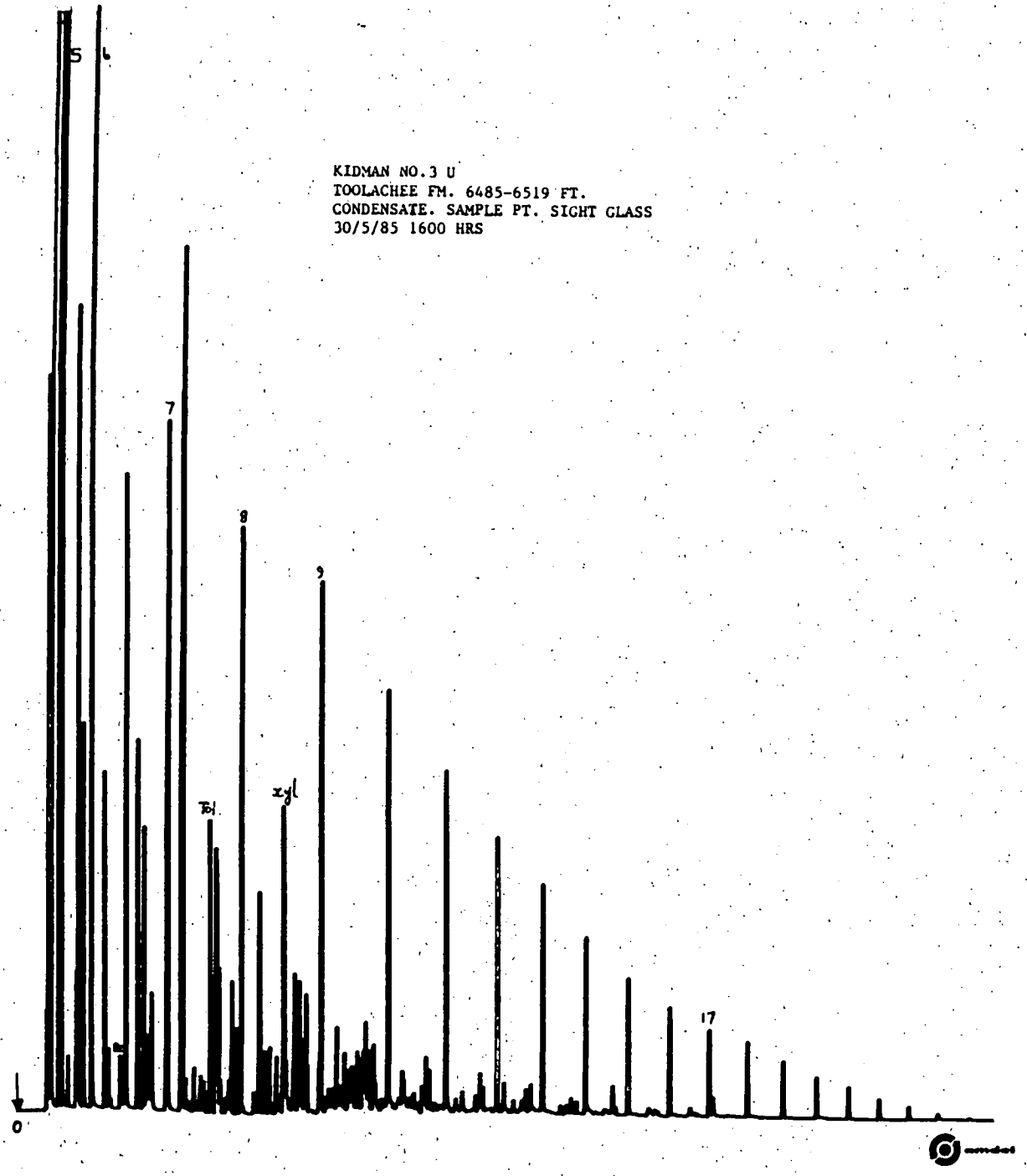
API GRAVITY (15.6 DEG.C)= 61

USBM DISTILLATION

boiling range (deg.c)	vol %	sum %	sp gr (15.6 deg)	corr index
RT-50	2.0	2.0	-----	----
50-100	19.0	21.0	0.694	11.7
100-150	37.5	58.5	0.743	17.4
150-200	14.0	72.5	0.771	17.0
200-250	7.5	80.0	0.793	16.5
250-300	4.5	84.5	0.810	16.3

initial boiling point = 31 deg.c
final boiling point = 292 deg.c (started cracking)

weight of distillate = 63.12 gms
weight of residue = 2.35 gms
loss = 6.6 gms
recovery = 90.8 %


KIDMAN NO.3 U
TOOLACHEE FM. 6485-6519 FT.
CONDENSATE. SAMPLE PT. SIGHT GLASS
30/5/85 1600 HRS
5
6
7
8
9
Et
xyl
17
0

AMDEL HIGH PRESSURE LIQUID HYDROCARBON ANALYSIS

KIDMAN NO.3 U
TOOLACHEE FM. 6485-6519 FT.
360 PSI 95 DEG.F.
EX SIGHT GLASS 30/5/85
-

The sample was released to air temperature and pressure by displacement with saturated brine solution to yield a flash gas and a liquid. The volume of each was measured, both fractions were then analysed chromatographically and the results combined mathematically to give an analysis of the sample as received.
The sample yielded 291 millilitres of liquid and 9 litres of gas at 13.8 degrees celsius.

FLASH GAS ANALYSIS

GAS	% MOL VOL
NITROGEN	1.55
CARBON DIOXIDE	5.40
METHANE	19.15
ETHANE	24.60
PROPANE	25.40
I-BUTANE	4.75
N-BUTANE	9.45
I-PENTANE	2.50
N-PENTANE	2.65
HEXANES	1.80
HEPTANES	1.50
OCTANES + HIGHER H'CARBONS	1.35

Calculated gas density (rel air = 1) = 1.415

Calorific value (15.6 deg.c, 760 mm Hg)

Gross = 2188 Btu/cu.ft (81.52 MJ/cu.m)
Nett = 2010 Btu/cu.ft (74.88 MJ/cu.m)

KIDMAN NO.3 U

LIQUID ANALYSIS

BOILING POINT RANGE (DEG.C)	CARBON NUMBER	% BY WEIGHT	MOL %
-88.6	ETHANE	0.14	0.49
-42.1	PROPANE	1.55	3.60
-11.7	I-BUTANE	1.25	2.20
-0.5	N-BUTANE	3.80	6.70
27.9	I-PENTANE	3.40	4.80
36.1	N-PENTANE	5.00	7.10
36.1-68.9	C-6	10.15	12.10
80.0	BENZENE	0.32	0.43
68.9-98.3	C-7	14.80	15.15
100.9	METHYLCYCLOHEXANE	8.80	9.20
110.6	TOLUENE	2.10	2.30
98.3-125.6	C-8	13.15	11.85
136.1-144.4	ETHYLBENZ.+ XYLENES	2.75	2.65
125.6-150.6	C-9	8.80	7.05
150.6-173.9	C-10	7.35	5.30
173.9-196.1	C-11	4.40	2.90
196.1-215.0	C-12	2.70	1.65
215.0-235.0	C-13	2.35	1.30
235.0-252.2	C-14	1.65	0.86
252.2-270.6	C-15	1.45	0.71
270.6-287.8	C-16	1.00	0.45
287.8-302.8	C-17	0.78	0.33
302.8-317.2	C-18	0.73	0.29
317.2-330.0	C-19	0.48	0.18
330.0-344.4	C-20	0.33	0.12
344.4-357.2	C-21	0.26	0.09
357.2-369.4	C-22	0.18	0.06
369.4-380.0	C-23	0.12	0.04
380.0-391.1	C-24	0.07	0.02
391.1-401.7	C-25	0.05	0.01
401.7-412.2	C-26	0.04	0.01
412.2-422.2	C-27	0.02	0.01
>422.2	C-28 + HIGHER H'CARBONS	0.00	0.00

0 = less than 0.01%

THE ABOVE BOILING POINT RANGES REFER TO THE NORMAL PARAFFIN HYDROCARBON BOILING IN THAT RANGE.
AROMATICS, BRANCHED HYDROCARBONS, NAPHTHENES AND OLEFINS MAY HAVE HIGHER OR LOWER CARBON NUMBERS BUT ARE GROUPED AND REPORTED ACCORDING TO THEIR BOILING POINTS.

Specific gravity = .734 (at 13.8 deg.c)
Specific gravity = .733 (at 15.6 deg.c)
API gravity = 61.5 (at 15.6 deg.c)
Specific gravity of C-8 plus fraction (calc.) = .812 at 15.6 deg.c
Ave. molecular weight of C-8 plus fraction (calc.) = 129 g/mole

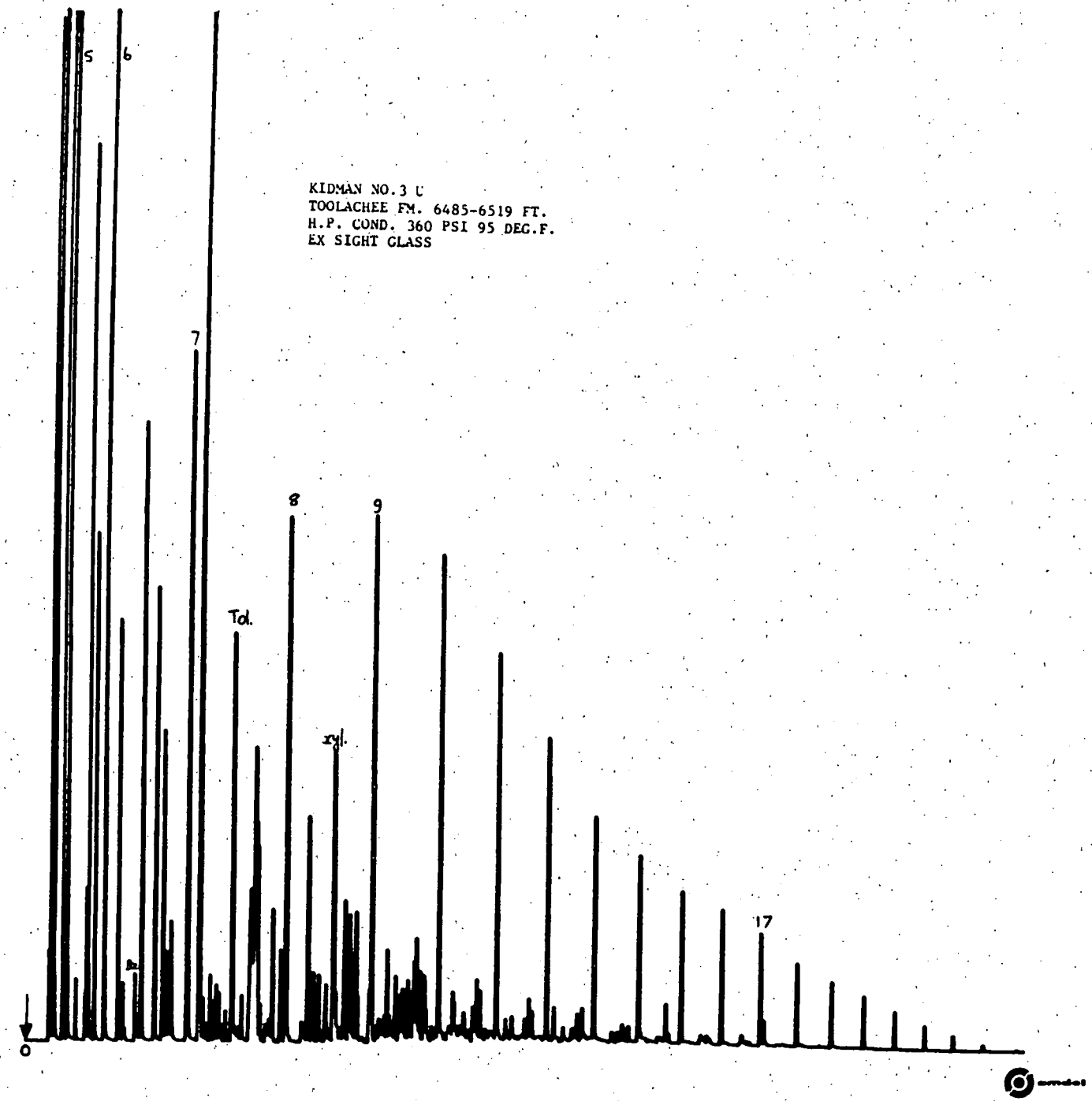
KIDMAN NO.3 U

CALCULATED COMPOSITION OF TOTAL SAMPLE AS RECEIVED

BOILING POINT RANGE (DEG.C)	CARBON NUMBER	% BY WEIGHT	MOL %
-195.8	NITROGEN	0.07	0.24
-78.5	CARBON DIOXIDE	0.40	0.84
-164	METHANE	0.51	3.00
-88.6	ETHANE	1.35	4.25
-42.1	PROPANE	3.30	7.00
-11.7	I-BUTANE	1.60	2.60
-0.5	N-BUTANE	4.45	7.15
27.9	I-PENTANE	3.45	4.45
36.1	N-PENTANE	5.00	6.40
36.1-68.9	C-6	9.75	10.55
80.0	BENZENE	0.30	0.36
68.9-98.3	C-7	13.80	12.85
100.9	METHYLCYCLOHEXANE	8.25	7.80
110.6	TOLUENE	1.95	1.95
98.3-125.6	C-8	12.55	10.25
136.1-144.4	ETHYLBENZ.+ XYLENES	2.55	2.25
125.6-150.6	C-9	8.20	5.95
150.6-173.9	C-10	6.90	4.50
173.9-196.1	C-11	4.10	2.45
196.1-215.0	C-12	2.55	1.40
215.0-235.0	C-13	2.20	1.10
235.0-252.2	C-14	1.55	0.73
252.2-270.6	C-15	1.40	0.60
270.6-287.8	C-16	0.94	0.38
287.8-302.8	C-17	0.73	0.28
302.8-317.2	C-18	0.68	0.25
317.2-330.0	C-19	0.45	0.16
330.0-344.4	C-20	0.31	0.10
344.4-357.2	C-21	0.25	0.08
357.2-369.4	C-22	0.17	0.05
369.4-380.0	C-23	0.11	0.03
380.0-391.1	C-24	0.06	0.02
391.1-401.7	C-25	0.05	0.01
401.7-412.2	C-26	0.03	0.01
412.2-422.2	C-27	0.02	0.00
>422.2	C-28 + HIGHER H'CARBONS	0.00	0.00

0 = less than 0.01%

THE ABOVE BOILING POINT RANGES REFER TO THE NORMAL PARAFFIN HYDROCARBON BOILING IN THAT RANGE.
AROMATICS, BRANCHED HYDROCARBONS, NAPHTHENES AND OLEFINS MAY HAVE HIGHER OR LOWER CARBON NUMBERS BUT ARE GROUPED AND REPORTED ACCORDING TO THEIR BOILING POINTS.


KIDMAN NO.3 C
TOOLACHEE FM. 6485-6519 FT.
H.P. COND. 360 PSI 95 DEG.F.
EX SIGHT GLASS
5
6
7
8
9
Tol.
Xyl.
17
0

00182

ROLLING BOTTOMHOLE PRESSURE SURVEY GAS CALCULATION SHEET

00183

WELL: Kidman # 3 Upper Pf = kPa

ORIFICE SIZE: mm " T = °C

LINE SIZE: mm " Diff = kPa

Cumulative Production to end of June/July '89 = 112.7 $m^3 \times 10^6$

Number of hours online in July '89 = —

Production in July '89 = Nil $m^3 \times 10^6$

. . Average flow rate in July '89 = (— / —) x 24 = Nil $m^3 \times 10^6/d$

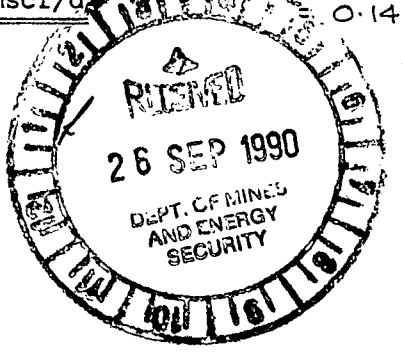
Number of days online in July '89 ~~before~~ after Shut In 1800 hrs 23/7/89
= Nil

. . Production up to 1800 hrs 23/7/89 = Nil x = $m^3 \times 10^6$

Total cumulative production =
= 112.7 $m^3 \times 10^6$
= 4000.174 mmscf ✓

Flow rate just prior to Shut In = Nil $m^3 \times 10^6$
= mmscf/d

Average daily prod for June '89 = 0.004 $m^3 \times 10^6$ = 0.148 mmscf/d ✓



WP 2946G(13)
LGA/jfs : 8/12/86

00184

TELEPHONE (08) 354 0488 TELEX AA87183
EXPERTEST PTY LTD
WIRELINE & WELL TESTING SERVICE
138 RICHMOND ROAD MARLESTON SA 5033 POSTAL ADDRESS: PO BOX 354 COWANDILLA 5033

WIRELINE REPORT

CLIENT SANTOS WELL KIDMAN # 3 UPPER

DATE 20-7-89

PROGRAMME BLIND BOX RUN

PURPOSE OF WORK TO ENSURE TUBING IS FREE OF ANY OBSTRUCTION FOR FLOWING GRADIENT SURVEY

REPORT OF WORK PERFORMED 20TH JULY 1989.

1100 : ARRIVE ON LOCATION, SWI & RIG UP SWAB VALVE.
1111 : PRESSURE TEST SWAB VALVE, OPEN WELL 100% & RIG UP WIRELINE EQUIPMENT.
1140 : RUN IN HOLE WITH 1.75" BLIND BOX TO 6400'KB (AS PER PROGRAMME).
1205 : @ 6400'KB (TUBING CLEAR). P.O.O.H.
1220 : @ SURFACE, RIG OUT TOOLSTRING & PREPARE ELEMENTS FOR FLOWING GRADIENT SURVEY.
1245 : RUN IN HOLE WITH 2 PRESSURE ELEMENTS & M.B.H. THERMOMETER.
1326 : @ BOTTOM STOP 6400'KB
1341 : P.O.O.H
1356 : @ LUBRICATOR
1411 : DEPRESSURE LUBRICATOR, DISENGAGE STYLUS, RECOVER CHARTS (GOOD) & RIG DOWN WIRELINE EQUIPMENT.
1430 : S.W.I. & RIG DOWN SWAB VALVE.
1440 : OPEN WELL 100% TO FLARE TO CLEAN UP.

Operator's Signature

WORKED PERFORMED BY A. SMITH OF EXPERTEST

WELL DATA:

Tubing Size 2 7/8" FWHP 586 KPA. SIWHP

Subsurface S.V./Landing Nipple @ S.S.D. @

'X' Nipple @ 'N'/'XN' Nipple @ Other @

Min. I.D. @ Packer @ 6365'KB

Perforated Interval: TOOLACHEE F.M 6485'KB → 6519'KB

E1

WELL: KIOMAN #3 UPPER

TYPE OF TEST: CLEAN UP

SANTOS LTD.
WELL TEST DATA SHEET

DATE: 14-7-89

PAGE No: #1

DATE / TIME	WELLHEAD					GAS FLOW DATA				OIL/CONDENSATE PRODUCTION			WATER PRODUCTION		WELL TEST RESULTS				
															GAS	OIL	WATER	TOTAL LIQUID	G.O.R.
	CASING KPA	TUBING KPA	TEMP. °C	CHOKE SIZE INS.	B.S.W. %	PI PSI	HW INS.H_2O	TEMP. °F	ORIFICE SIZE INS	TANK DIP INS	TANK PROD BBLS	API GRAVITY @60 °F	TANK DIP INS.	TANK PROD BBLS	FLOW RATE MMSCFD	FLOW RATE BBLS/DAY	FLOW RATE BBLS/DAY	FLOW RATE BBLS/DAY	SCF/BBL
14TH JULY		1989.													CHOKE COEFFICIENT				
1530	0	4620	35	12/64	FLUID TO SURFACE & CHOKE COEFFICIENT OF →										.46	MMSCFD	12.9	M^3	
15TH JULY		1989.																	
1040	0	4723	35	12/64	FLUID TO SURFACE & OPEN CHOKE TO 18/64"										.47	MMSCFD	13.2	M^3	
1055	0	3551	39	18/64	FLUID TO SURFACE & OPEN CHOKE TO 21/64"										.83	MMSCFD	23.4	M^3	
1105	0	2689	40	21/64	FLUID TO SURFACE & OPEN CHOKE TO 24/64"										.87	MMSCFD	24.5	M^3	
1120	0	2468	42	24/64	H_2O & OIL TO SURFACE										1.05	MMSCFD	29.6	M^3	
1130	0	2344	42	24/64	H_2O & OIL TO SURFACE & SLIGHT SLUDGING.										1.01	MMSCFD	28.5	M^3	
1330	0	2744	40	24/64	—— 〃 ——										1.17	MMSCFD	329	M^3	
1730	0	2296	43	24/64	—— 〃 ——										.98	MMSCFD	27.6	M^3	
2130	0	2275	43	24/64	—— 〃 ——										.98	MMSCFD	27.6	M^3	
16TH JULY		1989.																	
1100	0	2275	40	24/64	FLUID TO SURFACE										.98	MMSCFD	276	M^3	
2200	0	2324	39	24/64	FLUID TO SURFACE (LITTLE WATER)										1	MMSCFD	28.2	M^3	
17TH JULY		1989.																	
1000	0	2351	37	24/64	FLUID TO SURFACE. OPEN CHOKE TO 32/64"										1	MMSCFD	28	M^3	
1005	0	1434	42	32/64	—— 〃 ——										1.1	MMSCFD	31	M^3	
1010	0	1407	44	32/64	—— 〃 ——										1.1	MMSCFD	31	M^3	
1015	0	1407	44	32/64	—— 〃 ——										1.1	MMSCFD	31	M^3	
1020	0	1407	44	32/64	—— 〃 ——										1.1	MMSCFD	31	M^3	

OPERATOR A. SMITH

29 MAR 1990
AND ENLI
SECU
5653
00185

WELL: KIDMAN #3 UPPER

TYPE OF TEST: CLEAN UP

SANTOS LTD.

WELL TEST DATA SHEET

DATE: 17-7-89

PAGE No: #2

DATE / TIME	WELLHEAD					GAS FLOW DATA				OIL/CONDENSATE PRODUCTION			WATER PRODUCTION		WELL TEST RESULTS				
															GAS	OIL	WATER	TOTAL LIQUID	G.O.R.
	CASING KPa	TUBING KPa	TEMP. °C	CHOKE SIZE INS.	B.S.W. %	Pf PSI	HW INS.H_2O	TEMP. °F	ORIFICE SIZE INS	TANK DIP INS.	TANK PROD BBLS	API GRAVITY @60 °F	TANK DIP INS.	TANK PROD BBLS	FLOW RATE MMSCFD	FLOW RATE BBLS/DAY	FLOW RATE BBLS/DAY	FLOW RATE BBLS/DAY	SCF/BBL
17TH JULY		1989													CHOKE COEFFICIENT				
1730	0	1323	45	32/64		LITTLE FLUID TO SURFACE									1 mmscfd	28.2	m^3		
2200	0	1323	48	32/64		FLUID TO SURFACE									1 mmscfd	28.2	m^3		
18TH JULY		1989																	
1130	0	1392	46	32/64		LITTLE FLUID TO SURFACE				OPEN CHOKE TO 48/64"					1 mmscfd	28.2	m^3		
1230	0	786	48	48/64		FLUID TO SURFACE.									1.5 mmscfd	42	m^3		
1700	0	806	47	48/64		FLUID TO SURFACE.									1.6 mmscfd	45	m^3		
2030	0	772	51	48/64		LITTLE FLUID TO SURFACE.									1.5 mmscfd	42	m^3		
19TH JULY		1989																	
1430	0	738	50	48/64		LITTLE FLUID TO SURFACE.				OPEN CHOKE TO 64/64"					1.4 mmscfd	39.4	m^3		
1630	0	537	51	64/64		LITTLE FLUID TO SURFACE.									2 mmscfd	56.3	m^3		
2230	0	586	50	64/64		LITTLE FLUID TO SURFACE.									2 mmscfd	56.3	m^3		
20TH JULY		1989.																	
1100	0	586	44	64/64		LITTLE FLUID TO SURFACE.									2.2 mmscfd	61.9	m^3		
1100						FLOWING GRADIENT PERFORMED (REFER TO WIRELINE REPORT & GRADIENT SURVEY SHEETS).														
1440						FLOWING GRADIENT SURVEY COMPETED & CONTINIUE CLEAN UP FLOW.														
2200	0	579	50	64/64		LITTLE FLUID TO SURFACE.									2.1 mmscfd	59.1	m^3		
21ST JULY		1989.																	
1100	0	593	49	64/64		LITTLE FLUID TO SURFACE.									2.2 mmscfd	61.9	m^3		
1530	0	614	48	64/64		LITTLE FLUID TO SURFACE.									2.2 mmscfd	61.9	m^3		

OPERATOR A. SMITH

00100

WELL: KIOMAN #3 UPPER

TYPE OF TEST: CLEAN UP

SANTOS LTD.

WELL TEST DATA SHEET

DATE: 21-7-89

PAGE No: #3.

DATE / TIME	WELLHEAD					GAS FLOW DATA				OIL/CONDENSATE PRODUCTION			WATER PRODUCTION		WELL TEST RESULTS				
															GAS	OIL	WATER	TOTAL LIQUID	G.O.R.
	CASING KPA	TUBING KPA	TEMP. °C	CHOKE SIZE INS.	B.S.W. %	PI PSI	HW INS.H_2O	TEMP. °F	ORIFICE SIZE INS	TANK DIP INS	TANK PROD BBLS	API GRAVITY @60 °F	TANK DIP INS.	TANK PROD BBLS	FLOW RATE MMSCFD	FLOW RATE BBLS/DAY	FLOW RATE BBLS/DAY	FLOW RATE BBLS/DAY	SCF/BBL
21ST	JULY	1989.													CHOKE COEFFICIENT				
2230	0	600	50	64/64		LITTLE FLUIDS TO SURFACE.									2.2	mmSCFD	61.9	M^3	
22ND	JULY	1989.																	
1715	0	613	51	64/64		LITTLE FLUID TO SURFACE.									2.2	mmSCFD	61.9	M^3	
2300	0	613	51	64/64		LITTLE FLUID TO SURFACE.									2.2	mmSCFD	61.9	M^3	
23RD	JULY	1989.																	
1100	0	648	51	64/64		LITTLE FLUID TO SURFACE.									2.3	mmSCFD	64.8	M^3	
1100						S.W.I. & RIG UP SWAB VALVE, WIRELINE EQUIPMENT -													
						- FOR BOTTOM HOLE PRESSURE SURVEY.													
1142						OPEN WELL TO 64/64" CHOKE & START SURVEY.													
						NOTE: FOR B.H.P. SURVEY INFORMATON REFER TO BOMB DATA SHEETS.													

OPERATOR A.SMITH

00187

00188

EXPERTEST PTY. LTD.
WIRELINE & WELL TESTING SERVICE
PO BOX 354 COWANDILLA 5033
PH. (08) 354 0488 TELEX AA87183
FAX (08) 43 7408
138 RICHMOND ROAD MARLESTON
SOUTH AUSTRALIA 5033

Tested Thursday, 20th July 1989.

CLIENT	LOCATION	FORMATION
Santos Ltd.	KIDMAN#3UPPER	TOOLACHEE

FLOWING PRESSURE GRADIENT REPORT

PRESSURE ELEMENT DATA			
POSITION	SERIAL NO.	RANGE	CALIBRATED
Top	56432	3000	15/ 6/89
Bottom	62040	3000	15/ 6/89

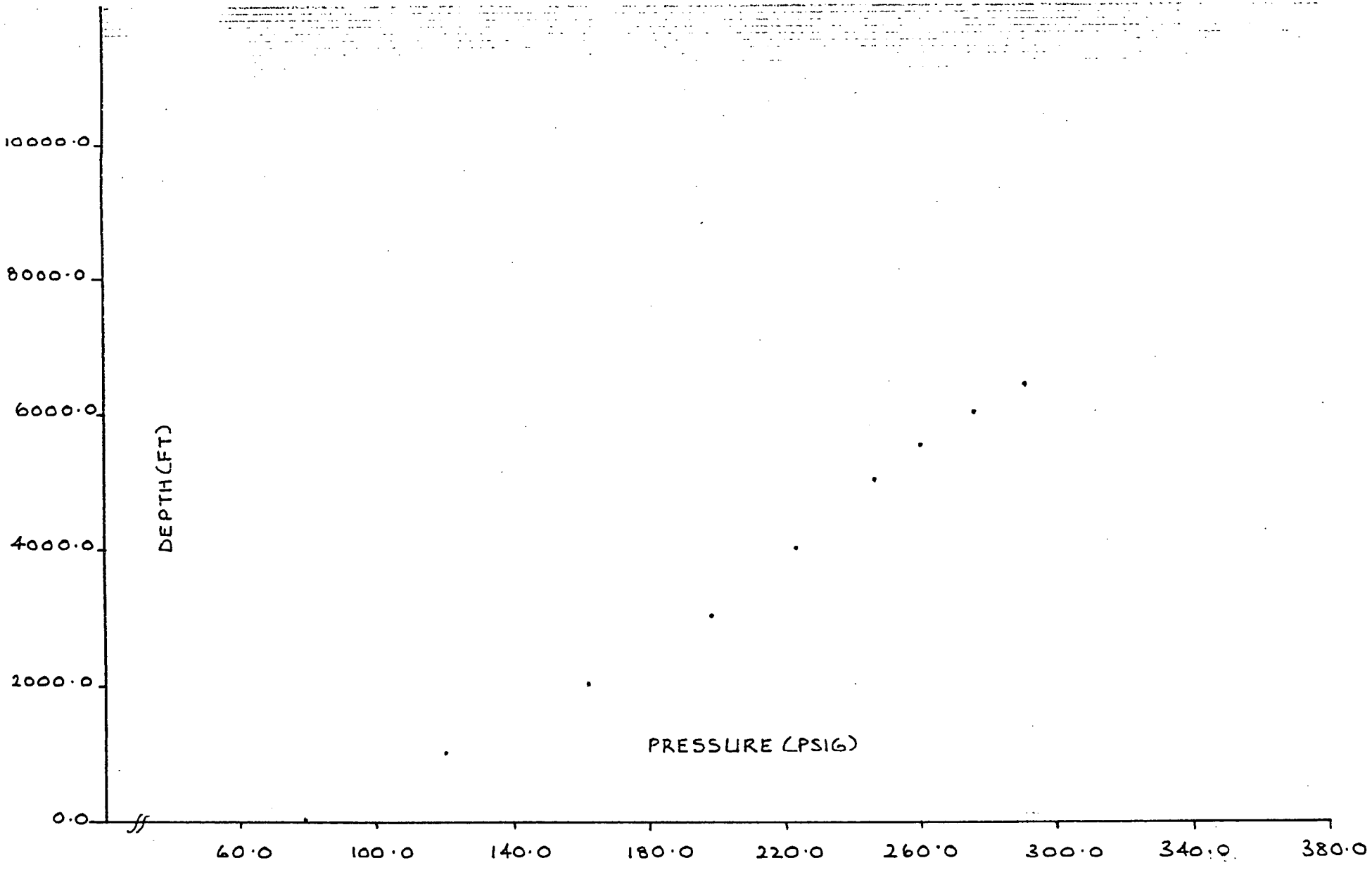
WELL DATA	
PARAMETER	VALUE
DWT In	86 PSI
DWT Out	86 PSI
Max BHT	150 F

	TOP ELEMENT			BOTTOM ELEMENT		
DEPTH FT KB	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT
LUB.	0.0530	79.0	-----	0.0520	79.9	-----
1000	0.0800	120.4	0.041	0.0780	120.5	0.041
2000	0.1070	161.9	0.042	0.1040	161.0	0.041
3000	0.1310	198.8	0.037	0.1270	196.8	0.036
4000	0.1470	223.4	0.025	0.1430	221.7	0.025
5000	0.1620	246.5	0.023	0.1570	243.5	0.022
5500	0.1710	260.3	0.028	0.1660	257.5	0.028
6000	0.1810	275.7	0.031	0.1760	273.1	0.031
6400	0.1910	291.1	0.039	0.1840	285.5	0.031
LUB.	0.0550	82.1	-----	0.0520	79.9	-----

GENERAL REMARKS

KIDMAN # 3 UPPER — FLOWING PRESSURE GRADIENT — 20/7/89

ELEMENT # 56432/3000 (TOP)



EXPERTEST PTY LTD
WIRELINE & WELL TESTING SERVICE
TELEPHONE (08) 354 0488 TELEX AA87183
138 RICHMOND ROAD MARLESTON SA 5033 POSTAL ADDRESS: PO BOX 354 COMANDILLA 5033

FLOWING ~~STATIC~~ GRADIENT SURVEY

CLIENT SANTOS OPERATOR A. SMITH DATE 20-7-89

WELL KIDMAN # 3 UPPER

BOMB No. 1 DATA

ELEMENT No. 56432 ELEMENT RANGE 3000 PSI
RECORDER No 34083 CLOCK DATA 2387 x 3HR
ENGAGE STYLUS 1223 DISENGAGE 1415
PRESSURE LUBRICATOR 1230

BOMB No 2 DATA

ELEMENT No. 62040 ELEMENT RANGE 3000PSI
RECORDER No 14927 CLOCK DATA 2360 x 3HR
ENGAGE STYLUS 1233 DISENGAGE 1415
BLEED LUBRICATOR 1411

DWT IN 593 KPA
DWT OUT 593 KPA

DATE	TIME	DEPTH'	DEFLEC-TION	PRESSURE TEMP.	GRADIENT psi/ft	DEPTH'	DEFLEC-TION	PRESSURE TEMP.	GRADIENT psi/ft	REMARKS
				KPA				KPA		
20TH JULY	1989									
	1230	LUB	·053			LUB	·052			PRESSURE LUBRICATOR.
	1245	R.I.H				R.I.H				RUN IN HOLE.
	1246	1000	·080			1000	·078			
	1252	2000	·107			2000	·104			
	1258	3000	·131			3000	·127			
	1303	4000	·147			4000	·143			
	1309	5000	·162			5000	·157			
	1315	5500	·171			5500	·166			
	1321	6000	·181			6000	·176			
	1326	6400	·191	2007		6400	·184	1969		
	1341	P.O.O.H				P.O.O.H				PULL OUT OF HOLE.
	1356	LUB	·055			LUB	·052			@ LUBRICATOR.
	1411	BLEED				BLEED				DEPRESSURE LUBRICATOR.

GENERAL REMARKS: M.B.H. TEMPERATURE = 66°C

00190

TELEPHONE (08) 354 0488 TELEX AA87183
EXPERTEST PTY LTD
WIRELINE & WELL TESTING SERVICE
138 RICHMOND ROAD MARLESTON SA 5033 POSTAL ADDRESS: PO BOX 354 COWANDILLA 5033

WIRELINE REPORT

CLIENT SANTOS WELL KIDMAN #3 UPPER

DATE 23·7·89

PROGRAMME BOTTOM HOLE PRESSURE SURVEY

PURPOSE OF WORK

REPORT OF WORK PERFORMED 23RD JULY 1989

1100 : ARRIVE ON LOCATION, S.W.I & RIG UP WIRELINE UNIT.
NOTE: DUMMY RUN WAS PERFORMED PRIOR GRADIENT.
1142 : OPEN WELL TO 64/64" CHOKE & PRESSURE LUBRICATOR.
1342 : R.I.H WITH 2 PRESSURE ELEMENTS WITH M.B.H THERMOMETER.
1356 : @ B.H.P HANG DEPTH 6400' KB
1900 : S.W.I & MONITOR BUILD UP.

27TH JULY 1989.

07:00 : POOH.
07:17 : HANG IN LUBRICATOR
09:17 : DEPRESSURE LUBRICATOR.
PREPARE GAUGES FOR STATIC GRADIENT AS PER PROGRAMME.

10:01 : RIH WITH 2 PRESSURE ELEMENTS AND MBH THERMOMETER.
10:52 : @ 6400' KB.
11:07 : POOH.
11:26 : @ SURFACE
11:41 : DEPRESS. LUB., RECOVER CHARTS, R/D EXT W/L UNIT + HAND WELL BACK TO PRODUCTION.

A. Smith.
Operator's Signature

WORKED PERFORMED BY A. SMITH OF EXPERTEST

WELL DATA: NOTE : DOWNHOLE INFORMATION ON WIRELINE REPORT #1.

Tubing Size FWHP SIWHP

Subsurface S.V./Landing Nipple @ S.S.D. @

'X' Nipple @ 'N'/'XN' Nipple @ Other @

Min. I.D. @ Packer @

Perforated Interval:

E1

SUB-SURFACE PRESSURE SURVEY

00192

CO.		RUN 01	FIELD KIDMAN	WELL 03U	
[redacted]F DEPTH		WELL STAT		TOOL HUNG	6394'
C[redacted]SING	-	CASING PRESS		ON BOTTOM	1356 23/7
LINER	-	TUBING PRESS		OFF BOTTOM	0700 27/7
DATE	890727	ELEMENT RANGE	0 - 4097	ZERO POINT	
[redacted]EVATION		ZONE		SHUT-IN	1800 23/7
MAX TEMP	252 F	PICK-UP		ON-PROD	
PERF	-	CAL SER NO.	45743	MPP	
T[redacted]BING	-				
U[redacted]ITS	ENGLISH	PURPOSE	BUILD-UP & FLOW		

SURVEY DATA

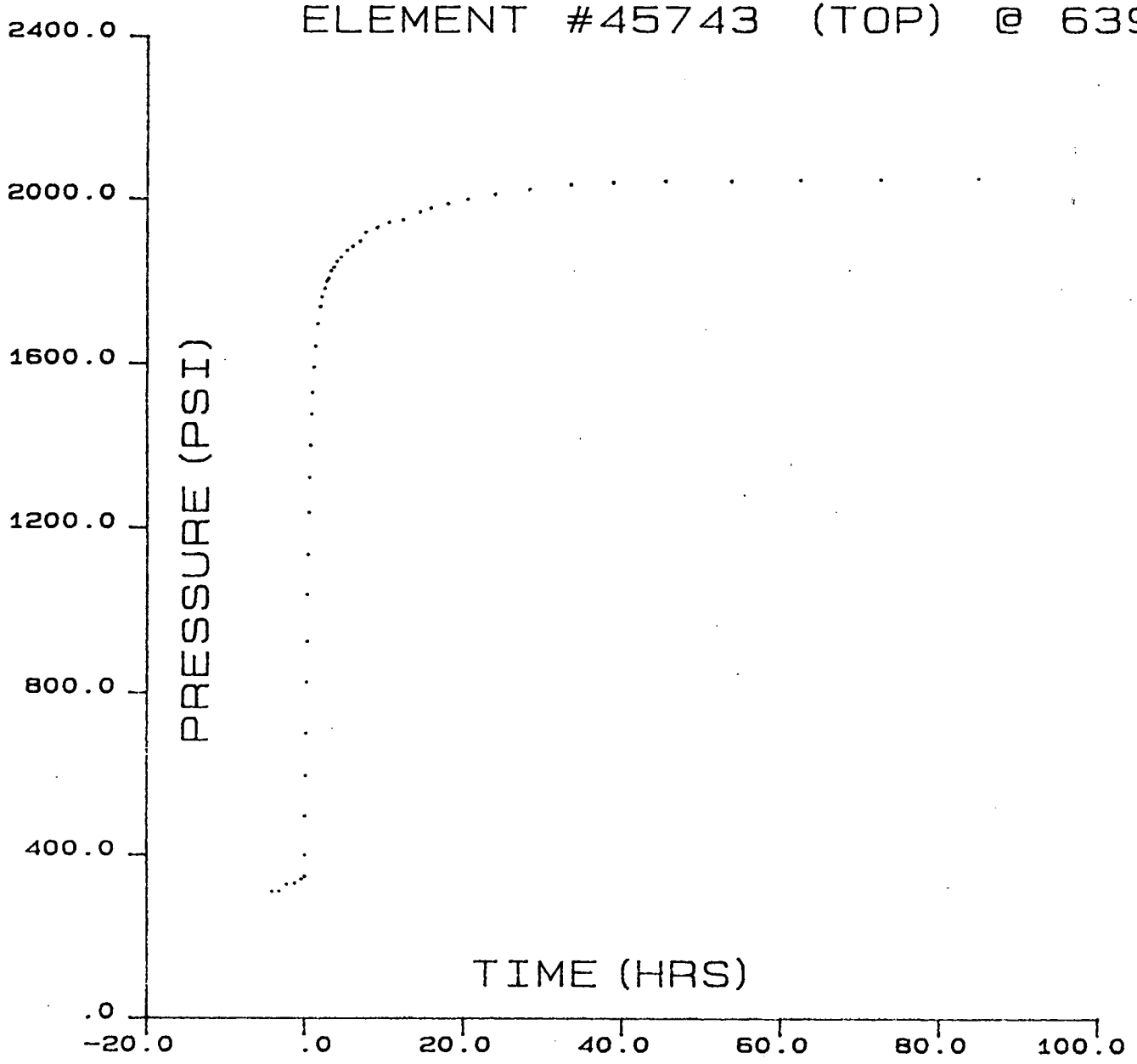
CO. RUN 01 FIELD KIDMAN WELL 03U

TIME	P-T	DP-DT	DTIME	TIME	P-T	DP-DT	DTIME
[redacted]18:00	346.4	346.4	.0	23:19	1876.0	1876.0	5.3
[redacted]18:01	399.9	399.9	.0	0:00	1885.3	1885.3	6.0
18:03	495.3	495.3	.1	0:58	1898.6	1898.6	7.0
[redacted]18:07	595.4	595.4	.1	1:40	1918.7	1918.7	7.7
[redacted]18:10	699.4	699.4	.2	3:07	1931.3	1931.3	9.1
18:14	825.2	825.2	.2	4:36	1943.4	1943.4	10.6
[redacted]18:17	922.7	922.7	.3	6:22	1950.4	1950.4	12.4
[redacted]18:20	1036.2	1036.2	.3	8:31	1968.8	1968.8	14.5
18:24	1132.5	1132.5	.4	9:52	1977.8	1977.8	15.9
18:30	1236.3	1236.3	.5	12:03	1989.6	1989.6	18.0
[redacted]18:38	1322.9	1322.9	.6	14:30	2000.5	2000.5	20.5
[redacted]18:45	1400.8	1400.8	.8	17:59	2013.8	2013.8	24.0
18:54	1477.2	1477.2	.9	22:21	2024.9	2024.9	28.3
[redacted]19:00	1530.8	1530.8	1.0	3:34	2036.2	2036.2	33.6
[redacted]19:11	1590.8	1590.8	1.2	8:54	2040.5	2040.5	38.9
19:22	1643.4	1643.4	1.4	15:30	2043.5	2043.5	45.5
[redacted]19:38	1696.8	1696.8	1.6	23:49	2043.3	2043.3	53.8
[redacted]19:57	1740.0	1740.0	2.0	8:30	2047.1	2047.1	62.5
20:09	1763.3	1763.3	2.1	18:41	2048.7	2048.7	72.7
20:30	1783.0	1783.0	2.5	7:00	2051.8	2051.8	85.0
[redacted]20:45	1799.7	1799.7	2.8	13:46	308.8	308.8	-4.2
[redacted]20:57	1807.0	1807.0	2.9	14:45	310.8	310.8	-3.2
21:18	1825.9	1825.9	3.3	15:40	326.6	326.6	-2.3
[redacted]21:37	1834.8	1834.8	3.6	16:44	329.6	329.6	-1.3
[redacted]22:01	1848.1	1848.1	4.0	17:35	340.7	340.7	-.4
22:32	1859.4	1859.4	4.5	18:00	346.2	346.2	.0

L[redacted]B IN DWT = 96 PSI / OUT = 1676 PSI
LUB INA MERADA = 102 PSI / OUT = 1660 PSI

KIDMAN #3U JULY 1989

ELEMENT #45743 (TOP) @ 6394'KB



TELEPHONE (08) 354 0488 TELEX AA87183

EXPERTEST PTY LTD
WIRELINE & WELL TESTING SERVICE

138 WEST BEACH ROAD MARLESTON SA 5033 POSTAL ADDRESS: PO BOX 354 COWANDILLA 5033

Well: KIDMAN # 3 UPPER Date: 23-7-89

Lubricator Data:

Operator A.SMITH

Pressure with D.W.T. In 662 KPA Out 11556 KPA

Time Pressured 1142 23-7-89 Time Depressured 09:17 27/7/89

Time Run in Hole 1342 —11— Time off Bottom 07:00 —11—

	Bomb No. 1 Data	Bomb No. 2 Data
Element No. and Range	D45743 × 4000PSI	D45735 × 4000PSI
Recorder No.	55338 × 15TLS	55337 × 15TLS
Clock and Lead Screw Data	15691 × 120HR	15690 × 120HR
Engage Stylus	Date: 23-7-89 Time: 1134	Date: 23-7-89 Time: 1134
Disengage	Date: 27/7/89 Time: 09:25	Date: 27/7/89 Time: 09:25

Remarks: M.B.H TEMPERATER = 252°F

Well-Head Data for Final Build-up

Date	Time	Hours shut-in Time	KPA Wellhead	KPA Casing	°C Wellhead Temp.	Remarks
23RD	JULY	1989.				
	1134					ENGAGE STYLUS
	1142					PRESSURE LUBRICATOR
	1342		662	0	47	R.I.H
	1356		648		45	@HANG DEPTH 6400'KB.
	1400		648		45	(WELL FLOWING 64/64")
	1500		648		46	
	1600		641		47	
	1700		627		47	
	1800		627		47	S.W.I. FOR BUILD UP.
	1805		3530		46	
	1810		4827		45	
	1815		5716		43	
	1830	.5	7612		39	
	1845		8543		33	
	1900	1	9122		27	
	1915		9446		22	
	1930		9653		22	
	1945		9825		22	
	2000	2	9963		22	
	2015		10108		22	
	2030		10177		20	
	2045		10246		19	
	2100	3	10336	0	18	

00195

TELEPHONE (08) 354 0488 TELEX AA87183

EXPERTEST PTY LTD
WIRELINE & WELL TESTING SERVICE

138 WEST BEACH ROAD MARLESTON SA 5033 POSTAL ADDRESS: PO BOX 354 COWANDILLA 5033

Well: KIDMAN #3 UPPER Date: 23-7-89

Lubricator Data:

Operator A.SMITH

Pressure with D.W.T. In

Out

Time Pressured

Time Depressured

Time Run in Hole

Time off Bottom

	Bomb No. 1 Data		Bomb No. 2 Data	
Element No. and Range				
Recorder No.				
Clock and Lead Screw Data				
Engage Stylus	Date:	Time:	Date:	Time:
Disengage	Date:	Time:	Date:	Time:

Remarks: REFER TO PAGE #1. FOR ELEMENT INFORMATION.

Well-Head Data for Final Build-up

Date	Time	Hours shut-in Time	KPA Wellhead	KPA Casing	°C Wellhead Temp.	Remarks
23RD	JULY	1989.				
	2115		10405	0	17	
	2130		10453		16	
	2145		10501		15	
	2200	4	10549		14	
24TH	JULY	1989.				
	0200		10859		10	
	0600	12	11087		7	
	1000		11230		14	
	1400		11404		21	
	1800	24	11446		16	
	2200		11473		10	
25TH	JULY	1989.				
	0200		11494		7	
	0600	36	11508		4	
	1000		11591		16	
	1400		11625		25	
	1800	48	11591		20	
	2200		11584		17	
26TH	JULY	1989.				
	0200		11563		15	
	0600	60	11556		12	
	1000					
	14:00		11570	0	24	

00196

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EXPERTEST PTY LTD
WIRELINE & WELL TESTING SERVICE

138 RICHMOND ROAD MARLESTON SA 5033 POSTAL ADDRESS: PO BOX 354 COWANDILLA 5033

Well: KIDMAN #3 UPPER Date: 26/7/89

Lubricator Data: Operator R. MOORE

Pressure with D.W.T. In Out

Time Pressured Time Depressured

Time Run in Hole Time off Bottom

	Bomb No. 1 Data		Bomb No. 2 Data	
Element No. and Range				
Recorder No.				
Clock and Lead Screw Data				
Engage Stylus	Date:	Time:	Date:	Time:
Disengage	Date:	Time:	Date:	Time:

Remarks: FOR ALL ELEMENT DATA : REFER TO PAGE #1

Well-Head Data for Final Build-up

Date	Time	Hours shut-in Time	Wellhead KPA	Casing KPA	Wellhead Temp. °C	Remarks
26TH	JULY	1989				
	18:00		11556	Ø	23	
	22:00		11542	↑	15	
27TH	JULY	1989				
	02:00		11542		11	
	06:00	84	11535		8	
	07:00		11542		8	PULL OUT OF HOLE.
	07:17		11556			HANG IN LUBRICATOR.
	09:17		11556			DEPRESSURE LUB.
	09:25					DISENGAGE STYLUS.
		PREPARE GAUGES FOR STATIC GRADIENT - AS PER PROGRAMME.				
	09:46		11542			PRESS. LUBRICATOR.
	10:01		11563			RUN IN HOLE
	10:52		11584			@ 6400' KB.
	11:07					PULL OUT OF HOLE.
	11:26			↓		@ SURFACE.
	11:41			Ø		DEPRESSURE LUB.
		FOR DETAILS SEE ATTACHED GRADIENT REPORT.				

EXPERTEST PTY LTD
WIRELINE & WELL TESTING SERVICE
138 RICHMOND ROAD MARLESTON SA 5033
TELEPHONE (08) 354 0488 TELEX AA87183
POSTAL ADDRESS: PO BOX 354 COWANDILLA 5033

00197

CLIENT SANTOS LTD WELL KIDMAN #3U

OPERATOR A. SMITH DATE 23.7.89

SURVEY FLOW & BUILDUP

TOP BOMB 45743 x 4000 PSI REC. No. 55338 x 15 HRS CLOCK DATA 15691 x 120 Hr

MID BOMB REC. No. CLOCK DATA

BTM BOMB 45735 x 4000 PSI REC. No. 55337 x 15 HRS CLOCK DATA 15690 x 120 Hr

ENG. STYLUS 1130 23/7 DISENGAGE STYLUS 09:25 27/7

DWT IN 66.2 kPa DWTOUT 11556 kPa MBHT 252° F

Date	Time	Cum. Time	Depth 'KB	Top Def.	Top PSI	Mid Def.	Mid PSI	Bot Def.	Bot PSI	Remarks
23/7			LUB	-						IN CUB
			RIH							R.I.H.
	1356		6900	0142	298.9					ON BOTTOM.
	1400			0.142	298.9					(Well Flaming 4/60")
	1500			0.142	298.9					
	1600			0.152	319.4					
	1700	(Min)		0.154	323.5					
	1800	0		0.163	341.9					SWI
	1805	5		0.266	556.6					START BUILDUP
		10		0.301	624.0					
		15		0.427	881.0					
		20		0.478	984.9					
		25		0.533	1097.0					
		30		0.574	1180.5					
		45		0.669	1374.1					
		60		0.730	1498.4					
		90		0.806	1653.4					
24/7	2000	2 hrs		0.843	1728.8					
	2100	3		0.877	1798.2					
	2200	4		0.892	1828.8					
	0200	8		0.932	1910.5					
	0600	12		0.948	1943.2					
	1000	16		0.960	1967.7					
	1400	20		0.970	1988.1					
	1800	24		0.978	2004.4					

138 RICHMOND ROAD MARLESTON SA 5033 POSTAL ADDRESS: PO BOX 334 GOVANDALE 5033

00193

CLIENT ..... WELL .....

OPERATOR ..... DATE .....

SURVEY .....

TOP BOMB ..... REC. No. ..... CLOCK DATA .....

MID BOMB ..... REC. No. ..... CLOCK DATA .....

BTM BOMB ..... REC. No. ..... CLOCK DATA .....

ENG. STYLUS ..... DISENGAGE STYLUS .....

DWT IN ..... DWTOUT ..... MBHT .....

Date	Time	Cum. Time Hrs	Depth 'KB	Top Def.	Top PSI	Mid Def.	Mid PSI	Bot Def.	Bot PSI	Remarks
24/7	2200	28	6400	0.984	2016.7					
25/7	0200	32		0.988	2024.9					
	0400	36		0.990	2028.9					
		40		0.992	2033.0					
		44		0.993	2035.1					
	1800	48		0.994	2037.1					
	2200	52		"	"					
26/7	0200	56		"	"					
	0600	60		"	"					
	1000	64		0995	2039.2					
	1400	68		"	"					
	1800	72		"	"					
	2200	76		"	"					
27/7	0200	80		"	"					
	0600	84		0.994	2037.1					P.O.O.H
	07.00		LUB	-						IN LUB

EXPERTEST PTY. LTD.
WIRELINE & WELL TESTING SERVICE
PO BOX 354 COWANDILLA 5033
PH. (08) 354 0488 TELEX AA87183
FAX (08) 43 7408
138 RICHMOND ROAD MARLESTON
SOUTH AUSTRALIA 5033

Tested Thursday, 27th July 1989.

CLIENT	LOCATION	FORMATION
Santos Ltd.	Kidman #3 Uppe	Toolachee

STATIC PRESSURE GRADIENT REPORT

PRESSURE ELEMENT DATA

POSITION	SERIAL NO.	RANGE	CALIBRATED
Top	45743	4000	9/ 7/89
Bottom	45735	4000	9/ 7/89

WELL DATA

PARAMETER	VALUE
DWT In	11542 Kpa
DWT Out	11542 Kpa
Max BHT	258 F

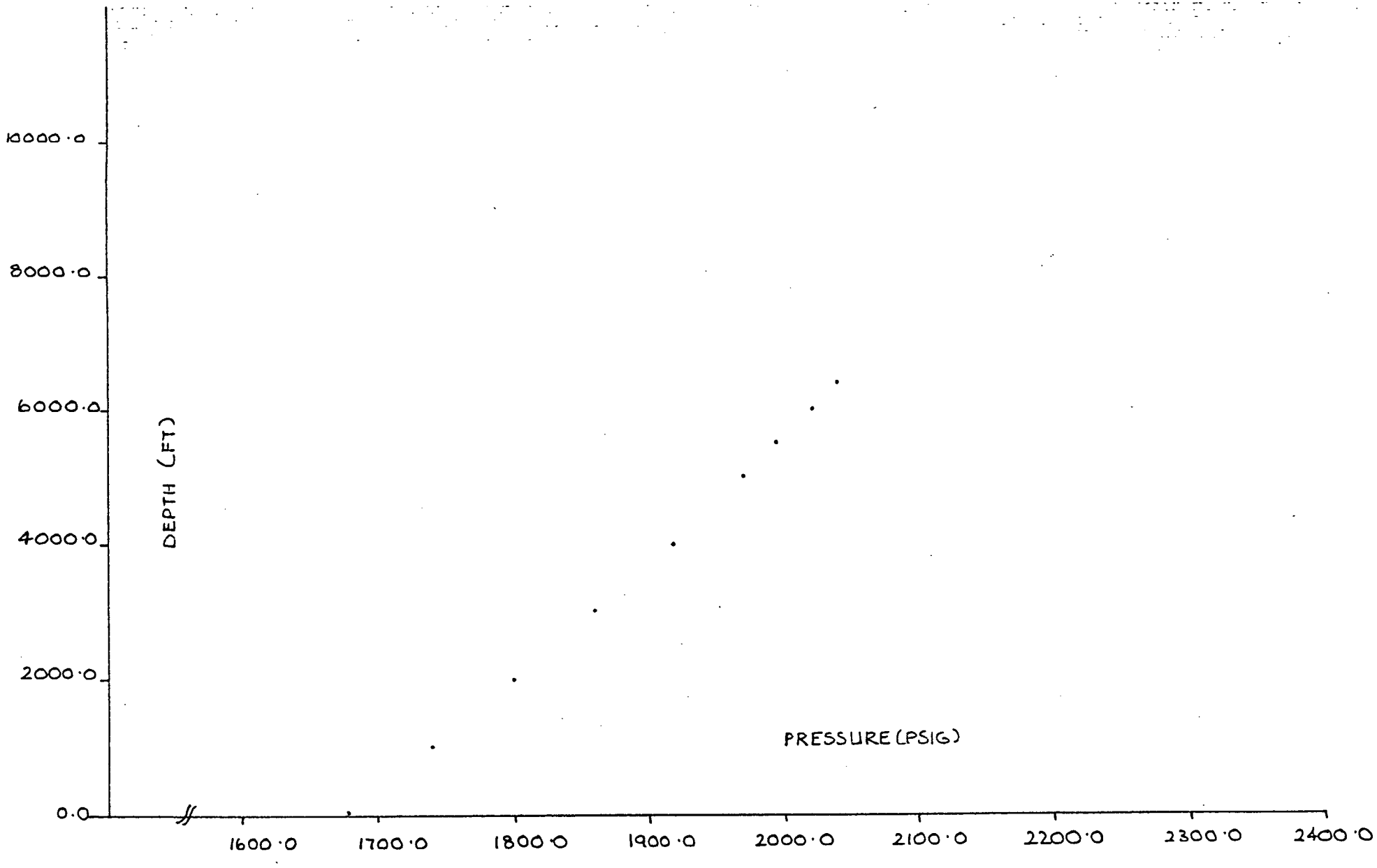
	TOP ELEMENT			BOTTOM ELEMENT		
DEPTH FT KB	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT
LUB.	0.6521	1339.6	-----	0.8277	1679.9	-----
1000	0.8532	1749.6	0.410	0.8576	1740.5	0.061
2000	0.8848	1814.1	0.065	0.8869	1799.8	0.059
3000	0.9129	1871.5	0.057	0.9161	1859.0	0.059
4000	0.9402	1927.2	0.056	0.9446	1916.7	0.058
5000	0.9667	1981.3	0.054	0.9708	1969.8	0.053
5500	0.9782	2004.8	0.047	0.9825	1993.5	0.047
6000	0.9915	2032.0	0.054	0.9958	2020.5	0.054
6400	1.0002	2049.8	0.044	1.0053	2039.8	0.048
LUB.	0.8270	1696.2	-----	0.8273	1679.1	-----

GENERAL REMARKS

Pressure split due to top elements stylus sticking.

KIDMAN # 3 UPPER – STATIC PRESSURE GRADIENT – 27/7/89

ELEMENT # 45735/4000 (BOT)



00200

WELL NAME: [redacted] KID[redacted] #3 UPPER [redacted] STATI[redacted]ADI[redacted]SURV[redacted] DATE: [redacted]7/8[redacted]

BOMB No. 1 DATA

ELEMENT No. D-45743 ELEMENT RANGE: 4000 PSI

RECORDER No: 55338 × 15 TUS CLOCK DATA: A-16083 × 3 HR

ENGAGE STYLUS: 09:39 DISENGAGE: 11:46

BOMB No. 2 DATA

ELEMENT No: D-45735 ELEMENT RANGE: 4000 PSI

RECORDER No: 55337 × 15 TUS CLOCK DATA: 2387 × 3 HR

ENGAGE STYLUS: 09:39 DISENGAGE: 11:46

LUBRICATOR DATA

PRESSURE WITH D.W.T: IN: 11542 KPA OUT: 11542 KPA

TIME PRESSURED: 09:46

TIME DEPRESSURED: 11:41

DATE	TIME	DEPTH	DEFLECTION	PRESSURE TEMP.	GRADIENT psi/ft	DEPTH	DEFLECTION	PRESSURE TEMP.	GRADIENT psi/ft	REMARKS
	09:46	LUB.	.6521			LUB.	.8277			15 MIN.
	10:01	RIH.				RIH.				TUB. 11563 KPA Csg. Ø
	10:05	1000	.8532			1000	.8576			5 MIN.
	10:12	2000	.8848			2000	.8869			
	10:20	3000	.9129			3000	.9161			
	10:27	4000	.9402			4000	.9446			
	10:35	5000	.9667			5000	.9708			
	10:41	5500	.9782			5500	.9825			
	10:47	6000	.9915			6000	.9958			5 MIN
	10:57	6400	1.0002			6400	1.0053			15 MIN
	11:07	POOH				POOH				TUB. Csg.
	11:26	LUB.	.8270			LUB	.8273			15 MIN

General Comments: MAX. BOTTOMHOLE TEMPERATURE: 258°F. *NB. PRESSURE SPLIT DUE TO TOP PRESSURE ELEMENTS STYLUS STICKING.

00201

G010

ROLLING BOTTOMHOLE PRESSURE SURVEY GAS CALCULATION SHEET 00202

WELL: Kidman # 3 Pf = 5250 kPa

ORIFICE SIZE: 60.325 mm 2.375 " T = 93 °C

LINE SIZE: 97.180 mm 3.826 " Diff = 27 kPa

Cumulative Production to end of May = 186.8 $m^3 \times 10^6$ ✓

Number of hours online in May = 737 ✓

Production in May = 6.952 $m^3 \times 10^6$ ✓

∴ Average flow rate in May = $(6.952/737) \times 24 = 0.226\ m^3 \times 10^6/d$ ✓

Number of days online in June before Shut In 0030 hrs 8 / 6 /90
= 6.896 days

∴ Production up to 0030 hrs 8 / 6 /90 = $6.896 \times 0.226 = 1.558\ m^3 \times 10^6$

Total cumulative production = 1.558 + 186.8
= 188.358 $m^3 \times 10^6$
= 6685.595 mmscf ✓

Flow rate just prior to Shut In = 0.252 $m^3 \times 10^6$
= 8.931 mmscf/d

RECEIVED
26 SEP 1990
DEPT. OF MINES AND ENERGY SECURITY
5653

WP 2946G(13)
LGA/jfs : 8/12/86

SUB-SURFACE PRESSURE SURVEY

CO.		RUN 01	FIELD KIDMAN	WELL 03	
E F DEPTH		WELL STAT		TOOL HUNG	6388'
CASING	-	CASING PRESS		ON BOTTOM	1250 7/6
LINER	-	TUBING PRESS		OFF BOTTOM	0745 11/6
D TE	900607	ELEMENT RANGE	0 - 3128	ZERO POINT	
E EVATION		ZONE		SHUT-IN	0030 8/6
MAX TEMP	221°F	PICK-UP		ON-PROD	
P RF	-	CAL SER NO.	56428	MPP	
T BING	-				
UNITS	ENGLISH	PURPOSE	BUILD-UP		

SURVEY DATA

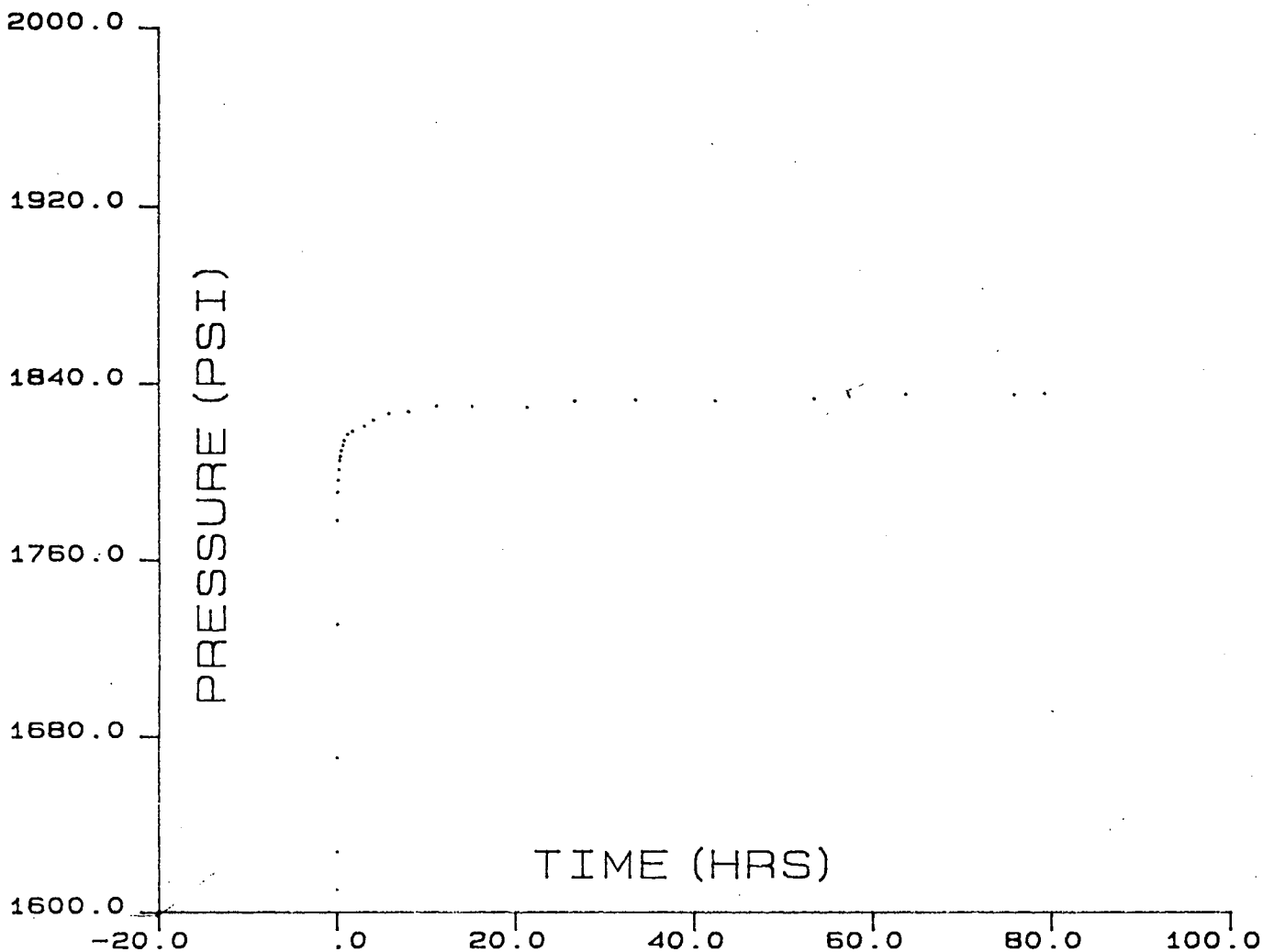
CO. RUN 01 FIELD KIDMAN WELL 03

TIME	P-T	DP-DT	DTIME	TIME	P-T	DP-DT	DTIME
0:30	1610.2	1610.2	.0	3:35	1820.7	1820.7	3.1
0:30	1627.6	1627.6	.0	4:33	1823.3	1823.3	4.1
0:31	1670.4	1670.4	.0	6:18	1826.3	1826.3	5.8
0:32	1731.1	1731.1	.0	8:29	1827.2	1827.2	8.0
0:33	1778.0	1778.0	.0	11:39	1829.8	1829.8	11.2
0:34	1790.3	1790.3	.1	15:39	1829.5	1829.5	15.2
0:40	1795.9	1795.9	.2	21:47	1829.0	1829.0	21.3
0:44	1800.6	1800.6	.2	3:06	1832.2	1832.2	26.6
0:49	1804.7	1804.7	.3	9:57	1832.6	1832.6	33.4
0:52	1806.7	1806.7	.4	18:52	1831.9	1831.9	42.4
1:00	1809.2	1809.2	.5	5:57	1833.2	1833.2	53.5
1:10	1811.7	1811.7	.7	16:12	1835.3	1835.3	63.7
1:18	1813.9	1813.9	.8	4:21	1834.8	1834.8	75.9
1:41	1816.7	1816.7	1.2	7:45	1835.6	1835.6	79.3
2:14	1818.2	1818.2	1.7	0:00	.0	.0	.0

LU B IN DWT = 785 PSI / OUT = 1555 PSI
LUB IN AMERADA = 786 PSI / OUT = 1554 PSI

KIDMAN #3 BUILD-UP 7-11/6/90

ELEMENT #56428 (TOP)



00204

SUB-SURFACE PRESSURE SURVEY

CO.		RUN 02	FIELD KI	WELL 03	
EFF DEPTH		WELL STAT		TOOL HUNG	6394'
CASING	-	CASING PRESS		ON BOTTOM	1250 7/6
LINER	-	TUBING PRESS		OFF BOTTOM	0745 11/6
DATE	900607	ELEMENT RANGE	0 - 3120	ZERO POINT	
ELEVATION		ZONE		SHUT-IN	0030 8/6
MAX TEMP	221°F	PICK-UP		ON-PROD	
PERF	-	CAL SER NO.	56431	MPP	
TUBING	-				
UNITS	ENGLISH	PURPOSE	BUILD-UP		

SURVEY DATA

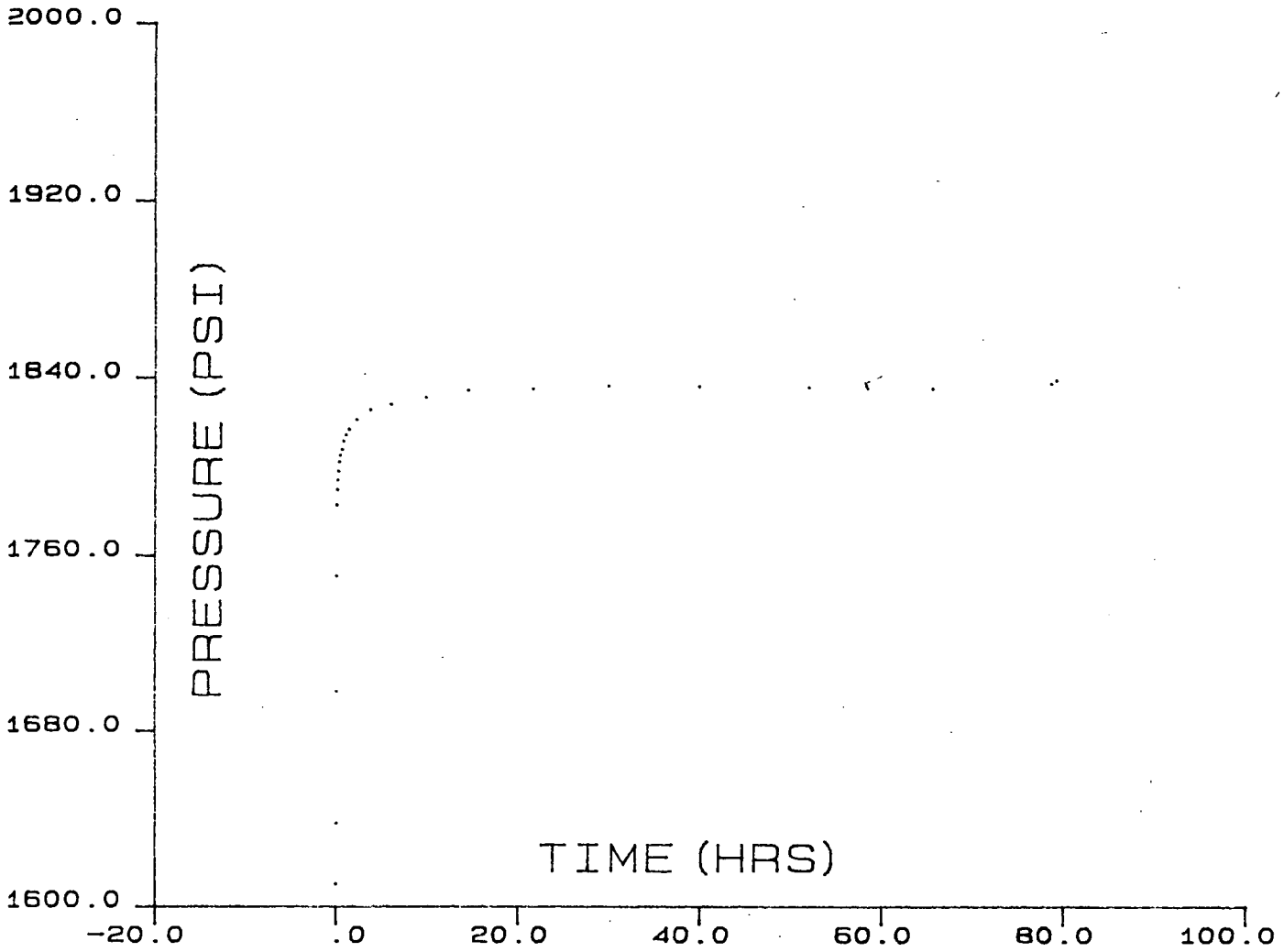
CO. RUN 02 FIELD KI WELL 03

TIME	P-T	DP-DT	DTIME	TIME	P-T	DP-DT	DTIME
0:30	1610.1	1610.1	.0	1:52	1816.5	1816.5	1.4
0:33	1637.8	1637.8	.0	2:41	1820.8	1820.8	2.2
0:34	1698.1	1698.1	.1	4:12	1825.3	1825.3	3.7
0:35	1750.9	1750.9	.1	6:31	1828.1	1828.1	6.0
0:36	1782.6	1782.6	.1	10:21	1831.2	1831.2	9.9
0:38	1789.4	1789.4	.1	15:00	1834.4	1834.4	14.5
0:41	1793.7	1793.7	.2	22:07	1835.2	1835.2	21.6
0:44	1797.7	1797.7	.2	6:26	1836.5	1836.5	29.9
0:49	1801.9	1801.9	.3	16:25	1836.1	1836.1	39.9
0:56	1804.9	1804.9	.4	4:29	1835.6	1835.6	52.0
1:06	1807.4	1807.4	.6	18:08	1835.1	1835.1	65.6
1:16	1811.1	1811.1	.8	7:10	1837.6	1837.6	78.7
1:30	1813.8	1813.8	1.0	7:45	1839.0	1839.0	79.3

LUB IN DWT = 785 PSI / OUT = 1555 PSI
LUB IN AMERADA = 786 PSI /OUT = 1544 PSI

KIDMAN #3.7-11/6/90 BUILD-UP

ELEMENT #56431 (BOT)



90200

EXPERTEST

WIRELINE & WELL TESTING SERVICE

PO BOX 354 COWANDILLA 5033

PH. (08) 354 0488 TELEX AA87183
FAX (08) 43 7408

138 RICHMOND ROAD MARLESTON
SOUTH AUSTRALIA 5033

00207

Tested Monday, 11th June 1990.

CLIENT	LOCATION	FORMATION
Santos Ltd.	Kidman 3	toolachee

STATIC PRESSURE GRADIENT REPORT

PRESSURE ELEMENT DATA

POSITION	SERIAL NO.	RANGE	CALIBRATED
Top	56428	3000	25/12/89
Bottom	56431	3000	25/12/89

WELL DATA

PARAMETER	VALUE
DWT In	1555 psi
DWT Out	1555 psi
Max BHT	~~N/A~~ 218°F

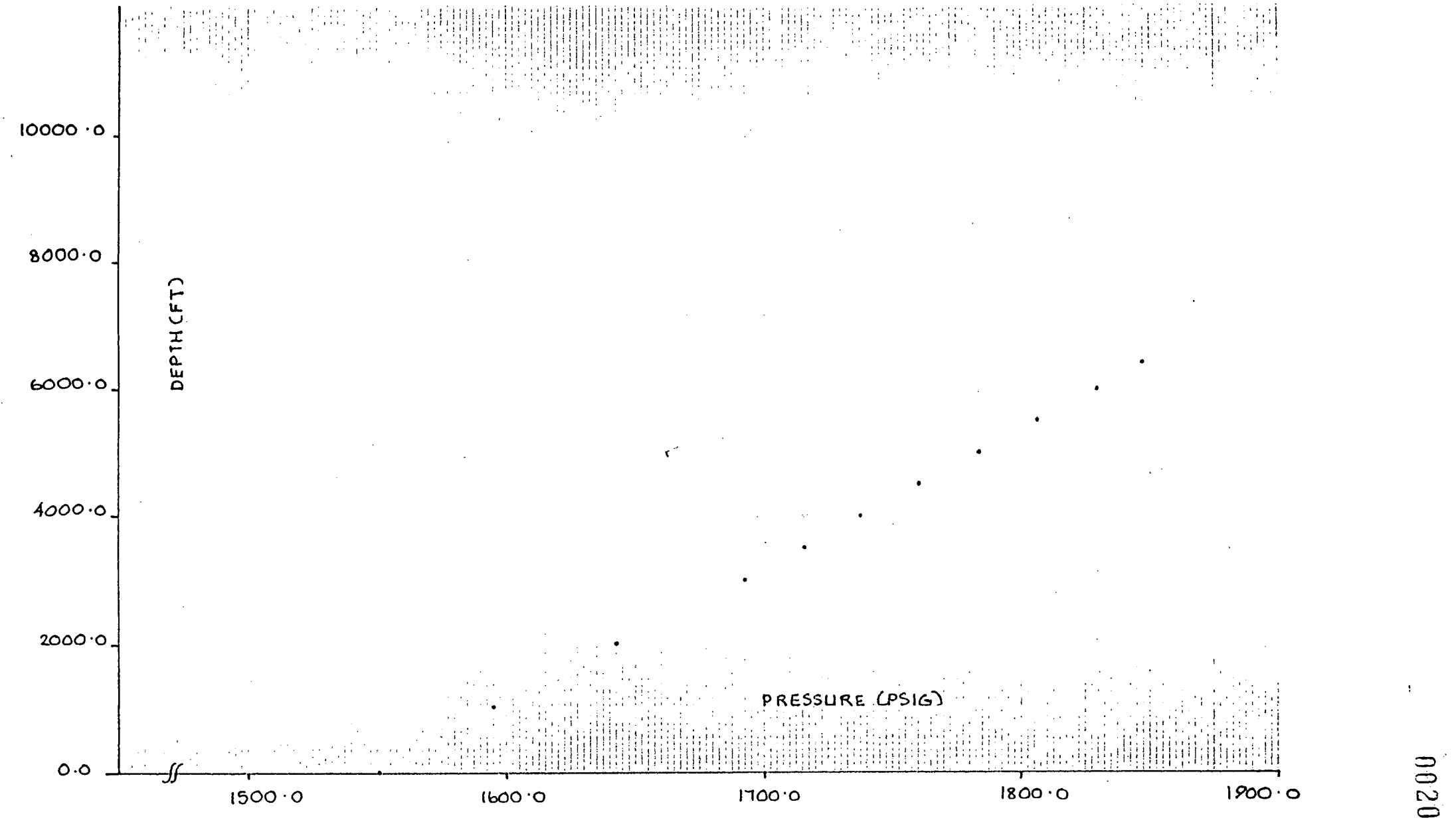
	TOP ELEMENT			BOTTOM ELEMENT		
DEPTH FT KB	DEFLECTION INCHES	PRESSURE PSIG.	GRADIENT PSI/FT	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT
LUB.	0.9945	1551.0	-----	0.9980	1551.5	-----
1000	1.0210	1592.5	0.042	1.0260	1595.2	0.044
2000	1.0510	1639.4	0.047	1.0565	1642.8	0.048
3000	1.0830	1689.5	0.050	1.0880	1692.1	0.049
3500	1.0980	1713.0	0.047	1.1030	1715.5	0.047
4000	1.1120	1734.9	0.044	1.1170	1737.4	0.044
4500	1.1260	1756.8	0.044	1.1320	1760.8	0.047
5000	1.1400	1778.7	0.044	1.1460	1782.7	0.044
5500	1.1550	1802.2	0.047	1.1610	1806.1	0.047
6000	1.1695	1824.9	0.045	1.1755	1828.8	0.045
6400	1.1820	1844.4	0.049	1.1870	1846.8	0.045
LUB.	0.9940	1550.2	-----	0.9980	1551.5	-----

GENERAL REMARKS

Temperature element number 860788, 37-207 deg C, ran as bottom bomb.
This static gradient report follows a flow and build up survey, coinciding with Kidman field shut down.

KIDMAN # 3 — STATIC PRESSURE GRADIENT — 11/6/90

ELEMENT # 56431/3000 (BOT)



00208

Fm 5030

EXPERTEST PTY. LTD.

TEST RESULTS

CUSTOMER : SANTOS LTD
PERFORATIONS: 6485 - 6772'
PAGE: 1 OF 4.

WELL NAME: KIOMAN #3
FORMATION : TOOLACHEE
DATE: 7-6-90

TEST TYPE : BHPS F&BU
COST CODE: 605. 3918. 813
OPR : R. BUCKLAND.

TIME		WELLHEAD DATA						FLOW RATES			CUMULATIVE PRODUCTION				
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (PSI/KPa)	ANNULUS PRESSURE (PSI/KPa)	WELLHEAD TEMP (°F/°C)	CHOKE SIZE	PRESSURE (PSI/KPa)	TEMP (°F/°C)	GAS MMSCFD $m^3 10^3/D$	OIL BPD m^3/D	WATER BPD m^3/D	GAS MMSCF $m^3 10^3$	OIL BBLS m^3	WATER BBLS m^3		
7-6-90															
1034		5481	3647	79	100%			Pressure up Lubricator.							
1234		5474	3647	79				Run in Hole with Bombs.							
1250		5467	3647	79				At Hanging depth of			6400' KB				
1330		5467	3640	79											
1400		5467	3640	79											
1430		5467	3626	79											
1500		5467	3620	79											
1530		5467	3620	79											
1600		5460	3620	79											
1630		5467	3620	79											
1700		5460	3620	79											
1730		5460	3620	79											
1800		5481	3620	80											
1830		5488	3620	80											
1900		548	3620	80											
1930		5481	3620	80											
2000		5495	3620	80											
2030		5481	3620	80											
2100		5502	3620	80											
2130		5509	3620	80	↓										
2200		5509	3620	80											

ET 104

00209

EXPERTEST PTY. LTD.

TEST RESULTS

CUSTOMER : SANTOS LTD | PERFORATIONS: 6485 - 6772 | PAGE: 2 OF 4

WELL NAME: KIOMAN #3 | FORMATION : TOOLACHEE | DATE: 7·6·90

TEST TYPE : BHP's F & BU | COST CODE: 605. 3918. 813 | OPR : R. BUCKLAND

TIME		WELLHEAD DATA						FLOW RATES			CUMULATIVE PRODUCTION				
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (PSI/KPa)	ANNULUS PRESSURE (PSI/KPa)	WELLHEAD TEMP (°F/°C)	CHOKE SIZE	PRESSURE (PSI/KPa)	TEMP (°F/°C)	GAS MMSCFD $m^3 10^3/D$	OIL BPD m^3/D	WATER BPD m^3/D	GAS MMSCF $m^3 10^3$	OIL BBLS m^3	WATER BBLS m^3		
7·6·90															
2230		5509	3619	80	100%										
2300		5516	3619	80	↓										
2330		5509	3619	80	↓										
2400		5516	3619	80	↓										
8·6·90					↓										
0030	0	5516	3619	80	0%			SHUT WELL IN, OBSERVE BUILD UP.							
0045		10597	3371	64											
0100		10638	3054	46											
0115		10666	2820	35											
0130	1	10721	2626	28											
0145		10687	2447	-											
0200		10687	2323	-											
0215		10694	2199												
0230	2	10694	2102												
0245		10694	2040												
0300		10707	1951												
0315		10707	1889												
0330	3	10714	1813												
0345		10721	1765												
0400		10721	1716												

00210

ET 104

EXPERTEST PTY. LTD.

TEST RESULTS

CUSTOMER : SANTOS LTD
WELL NAME: KIOMAN #3
TEST TYPE : BHP's F & BU

PERFORATIONS: 6485 - 6772
FORMATION : TOOLACHEE
COST CODE: 605 · 3918 · 813

DATE: 8·6·90
OPR : R. BUCKLAND

TIME		WELLHEAD DATA						FLOW RATES			CUMULATIVE PRODUCTION				
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (PSI/KPa)	ANNULUS PRESSURE (PSI/KPa)	WELLHEAD TEMP (°F/°C)	CHOKE SIZE	PRESSURE (PSI/KPa)	TEMP (°F/°C)	GAS MMSCFD $m^3 10^3/D$	OIL BPD m^3/D	WATER BPD m^3/D	GAS MMSCF $m^3 10^3$	OIL BBLS m^3	WATER BBLS m^3		
8·6·90															
0415		10721	1668												
0430	4	10721	1620												
0830	8	10721	1344												
1230	12	10721	1241												
1630	16	10721	1206												
2030	20	10721	1158												
9·6·90															
0030	24	10721	1124												
0430	28	10721	1103												
0830	32	10721	1093												
1230	36	10721	1072												
1630	40	10721	1051												
2030	44	10721	1035												
10·6·90															
0030	48	10721	1021												
0430	52	10721	1000												
0830	56	10721	1000												
1230	60	10721	1000												
1630	64	10721	1000												
2030	68	10721	1000												

ET 104

EXPERTEST PTY. LTD.

TEST RESULTS

CUSTOMER : SANTOS LTD
WELL NAME: KIDMAN #3
TEST TYPE : BHPS F&BU

PERFORATIONS: 6485 - 6772
FORMATION : TOOLACHEE
COST CODE: 605 · 3918 · 813

DATE: 11·6·90
OPR : R. BUCKLAND

TIME		WELLHEAD DATA						FLOW RATES			CUMULATIVE PRODUCTION				
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (PSI/KPa)	ANNULUS PRESSURE (PSI/KPa)	WELLHEAD TEMP (°F/°C)	CHOKE SIZE	PRESSURE (PSI/KPa)	TEMP (°F/°C)	GAS MMSCFD $m^3 10^3/D$	OIL BPD m^3/D	WATER BPD m^3/D	GAS MMSCF $m^3 10^3$	OIL BBLS m^3	WATER BBLS m^3		
11·6·90															
0030	72	10721	1000												
0745		10721	944			P.O.O.H WITH		BOMBS.							
0800	75·5	10721	944			IN LUBRICATOR									
1000	77·5	10721	944			DEPRESSURE LUBRICATOR. PREPARE TO RUN STATIC GRADIENT.									
				END OF FLOW AND BUILD UP SURVEY											

00212

EXPERTEST PTY. LTD.

BHP/BHT GAUGE RUN DATA

CUSTOMER : SANTOS
WELL NAME: KIDMAN #3
TEST TYPE : BHPS - F&BU.

PERFORATIONS: 6485' - 6772'
FORMATION : TOOLACHEE
COST CODE: 605·3918.813·

PAGE: 1 OF 1
DATE: 7·6·90
OPR : R BUCKLAND

GAUGE DATA	UPPER PRESSURE GAUGE	LOWER PRESSURE GAUGE	TEMPERATURE GAUGE
ELEMENT SERIAL NO.	56428	56431	860788
ELEMENT RANGE	3000 PSI	3000 PSI	37-207 °C
RECORDING SECTION SERIAL NO.	14620	14929	K3439
DATE OF CALIBRATION:	25·12·89	25·12·89	
CLOCK SERIAL NO.	N° 1	F15295	24710
CLOCK RANGE	120 HR	120 HR	120 HR.
LEAD SCREW TYPE	15 TLS	15 TLS	15 TLS
ENGAGE STYLUS DATE 7·6·90 TIME	1028	1028	1028
DISENGAGE STYLUS DATE 11·6·90 TIME	1013	1013	1013

RUN DATA		TIME (HOURS)	TUBING PRESSURE (PSI/KPa)	ANNULUS PRESSURE (PSI/KPa)
DATE	: 7·6·90		(785)	
PRESSURE LUBRICATOR	:	1034	5412	3647
RUN IN HOLE	:	1234	5474	3647
ON DEPTH AT	: 6400 FT/M	1250	5467	3647
	SI 0030 816			
DATE	: 11·6·90			
PULL OUT OF HOLE	:	0745	10721	944
AT SURFACE	:	0800	10721	944
DEPRESSURE LUBRICATOR	:	1000	10721	944.
MAXIMUM BHT AT	FT/M = °F/C		(155S)	
N.B. ALL DEPTHS ARE MEASURED FROM K.B.				

DATE	TIME	REMARKS		IN	OUT
		TEMPERATURE ELEMENT RAN.	①	786	1564
			②	786	1544

00213

BHP/BHT GAUGE RUN DATA

EXPERTEST PTY. LTD.

PAGE: 1 OF 1

CUSTOMER : SANTOS LTD
WELL NAME: KIDMAN #3
TEST TYPE : STATIC GRADIENT SURVEY

PERFORATIONS: 6485' - 6772'
FORMATION : TOOLACHEE
COST CODE: 605·3918·813

DATE: 11·6·90
OPR : R. BUCKLAND

GAUGE DATA	UPPER PRESSURE GAUGE	LOWER PRESSURE GAUGE	TEMPERATURE GAUGE
ELEMENT SERIAL NO.	56428	56431	860788
ELEMENT RANGE	3000	3000	37°-207c
RECORDING SECTION SERIAL NO.	14620	14929	K3439
DATE OF CALIBRATION:	25·12·89	25·12·89	
CLOCK SERIAL NO.	1	2502	2518
CLOCK RANGE	3	3	3
LEAD SCREW TYPE	15 TLS	15 TLS	15 TLS
ENGAGE STYLUS DATE 11·6·90 TIME	1042	1042	1042
DISENGAGE STYLUS DATE 11·6·90 TIME			

RUN DATA	TIME (HOURS)	TUBING PRESSURE (PSI/KPa)	ANNULUS PRESSURE (PSI/KPa)
DATE : 11·6·90			
PRESSURE LUBRICATOR :	1050	1555	139
RUN IN HOLE :	1105	1555	139
ON DEPTH AT : 6400 FT/M	1223		
DATE : 11·6·90			
PULL OUT OF HOLE :	1238	1555	139
AT SURFACE :	1259	1555	134
DEPRESSURE LUBRICATOR :	1314	1555	137
MAXIMUM BHT AT FT/M = °F/C			
N.B. ALL DEPTHS ARE MEASURED FROM K.B.			

REMARKS

DATE	TIME	

00214

EXPERTEST PTY. LTD.

SEQUENCE OF EVENTS

CUSTOMER :	SANTOS	PERFORATIONS:	6485' - 6772'	PAGE:	1 OF 1
WELL NAME:	KIDMAN #3	FORMATION :	TOOLACHEE	DATE:	27.5.90
TEST TYPE :	B.H.P.S. F&BU.	COST CODE :	605.3918.813	OPR :	M MUELLER.
				:	R. BUCKLAND

DATE/TIME	DESCRIPTION OF EVENTS
27.5.90	
0910	SHUT WELL IN & FIT SWAB VALVE.
0920	WELL BACK ON LINE. RIG UP WIRELINE UNIT.
1000	PRESSURE TEST BOP'S. NEED REDRESS RETURN TO DULUNGARI.
1230	REPLACE BOPS PRESSURE TEST O.K.
1300	RUN IN HOLE WITH 1.75" BLIND BOX TO A DEPTH OF 6400' KB AS PER PROGRAM.
	NO OBSTRUCTIONS. *NOTE WELL HAD TO BE CHOKED BACK TO PASS THROUGH WELL HEAD.
1348	PULL OUT OF HOLE.
1410	IN LUBRICATOR SECURE WELL (WIRELINE UNIT STILL RIGGED IN FOR BHPS).
7.6.90.	
1000	PREPARE PRESSURE AND TEMPERATURE ELEMENTS FOR BUILD UP SURVEY WHEN KIOMAN SATELLITE
	SHUTS DOWN.
1034	PRESSURE UP LUBRICATOR
1234	R.I.H. WITH BOMBS TO HANGING DEPTH OF 6400FT. KB.
1250	ARRIVE AT HANGING DEPTH. - OBSERVE WELL HEAD PRESSURES AND TEMPERATURES
8.6.90	
0030	SHUT IN WELL OBSERVE BUILD UP
11.6.90	
0745	P.O.O.H. WITH BOMBS
1000	DEPRESSURE LUBRICATOR, END OF FLOW & BUILD UP SURVEY.
1050	PRESSURE UP LUBRICATOR *
1105	R.I.H. WITH 2 PRESSURE ELEMENTS AND 1 TEMPERATURE ELEMENT FOR STATIC GRADIENT SURVEY
1330	CHARTS OK. RIG DOWN WIRELINE EQUIPMENT - MOVE OUT.

00215

ET 102

Kidman #3

Summary of Multi-Rate I.E.T., Flowing Gradients and Pressure Buildup Survey.

3-13 February 1992.

CHOKE	FINAL F.T.P (kPa)	FBHP (kPa). need to convert to psia.	Qg ($10^3 m^3/d$)	Qo (m^3/d)	Qw (m^3/d)	FINAL PSEP (kPa)	FINAL TSEP (°C)
80%	2427	7599	166.8	3.306	7.945	1448	71
50%	2771	7727	161.2	3.635	7.925	1482	66
25%	3530	7909	151.2	3.666	7.531	1654	65
7%	4075	8047	143.4	4.066	7.065	1448	64
13%	4813	8251	128.8	3.568	6.398	1345	59

Pressure Buildup

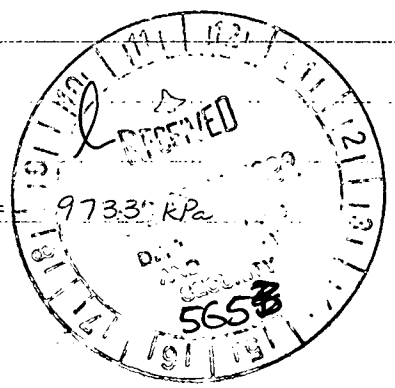
9/2/92 Ran in hole with ameradas on depth 6400' KB @ 1755 hrs.

9/2/92 Shut well in for buildup @ 2000 hrs

Monitored buildup until 0900 hrs on 13/2/92 for a shut in time of 85 hours.

Element # 56432 @ 6400 ft. KB.

S.I.B.H.P. (final) = 1411.6 psig = 9733 kPa



13/2/92 Ran Static Gradient Survey

Element # 56432 @ 6400 ft. KB = 1411.9 psig = 9735 kPa.

DATABOSS

00217

Kidman #3

Summary of Multi-Rate L.E.T.,
Flowing Gradients and Pressure Buildup Survey
3-13 February 1992

Production Summary

Cumulative production to 31/01/92 = 291.0 $10^6 m^3$
Average daily rate for January 92 = 153.1 $10^3 m^3/d$
Producing time until test shut in on 9/02/92 @ 2000 hrs = 8.83 days.
Assume February production is 153.1 $10^3 m^3/d$ x 8.83 days = 1352.4 $10^3 m^3$
New cumulative = 291 000.0 $10^3 m^3$ + 1352.4 $10^3 m^3$ = 292 352.4 $10^3 m^3$

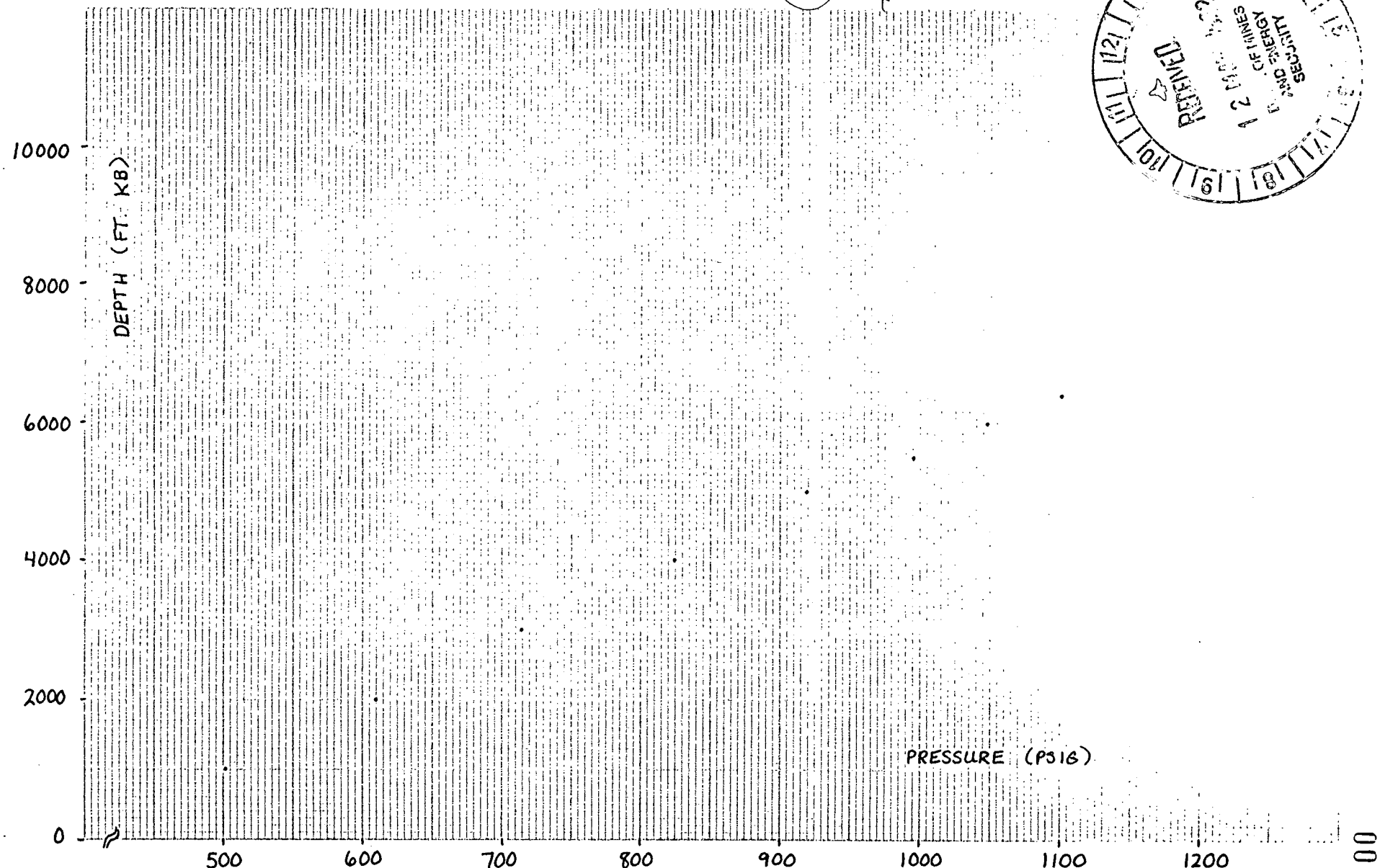
$$t = \frac{292352.4\ 10^3 m^3}{153.1\ 10^3 m^3/d} \times 24\ hrs./day = 45829\ hrs$$

* if L.E.T. rate on 80% choke is used then assume
February production is 166.8 $10^3 m^3/d$ x 8.83 days = 1472.8 $10^3 m^3$
New cumulative = 291,000.0 $10^3 m^3$ + 1472.8 $10^3 m^3$ = 292,472.8 $10^3 m^3$

$$t = \frac{292472.8\ 10^3 m^3}{166.8\ 10^3 m^3/d} \times 24\ hrs./day = 42082\ hrs.$$

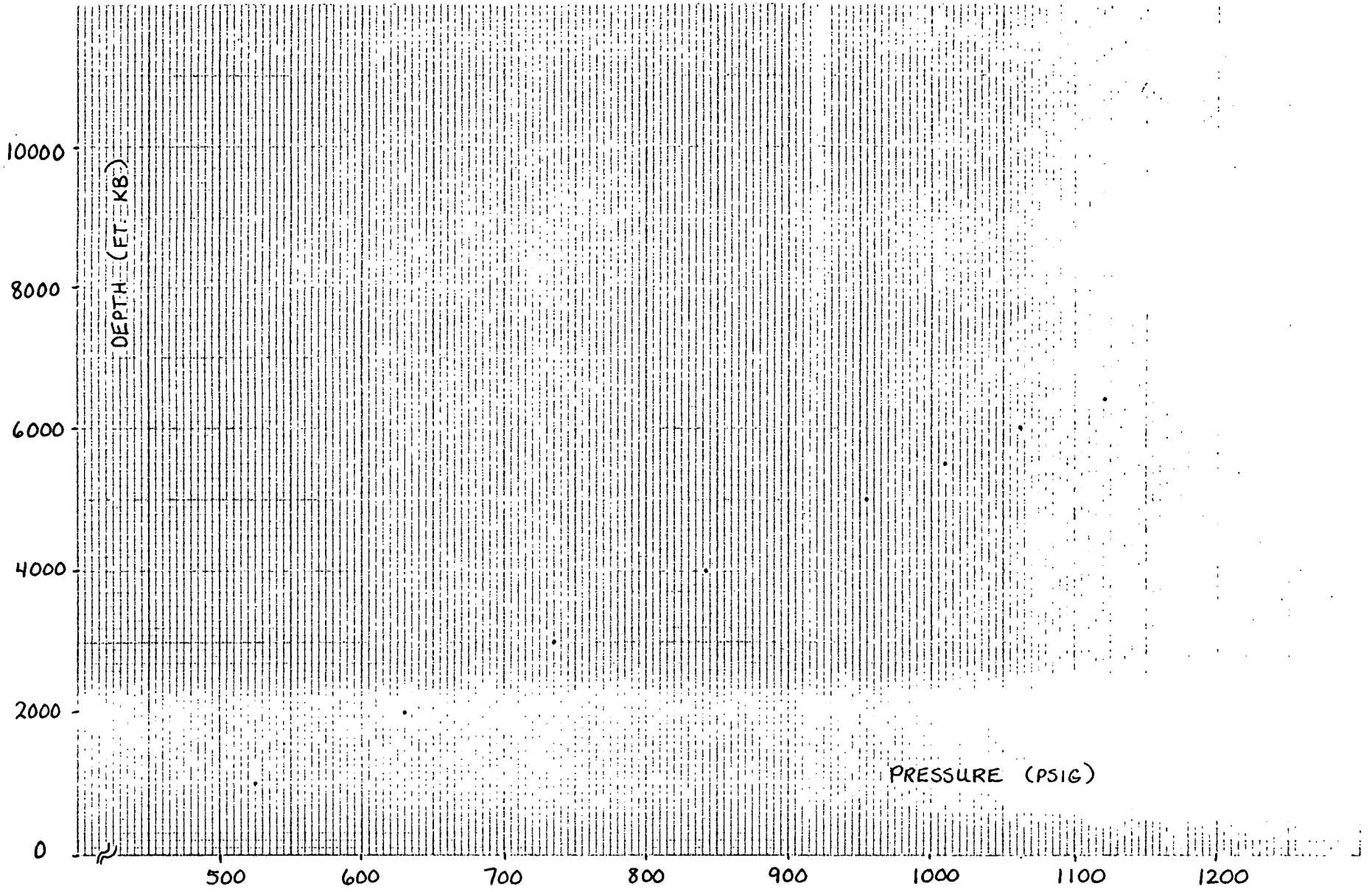
DEA BOSS

KIDMAN 3 - FLOWING PRESSURE GRADIENT - 80% CHOKE.
ELEMENT # 56432 (BOTTOM) - 5/2/92.

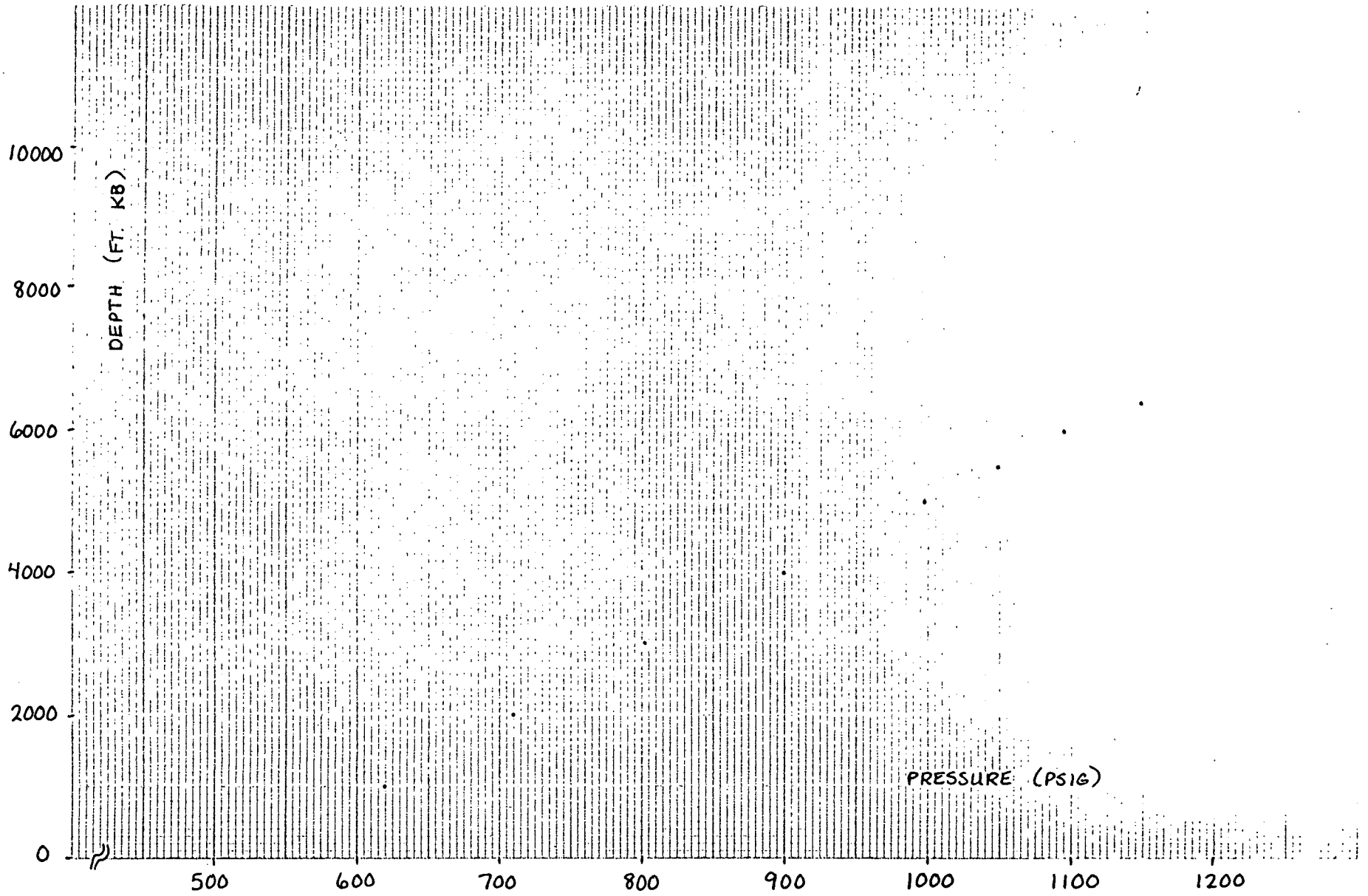


RECEIVED
MAY 21
DEPT. OF MINES
AND ENERGY
MINERALS
SECTION

KIOMAN 3 - FLOWING PRESSURE GRADIENT - 50% CHOKE.
ELEMENT # 56432 (BOTTOM) - 6/2/92.

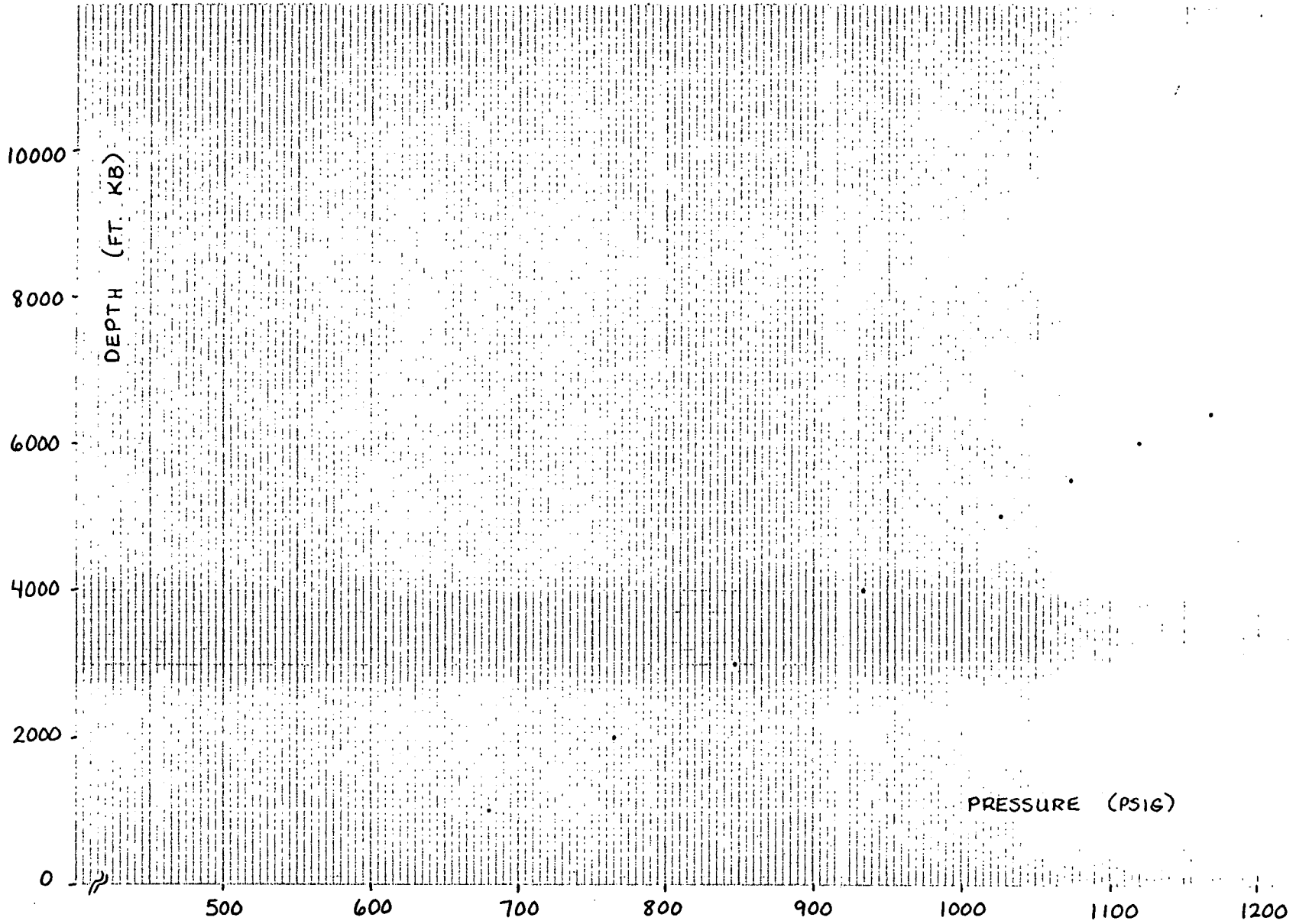


KIDMAN 3 - FLOWING PRESSURE GRADIENT - 25% CHOKE.
ELEMENT # 56432 (BOTTOM) - 7/2/92.



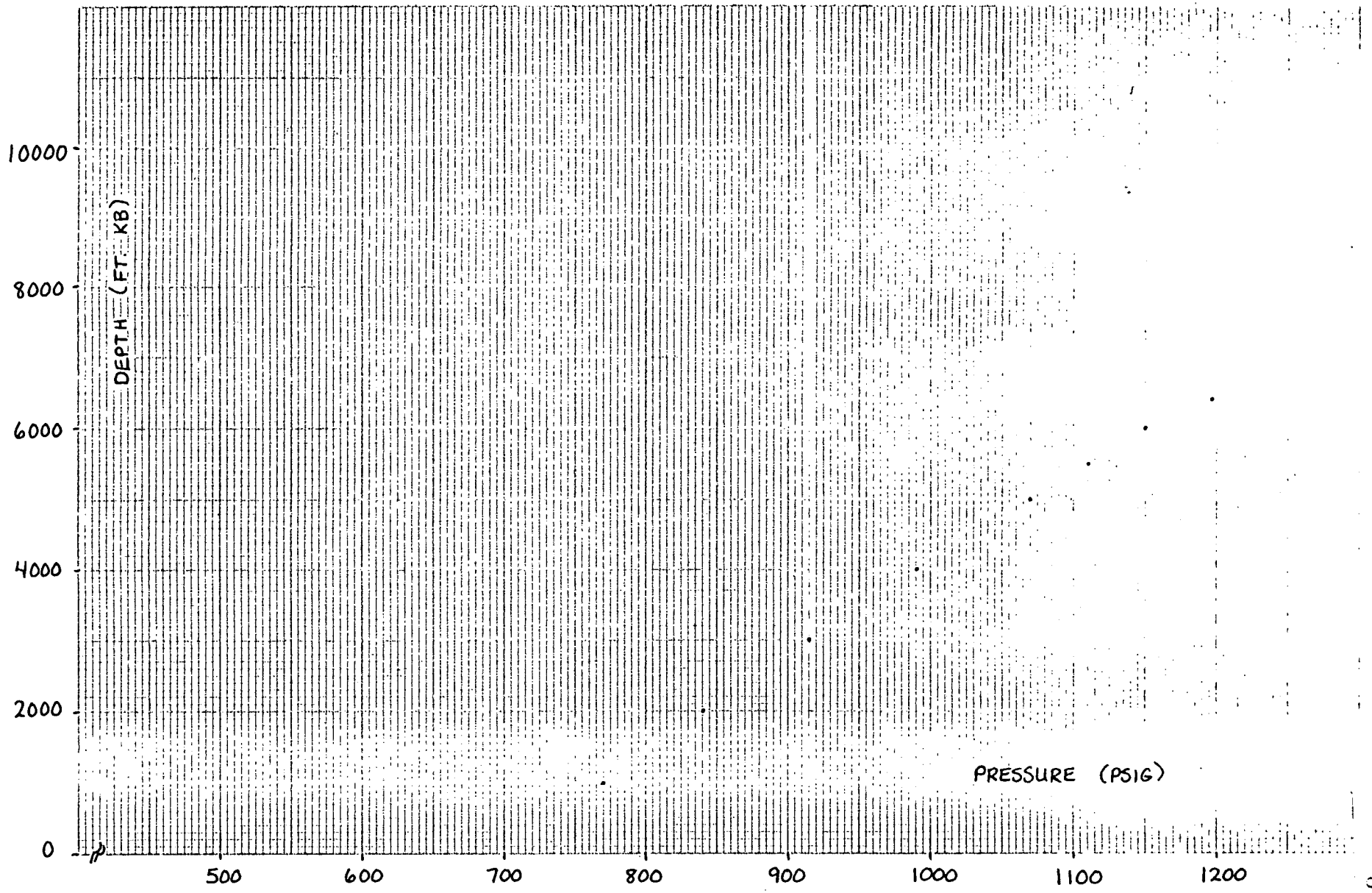
00220

KIDMAN 3 - FLOWING PRESSURE GRADIENT - 17% CHOKE.
ELEMENT # 56432 (BOTTOM) - 8/2/92.



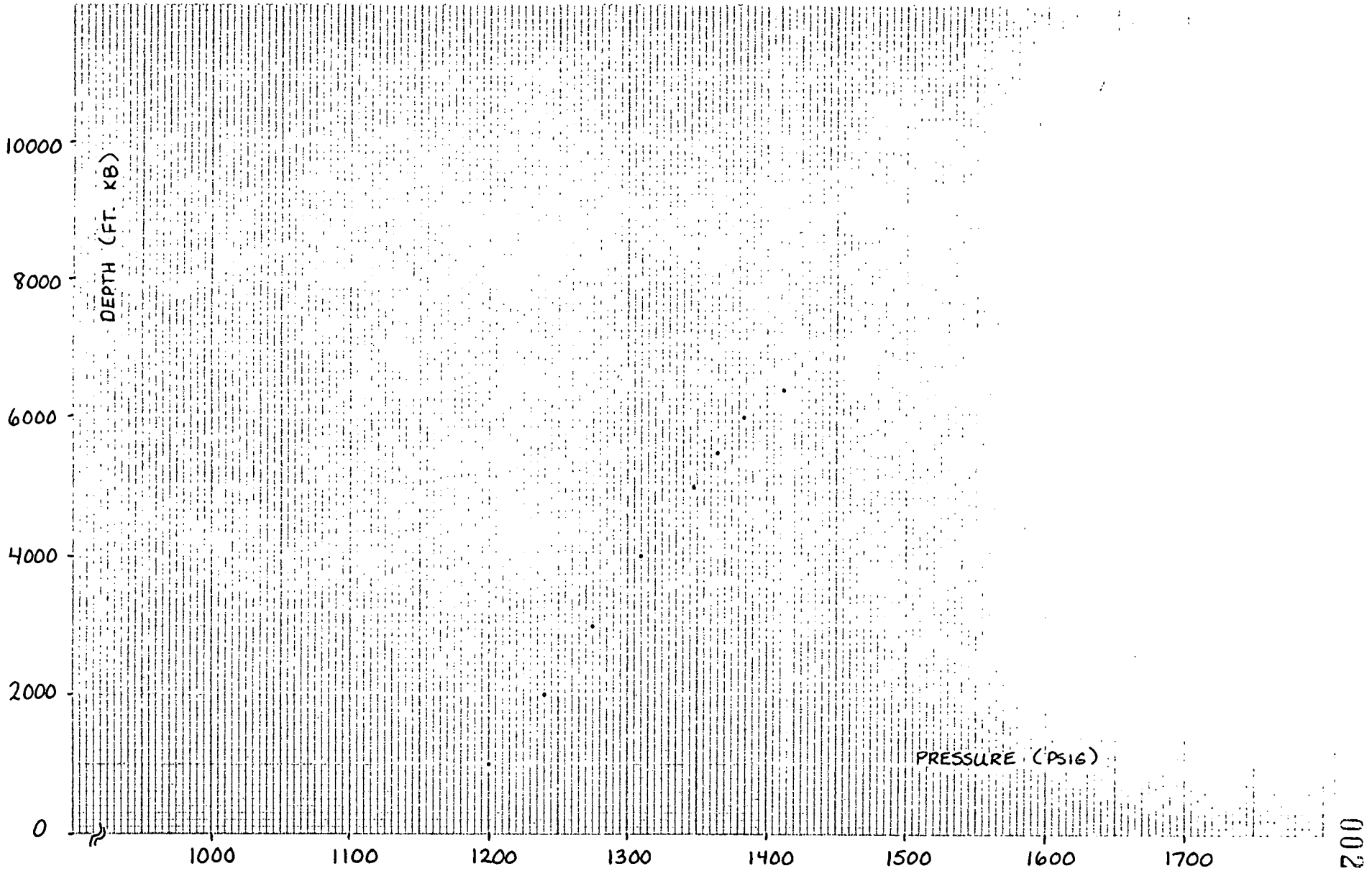
00221

KIDMAN 3 - FLOWING PRESSURE GRADIENT - 13% CHOKE.
ELEMENT # 56432 (BOTTOM) - 9/2/92.



22201

KIDMAN 3 - STATIC PRESSURE GRADIENT - 13/2/92.
ELEMENT # 56432 (BOTTOM).



00223

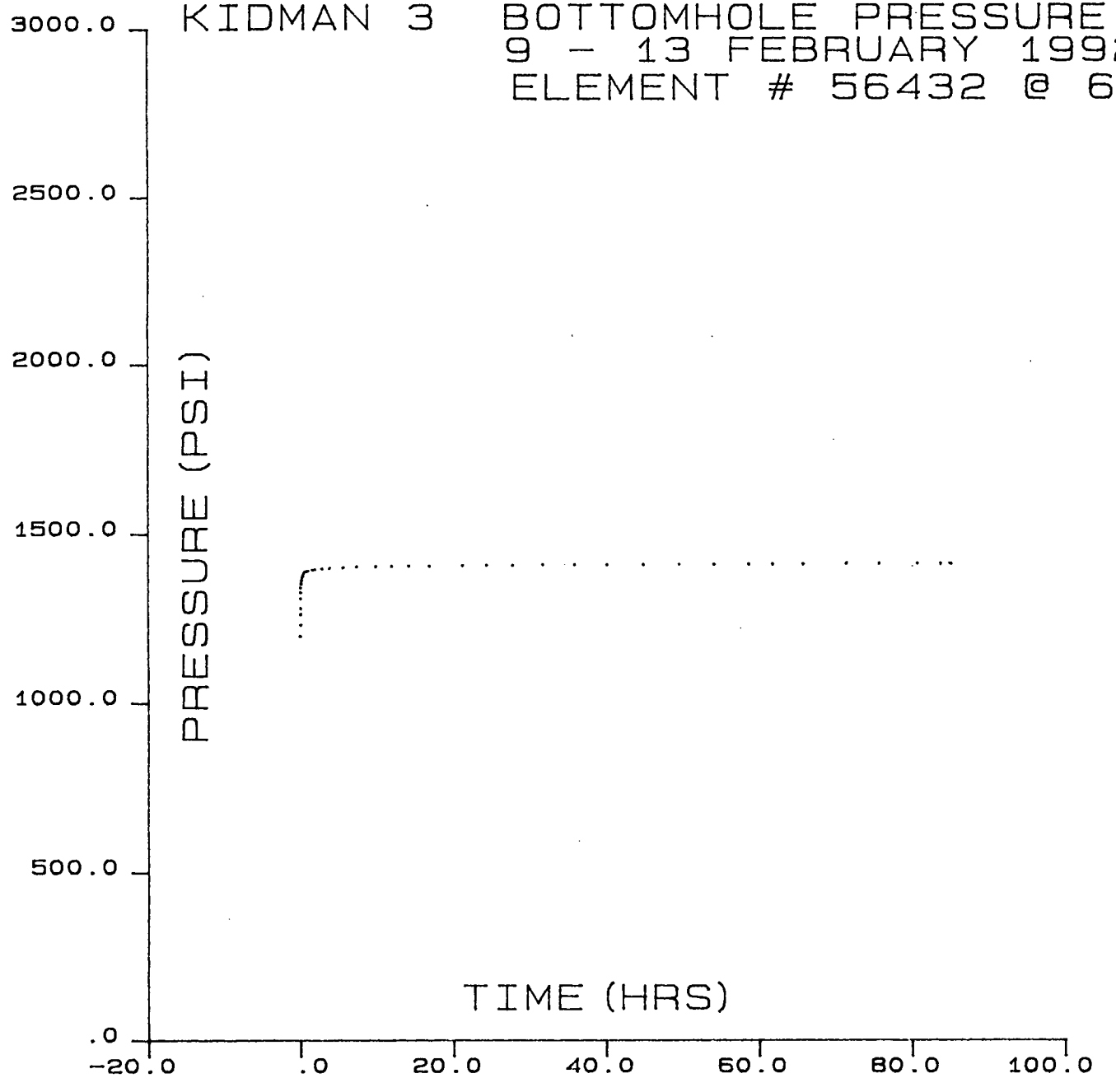
SUB-SURFACE PRESSURE SURVEY

CO. SANTOS		RUN 01 FIELD KIDMAN		WELL 03	
EFF DEPTH		WELL STAT		TOOL HUNG	6400 FT KB
CASING	-	CASING PRESS		ON BOTTOM	1755 920209
LINER	-	TUBING PRESS		OFF BOTTOM	0900 920213
DATE	920203	ELEMENT RANGE	0 - 3108	ZERO POINT	
ELEVATION		ZONE		SHUT-IN	2000 920209
MAX TEMP		PICK-UP		ON-PROD	
PERF	-	CAL SER NO.	56432	MPP	
TUBING	-				
UNITS	ENGLISH	PURPOSE	PRESSURE BUILDUP		

SURVEY DATA

CO. SANTOS RUN 01 FIELD KIDMAN WELL 03

TIME	P-T	DP-DT	DTIME	TIME	P-T	DP-DT	DTIME
20:00	1198.2	1198.2	.0	7:57	1404.7	1404.7	11.9
20:00	1230.7	1230.7	.0	10:11	1405.7	1405.7	14.2
20:01	1262.2	1262.2	.0	12:53	1404.8	1404.8	16.9
20:01	1280.1	1280.1	.0	17:12	1406.6	1406.6	21.2
20:01	1309.4	1309.4	.0	20:18	1406.8	1406.8	24.3
20:01	1326.0	1326.0	.0	23:46	1406.7	1406.7	27.8
20:02	1340.7	1340.7	.0	3:42	1408.5	1408.5	31.7
20:04	1352.8	1352.8	.1	7:50	1408.5	1408.5	35.8
20:09	1363.0	1363.0	.2	12:04	1408.5	1408.5	40.1
20:14	1371.8	1371.8	.2	16:49	1408.1	1408.1	44.8
20:18	1376.9	1376.9	.3	21:30	1410.2	1410.2	49.5
20:24	1383.0	1383.0	.4	2:02	1410.0	1410.0	54.0
20:33	1387.7	1387.7	.6	6:36	1410.3	1410.3	58.6
20:47	1389.5	1389.5	.8	9:43	1411.2	1411.2	61.7
20:58	1390.4	1390.4	1.0	13:41	1411.0	1411.0	65.7
21:34	1393.7	1393.7	1.6	19:23	1412.9	1412.9	71.4
21:53	1394.9	1394.9	1.9	23:39	1412.6	1412.6	75.7
22:50	1397.6	1397.6	2.8	4:38	1412.9	1412.9	80.6
23:46	1399.4	1399.4	3.8	7:39	1412.3	1412.3	83.7
1:34	1401.4	1401.4	5.6	8:52	1411.7	1411.7	84.9
3:23	1403.7	1403.7	7.4	9:00	1411.6	1411.6	85.0
5:50	1403.9	1403.9	9.8	0:00	.0	.0	.0


KIDMAN 3 BOTTOMHOLE PRESSURE BUILDUP
9 - 13 FEBRUARY 1992
ELEMENT # 56432 @ 6400 FT KB
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
.0
PRESSURE (PSI)
-20.0
.0
20.0
40.0
60.0
80.0
100.0
TIME (HRS)

00225

EXPERTEST PTY. LTD.

BHP/BHT GAUGE RUN DATA

CUSTOMER : Santos L.T.O.	PERFORATIONS: 6485' - 6772' kb	PAGE: 1 OF
WELL NAME: Kidman #3	FORMATION : Toolachee	DATE: 5/2/92
TEST TYPE : L.E.T. F.G.S.		OPR : N. Hay

GAUGE DATA	UPPER PRESSURE GAUGE	LOWER PRESSURE GAUGE	TEMPERATURE GAUGE	RUN DATA	TIME (HOURS)	TUBING PRESSURE (PSI/KPa)	ANNULUS PRESSURE (PSI/KPa)
ELEMENT SERIAL NO.	56429	56432		DATE : 5/2/92			
ELEMENT RANGE	3000psi	3000psi		PRESSURE LUBRICATOR :	15:45	2454	1778
RECORDING SECTION SERIAL NO.	14628	70544		RUN IN HOLE :	16:00	2454	1778
DATE OF CALIBRATION: @ 290°F	5·6·91	5·6·91		ON DEPTH AT : 6400kb FT/	17:00	2454	1778
CLOCK SERIAL NO.	2502	2509		DATE : 5/2/92			
CLOCK RANGE	3 HR	3 HR		PULL OUT OF HOLE :	17:50	2440	1785
LEAD SCREW TYPE	15 TCS	15 TCS		AT SURFACE :	18:07	2440	1785
				DEPRESSURE LUBRICATOR :	18:22	2440	1785
ENGAGE STYLUS DATE 5/2/92 TIME	15:40	15:40		MAXIMUM BHT AT 6400 FT/ = 256 °F/ MAX THERMOMETER			
DISENGAGE STYLUS DATE 5/2/92 TIME	18:29	18:29		N.B. ALL DEPTHS ARE MEASURED FROM K.B.			

DATE	TIME	REMARKS
		Well flowing on 80% choke.

00226

ET 108

EXPERTEST
WIRELINE & WELL TESTING SERVICE
PO BOX 354 COWANDILLA 5033
PH. (08) 354 0488 TELEX AA87183
FAX (08) 43 7408
138 RICHMOND ROAD MARLESTON
SOUTH AUSTRALIA 5033

Tested Wednesday, 5th February 1992.

CLIENT	LOCATION	FORMATION
Santos Ltd.	KIDMAN 3	toolachee

FLOWING PRESSURE GRADIENT REPORT

PRESSURE ELEMENT DATA

POSITION	SERIAL NO.	RANGE	CALIBRATED
Top	56429	3000	5/ 6/91
✓Bottom	56432	3000	5/ 6/91

WELL DATA

PARAMETER	VALUE
DWT In	356 PSIG
DWT Out	354 PSIG
Max BHT	256

	TOP ELEMENT			BOTTOM ELEMENT		
DEPTH FT KB	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT
LUB.	0.2310	362.6	-----	0.2290	355.0	-----
1000	0.3220	503.3	0.141	0.3240	501.9	0.147
2000	0.3900	608.3	0.105	0.3930	608.6	0.107
3000	0.4590	714.8	0.107	0.4610	713.8	0.105
4000	0.5290	822.8	0.108	0.5320	823.6	0.110
5000	0.6020	935.4	0.113	0.6060	938.0	0.115
5500	0.6410	995.6	0.120	0.6430	995.3	0.115
6000	0.6740	1046.5	0.102	0.6770	1047.9	0.105
6400	0.7080	1099.0	0.131	0.7120	1102.1 ✓	0.135
LUB.	0.2270	356.4	-----	0.2280	353.4	-----

GENERAL REMARKS

Well flowing on 80% choke
No base line drawn on charts

EXPERTEST PTY. LTD.

BHP/BHT GAUGE RUN DATA

CUSTOMER : Santos L.T.D.
WELL NAME: Kidman #3
TEST TYPE : L.E.T. F.G.S.

PERFORATIONS: 6485' - 6772' KB
FORMATION : Toolachee

PAGE: 2 OF
DATE: 6/2/92
OPR : N. Hay

GAUGE DATA	UPPER PRESSURE GAUGE	LOWER PRESSURE GAUGE	TEMPERATURE GAUGE
ELEMENT SERIAL NO.	56429	56432	N/A
ELEMENT RANGE	3000psi	3000psi	
RECORDING SECTION SERIAL NO.	14628	70544	
DATE OF CALIBRATION: @ 290°F	5·6·91	5·6·91	
CLOCK SERIAL NO.	2502	2509	
CLOCK RANGE	3 HR	3 HR	
LEAD SCREW TYPE	15 TLS	15 TLS	
ENGAGE STYLUS DATE 6/2/92 TIME	13:50	13:50	
DISENGAGE STYLUS DATE 6/2/92 TIME	16:18	16:18	

RUN DATA	TIME (HOURS)	TUBING PRESSURE (/KPa)	ANNULUS PRESSURE (/KPa)
DATE : 6/2/92			
PRESSURE LUBRICATOR :	13:53	2751	1903
RUN IN HOLE :	14:08	2751	1903
ON DEPTH AT : 6400 KB FT/	14:58	2723	1875
DATE : 6/2/92			
PULL OUT OF HOLE :	15:45	2785	1840
AT SURFACE :	16:00	2785	1840
DEPRESSURE LUBRICATOR :	16:15	2785	1840
MAXIMUM BHT AT 6400 KB FT/ = 256 °F/. MAX. THERMOMETER			
N.B. ALL DEPTHS ARE MEASURED FROM K.B.			

DATE	TIME	REMARKS
		Well Flowing on 50% choke

ET 108

00228

EXPERTEST
WIRELINE & WELL TESTING SERVICE
PO BOX 354 COWANDILLA 5033
PH. (08) 354 0488 TELEX AA87163
FAX (08) 43 7408
138 RICHMOND ROAD MARLESTON
SOUTH AUSTRALIA 5033

Tested Thursday, 6th February 1992.

CLIENT	LOCATION	FORMATION
Santos Ltd.	KIDMAN 3	TOOLACHEE

FLOWING PRESSURE GRADIENT REPORT

PRESSURE ELEMENT DATA			
POSITION	SERIAL NO.	RANGE	CALIBRATED
Top	56429	3000	5/ 6/91
/Bottom	56432	3000	5/ 6/91

WELL DATA	
PARAMETER	VALUE
DWT In	399 PSIG
DWT Out	404 PSIG
Max BHT	256

	TOP ELEMENT			BOTTOM ELEMENT		
DEPTH FT. KB	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT
LUB.	0.2550	399.7	-----	0.2500	387.5	-----
1000	0.3410	532.7	0.133	0.3390	525.1	0.138
2000	0.4090	637.7	0.105	0.4070	630.2	0.105
3000	0.4760	741.0	0.103	0.4750	735.4	0.105
4000	0.5460	849.0	0.108	0.5440	842.1	0.107
5000	0.6170	958.5	0.110	0.6160	953.5	0.111
5500	0.6540	1015.6	0.114	0.6520	1009.2	0.111
6000	0.6870	1066.6	0.102	0.6860	1061.9	0.105
6400	0.7220	1120.6	0.135	0.7240	1120.7/	0.147
LUB.	0.2610	409.0	-----	0.2600	402.9	-----

GENERAL REMARKS

Well flowing on 50% choke

EXPERTEST PTY. LTD.

BHP/BHT GAUGE RUN DATA

CUSTOMER : Santos L.T.D.
WELL NAME: Kidman #3
TEST TYPE : L.E.T. & F.G.S.

PERFORATIONS: 6485' - 6772' kb
FORMATION : Toolachee

PAGE: 3 OF
DATE: 7/2/92
OPR : W. Hay

GAUGE DATA	UPPER PRESSURE GAUGE	LOWER PRESSURE GAUGE	TEMPERATURE GAUGE
ELEMENT SERIAL NO.	56429	56432	N/A
ELEMENT RANGE	3000psi	3000psi	
RECORDING SECTION SERIAL NO.	14628	70544	
DATE OF CALIBRATION: @ 290°F	5·6·91	5·6·91	
CLOCK SERIAL NO.	2502	2509	
CLOCK RANGE	3 HR	3 HR	
LEAD SCREW TYPE	1STLS	1STLS	
ENGAGE STYLUS DATE 7/2/92 TIME	13:46	13:46	
DISENGAGE STYLUS DATE 7/2/92 TIME	16:23	16:23	

RUN DATA	TIME (HOURS)	TUBING PRESSURE (: ./KPa)	ANNULUS PRESSURE (.KPa)
DATE : 7/2/92			
PRESSURE LUBRICATOR :	13:52	3523	2040
RUN IN HOLE :	14:07	3523	2040
ON DEPTH AT : 6400 kb FT/	15:03	3516	2040
DATE : 7/2/92			
PULL OUT OF HOLE :	15:48	3523	2040
AT SURFACE :	16:04	3523	2040
DEPRESSURE LUBRICATOR :	16:19	3523	2040
MAXIMUM BHT AT 6400 kb FT/ = 258 °F/. MAX THERMOMETER			
N.B. ALL DEPTHS ARE MEASURED FROM K.B.			

DATE	TIME	REMARKS
		Well flowing on 25% choke

ET 108

00230

EXPERTEST

WIRELINE & WELL TESTING SERVICE

PO BOX 354 COWANDILLA 5033

PH. (08) 354 0488 TELEX AA87183
FAX (08) 43 7408

138 RICHMOND ROAD MARLESTON
SOUTH AUSTRALIA 5033

Tested Friday, 7th February 1992.

CLIENT	LOCATION	FORMATION
Santos Ltd.	KIDMAN 3	TODLACHEE

FLOWING PRESSURE GRADIENT REPORT

PRESSURE ELEMENT DATA

POSITION	SERIAL NO.	RANGE	CALIBRATED
Top	56429	3000	5/ 6/91
✓Bottom	56432	3000	5/ 6/91

WELL DATA

PARAMETER	VALUE
DWT In	510 PSIG
DWT Out	511 PSIG
Max BHT	258 F

	TOP ELEMENT			BOTTOM ELEMENT		
DEPTH FT KB	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT
LUB.	0.3270	511.0	-----	0.3300	511.2	-----
1000	0.3950	616.0	0.105	0.4000	619.4	0.108
2000	0.4500	700.9	0.085	0.4580	709.1	0.090
3000	0.5140	799.7	0.099	0.5180	801.9	0.093
4000	0.5760	895.3	0.096	0.5800	897.8	0.096
5000	0.6410	995.6	0.100	0.6440	996.8	0.099
5500	0.6730	1045.0	0.099	0.6770	1047.9	0.102
6000	0.7040	1092.8	0.096	0.7070	1094.4	0.093
6400	0.7370	1143.7	0.127	0.7410	1147.0✓	0.132
LUB.	0.3310	517.2	-----	0.3310	512.7	-----

GENERAL REMARKS

WELL FLOWING ON 25% CHOKE.

EXPERTEST PTY. LTD.

BHP/BHT GAUGE RUN DATA

CUSTOMER : Santos L.T.D.
WELL NAME: Kidman #3
TEST TYPE : L.E.T. & F.G.S.

PERFORATIONS: 6485' - 6772' kb
FORMATION : Toolachee

PAGE: 4 OF
DATE: 8/2/92
OPR : N. Hay

GAUGE DATA	UPPER PRESSURE GAUGE	LOWER PRESSURE GAUGE	TEMPERATURE GAUGE
ELEMENT SERIAL NO.	56429	56432	N/A
ELEMENT RANGE	3000psi	3000psi	
RECORDING SECTION SERIAL NO.	14628	70544	
DATE OF CALIBRATION: @ 290°F	5·6·91	5·6·91	
CLOCK SERIAL NO.	2502	2509	
CLOCK RANGE	3HR	3HR	
LEAD SCREW TYPE	15 TLS	15 TLS	
ENGAGE STYLUS DATE 8/2/92 TIME	1214	1214	
DISENGAGE STYLUS DATE 8/2/92 TIME	1457	1457	

RUN DATA	TIME (HOURS)	TUBING PRESSURE (/KPa)	ANNULUS PRESSURE (/KPa)
DATE : 8/2/92			
PRESSURE LUBRICATOR :	1217		
RUN IN HOLE :	1233	4061	2165
ON DEPTH AT : 6400 kb FT/	1330	4061	2165
DATE : 8/2/92			
PULL OUT OF HOLE :	1415	4061	2165
AT SURFACE :	1436		
DEPRESSURE LUBRICATOR :	1452	4075	2165
MAXIMUM BHT AT 6400kb FT/ = 258 °F/ MAX. THERMOMETER.			
N.B. ALL DEPTHS ARE MEASURED FROM K.B.			

DATE	TIME	REMARKS
8·2·92		Well flowing on 17/64
	1217	PRes. Lub.
	1227	Dep. Lub.
	1232	PRes. Lub.
	1233	R.I.H.
	1350	Hang Depth at 6400' KB.
	1415	POOH
	1436	IN Lub.
	1437	Dep. Lub.
	1442	PRes. Lub.
	1452	Dep. Lub.

00232

ET 108

EXPERTEST

WIRELINE & WELL TESTING SERVICE

PO BOX 354 COWANDILLA 5033

PH. (08) 354 0488 TELEX AA67183
FAX (08) 43 7408

138 RICHMOND ROAD MARLESTON
SOUTH AUSTRALIA 5033

Tested Saturday, 8th February 1992.

CLIENT	LOCATION	FORMATION
Santos Ltd.	KIDMAN 3	TOOLACHEE

FLOWING PRESSURE GRADIENT REPORT

PRESSURE ELEMENT DATA			
POSITION	SERIAL NO.	RANGE	CALIBRATED
Top	56429	3000	5/ 6/91
/Bottom	56432	3000	5/ 6/91

WELL DATA	
PARAMETER	VALUE
DWT In	589 PSIG
DWT Out	591 PSIG
Max BHT	258 F

	TOP ELEMENT			BOTTOM ELEMENT		
DEPTH FT KB	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT
LUB.	0.3810	594.4	-----	0.3790	587.0	-----
1000	0.4400	685.5	0.091	0.4390	679.7	0.093
2000	0.4940	768.8	0.083	0.4940	764.8	0.085
3000	0.5480	852.1	0.083	0.5470	846.8	0.082
4000	0.6040	938.5	0.086	0.6050	936.5	0.090
5000	0.6630	1029.5	0.091	0.6630	1026.3	0.090
5500	0.6930	1075.8	0.093	0.6930	1072.7	0.093
6000	0.7210	1119.0	0.086	0.7220	1117.6	0.090
6400	0.7520	1166.9	0.120	0.7540	1167.1/	0.124
LUB.	0.3810	594.4	-----	0.3810	590.0	-----

GENERAL REMARKS

WELL FLOWING ON 17% CHOKE.

EXPERTEST PTY. LTD.

BHP/BHT GAUGE RUN DATA

CUSTOMER : Santos LT.D.
WELL NAME: Kidman # 3
TEST TYPE : L.E.T. F.G.S.
PERFORATIONS: 6485' - 6772'
FORMATION : Toolachee
PAGE: 5 OF
DATE: 9/2/92
OPR : R. LARKIN

GAUGE DATA	UPPER PRESSURE GAUGE	LOWER PRESSURE GAUGE	TEMPERATURE GAUGE	RUN DATA	TIME (HOURS)	TUBING PRESSURE (/KPa)	ANNULUS PRESSURE (/KPa)
ELEMENT SERIAL NO.	56429	56432	N/A	DATE : 9/2/92			
ELEMENT RANGE	3000psi	3000psi		PRESSURE LUBRICATOR :	0817	4771	2124
RECORDING SECTION SERIAL NO.	14628	70544		RUN IN HOLE :	0833	4771	2124
DATE OF CALIBRATION: @ 290°F	5·6·91	5·6·91		ON DEPTH AT : 6400 FT/	0928	4771	2124
CLOCK SERIAL NO.	2502	2509		DATE : 9/2/92			
CLOCK RANGE	3 HR	3 HR		PULL OUT OF HOLE :	1013	4778	2124
LEAD SCREW TYPE	15 TLS	15 TLS		AT SURFACE :	1035		
				DEPRESSURE LUBRICATOR :	1100	4771	2124
ENGAGE STYLUS DATE 9/2/92 TIME	0809	0809		MAXIMUM BHT AT 6400 FT/ . = 256 °F/			
DISENGAGE STYLUS DATE 9/2/92 TIME	1104	1104		N.B. ALL DEPTHS ARE MEASURED FROM K.B.			

DATE	TIME	REMARKS
		Choke 13 %
Feb 9/92	0817	PRes. Lub.
	0827	Dep. Lub.
	0832	PRes. Lub.
	0833	R.I.H.
	0928	on Depth at 6400' KB
	1013	POOH
	1035	In Lub.
	1037	Dep. Lub.
	1042	PRes. Lub.
	1100	Dep. Lub.

00234

ET 108

EXPERTEST
WIRELINE & WELL TESTING SERVICE
PO BOX 354 COWANDILLA 5033
PH. (08) 354 0488 TELEX AA87183
FAX (08) 43 7408
138 RICHMOND ROAD MARLESTON
SOUTH AUSTRALIA 5033

Tested Sunday, 9th February 1992.

CLIENT	LOCATION	FORMATION
Santos Ltd.	KIDMAN 3	TOOLACHEE

FLOWING PRESSURE GRADIENT REPORT

PRESSURE ELEMENT DATA

POSITION	SERIAL NO.	RANGE	CALIBRATED
Top	56429	3000	5/ 6/91
Bottom	56432	3000	5/ 6/91

WELL DATA

PARAMETER	VALUE
DWT In	692 PSIG
DWT Out	692 PSIG
Max BHT	256 F

	TOP ELEMENT			BOTTOM ELEMENT		
DEPTH FT KB	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT
LUB.	0.4500	700.9	-----	0.4500	696.7	-----
1000	0.4950	770.4	0.069	0.4970	769.4	0.073
2000	0.5410	841.3	0.071	0.5430	840.6	0.071
3000	0.5880	913.8	0.073	0.5910	914.8	0.074
4000	0.6370	989.4	0.076	0.6400	990.7	0.076
5000	0.6880	1068.1	0.079	0.6910	1069.6	0.079
5500	0.7160	1111.3	0.086	0.7180	1111.4	0.084
6000	0.7410	1149.9	0.077	0.7430	1150.1	0.077
6400	0.7710	1196.2	0.116	0.7730	1196.6	0.116
LUB.	0.4530	705.6	-----	0.4530	701.4	-----

GENERAL REMARKS

WELL FLOWING ON 13% CHOKE

EXPERTEST PTY. LTD.

BHP/BHT GAUGE RUN DATA

CUSTOMER : Santos L.T.D.
WELL NAME: Kidman #3
TEST TYPE : L.E.T. & F.G.S. Buildup.

PERFORATIONS: 6485' - 6772'
FORMATION : Toolachee

PAGE: 6 OF 7
DATE: 9/2/92
OPR : R. Larkin

GAUGE DATA	UPPER PRESSURE GAUGE	LOWER PRESSURE GAUGE	TEMPERATURE GAUGE
ELEMENT SERIAL NO.	56429	56432	N/A
ELEMENT RANGE	3000 psi	3000 psi	
RECORDING SECTION SERIAL NO.	14628	70544	
DATE OF CALIBRATION: @ 290°F	5.6.91	5.6.91	
CLOCK SERIAL NO.	5/1	Exp/4	
CLOCK RANGE	120 HR	120 HR	
LEAD SCREW TYPE	15 TLS	15 TLS	
ENGAGE STYLUS DATE 9/2/92 TIME	1425	1425	
DISENGAGE STYLUS DATE 13/2/92 TIME	12:30	12:30	

RUN DATA	TIME (HOURS)	TUBING PRESSURE (~~PSI~~/KPa)	ANNULUS PRESSURE (~~PSI~~/KPa)
DATE : 9/2/92			
PRESSURE LUBRICATOR :	1435	4820	2117
RUN IN HOLE :	1736	4820	2117
ON DEPTH AT : 6400 FT/~~M~~	1755	4806	2117
DATE : 13.2.92			
PULL OUT OF HOLE :	0900	8046	993
AT SURFACE :	0920	8053	1007
DEPRESSURE LUBRICATOR :	1221	8053	1007

MAXIMUM BHT AT 6400 FT/~~M~~ = 256 °F/~~C~~ MAX. THERMOMETER

N.B. ALL DEPTHS ARE MEASURED FROM K.B.

DATE	TIME	REMARKS
9.2.92	1435	PRES. Lub
	1635	DEP. Lub 4792 KPA
	1735	PRES. Lub
	1736	R.I.H.
	1755	ON DEPTH at 6400' K.B.
13.2.92	0900	P OO H
	0920	IN Lub.
	0921	DEP. Lub
	1021	PRES. Lub
	1221	DEP. Lub Both clocks Failed to complete Build up.

ET 108

00236

EXPERTEST PTY. LTD.

BHP/BHT GAUGE RUN DATA

CUSTOMER : Santos L.T.D.	PERFORATIONS: 6485' - 6772'	PAGE: 7 OF 7
WELL NAME: Kidman #3	FORMATION : Toolachee	DATE: 13/2/92
TEST TYPE : S.G.S.		OPR : R. Larkin

GAUGE DATA	UPPER PRESSURE GAUGE	LOWER PRESSURE GAUGE	TEMPERATURE GAUGE
ELEMENT SERIAL NO.	56429	56432	N/A
ELEMENT RANGE	3000psi	3000psi	
RECORDING SECTION SERIAL NO.	14628	70544	
DATE OF CALIBRATION: @ 290 °F	5·6·91	5·6·91	
CLOCK SERIAL NO.	2502	2509	
CLOCK RANGE	3 HR	3 HR	
LEAD SCREW TYPE	15 TLS	15 TLS	
ENGAGE STYLUS DATE 13/2/92 TIME	12:38	12:38	
DISENGAGE STYLUS DATE 13/2/92 TIME	16:10	16:10	

RUN DATA	TIME (HOURS)	TUBING PRESSURE (PSI/KPa)	ANNULUS PRESSURE (PSI/KPa)
DATE : 13/2/92			
PRESSURE LUBRICATOR :	12:48	8039	1007
RUN IN HOLE :	13:04	8039	1007
ON DEPTH AT : 6400' FT/M	14:01	8039	1007
DATE : 13/2/92			
PULL OUT OF HOLE :	14:16	8039	1007
AT SURFACE :	14:29	8039	1007
DEPRESSURE LUBRICATOR :	14:45	8039	1007
MAXIMUM BHT AT 6400 FT/M = 254 °F/M	MAX THERMOMETER		
N.B. ALL DEPTHS ARE MEASURED FROM K.B.			

DATE	TIME	REMARKS
13/2/92	12:48	Press lub
	12:58	Depress lub
	13:03	Press lub
	13:04	R.I.H.
	14:01	ON depth at 6400' KB
13/2/92	14:16	POOH
	14:29	In lub
	14:30	Depress lub
	14:35	Press lub
	14:45	Depress lub

00237

ET 108

00238

EXPERTEST Pty. Ltd.
WIRELINE & WELL TESTING SERVICE
PO BOX 354 COWANDILLA 5033
PH. (08) 354 0488 TELEX AA87183
FAX (08) 43 7408
138 RICHMOND ROAD MARLESTON
SOUTH AUSTRALIA 5033

Tested Thursday, 13th February 1992.

CLIENT	LOCATION	FORMATION
Santos Ltd.	KIDMAN 3	TOOLACHEE

STATIC PRESSURE GRADIENT REPORT

PRESSURE ELEMENT DATA

POSITION	SERIAL NO.	RANGE	CALIBRATED
Top	56429	3000	5/ 6/91
Bottom	56432/	3000	5/ 6/91

WELL DATA

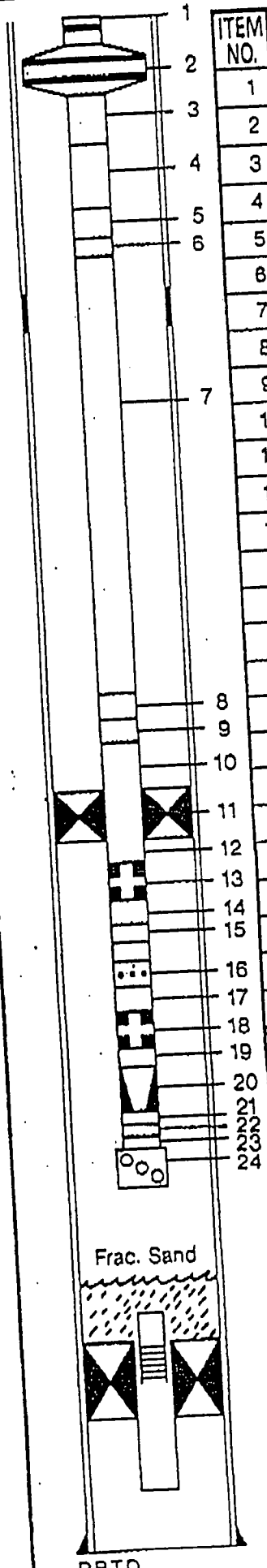
PARAMETER	VALUE
DWT In	1165 PSIG
DWT Out	1165 PSIG
Max BHT	254 F

	TOP ELEMENT			BOTTOM ELEMENT		
DEPTH FT KB	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT
LUB.	0.7540	1170.0	-----	0.7520	1164.0	-----
1000	0.7760	1203.9	0.034	0.7750	1199.7	0.036
2000	0.8000	1241.0	0.037	0.8000	1238.4	0.039
3000	0.8230	1276.5	0.036	0.8230	1274.0	0.036
4000	0.8420	1305.9	0.029	0.8450	1308.1	0.034
5000	0.8710	1350.7	0.045	0.8700	1346.8	0.039
5500	0.8820	1367.7	0.034	0.8810	1363.9	0.034
6000	0.8930	1384.7	0.034	0.8930	1382.5	0.037
6400	0.9100	1411.0	0.066	0.9120	1411.9	0.074
LUB.	0.7530	1168.4	-----	0.7520	1164.0	-----

GENERAL REMARKS

PETROLEUM ENGINEERING DEPARTMENT

DOWNHOLE INSTALLATION — KIDMAN 3



ITEM NO.	DESCRIPTION	LENGTH (ft)	DEPTH K.B. (ft)	MIN. I.D. (In)
1	K.B. to top of tubinghead spool	17 · 28	0 · 00	
2	C.I.W. FBB-EN 7 1/16" x 2⅞" AB x 2⅞" CS Hydril	0 · 75	18 · 03	
3	2⅞" IJ-3SS J55 nipple	0 · 32	18 · 35	
4	1 joint 2⅞" IJ-3SS J55 6 · 5# tubing	31 · 39	49 · 74	
5	2⅞" IJ-3SS J55 6 · 5# pup joint	1 · 75	51 · 49	
6	X/over 2⅞" IJ-3SS x 2⅞" J55 Lock-It	1 · 75	53 · 24	
7	202 joints 2⅞" Lock-it J55 6 · 5# tubing	6233 · 05		
8	X/over 2⅞" Lock-it x 2⅞" IJ-3SS	1 · 73	6286 · 29	piptag
9	10' x 2⅞" IJ-3SS J55 6 · 5# pup joint	9 · 72		
10	1 joint 2⅞" IJ · 3SS J55 6 · 5# tubing	31 · 47		
11	Otis 7" PL packer 12PL7017	5 · 66	6329 · 21	2 · 441
12	10' x 2⅞" IJ-3SS J55 6 · 5# pup joint tubing	9 · 73		
13	Otis 2⅞" 711X23103 nipple	0 · 95	6344 · 60	2 · 313
14	10' x 2⅞" IJ-3SS J55 6 · 5# pup joint tubing	9 · 73		
15	X/over 2⅞" IJ-3SS x 2⅞" EUE J55	1 · 83		
16	2⅞" EUE vent sub	2 · 88	6357 · 11	2 · 300
17	10' x 2⅞" EUE J55 6 · 5# pup joint	9 · 98		
18	Otis 2⅞" nipple 11XN14	1 · 27	6369 · 97	2 · 205
19	1 joint 2⅞" EUE J55 6 · 5#	31 · 53		
20	Tubing release sub	1 · 58		2 · 300
21	2 joints 2⅞" EUE J55 6 · 5#	63 · 10		
22	Percussion firing head c/w 2⅞" collar	7 · 08		2 · 300
23	Safety spacer section	8 · 80		
24	Tubing conveyed perforating guns		6483 · 33	

PERFORATED INTERVALS:

FORMATION	INTERVAL	GUN: SIZE	GUN: TYPE	CHARGES: S.P.F.	CHARGES: TYPE	CHARGES: WT(g)
TOOLACHEE	6485' · 6519'			6	HMX	22
	6728' · 6772'			6	HMX	22
PATCHAWARRA	7264' · 7272'	4"	Csg guns	4		
	7302' · 7310'	4"		4		
	7324' · 7348'	4"		4		
	7360' · 7384'	4"		4		

REMARKS:

ANNULUS FLUID : 8 · 5ppg 2% KCl brine (& Applied 2100)

INDICATED STRING WEIGHT :

CALCULATED STRING WEIGHT : 36000#

SLACK-OFF WEIGHT : Approx. 13000 Compression TCP completion 1100' water cushion 7000 compression on hanger 1 · 75" travel in packer & 1 · 1" compression

NOT TO SCALE		WELLSITE SUPERVISOR:	I. Fendley	
PROPOSED		DATE OF INSTALLATION	4/8/1989	
RE-COMPLETION	✓	DRAFTED	H. Sulzmann	DATE 27/9/1989
COMPLETION		REVISED		DATE

EXPERTEST PTY. LTD.

SEQUENCE OF EVENTS

CUSTOMER : SANTOS	PERFORATIONS: 6485' - 6772' I.K.B	PAGE: 1 OF
WELL NAME: HIDMAN #3	FORMATION : TOOLACHEE	DATE: 2-2-92
TEST TYPE : L.E.T & F.G.S		OPR : N. HAY

DATE/TIME	DESCRIPTION OF EVENTS
2-2-92	
13:00	ARRIVE ON LOCATION
	SPOT SEPARATOR & FRAC TANK
14:13	SHUT WELL & RIG UP SWAB VALVE & WIRELINE UNIT
14:35	R.I.H WITH 1.75" BLIND BOX
14:52	TAG TOP OF T.C.P GUNS AT 6447' I.K.B
14:54	P.O.O.H ON THE WAY OUT OF THE HOLE. THE WIRE PARTED
	AT THE COUNTER HEAD OF THE WIRELINE UNIT
	WITH 4780' W/L STILL IN HOLE
3-2-92	
	THE WIRE & TOOL STRING RECOVERD
4-2-92	
09:30	ARRIVE BACK ON LOCATION & COMPLET RIG UP OF SEPARATOR FRAC TANK &
	FLARE LINE
12:45	PRESSURE TEST FLOW LINE TO FULL S.I.W.H.P. ALL OK
13:13	FLOW WELL TO FLARE BYPASSING THE SEPARATOR
13:30	DIVERT FLOW THROUGH THE SEPARATOR & TRIM WITH 2.25" ORIFICE PLATE
14:00	COMMENCE L.E.T. ON 80% CHOKE
5-2-92	
	RIG UP 2X3000 PSI PRESSURE ELEMENTS COUPLED TO 3HR CLOCK FOR F.G.S
15:45	HANG ELEMENTS IN LUB & PRESSURE UP
15:50	DEPRESSURE LUB
16:00	PRESSURE UP LUB & R.I.H.
17:50	P.O.O.H.

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00240

EXPERTEST PTY. LTD.

SEQUENCE OF EVENTS

CUSTOMER : SANTOS	PERFORATIONS: 6485' - 6772' ITB	PAGE: 2 OF
WELL NAME: KIDMAN # 3	FORMATION : TOOLACHEE	DATE: 5-2-92
TEST TYPE : L.E.T & E.G.S		OPR : N. HAY

DATE/TIME	DESCRIPTION OF EVENTS
5-2-92	
18:07	ARRIVE BACK IN LUB & DEPRIESSURE
18:12	PRIESSURE UP LUB
18:22	DEPRIESSURE LUB & RECOVER CHARTS GOOD CHARTS
20:00	ADJUST CHOMIE SETTING TO OBTAIN F.W.H.P. OF 2758 K.P.A. 50% CHOME
6-2-92	
	RIG UP 2X3000 PSI PRIESSURE ELEMENTS COUPLED TO 3HR CLOCKS FOR E.G.S
13:53	HANG ELEMENTS IN LUB & PRIESSURE UP
13:58	DEPRESSURE LUB
14:08	PRIESSURE UP LUB & R.I.H.
15:45	P.O.O.H
16:00	ARRIVE BACK IN LUB & DEPRIESSURE
16:05	PRIESSURE UP LUB
16:15	DEPRESSURE LUB & RECOVER CHARTS GOOD CHARTS
18:00	ADJUST CHOKE SETTING TO OBTAIN F.W.H.P. OF 3445 KPA 25% CHOKE
7-2-92	
	RIG UP 2X3000 P.S.I. PRIESSURE ELEMENTS COUPLED TO 3HR CLOCK FOR E.G.S.
13:52	HANG ELEMENTS IN LUB & PRIESSURE UP
13:57	DEPRESSURE LUB
14:07	PRIESSURE UP LUB & R.I.H.
15:48	P.O.O.H.
16:04	ARRIVE BACK IN LUB & DEPRIESSURE
16:09	PRESSURE UP LUB
16:19	DEPRIESSURE LUB & RECOVER CHARTS GOOD CHARTS

00241

EXPERTEST PTY. LTD.

SEQUENCE OF EVENTS

CUSTOMER : SANTOS	PERFORATIONS: 6485' - 6772' ITB	PAGE: 3 OF	
WELL NAME: KIDMAN #3	FORMATION : TOOLACHEE	DATE: 7-2-92	
TEST TYPE : L.E.T & F.G.S		OPR : N HAY	

DATE/TIME	DESCRIPTION OF EVENTS
7-2-92	
18:00	ADJUST CHOKE SETTING TO OBTAIN F.W.H.P OF 4137 KPA 17 % CHOKE
8.2.92	
1200	PREPARE PRES. ELEMENTS FOR F.G.S.
1217	PRES. LUB
1227	DEP. LUB 4061 KPA. TUBING PRES.
1232	PRES. LUB
1233	R. I. H.
1330	BOTTOM STOP at 6400' KB. 45 min. STOP.
1415	POOH.
1436	IN LUB
1437	DEP. LUB
1442	PRES. LUB
1452	DEP. LUB. CHARTS GOOD. MONITOR FLOW.
1800	CHANGE CHOKE TO 13 % FOR FINAL RATE OF APPROX. 4826 KPA.
Feb. 9/92	
0800	PREPARE PRES. ELEMENTS FOR F.G.S.
0817	PRES. LUB.
0827	DEPRES. LUB.
0832	PRES. LUB.
0833	R. I. H.
0928	at HANG DEPTH at 6400' KB. 45 min. STOP.
1013	POOH.

00242

ET 102

EXPERTEST PTY. LTD.	SEQUENCE OF EVENTS		
	CUSTOMER : SANTOS	PERFORATIONS: 6485'-6772'	PAGE: 4 OF
	WELL NAME: KIDMAN # 3	FORMATION : TOOLACHEE	DATE: 9.2.92
	TEST TYPE : LET/FGS		OPR : R. LARKIN

DATE/TIME	DESCRIPTION OF EVENTS
Feb 9/92	
1035	IN Lub.
1037	Dep. Lub
1042	PRES. Lub.
1100	Dep. Lub. charts good.
1300	Take 1st set of H.P. GAS & COND. SAMPLES.
1400	Take 2ND Set of HP GAS & COND. SAMPLES
1410	PREPARE PRES. ELEMENTS with 120 hr CLOCKS FOR B.H.P.S.
1435	PRES. Lub
1635	Dep. Lub
1735	PRES Lub
1736	R.I.H.
1755	ON Depth at 6400' K.B.
2000	Shut IN FOR Build up. (96[85] hrs)
Feb 13/92	
0900	POOH PRES. ELEMENTS. : Rig out Test Equipment.
0920	IN Lub Note: Tight Pulling out of hole between 4600' AND 6400'.
0921	Dep. Lub.
1021	PRES. Lub.
1221	Dep. Lub.
	PREPARE PRES. ELEMENTS FOR S.G.S.

00243

ET 102

EXPERTEST PTY. LTD.	SEQUENCE OF EVENTS		
	CUSTOMER : Santos	PERFORATIONS: 6485' - 6772	PAGE: 5 OF 5
	WELL NAME: Kidman #3	FORMATION : Toolachee	DATE: 13/2/92
	TEST TYPE : S.G.S.		OPR : R. Larkin

DATE/TIME	DESCRIPTION OF EVENTS
Feb 13/92	
12:30	Prepare pressure elements coupled to 3HR clocks for S.G.S.
12:48	Pressure lub
12:58	Depressure lub
13:03	Pressure lub
13:04	R.I.H. Spot Test Sep. 2 - Frac tanks on Kidman #5.
14:01	On depth at 6400' kB
Feb 13/92	
14:16	P.O.O.H.
14:29	In lub
14:30	Depressure lub
14:35	Pressure lub
14:45	Depressure lub. Charts good.
	Rig out Swab Equipment on Kidman #7
16:30	Rig out wireline unit, B.O.P. swabvalve on Kidman 3.
18:00	Completed program on Kidman #3.
	NOTE: Problems occured pulling out of hole on all Runs between 4600' and 6400'. An extra knuckle joint was Run with tool string thus enabling to POOH Easily. Possibility of corked screwed Tubing.

00244

EXPERTEST PTY. LTD.

FIELD READINGS

CUSTOMER : SANTOS	PERFORATIONS: 6485'-6772' MB	PAGE: 1 OF	
WELL NAME: KIDMAN #3	FORMATION : TOOLACHEE	DATE: 2-2-92	
TEST TYPE : L.E.T & F.G.S		OPR : N. MAY	

TIME		WELLHEAD DATA					SEPARATOR DATA				LIQUID PRODUCTION				
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (PSIG/KPa)	ANNULUS PRESSURE (PSIG/KPa)	WELLHEAD TEMP (°F/°C)	CHOKE SIZE	BS&W (%)	ORIFICE PLATE SIZE (IN)	STATIC PRESS. (PSIG)	DIFF PRESS. (IN WC)	GAS TEMP (°F)	TOTAL LIQUID (IN/CMT)	OIL (IN/CMT)	OIL API GRAVITY @ 60°F	WATER (IN/CMT)	
2-2-92															
13:00			ARRIVE ON LOCATION												
			SPOT SEPARATOR & FRAC TANK												
14:13			SHUT WELL IN & RIG UP SWAB VALVE & WIRELINE UNIT												
14:35			R.I.H WITH 1.75" BLIND BOX												
14:52			TAG TOP OF T.C.P. GUNS AT 6447' KB												
14:54			P.O.O.H. ON THE WAY OUT OF THE HOLE THE WIRE PARTED												
			AT THE COUNTER HEAD OF THE WIRELINE UNIT												
			WITH 4780' W/L STILL IN HOLE												
3-2-92															
			THE WIRE & TOOL STRING RECOVERD												
4-2-92															
09:30			ARRIVE BACK ON LOCATION & COMPLET RIG UP OF SEPARTOR FRAC TANK &												
			FLARE LINE												
12:45			PRESSURE TEST FLOW LINE TO FULL S.I.W.H.P ALL OK												
13:13		8067	4440	FLOW WELL TO FLARE BYPASSING THE SEPARATOR											
13:30		2502		DIVERT FLOW THROUGH THE SEPARATOR & TRIM WITH 2.25" ORIFICE PLATE											
14:00	0	2565	4674	66	80%		2.25	235	136	158	4.25	.5	3.75		
16:00	2	2406	4978	69	"		"	200	171	158	6.25	1	5.25		
18:00	4	2413	5047	70	"		"	200	168	158	10	2.5	7.5		
20:00	6	2420	5095	71	"		"	205	166	154	14.25	4	10.25		
22:00	8	2427	5116	70	"		"	210	164	156	17.75	5.25	12.5		

ET 103

00245

EXPERTEST PTY. LTD.

FIELD READINGS

CUSTOMER : SANTOS
WELL NAME: KIDMAN #3
TEST TYPE : L.E.T & F.G.S

PERFORATIONS: 6485' - 6772
FORMATION : TOOLACHEE

PAGE: 2 OF
DATE: 5-2-92
OPR : N. HAY

TIME		WELLHEAD DATA					SEPARATOR DATA				LIQUID PRODUCTION			
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (PSI/KPa)	ANNULUS PRESSURE (PSI/KPa)	WELLHEAD TEMP (°F/°C)	CHOKE SIZE %	BS&W (%)	ORIFICE PLATE SIZE (IN)	STATIC PRESS. (PSIG)	DIFF PRESS. (IN WC)	GAS TEMP (°F)	TOTAL LIQUID (IN/CM)	OIL (IN/CM)	OIL API GRAVITY @ 60°F	WATER (IN/CM)	
5-2-92															
02:00	12	2420	5143	71	80		2·25	216	163	158	25	7·25		17·75	
06:00	16	2371	5157	67	"		"	216	163	154	32·25	9·5		22·75	
08:00	18	2434	5205	70	"		"	210	163	156	36	10·75		25·25	
09:30		BLOW ANNULUS DOWN TO 1000 KPA													
10:00	20	2399	1000	67	80		2·25	210	164	158	39·5	11·5		28	
12:00	22	2440	1778	74	"		"	210	163	161	43·25	12·25		31	
14:00	24	2440	1799	73	"		"	210	163	163	47	13·25		33·75	
15:00	25	2420	1778	73	"		"	210	163	163	48·75	13·5		35·25	
		RIG UP 2 X 3000 P.S.I. PRESSURE ELEMENTS COUPLED TO 3 HR CLOCK FOR F.G.S													
15:45		HANG ELEMENTS IN LUB & TAKE 2 X 500 cc L.P WATER SAMPLES FROM SEPARATOR SIGHT GLASS													
16:00		R.I.H.													
16:00	26	2454	1778	75	80		2·25	210	164	163	50·5	14		36·5	
17:00	27	2420	1785	73	"		"	210	164	163	52·5	14·5		38	
17:50		P.O.O.H.													
18:00	28	2440	1785	72	"		"	210	164	163	53·75	15·25		38·5	
18:07		ARRIVE BACK IN LUB													
19:00	29	2420	1792	72	80		2·25	210	164	162	55·25	15·5		39·75	
20:00	30	2427	1799	70	"		"	210	164	160	57	16		41	4
20:00		ADJUST CHOME SETTING TO OBTAIN F.W.H.P. OF 2758 KPA													
22:00	32	2744	1799	67	50		"	210	153	153	61	17·75		43·25	

ET 103

00246

EXPERTEST PTY. LTD.

FIELD READINGS

CUSTOMER : SANTOS
WELL NAME: KIDMAN # 3
TEST TYPE : L.E.T & F.G.S

PERFORATIONS: 6485'- 6772' MD
FORMATION : TOOLACHEE

PAGE: 3 OF
DATE: 6-2-92
OPR : N. HAY

TIME		WELLHEAD DATA					SEPARATOR DATA				LIQUID PRODUCTION			
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (~~PSI~~/KPa)	ANNULUS PRESSURE (~~PSI~~/KPa)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE %	BS&W (%)	ORIFICE PLATE SIZE (IN)	STATIC PRESS. (PSIG)	DIFF PRESS. (IN WC)	GAS TEMP (°F)	TOTAL LIQUID (IN/~~CM~~)	OIL (IN/~~CM~~)	OIL API GRAVITY @ 60°F	WATER (IN/~~CM~~)
6-2-92														
02:00	36	2744	1840	65	50		2·25	210	152	149	67·5	20		47·5
06:00	40	2758	1861	67	"		"	210	152	149	75	22·5		52·5
08:00	42	2758	1875	66	"		"	210	150	149	78·75	23·75		55
10:00	44	2758	1875	70	"		"	210	150	152	82·25	24·25		58
12:00	46	2778	1889	72	"		"	210	151	156	85·5	25·75		59·75
13:00	47	2813	1889	76	"		"	210	151	161	89	27·25		61·75
		RIG UP 2X3000PSI PRESSURE ELEMENTS COUPLED TO 3HR CLOCK FOR F.G.S												
13:53		HANG ELEMENTS IN LUB												
14:00	48	2751	1903	74	50		2·25	210	160	159	90·25	27·25		63
14:08		R.I.H.												
15:00	49	2723	1875	62	"		"	210	154	149	91	27·5		63·5
15:45		P.O.O.H.												
16:00		ARRIVE BACK IN LUB												
16:00	50	2785	1840	65	50		2·25	210	142	152	93	28		65
17:00	51	2771	1854	62	"		"	215	144	152	95·25	28·25		67
18:00	52	2771	1854	60	"		"	215	143	150	96·75	28·5		68·25
18:00		ADJUST CHOKE SETTING TO OBTAIN F.W.H.P OF 3445 K.P.A												
20:00	54	3440	1868	62	25		2·25	215	128	147	100	29		71
22:00	56	3447	1903	65	"		"	209	132	149	103	30		73
7-2-92														
02:00	60	3496	1971	69	25		2·25	218	123	154	110·25	32·75		77·5

ET 103

00247

EXPERTEST PTY. LTD.

FIELD READINGS

CUSTOMER : SANTOS
WELL NAME: KIDMAN #3
TEST TYPE : L.E.T & E.G.S
PERFORATIONS: 6485' - 6772' MD
FORMATION : TOOLACHEE
PAGE: 4 OF
DATE: 7-2-92
OPR : N. HAY

TIME		WELLHEAD DATA					SEPARATOR DATA				LIQUID PRODUCTION			
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (PSIA/KPa)	ANNULUS PRESSURE (PSIA/KPa)	WELLHEAD TEMP (°F/°C)	CHOKE SIZE %	BS&W (%)	ORIFICE PLATE SIZE (IN)	STATIC PRESS. (PSIG)	DIFF PRESS. (IN WC)	GAS TEMP (°F)	TOTAL LIQUID (IN/CM)	OIL (IN/CM)	OIL API GRAVITY @ 60°F	WATER (IN/CM)
7-2-92														
06:00	64	3502	2013	70	25		2·25	220	124	154	118	35·25		82·75
08:00	66	3502	2020	72	〃		〃	225	124	158	121·25	36·25		85
10:00	68	3509	2034	65	〃		〃	225	124	152	124·5	38		86·5
12:00	70	3516	2034	67	〃		〃	230	123	152	128·5	39		89·5
13:00	71	3516	2034	61	〃		〃	230	121	149	130	39·75		90·25
		RIG UP 2X3000 P.S.I PRESSURE ELEMENTS COUPLED TO 3HR CLOCKS FOR E.G.S.												
13:52		HANG ELEMENTS IN LUB												
14:00	72	3523	2040	62	25		2·25	235	120	149	132	40·25		91·75
14:07		R.I.H.												
15:00	73	3516	2040	62	〃		〃	240	120	149	133·5	40·5		93
15:48		P.O.O.H.												
16:00	74	3523	2040	67	〃		〃	240	118	149	135·5	41·25		94·25
16:04		ARRIVE BACK IN LUB												
17:00	75	3537	2047	64	25		〃	240	116	149	137·25	41·75		95·5
18:00	76	3530	2047	62	〃		〃	240	116	149	138·75	42·25		96·5
18:00		ADJUST CHOKE SETTING TO OBTAIN F.W.H.P. OF 4137 KPA												
20:00	78	4102	2082	62	17		2·25	240	100	143	142·5	44		98·5
2200	80	4089	2103	62	17		2.25	238	102	145	146	45		101
Feb 8/92														
0200	84	4089	2103	63	17		2.25	238	102	144	153	48		105
0600	88	4000	2131	66	17		2.25	200	120	147	160	50		110

ET 103

00248

EXPERTEST PTY. LTD.

FIELD READINGS

CUSTOMER : Santos | PERFORATIONS: 6485' - 6772' | PAGE: 5 OF

WELL NAME: KIDMAN #3 | FORMATION : TOOLACHEE | DATE: 8·2·92

TEST TYPE : LET & FGS | OPR : R. LARKIN

TIME		WELLHEAD DATA					SEPARATOR DATA				LIQUID PRODUCTION				
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (~~PSI~~/KPa)	ANNULUS PRESSURE (~~PSI~~/KPa)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE	BS&W (%)	ORIFICE PLATE SIZE (IN)	STATIC PRESS. (PSIG)	DIFF PRESS. (IN WC)	GAS TEMP (°F)	TOTAL LIQUID (IN/~~CM~~)	OIL (IN/~~CM~~)	OIL API GRAVITY @ 60°F	WATER (IN/~~CM~~)	
Feb 8/92					17%						160	50		110	
0800	90	4019	2137	65	"		2.25	200	120	145	163.5	51.5		112	
1000	92	4047	2144	66	"		"	200	120	147	167	52.5		114.5	
1200	94	4068	2165	66	"		"	210	120	149	170.5	53.5		117	
1300	95	4061	2158	66				210	119	149					
1400	96	4054	2151	66	"		"	210	118	147	174	55		119	
1500	97	4082	2151	66	"		"	210	119	147					
1600	98	4082	2165	67	"		"	210	119	147	177	56		121	
1700	99	4082	2172	66	"		"	210	119	147					
1800	100	4075	2172	67	"		"	210	119	147	180.5	57.5		123	
	cut choke to 13%. Drain water from tank.														
2000	102				new TK. DIP.						99.5	59		40.5	
2000	102	4806	2083	65	13%		2.25	210	93	140	99.5	59		40.5	
2200	104	4792	2069	64	"		"	160	115	138	102.5	60.5		42	
Feb 9/92															
0200	108	4751	2089	66	"		"	150	128	136	109	62		47	
0600	112	4764	2096	66	"		"	150	128	136	115.5	64.5		51	
0800	114	4792	2103	67	"										
0832					R. I. H.		F.G.S.	195	100	142	118.5	65		53.5	
0900	115	4757	2110	65	13%			195	100	140					
0928					ON Depth		at 6400'	KB.							
1000	116	4792	2110	66	13%			195	100	140	122	66		56	

ET 103

00249

EXPERTEST PTY. LTD.

FIELD READINGS

CUSTOMER : SANTOS | PERFORATIONS: 6485' 6772' | PAGE: 6 OF 6.

WELL NAME: KIDMAN #3 | FORMATION : TOOLACHEE | DATE: 9.2.92

TEST TYPE : LET/FGS | OPR : R. LARKIN

TIME		WELLHEAD DATA					SEPARATOR DATA				LIQUID PRODUCTION				
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (~~PSI~~/KPa)	ANNULUS PRESSURE (~~PSI~~/KPa)	WELLHEAD TEMP (~~°F~~°C)	CHOKE SIZE %	BS&W (%)	ORIFICE PLATE SIZE (IN)	STATIC PRESS. (PSIG)	DIFF PRESS. (IN WC)	GAS TEMP (°F)	TOTAL LIQUID (IN/~~CM~~)	OIL (IN/~~CM~~)	OIL API GRAVITY @ 60°F	WATER (IN/~~GM~~)	
Feb 9/92											122	66		56	
1013					POOH	PRES.	Elements								
1100	117	4771	2124	65	13%		2.25	195	100	140					
1200	118	4764	2117	65	"		"	195	100	140	125.5	67.5		58	
1300	119	4785	2117	66	"		"	195	100	140	127	68		59	
	Take 1st set of HP gas @ SPE 243, HP COND. @ SPE 161, SAMPLES.														
1400	120	4798	2117	66	13%		2.25	195	100	140	128.5	68.5		60	
	Take 2nd set of H.P. gas @ PDE 111, HP COND. SPE 058, SAMPLES.														
1600	122	4806	2117	65	13%		2.25	195	100	140	131.5	69.5		62	
1736		4820	RIH.	PRES	Elements	with	120	hr clocks.							
1755		4806			HANG	at	6400'	KB.							
1800	124	4806	2117	65	13%		2.25	195	99	138	135.5	71		64.5	
2000	126	4813	2124	65	13%		2.25	195	99	138	138.5	72		66.5	
		Shut IN FOR Build up.													

ET 103

00250

EXPERTEST PTY. LTD.

TEST RESULTS

CUSTOMER : SANTOS
WELL NAME: KIDMAN #3
TEST TYPE : L.I.T & F.G.S.

PERFORATIONS: 6485' - 6772' ITB
FORMATION : TOOLACHEE

PAGE: 1 OF
DATE: 4-2-92
OPR : N. HAY

TIME		WELLHEAD DATA				SEPARATOR		FLOW RATES			CUMULATIVE PRODUCTION			
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (~~PSI~~/KPa)	ANNULUS PRESSURE (~~PSI~~/KPa)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE %	PRESSURE (~~PSI~~/KPa)	TEMP (~~°F~~/°C)	GAS ~~MMSCFD~~ $m^3 10^3/D$	OIL ~~BPD~~ m^3/D	WATER ~~BPD~~ m^3/D	GAS ~~MMSCF~~ $m^3 10^3$	OIL ~~BBLS~~ m^3	WATER ~~BBLS~~ m^3	L.G.R $m^3 10^6/m^3$
4-2-92														
13:13		8067	4440	FLOW WELL										
14:00	0	2565	4674	66	80	1620	70	160.9	0	0		0	0	
16:00	2	2406	4978	69	"	1379	70	166.9	.79	4.79		.066	.399	33
18:00	4	2413	5047	70	"	1379	70	165.5	4.79	7.19		.465	.998	72
20:00	6	2420	5095	71	"	1413	68	167.1	4.79	8.79		.864	1.731	81
22:00	8	2427	5116	70	"	1447	69	167.6	3.99	7.19		1.197	2.33	66
5-2-92														
02:00	12	2420	5143	70	80	1447	70	166.8	3.19	8.39		1.73	3.72	69
06:00	16	2371	5157	67	"	1447	68	167.4	3.59	7.99	110.6	2.32	5.05	69
08:00	18	2434	5205	70	"	1447	69	167.1	3.99	7.99		2.66	5.72	71
09:30		FLOW ANNULUS DOWN TO 1000 KPA												
10:00	20	2399	1000	67	80	1447	70	167.4	2.39	8.79		2.86	6.45	66
12:00	22	2440	1778	74	"	1447	72	166.4	2.39	9.59		3.06	7.25	71
14:00	24	2440	1799	73	"	1447	73	166.1	3.19	8.79		3.32	7.99	72
15:00	25	2420	1778	73	"	1447	73	166.1	1.59	9.59		3.39	8.38	67
16:00	26	2454	1778	75	"	1447	73	166.6	3.19	7.99		3.52	8.72	67
17:00	27	2420	1785	73	"	1447	73	166.6	3.19	9.59		3.65	9.12	76
18:00	28	2440	1785	72	"	1447	73	166.6	4.79	3.19		3.85	9.25	47
19:00	29	2420	1792	72	"	1447	72	166.7	1.60	7.99		3.92	9.58	57
20:00	30	2427	1799	70	"	1447	71	167.1	3.19	1.59		4.05	9.65	28
22:00	32	2744	1799	67	50	1447	67	162.3	5.59	7.19		4.52	10.24	78

ET 104

00251

EXPERTEST PTY. LTD.

TEST RESULTS

CUSTOMER : SANTOS
WELL NAME: MIDMAN #3
TEST TYPE : L.E.T & F.G.S

PERFORATIONS: 6485' - 6772' ITB
FORMATION : TOOLACHEE

PAGE: 2 OF
DATE: 6-2-92
OPR : N. HAY

TIME		WELLHEAD DATA				SEPARATOR		FLOW RATES			CUMULATIVE PRODUCTION			
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (~~PSI~~/KPa)	ANNULUS PRESSURE (~~PSI~~/KPa)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE %	PRESSURE (~~PSI~~/KPa)	TEMP (~~°F~~/°C)	GAS ~~MMSCFD~~ $m^3 10^3/D$	OIL ~~BPD~~ m^3/D	WATER ~~BPD~~ m^3/D	GAS ~~MMSCF~~ $m^3 10^3$	OIL ~~BBLS~~ m^3	WATER ~~BBLS~~ m^3	L.G.R $m^3 10^6/m^3$
6-2-92														
02:00	36	2744	1840	65	50	1447	65	162.4	3.59	6.79		5.12	11.37	63
06:00	40	2758	1861	67	"	1447	65	162.4	3.99	7.99	276.2	5.78	12.70	73
08:00	42	2758	1875	66	"	1447	65	161.3	3.99	7.99		6.11	13.36	74
10:00	44	2758	1875	70	"	1447	67	160.9	1.59	9.59		6.24	14.15	69
12:00	46	2778	1884	72	"	1447	69	160.8	4.79	5.59		6.64	14.62	64
13:00	47	2813	1889	76	"	1447	72	160.1	9.59	12.79		7.04	15.15	139
14:00	48	2751	1903	74	"	1447	71	165.1	0	7.99		7.04	15.48	48
15:00	49	2723	1875	62	"	1447	65	163.5	1.59	3.19		7.10	15.61	29
16:00	50	2785	1840	65	"	1447	67	156.5	3.19	9.59		7.24	16.00	81
17:00	51	2771	1854	62	"	1482	67	159.4	1.59	12.79		7.30	16.53	90
18:00	52	2771	1854	60	"	1482	66	159.2	1.59	7.99		7.36	16.86	60
20:00	54	3440	1868	62	25	1482	64	151.0	1.59	8.79		7.49	17.59	68
22:00	56	3447	1908	65	"	1441	65	150.9	3.19	6.39		7.75	18.12	63
7-2-92														
02:00	60	3496	1971	69	25	1503	68	148.0	3.59	7.19		8.35	19.31	72
06:00	64	3502	2013	70	"	1516	68	149.3	4.79	8.39	433.5	9.14	20.70	88
08:00	66	3502	2020	72	"	1551	70	150.3	3.19	7.19		9.41	21.29	69
10:00	68	3509	2034	65	"	1552	67	151.2	5.59	4.79		9.87	21.68	68
12:00	70	3516	2034	67	"	1585	67	152.2	3.19	9.59		10.13	22.47	66
13:00	71	3516	2034	61	"	1585	65	151.4	2.39	2.39		10.33	22.66	18
14:00	72	3523	2040	62	"	1620	65	152.3	3.19	9.59		10.46	23.05	66

ET 104

00232

EXPERTEST PTY. LTD.

TEST RESULTS

CUSTOMER : SANTOS
WELL NAME: KIDMAN #3
TEST TYPE : L.E.T & E.G.S

PERFORATIONS: 6485' - 6772' MB
FORMATION : TOOLACHEIE

PAGE: 3 OF
DATE: 7-2-92
OPR : N. HAY

TIME		WELLHEAD DATA				SEP.		FLOW RATES			CUMULATIVE PRODUCTION			
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (~~PSI~~/KPa)	ANNULUS PRESSURE (~~PSI~~/KPa)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE %	PRESSURE (~~PSI~~/KPa)	TEMP (~~°F~~/°C)	GAS ~~MMSCFD~~ $m^3 10^3/D$	OIL ~~BPD~~ m^3/D	WATER ~~BPD~~ m^3/D	GAS ~~MMSCF~~ $m^3 10^3$	OIL ~~BBLS~~ m^3	WATER ~~BBLS~~ m^3	L.G.R $m^3/10^6 m^3$
7-2-92														
15:00	73	3516	2040	62	25	1654	65	153.9	1.59	7.99		10.52	23.39	53
16:00	74	3523	2040	67	"	1654	65	152.6	4.79	7.99		10.72	23.72	57
17:00	75	3537	2047	64	"	1654	65	151.3	3.199	7.99		10.85	24.05	56
18:00	76	3530	2047	62	"	1654	65	151.3	3.199	6.398		10.98	24.31	45
20:00	78	4102	2082	62	17	1654	62	141.2	5.598	6.398		11.44	24.84	50
22:00	80	4089	2103	62	"	1641	63	142.5	3.2	8.01		11.71	25.51	79
Feb 8/92														
0200	84	4089	2103	63	17	1641	62	142.7	4.81	6.41		12.511	26.578	79
0600	88	4000	2131	66	17	1379	64	141.9	3.2	8.01	580.41	13.045	27.913	79
0800	90	4019	2137	65	17	1379	63	142.1	4.8	6.41		13.446	28.447	79
1000	92	4047	2144	66	17	1379	64	141.85	3.2	8.02		13.713	29.115	79
1200	94	4068	2165	66	17	1448	65	144.96	3.2	8.02		13.98	29.783	77
1300	95	4061	2158	66	17	1448	65	144.35	3.2	8.02				
1400	96	4054	2151	66	17	1448	64	144.0	4.8	6.41		14.381	30.317	78
1500	97	4082	2151	66	"	1448	64	144.6						
1600	98	4082	2165	67	"	1448	64	144.6	3.2	6.41		14.648	30.851	66
1700	99	4082	2172	66	"	1448	64	144.6						
1800	100	4025	2172	67	"	1448	64	144.6	4.8	6.41		15.049	31.385	78
		cut	choke		to	13 %.								
2000	102	4806	2083	65	13 %	1448	60	128.63	4.8	-		15.45		
2200	104	4792	2069	64	"	1103	59	131.0	4.8	4.8		15.851	31.786	73

ET 104

00253

EXPERTEST PTY. LTD.

TEST RESULTS

CUSTOMER : SANTOS
WELL NAME: KIDMAN #3
TEST TYPE : LET / FGS

PERFORATIONS: 6485' - 6772'
FORMATION : TOOLACHER

PAGE: 4 OF
DATE: 9.2.92
OPR : R. LARKIN

TIME		WELLHEAD DATA				Sep		FLOW RATES			CUMULATIVE PRODUCTION			
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (~~PSI~~/KPa)	ANNULUS PRESSURE (~~PSI~~/KPa)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE %	PRESSURE (~~PSI~~/KPa)	TEMP (~~°F~~/°C)	GAS ~~MMSCFD~~ $m^3 10^3/D$	OIL ~~BPD~~ m^3/D	WATER ~~BPD~~ m^3/D	GAS ~~MMSCF~~ $m^3 10^3$	OIL ~~BBLS~~ m^3	WATER ~~BBLS~~ m^3	L.G.R. $M^3/10^6 M^3$
Feb 9/92					13									
0200	108	4751	2089	66	"	1034	58	129.17	2.41	8.01		16.252	33.121	81
0600	112	4764	2096	66	"	1034	58	129.17	4.01	6.41	716.97	16.92	34.189	81
0800	114	4792	2103	67	"	1345	61	128.47	1.61	8.01		17.054	34.857	75
0900	115	4757	2110	65	"	1345	60	128.71						
1000	116	4792	2110	66	"	1345	60	128.71	3.2	8.01		17.317	35.525	87
1100	117	4771	2124	65	"	1345	60	128.71						
1200	118	4764	2117	65	"	1345	60	128.71	4.8	6.41		17.718	36.039	87
1300	119	4785	2117	66	"	1345	60	128.71	3.2	6.41		17.852	36.306	75
	Take 1st Set of H.P. gas & COND. SAMPLES: gas SPE 243, & SPE 161													
1400	120	4798	2117	66	13%	1345	60	128.71	3.2	6.41		17.986	36.573	75
	Take and Set of HP gas & PDE 111, HP COND. SPE 058 SAMPLES.													
1600	122	4806	2117	65	13%	1345	60	128.71	3.2	6.41		18.253	37.107	75
1800	124	4806	2117	65	13%	1345	59	128.3	4.81	8.01		18.654	37.775	100
2000	126	4813	2124	65	13%	1345	59	128.3	3.2	6.41	791.97	18.921	38.309	75
	0		End of Test.			Shut IN FOR Build up								
2005		7709												
2010		7867												
2015		7929	1958											
2030		7998	1820											
2045		8033	1675											
2100	1	8046	1620											

ET 104

00254

EXPERTEST PTY. LTD.

TEST RESULTS

CUSTOMER : SANTOS
WELL NAME: KIDMAN # 3
TEST TYPE : LGT/FGS BHP

PERFORATIONS: 6485' - 6772
FORMATION : TOOLACHEE

PAGE: 5 OF
DATE: 9 · 2 · 92
OPR : R. LARKIN

TIME		WELLHEAD DATA						FLOW RATES			CUMULATIVE PRODUCTION				
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (~~PSI~~/KPa)	ANNULUS PRESSURE (~~PSI~~/KPa)	WELLHEAD TEMP (°F/°C)	CHOKE SIZE	PRESSURE (PSI/KPa)	TEMP (°F/°C)	GAS MMSCFD $m^3 10^3/D$	OIL BPD m^3/D	WATER BPD m^3/D	GAS MMSCF $m^3 10^3$	OIL BBLS m^3	WATER BBLS m^3		
Feb 9/92						BUILD UP									
2130		8046	1489												
2200	2	8074	1386												
2230		8081	1310												
2300	3	8074	1269												
2400	4	8074	1248												
Feb 10/92															
0200	6	8067	1234												
0600	10	8060	1200												
1000	14	8067	1172												
1400	18	8074	1151												
1800	22	8081	1131												
2200	26	8081	1103												
Feb 11/92															
0200	30	8074	1082												
0600	34	8067	1062												
1000	38	8067	1062												
1400	42	8074	1055												
1800	46	8074	1049												
2200	50	8067	1042												
Feb 12/92															
0200	54	8060	1027												

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00255

EXPERTEST PTY. LTD.

TEST RESULTS

CUSTOMER : SANTOS
WELL NAME: KIDMAN #3
TEST TYPE : L.ET / FGS BHP

PERFORATIONS: 6485'- 6772'
FORMATION : JOOLACHEE

DATE: 12·2·92
OPR : R. LARKIN

TIME		WELLHEAD DATA						FLOW RATES			CUMULATIVE PRODUCTION				
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (~~PSI~~/KPa)	ANNULUS PRESSURE (~~PSI~~/KPa)	WELLHEAD TEMP (°F/°C)	CHOKE SIZE	PRESSURE (PSI/KPa)	TEMP (°F/°C)	GAS MMSCFD $m^3 10^3/D$	OIL BPD m^3/D	WATER BPD m^3/D	GAS MMSCF $m^3 10^3$	OIL BBLS m^3	WATER BBLS m^3		
Feb 12/92						BUILD UP.									
0600	58	8046	1020												
1000	62	8046	1014												
1400	66	8046	1007												
1800	70	8046	1000												
2200	74	8046	1000												
Feb 13/92															
0200	78	8046	993												
0600	82	8046	993												
0900	85	8046	993			POOH PRES. ELEMENTS.									
0920						IN LUB									
0921		8053	1007			DEP. LUB.									
1021						PRES. LUB.									
1221		8053	1007			DEP. LUB.									
						PREPARE PRES. ELEMENTS FOR S.G.S.									
1248						PRES. LUB.									
1304		8039	1007			R.I.H.									
1401		8039	1007			ON DEPTH at 6400' KB.									
1416		8039	1007			POOH									
1429						at SURFACE.									
1445		8039	1007			DEP. LUB. CHARTS GOOD.									
16:30						RIG DOWN WIRE LINE EQUIPMENT.									

00256

ET 104

EXPERTEST PTY. LTD.

GAS FLOW CALCULATIONS

CUSTOMER : SANTOS	PERFORATIONS: 6485' - 6772' ITB	PAGE: 1 OF	
WELL NAME: KIDMAN #3	FORMATION : TOOLACHEE	DATE: 4-2-92	
TEST TYPE : L.F.T & F.G.S		OPR : N. HAY	
ORIFICE METER TYPE: DANIELS	STATIC PRESSURE RANGE : 0-1500 PSIG	GAS SPECIFIC GRAVITY (SG) = .789	
METER RUN SIZE : 3.068	DIFFERENTIAL PRESS. RANGE: 0-200 IN WC	FG $\sqrt{(1/SG)}$ = 1.1258	
SEPARATOR NO : 459	STANDARD CONDITIONS : 14.73 PSI @ 60°F	C_2 (FU × FG) = 27.0192	

DATE / TIME	FLOW TIME (HOURS)	CHOKE SIZE %	STATIC PRESS P_F (PSIA)	DIFF PRESS H_W (IN WC)	GAS FLOW TEMP (°F)	ORIF. PLATE SIZE (IN)	$\sqrt{(P_F \times H_W)}$	$C_1 = F_B \times F_{TF} \times F_{PV} \times Y_2$				C_1	C	GAS FLOW RATE $Q = \sqrt{(P_F \times H_W)} \times C$	
								F_B	F_{TF}	F_{PV}	Y_2		($C = C_1 \times C_2$)	(MMSCFD)	($m^3 10^3/D$)
4-2-92															
14:00	0	80	249	136	158	2.25	184.29	1223.18	.9173	1.0200	1.0021	1146.92	30989.04	5.711	160.9
16:00	2	"	214	171	158	"	191.62	"	.9173	1.0172	1.0031	1144.83	30932.5	5.927	166.9
18:00	4	"	214	168	158	"	189.93	"	.9173	1.0172	1.0031	1144.77	30930.8	5.875	165.52
20:00	6	"	219	166	154	"	190.98	"	.9203	1.0180	1.0030	1149.27	31052.5	5.931	167.10
22:00	8	"	224	164	156	"	191.978	"	.9188	1.0182	1.0029	1147.53	31005.5	5.952	167.69
5-2-92															
02:00	12	80	224	163	158	2.25	191.39	1223.18	.9173	1.0180	1.0028	1145.43	30948.7	5.923	166.87
06:00	16	"	224	163	154	"	191.39	"	.9203	1.0184	1.0028	1149.61	31061.6	5.945	167.49
08:00	18	"	224	163	156	"	191.39	"	.9188	1.0182	1.0028	1147.51	31005.0	5.934	167.18
10:00	20	"	224	164	158	"	191.978	"	.9173	1.0180	1.0029	1145.45	30949.2	5.942	167.41
12:00	22	"	224	163	161	"	191.39	"	.9151	1.0177	1.0028	1142.33	30864.9	5.907	166.42
14:00	24	"	224	163	163	"	191.39	"	.9136	1.0175	1.0028	1140.28	30809.5	5.897	166.14
15:00	25	"	224	163	163	"	191.39	"	.9136	1.0175	1.0028	1140.28	30809.5	5.897	166.14
16:00	26	"	224	164	163	"	191.97	"	.9136	1.0175	1.0029	1140.30	30810.0	5.915	166.64
17:00	27	"	224	164	163	"	191.97	"	.9136	1.0175	1.0029	1140.30	30810.0	5.915	166.64
18:00	28	"	224	164	163	"	191.97	"	.9136	1.0175	1.0029	1140.30	30810.0	5.915	166.64
19:06	29	"	224	164	162	"	191.97	"	.9143	1.0176	1.0029	1141.32	30837.7	5.920	166.79
20:00	30	"	224	164	160	"	191.97	"	.9158	1.0178	1.0029	1143.38	30893.3	5.931	167.10
22:00	32	50	224	153	153	"	185.42	"	.9210	1.0185	1.0027	1150.46	31084.6	5.764	162.39

00257

EXPERTEST PTY. LTD.

GAS FLOW CALCULATIONS

CUSTOMER : SANTOS	PERFORATIONS: 6485' - 6772' M13	PAGE: 2 OF	
WELL NAME: KIDMAN #3	FORMATION : TOOLACHEE	DATE: 6-2-92	
TEST TYPE : L.E.T & F.G.S.		OPR : N. HAY	
ORIFICE METER TYPE: DANIELS	STATIC PRESSURE RANGE : 0-1500 PSIG	GAS SPECIFIC GRAVITY (SG) = .789	
METER RUN SIZE : 3.068	DIFFERENTIAL PRESS. RANGE: 0-200 IN WC	FG $\sqrt{(1/SG)}$ = 1.1258	
SEPARATOR NO : 459	STANDARD CONDITIONS : 14.73 PSI @ 60°F	C_2 (FU × FG) = 27.0192	

DATE / TIME	FLOW TIME (HOURS)	CHOKE SIZE %	STATIC PRESS P_F (PSIA)	DIFF PRESS H_W (IN WC)	GAS FLOW TEMP (°F)	ORIF. PLATE SIZE (IN)	$\sqrt{(P_F \times H_W)}$	$C_1 = F_B \times F_{TF} \times F_{PV} \times Y_2$				C_1	C (C = $C_1 \times C_2$)	GAS FLOW RATE $Q = \sqrt{(P_F \times H_W)} \times C$	
								F_B	F_{TF}	F_{PV}	Y_2			(MMSCFD)	($m^3 10^3$/D)
6-2-92															
02:00	36	50	224	152	149	2.25	184.82	1223.18	.9240	1.0189	1.0026	1154.68	31198.7	5.766	162.4
06:00	40	"	224	152	149	"	184.82	"	.9240	1.0189	1.0026	1154.68	31198.7	5.766	162.4
08:00	42	"	224	150	149	"	183.60	"	.9240	1.0189	1.0026	1154.64	31197.6	5.728	161.3
10:00	44	"	224	150	152	"	183.60	"	.9218	1.0186	1.0026	1151.45	31111.5	5.712	160.9
12:00	46	"	224	151	156	"	184.21	"	.9188	1.0182	1.0026	1147.27	30998.4	5.71	160.8
13:00	47	"	224	151	161	"	184.21	"	.9151	1.0177	1.0026	1142.09	30858.4	5.685	160.1
14:00	48	"	224	160	159	"	189.62	"	.9166	1.0179	1.0028	1144.33	30919.0	5.863	165.1
15:00	49	"	224	154	149	"	186.03	"	.9240	1.0189	1.0027	1154.72	31199.8	5.804	163.5
16:00	50	"	224	142	152	"	178.63	"	.9218	1.0186	1.0025	1151.29	31107.11	5.557	156.5
17:00	51	"	229	144	152	"	181.88	"	.9218	1.0190	1.0025	1151.75	31119.4	5.660	159.4
18:00	52	"	229	143	150	"	181.24	"	.9233	1.0192	1.0024	1153.86	31176.4	5.651	159.2
20:00	54	25	229	128	147	"	171.48	"	.9256	1.0196	1.0022	1156.78	31255.3	5.360	151.0
22:00	56	"	223	132	149	"	171.84	"	.9240	1.0188	1.0023	1154.19	31185.4	5.359	150.9
7-2-92															
02:00	60	25	232	123	154	2.25	169.19	1223.18	.9203	1.0191	1.0021	1149.47	31057.9	5.255	148.0
06:00	64	"	234	124	154	"	170.60	"	.9203	1.0192	1.0021	1149.66	31063.0	5.30	149.3
08:00	66	"	239	124	158	"	172.41	"	.9173	1.0192	1.0020	1145.87	30960.6	5.338	150.3
10:00	68	"	239	124	152	"	172.41	"	.9218	1.0199	1.0020	1152.21	31132.0	5.368	151.2
12:00	70	"	244	123	152	"	173.49	"	.9218	1.0203	1.0020	1152.63	31143.2	5.403	152.2

002258

EXPERTEST PTY. LTD.

GAS FLOW CALCULATIONS

CUSTOMER : SANTOS	PERFORATIONS: 6485'-6772' KB	PAGE: 3 OF	
WELL NAME: KIDMAN #3	FORMATION : TOOLACHEE	DATE: 7-2-92	
TEST TYPE : L.F.T & F.G.S		OPR : K. HAY	
ORIFICE METER TYPE: DANIELS	STATIC PRESSURE RANGE : 0-1500 PSIG	GAS SPECIFIC GRAVITY (SG) = .789	
METER RUN SIZE : 3.068	DIFFERENTIAL PRESS. RANGE: 0-200 IN WC	FG $\sqrt{(1/SG)}$ = 1.1258	
SEPARATOR NO : 45-9	STANDARD CONDITIONS : 14.73 PSI @ 60°F	C_2 (FU × FG) = 27.0192	

DATE / TIME	FLOW TIME (HOURS)	CHOKE SIZE o/o	STATIC PRESS P_F (PSIA)	DIFF PRESS H_W (IN WC)	GAS FLOW TEMP (°F)	ORIF. PLATE SIZE (IN)	$\sqrt{(P_F \times H_W)}$	$C_1 = F_B \times F_{TF} \times F_{PV} \times Y_2$				C_1	C ($C = C_1 \times C_2$)	GAS FLOW RATE $Q = \sqrt{(P_F \times H_W)} \times C$	
								F_B	F_{TF}	F_{PV}	Y_2			(MMSCFD)	($m^3 10^3$/D)
7-2-92															
13:00	71	25	244	121	149	2.25"	172.08	1223.18	.9240	1.0206	1.0019	1155.82	31229.4	5.374	151.4
14:00	72	"	249	120	149	"	173.11	"	.9240	1.0211	1.0019	1156.25	31241.0	5.408	152.3
15:00	73	"	254	120	149	"	174.83	"	.9240	1.0215	1.0018	1156.70	31253.17	5.464	153.9
16:00	74	"	254	118	149	"	173.372	"	.9240	1.0215	1.0018	1156.66	31252.21	5.418	152.6
17:00	75	"	254	116	149	"	171.897	"	.9240	1.0215	1.0018	1156.63	31251.2	5.372	151.3
18:00	76	"	254	116	149	"	171.897	"	.9240	1.0215	1.0018	1156.63	31251.2	5.372	151.3
20:00	78	17	254	100	143	"	159.60	"	.9286	1.0223	1.0015	1162.93	31421.5	5.015	141.2
22:00	80	17	252	102	145	"	160.56	1223.18	.9271	1.0218	1.0016	1160.51	31355.98	5.034	142.5
Feb 8/92															
0200	84	17	252	102	144	"	160.56	1223.18	.9279	1.0219	1.0016	1161.61	31385.74	5.039	142.7
0600	88	17	214	120	147	"	160.52	1223.18	.9256	1.0182	1.0022	1155.26	31214.13	5.011	141.9
0800	90	17	214	120	145	"	160.52	1223.18	.9271	1.0184	1.0022	1157.40	31271.96	5.02	142.1
1000	92	17	214	120	147	"	160.52	1223.18	.9256	1.0182	1.0022	1155.26	31214.13	5.011	141.85
1200	94	17	224	120	149	"	164.22	1223.18	.9240	1.0189	1.0021	1153.99	31179.93	5.12	144.96
1300	95	17	224	119	149	"	163.53	1223.18	.9240	1.0189	1.0021	1153.97	31179.38	5.10	144.35
1400	96	17	224	118	147	"	162.85	1223.18	.9256	1.0191	1.0020	1156.09	31236.66	5.09	144.0
1500	97	17	224	119	147	"	163.53	1223.18	.9256	1.0191	1.0021	1156.11	31237.21	5.10	144.6
1600	98	17	224	119	147	"	163.53	1223.18	.9256	1.0191	1.0021	1156.11	31237.21	5.10	144.6
1700	99	17	224	119	147	"	163.53	1223.18	.9256	1.0191	1.0021	1156.11	31237.21	5.10	144.6

ET 106

EXPERTEST PTY. LTD.

GAS FLOW CALCULATIONS

CUSTOMER : SANTOS	PERFORATIONS: 6485' - 6772	PAGE: 4 OF 4.
WELL NAME: KIDMAN #3	FORMATION : TOOLACHEE	DATE: 8.2.92
TEST TYPE : LET / FGS		OPR : R. LARKIN

ORIFICE METER TYPE: DANIELS	STATIC PRESSURE RANGE : 0 - 1500 PSIG	GAS SPECIFIC GRAVITY (SG) = .789
METER RUN SIZE : 3.068"	DIFFERENTIAL PRESS. RANGE: 0 - 200 " IN WC	FG $\sqrt{(1/SG)}$ = 1.1258
SEPARATOR NO : 459	STANDARD CONDITIONS : 14.73 PSI @ 60°F	C_2 (FU × FG) = 27.0192

DATE / TIME	FLOW TIME (HOURS)	CHOKE SIZE %	STATIC PRESS P_F (PSIA)	DIFF PRESS H_W (IN WC)	GAS FLOW TEMP (°F)	ORIF. PLATE SIZE (IN)	$\sqrt{(P_F \times H_W)}$	$C_1 = F_B \times F_{TF} \times F_{PV} \times Y_2$				C_1	C ($C = C_1 \times C_2$)	GAS FLOW RATE $Q = \sqrt{(P_F \times H_W)} \times C$	
								F_B	F_{TF}	F_{PV}	Y_2			(MMSCFD)	($m^3 10^3/D$)
Feb. 8/92															
1800	100	17	224	119	147	2.25	163.53	1223.18	.9256	1.0191	1.0021	1156.11	31232.21	5.11	144.6
		change choke to 13 %													
2000	102	13	224	93	140	2.25	144.57	1223.18	.9309	1.0198	1.0016	1163.18	31428.26	4.54	128.63
2200	104	13	174	115	138	"	147.32	1223.18	.9325	1.0168	1.0024	1162.51	31410.12	4.63	131.0
Feb 9/92															
0200	108	"	164	128	136	"	145.21	1223.18	.9341	1.0147	1.0030	1162.92	31421.24	4.56	129.17
0600	112	"	164	128	136	"	145.21	1223.18	.9341	1.0147	1.0030	1162.92	31421.24	4.56	129.17
0800	114	"	209	100	142	"	144.82	1223.18	.9394	1.0183	1.0019	1159.75	31335.50	4.54	128.47
0900	115	"	209	100	140	"	144.82	1223.18	.9309	1.0185	1.0019	1161.92	31394.06	4.55	128.71
1000	116	"	209	100	140	"	144.82	1223.18	.9309	1.0185	1.0019	1161.92	31394.06	4.55	128.71
1100	117	"	209	100	140	"	144.82	1223.18	.9309	1.0185	1.0019	1161.92	31394.06	4.55	128.71
1200	118	"	209	100	140	"	144.82	1223.18	.9309	1.0185	1.0019	1161.92	31394.06	4.55	128.71
1300	119	"	209	100	140	"	144.82	1223.18	.9309	1.0185	1.0019	1161.92	31394.06	4.55	128.71
1400	120	"	209	100	140	"	144.82	1223.18	.9309	1.0185	1.0019	1161.92	31394.06	4.55	128.71
1600	122	"	209	100	140	"	144.82	1223.18	.9309	1.0185	1.0019	1161.92	31394.06	4.55	128.71
1800	124	"	209	99	138	"	144.09	1223.18	.9325	1.0187	1.0018	1164.07	31452.41	4.53	128.30
2000	126	"	209	99	138	"	144.09	1223.18	.9325	1.0187	1.0018	1164.07	31452.41	4.53	128.30
			END OF TEST.												

00260

ET 106

EXPERTEST PTY. LTD.

LIQUID PRODUCTION

CUSTOMER : SANTOS	PERFORATIONS: 6485'-6772	PAGE: 1 OF	
WELL NAME: KIDMAN #3	FORMATION : TOOLACHEE	DATE: 4-2-92	
TEST TYPE : L.E.T & F.G.S		OPR : N. HAY	

TANK NUMBER		TANK CAPACITY		TANK SCALE		OIL API GRAVITY = @ 60°F
	#1 = 52		#1 = 56.6 ~~bbls/m³~~		#1 = 1" = .2666 ~~bbls/in - m³/cm~~	
	#2 =		#2 = bbls/m³		#2 = bbls/in - m³/cm	

DATE / TIME	FLOW TIME (HOURS)	TANK USED (NUMBER)	TOTAL TANK DIP (IN/~~CM~~)	OIL/CONDENSATE PRODUCTION				WATER PRODUCTION			
				TANK DIP (IN/~~CM~~)	TANK PRODUCTION (~~BBLS~~/m³)	FLOW RATE (~~BPD~~/m³D)	CUMULATIVE PRODUCTION (~~BBLS~~/m³)	TANK DIP (IN/~~CM~~)	TANK PRODUCTION (~~BBLS~~/m³)	FLOW RATE (~~BPD~~/m³D)	CUMULATIVE PRODUCTION (~~BBLS~~/m³)
4-2-92											
14:00	0	52	4.25	.5				3.75			
16:00	2	"	6.25	1	.066	.79	.066	5.25	.399	4.798	.399
18:00	4	"	10	2.5	.399	4.798	.465	7.5	.599	7.198	.998
20:00	6	"	14.25	4	.399	4.798	.864	10.25	.733	8.797	1.731
22:00	8	"	17.75	5.25	.333	3.99	1.197	12.5	.599	7.198	2.330
5-2-92											
02:00	12	52	25	7.25	.533	3.199	1.73	17.75	1.399	8.397	3.724
06:00	16	"	32.25	9.5	.599	3.599	2.329	22.75	1.33	7.99	5.059
08:00	18	"	36	10.75	.333	3.99	2.662	25.25	.666	7.99	5.725
10:00	20	"	39.5	11.5	.199	2.39	2.861	28	.733	8.79	6.458
12:00	22	"	43.25	12.25	.199	2.39	3.060	31	.799	9.597	7.257
14:00	24	"	47	13.25	.266	3.19	3.326	33.75	.733	8.79	7.99
15:00	25	"	48.75	13.5	.066	1.59	3.392	35.25	.399	9.59	8.389
16:00	26	"	50.5	14	.133	3.19	3.525	36.5	.333	7.99	8.722
17:00	27	"	52.5	14.5	.133	3.19	3.658	38	.399	9.59	9.121
18:00	28	"	53.75	15.25	.200	4.79	3.858	38.5	.133	3.199	9.254
19:00	29	"	55.25	15.5	.067	1.600	3.925	39.75	.333	7.99	9.587
20:00	30	"	57	16	.133	3.19	4.058	41	.066	1.59	9.653
22:00	32	"	61	17.75	.466	5.59	4.524	43.25	.59	7.198	10.243
6-2-92											

ET 105

00261

EXPERTEST PTY. LTD.

LIQUID PRODUCTION

CUSTOMER : SANTOS
WELL NAME: MIDMAN #3
TEST TYPE : L.E.T & F.G.S
PERFORATIONS: 6485'- 6772' KB
FORMATION : TOOLACHEE
PAGE: 2 OF
DATE: 6-2-92
OPR : N. MAY

TANK NUMBER	#1 = 52	TANK CAPACITY	#1 = 56.6 bbls/m³	TANK SCALE	#1 = 1" = .2666 bbls/in - m³/cm	OIL API GRAVITY = @ 60°F
	#2 =		#2 = bbls/m³		#2 = bbls/in - m³/cm	

DATE / TIME	FLOW TIME (HOURS)	TANK USED (NUMBER)	TOTAL TANK DIP (IN/CM)	OIL/CONDENSATE PRODUCTION				WATER PRODUCTION			
				TANK DIP (IN/CM)	TANK PRODUCTION (BBLS/m³)	FLOW RATE (BPD/m³D)	CUMULATIVE PRODUCTION (BBLS/m³)	TANK DIP (IN/CM)	TANK PRODUCTION (BBLS/m³)	FLOW RATE (BPD/m³D)	CUMULATIVE PRODUCTION (BBLS/m³)
6-2-92											
02:00	36	52	67.5	20	.599	3.59	5.12	47.5	1.133	6.798	11.37
06:00	40	"	75	22.5	.666	3.99	5.783	52.5	1.33	7.99	12.70
08:00	42	"	78.75	23.75	.333	3.99	6.113	55	.666	7.99	13.36
10:00	42	"	82.25	24.25	.133	1.59	6.243	58	.799	9.59	14.159
12:00	46	"	85.5	25.75	.399	4.79	6.642	59.75	.466	5.598	14.62
13:00	47	"	89	27.25	.399	9.597	7.04	61.75	.533	12.796	15.15
14:00	48	"	90.25	27.25	0	0	7.04	63	.333	7.99	15.48
15:00	49	"	91	27.5	.066	1.599	7.107	63.5	.133	3.199	15.61
16:00	50	"	93	28	.133	3.199	7.24	65	.399	9.597	16.00
17:00	51	"	95.25	28.25	.066	1.59	7.306	67	.533	12.796	16.533
18:00	52	"	96.75	28.5	.066	1.59	7.36	68.25	.333	7.998	16.86
20:00	54	"	100	29	.133	1.59	7.49	71	.733	8.797	17.59
22:00	56	"	103	30	.267	3.199	7.757	73	.533	6.398	18.12
7-2-92											
02:00	60	52	110.25	32.25	.599	3.599	8.356	77.5	1.199	7.198	19.31
06:00	64	"	118	35.25	.799	4.798	9.146	82.75	1.399	8.397	20.70
08:00	66	"	121.25	36.25	.266	3.199	9.412	85	.599	7.198	21.29
10:00	68	"	124.5	38	.466	5.598	9.87	86.5	.399	4.798	21.68
12:00	70	"	128.5	39	.266	3.199	10.136	89.5	.799	9.597	22.47
13:00	71	"	130	39.75	.199	2.399	10.335	90.25	.199	2.399	22.66

35% Choke

25% Choke

ET 105

00262

EXPERTEST PTY. LTD.

LIQUID PRODUCTION

CUSTOMER : SANTOS
WELL NAME: KIDMAN #3
TEST TYPE : L.E.T & F.G.S

PERFORATIONS: 6485'-6772' 1713
FORMATION : TOOLACHEE

PAGE: 3 OF
DATE: 7-2-92
OPR : N. HAY

TANK NUMBER	#1 = 52	TANK CAPACITY	#1 = 56.6 bbls/m³	TANK SCALE	#1 = 1" = .2666 ~~bbls~~/in - m³/~~cm~~	OIL API GRAVITY = @ 60°F
	#2 =		#2 = bbls/m³		#2 = bbls/in - m³/cm	

DATE / TIME	FLOW TIME (HOURS)	TANK USED (NUMBER)	TOTAL TANK DIP (IN/~~CM~~)	OIL/CONDENSATE PRODUCTION				WATER PRODUCTION			
				TANK DIP (IN/~~CM~~)	TANK PRODUCTION (~~BBLS~~/m³)	FLOW RATE (~~BPD~~/m³D)	CUMULATIVE PRODUCTION (~~BBLS~~/m³)	TANK DIP (IN/~~CM~~)	TANK PRODUCTION (~~BBLS~~/m³)	FLOW RATE (~~BPD~~/m³D)	CUMULATIVE PRODUCTION (~~BBLS~~/m³)
7-2-92											
14:00	72	52	132	40.25	.133	3.199	10.463	91.75	.399	9.597	23.05
15:00	73	"	133.5	40.5	.066	1.599	10.529	93	.333	7.99	23.39
16:00	74	"	135.5	41.25	.199	4.798	10.728	94.25	.333	7.99	23.72
17:00	75	"	137.25	41.75	.133	3.199	10.85	95.5	.333	7.99	24.05
18:00	76	"	138.75	42.25	.133	3.199	10.98	96.5	.266	6.398	24.31
20:00	78	"	142.5	44	.466	5.598	11.44	98.5	.533	6.398	24.84
22 00	80	"	146	45	.267	3.2	11.71	101	.667	8.01	25.51
Feb 8/92											
0200	84	"	153	48	.801	4.81	12.511	105	1.068	6.41	26.578
0600	88	"	160	50	.534	3.2	13.045	110	1.335	8.01	27.913
0800	90	"	163.5	51.5	.401	4.8	13.446	112	.534	6.41	28.447
1000	92	"	167	52.5	.267	3.2	13.713	114.5	.668	8.02	29.115
1200	94	"	170.5	53.5	.267	3.2	13.98	117	.668	8.02	29.783
1400	96	"	174	55	.401	4.8	14.381	119	.534	6.41	30.317
1600	98	"	177	56	.267	3.2	14.648	121	.534	6.41	30.851
1800	100	"	180.5	57.5	.401	4.8	15.049	123	.534	6.41	31.385
1800	DRAIN WATER FROM TANK.					FOR 2	hRS.				
2000	102	TARE	99.5	59	.401	4.8	15.45	40.5	-	-	
2200	104		102.5	60.5	.401	4.8	15.851	42	.401	4.8	31.786

ET 105

00263

EXPERTEST PTY. LTD.

LIQUID PRODUCTION

CUSTOMER : Santos
WELL NAME: Kidman #3
TEST TYPE : L.E.T. & F.G.S.

PERFORATIONS: 6485' - 6772 KB
FORMATION : TOOLACHEE

PAGE: 4 OF 4.
DATE: 8/2/92
OPR : B. Larkin

TANK NUMBER		TANK CAPACITY		TANK SCALE		OIL API GRAVITY = @ 60°F
	#1 = 52		#1 = 56.6 ~~bbls~~/m³		#1 = 1" = .2666 ~~bbls~~/in - m³/~~cm~~	
	#2 =		#2 = bbls/m³		#2 = bbls/in - m³/cm	

DATE / TIME	FLOW TIME (HOURS)	TANK USED (NUMBER)	TOTAL TANK DIP (IN/~~CM~~)	OIL/CONDENSATE PRODUCTION				WATER PRODUCTION			
				TANK DIP (IN/~~CM~~)	TANK PRODUCTION (~~BBLS~~/m³)	FLOW RATE (~~BPD~~/m³D)	CUMULATIVE PRODUCTION (~~BBLS~~/m³)	TANK DIP (IN/CM)	TANK PRODUCTION (~~BBLS~~/m³)	FLOW RATE (~~BPD~~/m³D)	CUMULATIVE PRODUCTION (~~BBLS~~/m³)
9/2/92			102.5	60.5			15.851	42			31.786
02:00	108	52	109	62	.401	2.41	16.252	47	1.335	8.01	33.121
06 00	112		115.5	64.5	.668	4.01	16.92	51	1.068	6.41	34.189
0800	114		118.5	65	.134	1.61	17.05	53.5	.668	8.01	34.857
1000	116		122	66	.267	3.2	17.317	56	.668	8.01	35.525
1200	118		125.5	67.5	.401	4.8	17.718	58	.534	6.41	36.039
1300	119		127	68	.134	3.2	17.852	59	.267	6.41	36.306
1400	120		128.5	68.5	.134	3.2	17.986	60	.267	6.41	36.573
1600	122		131.5	69.5	.267	3.2	18.253	62	.534	6.41	37.107
1800	124		135.5	71	.401	4.81	18.654	64.5	.668	8.01	37.775
2000	126		138.5	72	.267	3.2	18.921	66.5	.534	6.41	38.309
		END OF TEST.									

15% Choke

00264

ET 105

EXPERTEST PTY. LTD.

SAMPLING DATA

CUSTOMER : SANTOS | PERFORATIONS: 6485' - 6772' ITB | PAGE: 1 OF 2

WELL NAME: KIDMAN #3 | FORMATION : TOOLACHEE | DATE: 5-2-92

TEST TYPE : L.F.T & F.G.S | OPR : N. MAY

SAMPLE #

TIME SAMPLE COLLECTED	CYLINDER SERIAL NO.	CYLINDER VOLUME (CC)	SAMPLE TYPE	SAMPLING DURATION (MINS)	CYLINDER INITIALLY FILLED WITH	OUTAGE (CC)	VOLUME OF FILL REMAINING WITH SAMPLE (CC)	SAMPLE POINT	SAMPLE PRESS (PSI/KPa)	SAMPLE TEMP (°F/°C)	AMBIENT PRESS (PSI/KPa)	AMBIENT TEMP (°F/°C)
16:00	#1 #2	500	H20	1				SIGHT GLASS		163		43

WELLHEAD DATA				SEPARATOR DATA			GRAVITIES		FLOW RATES			RATIOS	BOTTOM HOLE	
TUBING PRESS (PSI/KPa)	WELLHEAD TEMP (°F/°C)	CHOKE SIZE	BS&W (%)	SEPARATOR PRESS (PSI/KPa)	SEPARATOR TEMP (°F/°C)	FPV	GAS SPECIFIC GRAVITY	OIL API GRAV @60°F	GAS MMSCFD $m^3 10^3/D$	OIL BPD m^3/D	WATER BPD m^3/D	L.G.R. $m^3 10^6/m^3$	PRESSURE (PSI/KPa)	TEMPERATURE (°F/°C)
2451	75	80%		1447	73	1.0175	.789		166.6	3.19	7.99	67		

REMARKS:

Feb 9/92 SAMPLE # SPE 243

TIME SAMPLE COLLECTED	CYLINDER SERIAL NO.	CYLINDER VOLUME (CC)	SAMPLE TYPE	SAMPLING DURATION (MINS)	CYLINDER INITIALLY FILLED WITH	OUTAGE (CC)	VOLUME OF FILL REMAINING WITH SAMPLE (CC)	SAMPLE POINT	SAMPLE PRESS (PSI/KPa)	SAMPLE TEMP (°F/°C)	AMBIENT PRESS (PSI/KPa)	AMBIENT TEMP (°F/°C)
1300	SPE 243	500	HP gas	15	VACCUM	-	-	Meter Run	1345	60	14	25

WELLHEAD DATA				SEPARATOR DATA			GRAVITIES		FLOW RATES			RATIOS	BOTTOM HOLE	
TUBING PRESS (PSI/KPa)	WELLHEAD TEMP (°F/°C)	CHOKE SIZE	BS&W (%)	SEPARATOR PRESS (PSI/KPa)	SEPARATOR TEMP (°F/°C)	FPV	GAS SPECIFIC GRAVITY	OIL API GRAV @60°F	GAS MMSCFD $m^3 10^3/D$	OIL BPD m^3/D	WATER BPD m^3/D	LGR $m^3/10^6 m^3$	PRESSURE (PSI/KPa)	TEMPERATURE (°F/°C)
4785	66	13%	-	1345	60	1.0185	.789	N/A	128.71	3.2	6.41	75		256°F

REMARKS:

SAMPLE # SPE 161

TIME SAMPLE COLLECTED	CYLINDER SERIAL NO.	CYLINDER VOLUME (CC)	SAMPLE TYPE	SAMPLING DURATION (MINS)	CYLINDER INITIALLY FILLED WITH	OUTAGE (CC)	VOLUME OF FILL REMAINING WITH SAMPLE (CC)	SAMPLE POINT	SAMPLE PRESS (PSI/KPa)	SAMPLE TEMP (°F/°C)	AMBIENT PRESS (PSI/KPa) PSI	AMBIENT TEMP (°F/°C)
1300	SPE 161	500	HP COND	15	BRINE	460	40	Dump Line	1345	60	14	25 °C

WELLHEAD DATA				SEPARATOR DATA			GRAVITIES		FLOW RATES			RATIOS	BOTTOM HOLE	
TUBING PRESS (PSI/KPa)	WELLHEAD TEMP (°F/°C)	CHOKE SIZE	BS&W (%)	SEPARATOR PRESS (PSI/KPa)	SEPARATOR TEMP (°F/°C)	FPV	GAS SPECIFIC GRAVITY	OIL API GRAV @60°F	GAS MMSCFD $m^3 10^3/D$	OIL BPD m^3/D	WATER BPD m^3/D	LGR $m^3/10^6 m^3$	PRESSURE (PSI/KPa)	TEMPERATURE (°F/°C)
4785	66	13%	-	1345	60	1.0185	.789	N/A	128.71	3.2	6.41	75		

REMARKS:

ET 107

002265

EXPERTEST PTY. LTD.

SAMPLING DATA

CUSTOMER : SANTOS	PERFORATIONS: 6485' - 6772'	PAGE: 2 OF 2
WELL NAME: KIDMAN #3	FORMATION : TOOLACHEE	DATE: 9 · 2 · 92
TEST TYPE : LET/FGS		OPR : R. LARKIN

SAMPLE # PDE 111

TIME SAMPLE COLLECTED	CYLINDER SERIAL NO.	CYLINDER VOLUME (CC)	SAMPLE TYPE	SAMPLING DURATION (MINS)	CYLINDER INITIALLY FILLED WITH	OUTAGE (CC)	VOLUME OF FILL REMAINING WITH SAMPLE (CC)	SAMPLE POINT	SAMPLE PRESS (~~PSI~~/KPa)	SAMPLE TEMP (~~°F~~/°C)	AMBIENT PRESS (PSI/~~KPa~~)	AMBIENT TEMP (~~°F~~/°C)
1400	PDE 111	500	HP gas	15	vaccuum	-	-	Meter Run	1345	60	14	25

WELLHEAD DATA				SEPARATOR DATA			GRAVITIES		FLOW RATES			RATIOS	BOTTOM HOLE	
TUBING PRESS (~~PSI~~/KPa)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE	BS&W (%)	SEPARATOR PRESS (~~PSI~~/KPa)	SEPARATOR TEMP (~~°F~~/°C)	FPV	GAS SPECIFIC GRAVITY	OIL API GRAV @60°F	GAS ~~MMSCFD~~ $m^3 10^3/D$	OIL ~~BPD~~ m^3/D	WATER ~~BPD~~ m^3/D		PRESSURE (PSI/KPa)	TEMPERATURE (~~°F~~/°C)
4798	66	13%	-	1345	60	1.0185	.789	N/A	128.71	3.2	6.41	LGR: $M^3/10^6M^3$ 75		256°C

REMARKS:

SAMPLE # SPE 058

TIME SAMPLE COLLECTED	CYLINDER SERIAL NO.	CYLINDER VOLUME (CC)	SAMPLE TYPE	SAMPLING DURATION (MINS)	CYLINDER INITIALLY FILLED WITH	OUTAGE (CC)	VOLUME OF FILL REMAINING WITH SAMPLE (CC)	SAMPLE POINT	SAMPLE PRESS (~~PSI~~/KPa)	SAMPLE TEMP (~~°F~~/°C)	AMBIENT PRESS (~~PSI/KPa~~)	AMBIENT TEMP (~~°F~~/°C)
1400	SPE 058	500	HP COND	15	BRINE	460	40	Dumpline	1345	60	14 PSI	25

WELLHEAD DATA				SEPARATOR DATA			GRAVITIES		FLOW RATES			RATIOS	BOTTOM HOLE	
TUBING PRESS (~~PSI~~/KPa)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE	BS&W (%)	SEPARATOR PRESS (~~PSI~~/KPa)	SEPARATOR TEMP (~~°F~~/°C)	FPV	GAS SPECIFIC GRAVITY	OIL API GRAV @60°F	GAS ~~MMSCFD~~ $m^3 10^3/D$	OIL ~~BPD~~ m^3/D	WATER ~~BPD~~ m^3/D		PRESSURE (PSI/KPa)	TEMPERATURE (~~°F~~/°C)
4798	66	13%	-	1345	60	1.0185	.789	N/A	128.71	3.2	6.41	LGR: $M^3/10^6M^3$ 75		256°F

REMARKS:

SAMPLE #

TIME SAMPLE COLLECTED	CYLINDER SERIAL NO.	CYLINDER VOLUME (CC)	SAMPLE TYPE	SAMPLING DURATION (MINS)	CYLINDER INITIALLY FILLED WITH	OUTAGE (CC)	VOLUME OF FILL REMAINING WITH SAMPLE (CC)	SAMPLE POINT	SAMPLE PRESS (PSI/KPa)	SAMPLE TEMP (°F/°C)	AMBIENT PRESS (PSI/KPa)	AMBIENT TEMP (°F/°C)

WELLHEAD DATA				SEPARATOR DATA			GRAVITIES		FLOW RATES			RATIOS	BOTTOM HOLE	
TUBING PRESS (PSI/KPa)	WELLHEAD TEMP (°F/°C)	CHOKE SIZE	BS&W (%)	SEPARATOR PRESS (PSI/KPa)	SEPARATOR TEMP (°F/°C)	FPV	GAS SPECIFIC GRAVITY	OIL API GRAV @60°F	GAS MMSCFD $m^3 10^3/D$	OIL BPD m^3/D	WATER BPD m^3/D		PRESSURE (PSI/KPa)	TEMPERATURE (°F/°C)

REMARKS:

ET 107

00266

EXPERTEST PTY. LTD.	SEQUENCE OF EVENTS		
	CUSTOMER : Santos Ltd	PERFORATIONS: 6485' - 6772' KB	PAGE: 1 OF 1
	WELL NAME: Kidman # 3	FORMATION : ~~Patchawarra~~ Toolachee	DATE: 12th August 1993
	TEST TYPE : Static gradient.		OPR : B. Potter

DATE/TIME	DESCRIPTION OF EVENTS
12th August 1993	
1100	M.I.R.U. Wire line unit.
1200	R.I.H with 1.75" Blind Box.
1220	Tag obstruction @ 6209' KB. Unable to pass through.
1222	P.O.O.H.
1240	At surface with tool string, Secure unit and Travel to Strzlecki Satt to pick up 4000 psi gauges.
1345	Prepare gauges for S.G.S.
1404	Pressure Lub
1414	Depressure Lub.
1419	Pressure Lub and R.I.H. with gauges to perform S.G.S.
1508	Bottom gradient stop @ 6200' KB (modified Hang depth)
1523	P.O.O.H.
1541	At surface with gauges, Depressure Lub.
1546	Pressure Lub.
1556	Depressure Lub and recover charts.
1605	Both charts good, Secure unit and Return to Moomba

RECEIVED
22 DEC
SECURITY
5653

df

00267

EXPERTEST PTY. LTD.

BHP/BHT GAUGE RUN DATA

CUSTOMER : Santos Ltd
WELL NAME: Kidman # 3
TEST TYPE : Static gradient.

PERFORATIONS: 6485' - 6772' KB
FORMATION : Patchawarra.
Tool

PAGE: 1 OF 1
DATE: 12th August 1993
OPR : B. Potter

GAUGE DATA	UPPER PRESSURE GAUGE	LOWER PRESSURE GAUGE	TEMPERATURE GAUGE
ELEMENT SERIAL NO.	21379	21821	
ELEMENT RANGE (psi)	4825	4750	
RECORDING SECTION SERIAL NO.	70545	14619	
DATE OF CALIBRATION: @ 290° F	12·7·93	12·7·93	
CLOCK SERIAL NO.	2	2297	
CLOCK RANGE (hr)	3	3	
LEAD SCREW TYPE	15TLS	15TLS	
ENGAGE STYLUS DATE 12·8·93 TIME	13:59	13:59	
DISENGAGE STYLUS DATE 12·8·93 TIME	16:03	16:03	

RUN DATA	TIME (HOURS)	TUBING PRESSURE (~~PSI~~/KPa)	ANNULUS PRESSURE (~~PSI~~/KPa)
DATE : 12·8·93			
PRESSURE LUBRICATOR :	14:04	14790	0
RUN IN HOLE :	14:19	14790	
ON DEPTH AT : 6200 FT/~~M~~	15:08	14830	
DATE : 12·8·93			
PULL OUT OF HOLE :	15:23	14810	
AT SURFACE :	15:41	14790	
DEPRESSURE LUBRICATOR :	15:56	14780	

MAXIMUM BHT AT 6200 FT/~~M~~ = N/A °F/~~C~~ Broken Thermometer

N.B. ALL DEPTHS ARE MEASURED FROM K.B.

DATE	TIME	REMARKS

00268

ET 108

EXPERTEST PTY. LTD.

STATIC PRESSURE GRADIENT SURVEY

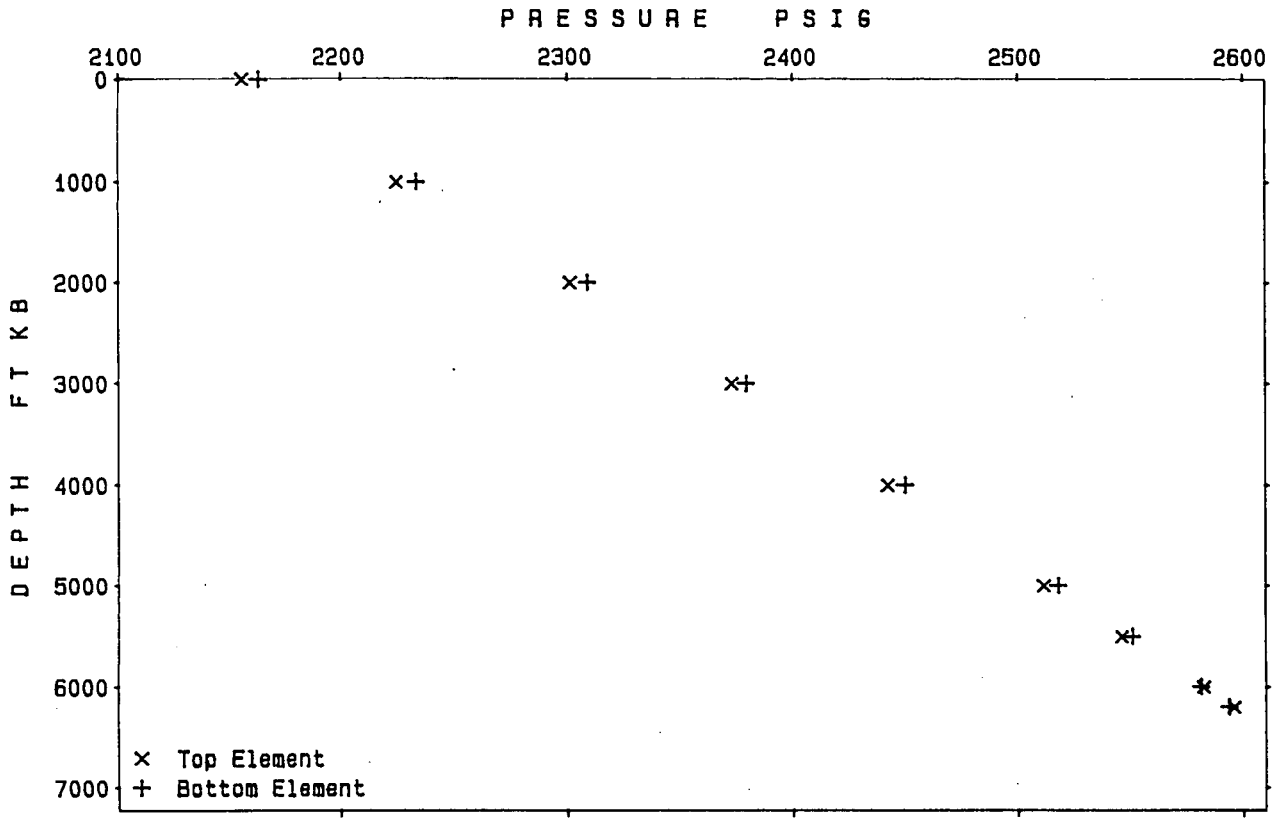
Location: KIDMAN #3	Tested: 12th August 1993.
Formation: ~~PATCHAWARRA~~ Tool.	Client: SANTOS LTD.

PRESSURE ELEMENT DATA

Position	Serial No	Range	Calibrated
Top	21379	4825	12/ 7/93
Bottom	21821	4750	12/ 7/93

WELL DATA

DWT In	2145 PSIG
DWT Out	2144 PSIG
Max BHT	N/A



Depth FT KB	TOP ELEMENT Deflection Inches	Pressure PSIG	Gradient PSI/FT	BOTTOM ELEMENT Deflection Inches	Pressure PSIG	Gradient PSI/FT
LUB.	0.8740	2155.1	-	0.8570	2162.8	-
1000	0.9020	2224.4	0.069	0.8850	2233.3	0.071
2000	0.9330	2301.0	0.077	0.9150	2308.9	0.076
3000	0.9620	2372.8	0.072	0.9430	2379.4	0.071
4000	0.9900	2442.1	0.069	0.9710	2450.0	0.071
5000	1.0180	2511.4	0.069	0.9980	2518.0	0.068
5500	1.0320	2546.1	0.069	1.0110	2550.8	0.065
6000	1.0465	2582.0	0.072	1.0230	2581.0	0.060
6200	1.0520	2595.6	0.068	1.0280	2593.6	0.063
LUB.	0.8730	2152.6	-	0.8580	2165.4	-

GENERAL REMARKS

M.B.H.T. UNAVAILABLE DUE TO BROKEN THERMOMETER

EXPERTEST PTY. LTD.

SEQUENCE OF EVENTS

CUSTOMER : SANTOS LTD.	PERFORATIONS: 6485' - 6772'.	PAGE: 1 OF 1
WELL NAME: KIDMAN # 3.	FORMATION : TOOLACHEE	DATE: 17/8/93.
TEST TYPE : GRADIENT.		OPR : P. HAHN.

DATE/TIME	DESCRIPTION OF EVENTS
	TRAVEL MOOMBA TO KIDMAN & HOLD SAFETY MEETING.
0900	RIH 1.82" BROACH & CLEAR OBSTRUCTION @ 6189' KB
	RUN TO 6575' KB.
1015	POOH.
	REPORT STATUS TO TOWN.
1300	RIH 1.5" LIB & TAG @ 6575' KB & POOH.
	REPORT STATUS
	RIG UP AMERADS
1510	OPEN WELL FOR 15 MINUTES.
1525	RIH TO 6000' KB FOR 5 MINUTES.
	RIH TO 6,500' KB FOR 5 MINUTES.
	RIH TO 6575' KB FOR 15 MINUTES.
	POOH SECURE WELL
	TRAVEL TO MOOMBA.

RECEIVED
22 DEC 1993
DEPT. OF MINES
AND ENERGY
SECURITY
5653

O/F

NOTE - 2192 PSI. WELL HEAD

00270

ET 102

EXPERTEST PTY. LTD.

BHP/BHT GAUGE RUN DATA

CUSTOMER : SANTOS LTD.
WELL NAME: KIDMAN #3.
TEST TYPE : SGS

PERFORATIONS: 6485' - 6772'
FORMATION : TOOLACHEE

PAGE: 1 OF 1
DATE: 17/8/93.
OPR : PAUL HAMM

GAUGE DATA	UPPER PRESSURE GAUGE	LOWER PRESSURE GAUGE	TEMPERATURE GAUGE
ELEMENT SERIAL NO.	29321	29323	65865
ELEMENT RANGE (PSI)	4000	3950	211-437°F
RECORDING SECTION SERIAL NO.	14631	12963	70545
DATE OF CALIBRATION: @ 290 I	25/6/93	25/6/93.	21/7/86
CLOCK SERIAL NO.	A3054	A16087	25512
CLOCK RANGE HRS.	3	3	3
LEAD SCREW TYPE			
ENGAGE STYLUS DATE 17/8/93 TIME	1449	1449.	
DISENGAGE STYLUS DATE 17/8/93 TIME	1652	1652.	

RUN DATA	TIME (HOURS)	TUBING PRESSURE (PSI/~~KPa~~)	ANNULUS PRESSURE (PSI/KPa)
DATE : 17/8/93			0
PRESSURE LUBRICATOR :	1502	2192.	
RUN IN HOLE :	1525	2182.	
ON DEPTH AT : 6575 FT/M	1557.	2198	
DATE : 17/8/93.			
PULL OUT OF HOLE :	1612	2198	
AT SURFACE :	1628.	2198	
DEPRESSURE LUBRICATOR :	1643	2198	
MAXIMUM BHT AT 6575 FT/M = N/A °F/C			
N.B. ALL DEPTHS ARE MEASURED FROM K.B.			

DATE	TIME	REMARKS
		GRADIENT TO COMPLETE SGS PROGRAM AFTER OBSTRUCTION CLEARED.

00271

ET 108

EXPERTEST PTY. LTD.

STATIC PRESSURE GRADIENT SURVEY

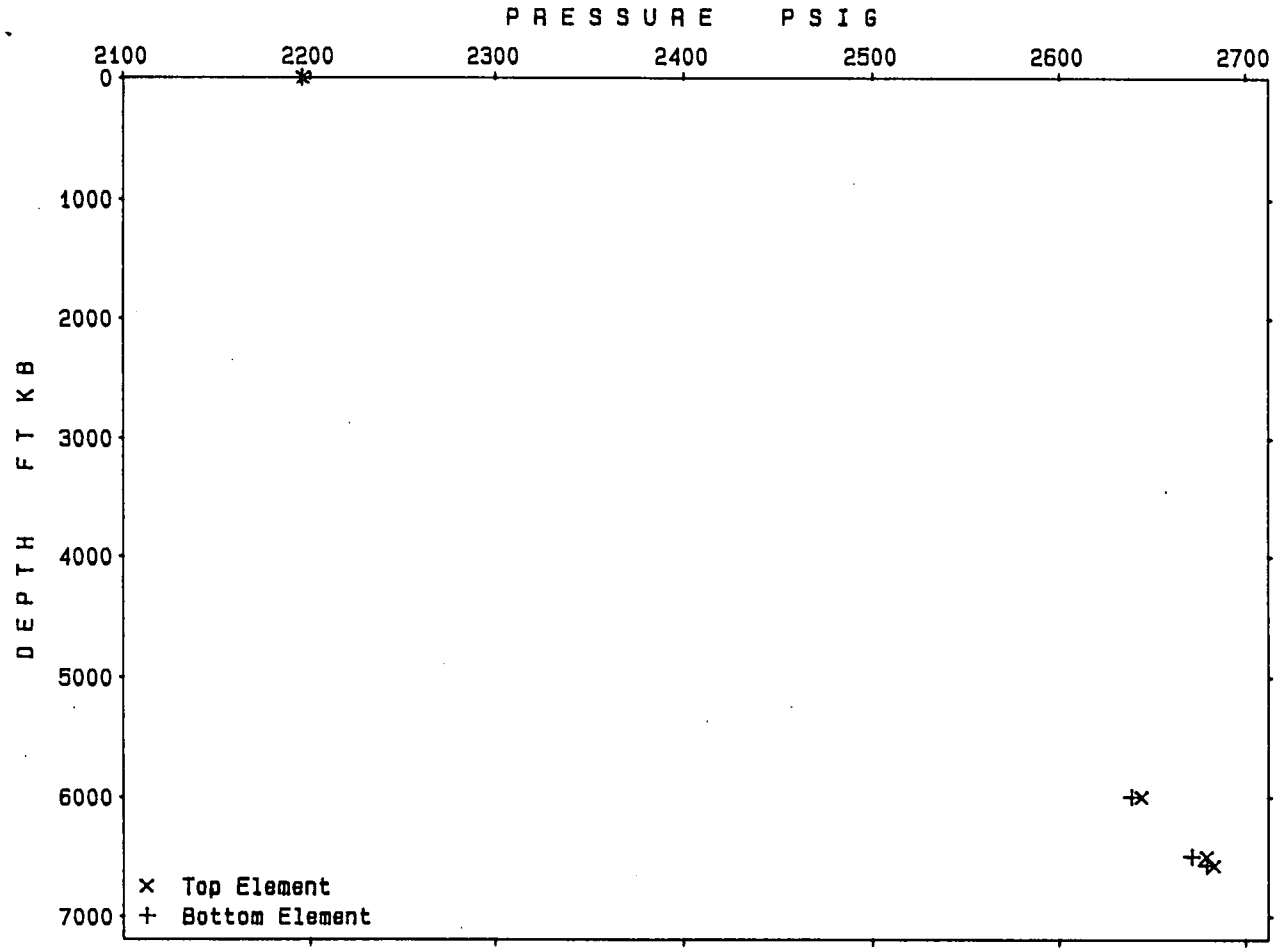
Location: KIDMAN #3	Tested: 17th August 1993.
Formation: TOOLACHEE	Client: SANTOS LTD.

PRESSURE ELEMENT DATA

Position	Serial No	Range	Calibrated
Top	29321	4000	25/ 6/93
Bottom	29323	3950	25/ 6/93

WELL DATA

DWT In	2192 PSIG
DWT Out	2192 PSIG
Max BHT	N/A



TOP ELEMENT / BOTTOM ELEMENT

Depth FT KB	Deflection Inches	Pressure PSIG	Gradient PSI/FT	Deflection Inches	Pressure PSIG	Gradient PSI/FT
LUB.	1.0930	2195.7	-	1.1040	2195.3	-
6000	1.3150	2644.6	0.075	1.3260	2639.1	0.074
6500	1.3320	2679.0	0.069	1.3420	2671.1	0.064
6575	1.3340	2683.0	0.054	1.3460	2679.1	0.107
LUB.	1.1050	2219.9	-	1.1120	2211.3	-

GENERAL REMARKS

Temp Element used.

EXPERTEST PTY. LTD.	SEQUENCE OF EVENTS		
	CUSTOMER : Santos Ltd	PERFORATIONS: 6485' – 6772' KB	PAGE: 1 OF 2
	WELL NAME: Kidman # 3	FORMATION : Toolachee	DATE: 28th sept 1993
	TEST TYPE : 2 - rate L.E.T & F.G.S.		OPR : B. Potter

DATE/TIME	DESCRIPTION OF EVENTS
28th september 1993	
0930	Arrive Location, rig up Standard wireline unit.
1115	Spot Separator
1305	Shut in well, Fit swab valve and test flanges.
1350	Openwell 100% choke. Flow in line. Continue Rig in.
1430	R.I.H 1·75" Blind Box to P.B.T.D.
1455	Tag D.R. Plug @ 7110' WL. Tubing and Perfs all clear. P.O.O.H
1515	At surface with tool string. Secure unit.
1530	Press test vessel to 420 psi. (F.T.H.P.)
1600	Divert flow through separator. Commence L.E.T rate ① Flowing in-line 100% choke.
	Engage 1·25" oriface plate.
29th september 1993	
1400	Prepare B.H.P gauges for F.G.S.
1441	R.I.H with B.H.P gauges and Perform F.G.S as per program.
1618	At surface with B.H.P gauges. Both charts good.
1800	Collect 2 x 0·5 Lt water samples.
30th september 1993	
0900	Bypass Separator, Rate ① completed.
1000	Shut in well, rig separator to flare
1008	Open well 20% choke, Bypass sep to flare.
1100	Divert flow through Separator, Commence L.E.T rate ②
	Engage 2.00" oriface plate.
1130	Increase choke size to 100%

RECEIVED
22 DEC
DEPT. OF MINES AND ENERGY SECURITY
563

O/F

00273

EXPERTEST PTY. LTD.	SEQUENCE OF EVENTS		
	CUSTOMER : Santos Ltd	PERFORATIONS: 6485' - 6772' KB	PAGE: 2 OF 2
	WELL NAME: Kidman # 3	FORMATION : Toolachee	DATE: 1st october 1993
	TEST TYPE : 2- rate L.E.T &	F.G.S.	OPR : B. Potter

DATE/TIME	DESCRIPTION OF EVENTS
1st october 1993	
1000	Prepare gauges for F.G.S.
1105	R.I.H with B.H.P gauges and perform F.G.S.
	Choke well to 20% due to gauges lifting in High flow rate.
1203	Bottom Gradient stop @ 6749' KB.
1238	At surface with gauges. Both charts good.
1300	Increase choke size to 100%.
1500	Collect 2x0.5 H water samples.
	Prepare Gauges for Modified F.G.S.
1521	R.I.H with B.H.P gauges and perform modified F.G.S.
	Choke well to 20%
1530	Open choke to 100%
1541	Bottom Stop @ 6749' KB
1641	P.O.O.H.
1700	At surface with gauges. Both charts good.
2nd october	
0900	L.E.T rate ② completed. Shut in well.
	Rig down test equipment.
1100	Handover well to Production Dept.
	Program completed.

RATE : #1 (FLOW IN LINE)
CHOKE : 100%
FTHP : 3132 kPa
Qg : 48-585 E3m³/d
Qc : 2.618 m³/d
Qw : 2.188 m³/d

RATE : #2 (FLOW TO FLARE)
CHOKE : 100%
FTHP : 1201 kPa
Qg : 59.624 E3m³/d
Qc : 1.722 m³/d
Qw : 2.083 m³/d

00274

ET 102

EXPERTEST PTY. LTD.

FIELD READINGS

CUSTOMER : Santos Ltd
WELL NAME: Kidman # 3
TEST TYPE : 2-rate L.E.T & F.G.S.
PERFORATIONS: 6485' – 6772' KB
FORMATION : Toolachee
PAGE: 1 OF 4
DATE: 28th sept 1993
OPR : B. Potter

TIME		WELLHEAD DATA					SEPARATOR DATA				LIQUID PRODUCTION				
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (PSI/~~KPa~~)	ANNULUS PRESSURE (PSI/~~KPa~~)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE %	BS&W (%)	ORIFICE PLATE SIZE (IN)	STATIC PRESS. (PSIG)	DIFF PRESS. (IN WC)	GAS TEMP °C (~~°F~~)	TOTAL LIQUID (IN/~~CM~~)	OIL (IN/~~CM~~)	OIL API GRAVITY @ 60°F	WATER (IN/~~CM~~)	
28th September 1993.															
0930		M.I.R.U wire line unit.													
1115		Spot separator													
1305		S.I.W. Fit swab valve and test flanges.													
1350		Open well 100% choke, continue Rig in.													
1430		R.I.H with 1.75" B.B to P.B.T.D.													
1455		Tag D.R Plug @ 7110' WL. Tubing clear. P.O.O.H.													
1515		At surface with Toolstring. Secure unit.													
1530		Press Test vessel to 420 psi (F.T.H.P)													
1600	0	452	1006	59	100	Divert flow thru Separator. Commence L.E.T									
		Rate ① Flowing in line 100% choke. Engage 1.25" O.P.													
1800	2	455	1032	58	100	–	1.25"	436	94	48	2.0	1.25		0.75	
29th september 1993															
0600	14	445	1081	56				430	90	42	11.0	6.0		5.0	
0800	16	446	1081	56				430	93	43	12.75	7.25		5.5	
1000	18	446	1084	57				430	91	45	14.5	8.0		6.5	
1200	20	448	1089	59				433	90	46	15.75	8.75		7.0	
1400	22	448	1092	60				430	90	48	17.5	10.0		7.5	
		Prepare B.H.P gauges for F.G.S.													
1441		R.I.H with B.H.P gauges and perform F.G.S.													
1542		Bottom Gradient Stop @ 6749' KB													

ET 103

00275

EXPERTEST PTY. LTD.

FIELD READINGS

CUSTOMER : Santos Ltd | PERFORATIONS: 6485' - 6772' KB | PAGE: 1 OF 4

WELL NAME: Kidman # 3 | FORMATION : Toolachee | DATE: 29th sept 1993

TEST TYPE : 2- rate L.E.T & F.G.S. | OPR : B. Potter

TIME		WELLHEAD DATA					SEPARATOR DATA				LIQUID PRODUCTION				
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (PSI/~~KPa~~)	ANNULUS PRESSURE (PSI/~~KPa~~)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE %	BS&W (%)	ORIFICE PLATE SIZE (IN)	STATIC PRESS. (PSIG)	DIFF PRESS. (IN WC)	GAS TEMP °C (~~°F~~)	TOTAL LIQUID (IN/~~GM~~)	OIL (IN/~~GM~~)	OIL API GRAVITY @ 60°F	WATER (IN/~~GM~~)	
29th september			1993												
1600	24	449	1095	58	100	–	1.25"	432	92	46	19.0	10.75	52.7	8.25	
1618		At surface with gauges. Both charts good.													
1800	26	450	1116	57	1		1	431	96	46	20.75	12.0		8.75	
		Collect 2 x 0.5 Lt water samples.													
30th september			1993												
0600	38	474	1099	55				457	89	43	29.5	16.5		13.0	
0800	40	468	1099	56				460	86	43	30.75	17.0		13.75	
0900	41	470	1100	56	↓		↓	452	85	44	31.5	17.5		14.0	
		Bypass separator. Rate ① completed													
1000		465	1100	56	Shut in well, Rig separator to flare.										
1008		950	1050	54	Open well 20% choke, Bypass Sep to flare.										
1030		220	1075	55	20										
1100	0	223	1084	55	20	Divert flow through separator					31.5	17.5		14.0	
		Commence L.E.T rate ②				Engage 2.00" orifice plate.									
1130		234	1090	56	Increase choke size to 100%										
1200	1	172	1090	59	100	–	2.00"	113	71	47	32.5	18.25		14.25	
1400	3	173	1080	58				113	72	47	33.75	18.75		15.0	
1600	5	170	1074	58				114	71	47	35.25	19.5		15.75	
1800	7	173	1068	58	↓		↓	115	74	47	36.25	20.0		16.25	

00276

ET 103

EXPERTEST PTY. LTD.

FIELD READINGS

CUSTOMER : Santos Ltd | PERFORATIONS: 6485' – 6772' KB | PAGE: 3 OF 4

WELL NAME: Kidman # 3 | FORMATION : Toolachee | DATE: 1st october 1993

TEST TYPE : 2- rate L.E.T & F.G.S. | OPR : B. Potter

TIME		WELLHEAD DATA					SEPARATOR DATA				LIQUID PRODUCTION				
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (PSI/~~KPa~~)	ANNULUS PRESSURE (PSI/~~KPa~~)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE %	BS&W (%)	ORIFICE PLATE SIZE (IN)	STATIC PRESS. (PSIG)	DIFF PRESS. (IN WC)	GAS TEMP °C (~~°F~~)	TOTAL LIQUID (IN/~~CM~~)	OIL (IN/~~CM~~)	OIL API GRAVITY @ 60°F	WATER (IN/~~CM~~)	
1st october		1993													
0600	19	173	1068	57	100	-	2.00"	115	72	44	43.25	22.75	52.7	20.5	
0800	21	175	1070	58	↓		↓	118	72	48	44.5	23.25		21.25	
1000	23	175	1070	59				120	72	49	45.75	24.25		21.5	
		Prepare Gauges for F.G.S.													
1105		R.I.H with B.H.P gauges and Perform F.G.S. Choke well to 20%													
		due to gauges lifting in High flow rate.													
1200	25	245	1081	60	20	-	2.00"	113	70	45	47.0	24.75		22.25	
1203		Bottom gradient stop @ 6749' KB.													
1238		At surface with B.H.P gauges. Both charts good.													
1300	26	249	1094	60	20	-	2.00"	120	70	46	47.5	25.0		22.5	
		Increase choke size to 100%													
1500	28	176	1078	56	100	-	2.00"	117	72	47	48.5	25.25		23.25	
		Collect 2x 0.5Lt water samples as per program.													
		Prepare B.H.P gauges for F.G.S.													
1521		R.I.H with gauges and Perform modified F.G.S. Choke to 20%													
1530		Increase choke to 100%													
1541		Hang depth @ 6749' KB.													
1600	29	180	1076	56	100	-	2.00"	120	72	47	49.25	25.75		23.5	
1700	30	175	1076	55	↓		↓	116	72	46	50.0	26.0		24.0	
		At surface with B.H.P gauges. Both charts good.													

ET 103

00277

EXPERTEST PTY. LTD.

FIELD READINGS

CUSTOMER : Santos Ltd
WELL NAME: Kidman # 3
TEST TYPE : 2-rate L.E.T # F.G.S.
PERFORATIONS: 6485' - 6772' KB
FORMATION : Toolachee
PAGE: 4 OF 4
DATE: 1st october 1993
OPR : B. Potter

TIME		WELLHEAD DATA					SEPARATOR DATA				LIQUID PRODUCTION				
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (PSI/~~KPa~~)	ANNULUS PRESSURE (PSI/~~KPa~~)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE %	BS&W (%)	ORIFICE PLATE SIZE (IN)	STATIC PRESS. (PSIG)	DIFF PRESS. (IN WC)	GAS TEMP °C (~~°F~~)	TOTAL LIQUID (IN/~~CM~~)	OIL (IN/~~CM~~)	OIL API GRAVITY @ 60°F	WATER (IN/~~CM~~)	
1st october 1993															
1800	31	174	1071	56	100	—	2.00"	117	72	47	50.5	26.25	52.7	24.25	
2nd october 1993															
0600	43	173	1058	56	↓		↓	118	68	46	57.5	29.5		28.0	
0800	45	174	1058	54				117	67	45	58.5	29.75		28.75	
0900	46	175	1058	55				118	67	45	59.0	30.0		29.0	
		Shut in well. L.E.T rate ② completed.													
		Rig down test Equipment.													
1100		Handover well to Production Dept.													
		Program completed.													

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00278

EXPERTEST PTY. LTD.

TEST RESULTS

CUSTOMER : Santos Ltd | PERFORATIONS: 6485' - 6772' KB | PAGE: 1 OF 3

WELL NAME: Kidman # 3 | FORMATION : Toolachee | DATE: 28th sept 1993

TEST TYPE : 2- rate L.E.T & F.G.S. | OPR : B. Potter

TIME		WELLHEAD DATA				separator		FLOW RATES			CUMULATIVE PRODUCTION				
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (PSI/KPa)	ANNULUS PRESSURE (PSI/KPa)	WELLHEAD TEMP (°F/°C)	CHOKE SIZE %	PRESSURE (PSI/KPa)	TEMP (°F/°C)	GAS MMSCFD $m^3 10^3/D$	OIL BPD m^3/D	WATER BPD m^3/D	GAS MMSCF $m^3 10^3$	OIL BBLS m^3	WATER BBLS m^3		L.G.R $m^3/10^6 m^3$
28th september		1993													
1600	0	3117	6936	59	100	Commence L.E.T Rate ①					In-Line		100% choke.		
1800	2	3137	7116	58		3006	48	49.09	1.60	2.40	4.09	.134	.200		81
29th september		1993													
0600	14	3068	7453	56		2965	42	48.25	2.54	2.27	28.21	1.402	1.335		100
0800	16	3075	7453	56		2965	43	48.99	4.01	1.60	32.29	1.736	1.469		115
1000	18	3075	7474	57		2965	45	48.23	2.40	3.20	36.31	1.936	1.736		116
1200	20	3089	7509	59		2986	46	48.03	2.40	1.60	40.31	2.136	1.870		83
1400	22	3089	7529	60		2965	48	47.68	4.01	1.60	44.28	2.470	2.004		118
1441		Perform F.G.S. see Gauge Run Data sheet for Details.													
1600	24	3096	7550	58		2979	46	48.50	2.40	2.40	48.32	2.670	2.204		99
1800	26	3103	7695	57		2972	46	49.48	4.01	1.60	52.44	3.004	2.337		113
		Collect 2 x 0.5 Lt water samples as per program.													
30th september		1993													
0600	38	3268	7578	55		3151	43	49.52	2.40	2.27	77.20	4.205	3.472		94
0800	40	3227	7578	56		3172	43	48.84	1.60	2.40	81.27	4.339	3.672		82
0900	41	3241	7585	56		3117	44	47.98	3.20	1.60	83.27	4.473	3.739		100
	(3/32)	Bypass Separator. Rate ① completed.													
1100	0	1538	7474	55	20	Commence L.E.T Rate ② Gas To flare									
1130		1613	7516	56	Increase choke size to 100%										
1200	1	1186	7516	59	100	779	47	58.72	4.81	1.60	2.45	.200	.067		109

ET 104

00279

EXPERTEST PTY. LTD.

TEST RESULTS

CUSTOMER : Santos Ltd
WELL NAME: Kidman # 3
TEST TYPE : 2- rate L.E.T & F.G.S.
PERFORATIONS: 6485' - 6772' KB
FORMATION : Toolachee
DATE: 30th sept 1993
OPR : B. Potter

TIME		WELLHEAD DATA				Separator		FLOW RATES			CUMULATIVE PRODUCTION				
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (~~PSI~~/KPa)	ANNULUS PRESSURE (~~PSI~~/KPa)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE %	PRESSURE (~~PSI~~/KPa)	TEMP (~~°F~~/°C)	GAS ~~MMSCFD~~ $m^3 10^3/D$	OIL ~~BPD~~ m^3/D	WATER ~~BPD~~ m^3/D	GAS ~~MMSCF~~ $m^3 10^3$	OIL ~~BBLS~~ m^3	WATER ~~BBLS~~ m^3		L.G.R $m^3/10^6 m^3$
30th September 1993															
1400	3	1193	7447	58	100	779	47	59.14	1.60	2.40	7.38	.334	.267		68
1600	5	1172	7405	58	↓	786	47	58.96	2.40	2.40	12.29	.534	.467		81
1800	7	1193	7364	58	↓	793	47	60.44	1.60	1.60	17.33	.668	.601		53
1st october		1993			↓										
0600	19	1193	7364	57	↓	793	44	59.95	1.47	2.27	47.30	1.402	1.736		62
0800	21	1207	7378	58	↓	814	48	60.25	1.60	2.40	52.32	1.536	1.936		66
1000	23	1207	7378	59	↓	827	49	60.60	3.20	.80	57.37	1.803	2.003		66
		Perform F.G.S. see Gauge Run data sheet for Details.													
1105		Choke well to 20% during F.G.S due to gauges lifting in high flow Rate.													
1200	25	1689	7453	60	20	779	45	58.53	1.60	2.40	62.25	1.937	2.203		68
1300	26	1717	7543	60	20	827	46	60.03	1.60	1.60	64.75	2.004	2.270		53
		Increase choke size to 100%													
1500	28	1214	7433	56	100	807	47	60.08	.80	2.40	69.76	2.071	2.470		53
		Collect 2 x 0.5Lt water samples as per program.													
1511		Perform modified F.G.S. see gauge run data sheet for details.													
1600	29	1241	7419	56	100	827	47	60.77	3.20	1.60	72.29	2.205	2.537		79
1700	30	1207	7419	55	↓	800	46	59.96	1.60	3.20	74.79	2.272	2.671		80
1800	31	1200	7385	56	↓	807	47	60.08	1.60	1.60	77.29	2.339	2.738		53
2nd october		1993			↓										
0600	43	1193	7295	56	↓	814	46	58.71	1.74	2.00	106.64	3.206	3.739		64

00280

ET 104

EXPERTEST PTY. LTD.

TEST RESULTS

CUSTOMER : Santos Ltd
WELL NAME: Kidman # 3
TEST TYPE : 2- rate L.E.T & F.G.S.

PERFORATIONS: 6485' - 6772' KB
FORMATION : Toolachee

DATE: 2nd october 1993
OPR : B. Potter

TIME		WELLHEAD DATA				separator		FLOW RATES			CUMULATIVE PRODUCTION				
DATE / TIME	FLOW OR SHUT IN TIME (HOURS)	TUBING PRESSURE (~~PSI~~/KPa)	ANNULUS PRESSURE (~~PSI~~/KPa)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE %	PRESSURE (~~PSI~~/KPa)	TEMP (~~°F~~/°C)	GAS ~~MMSCFD~~ $m^3 10^3/D$	OIL ~~BPD~~ m^3/D	WATER ~~BPD~~ m^3/D	GAS ~~MMSCF~~ $m^3 10^3$	OIL ~~BBLS~~ m^3	WATER ~~BBLS~~ m^3		L.G.R $m^3/10^3 m^3$
2nd october 1993															
0800	45	1200	7295	54	100	807	45	58·16	·80	2·40	111·49	3·273	3·939		55
0900	46	1207	7295	55	100	814	45	58·39	1·60	1·60	113·92	3·340	4·006		55
		L.E.T rate ② completed. Shut in well.													
		Rig down Test equipment.													
	(1207)														

00281

EXPERTEST PTY. LTD.

GAS FLOW CALCULATIONS

CUSTOMER : Santos Ltd	PERFORATIONS: 6485' - 6772' KB	PAGE: 1 OF 2
WELL NAME: Kidman # 3	FORMATION : Toolachee	DATE: 28th Sept 1993
TEST TYPE : 2-rate L.E.T. & F.G.S.		OPR : B. Potter

ORIFICE METER TYPE: Daniels Snr	STATIC PRESSURE RANGE : 0 - 1500 PSIG	GAS SPECIFIC GRAVITY (SG) = .808
METER RUN SIZE : 3.826"	DIFFERENTIAL PRESS. RANGE: 0 - 200 IN WC	FG $\sqrt{(1/SG)}$ = 1.1124
SEPARATOR NO : # 37	STANDARD CONDITIONS : 14.73 PSI @ 60°F	C_2 (FU x FG) = 26.699

DATE / TIME	FLOW TIME (HOURS)	CHOKE SIZE %	STATIC PRESS P_F (PSIA)	DIFF PRESS H_W (IN WC)	GAS FLOW TEMP (°F)	ORIF. PLATE SIZE (IN)	$\sqrt{(P_F \times H_W)}$	$C_1 = F_B \times F_{TF} \times F_{PV} \times Y_2$				C_1	C ($C = C_1 \times C_2$)	GAS FLOW RATE $Q = \sqrt{(P_F \times H_W)} \times C$	
								F_B	F_{TF}	F_{PV}	Y_2			(MMSCFD)	($m^3 10^3/D$)
28th September 1993															
1600	0	100	Commence L.E.T Rate ①												
1800	2	1	451	94	118	1.25"	205.84	318.031	.9485	1.0496	1.0013	317.06	8465.5	1.742	49.09
29th September 1993															
0600	14		445	90	108		200.06		.9568	1.0522	1.0013	320.62	8560.4	1.712	48.25
0800	16		445	93	109		203.37		.9559	1.0518	1.0013	320.24	8550.4	1.738	48.99
1000	18		445	91	113		201.17		.9526	1.0505	1.0013	318.71	8509.4	1.711	48.23
1200	20		448	90	115		200.74		.9509	1.0502	1.0013	318.06	8492.1	1.704	48.03
1400	22		445	90	118		200.06		.9485	1.0489	1.0013	316.83	8459.4	1.692	47.68
1600	24		447	92	115		202.73		.9509	1.0501	1.0013	318.03	8491.3	1.721	48.50
1800	26		446	96	115		206.86		.9509	1.0500	1.0014	318.01	8490.9	1.756	49.48
30th September 1993															
0600	38		472	89	109		204.90		.9559	1.0553	1.0012	321.26	8577.5	1.757	49.52
0800	40		475	86	109		202.06		.9559	1.0557	1.0011	321.36	8580.2	1.733	48.84
0900	41	↓	467	85	111	↓	199.18	↓	.9542	1.0539	1.0011	320.27	8551.0	1.703	47.98
		Bypass separator Rate ① completed.													
1100	0	20	Commence L.E.T Rate ②										RATE 1, Qg:	1.724	48.584
1200	1	100	128	71	117	2.00"	95.23	849.409	.9493	1.0132	1.0033	819.78	21887.9	2.084	58.72
1400	3	100	128	72	117	↓	95.90	↓	.9493	1.0132	1.0033	819.82	21888.9	2.099	59.14

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00282

EXPERTEST PTY. LTD.

GAS FLOW CALCULATIONS

CUSTOMER : Santos Ltd | PERFORATIONS: 6485' – 6772' KB | PAGE: 2 OF 2

WELL NAME: Kidman #3 | FORMATION : Toolachee | DATE: 30th sept 1993

TEST TYPE : 2-rate L.E.T & F.G.S. | OPR : B. Potter

ORIFICE METER TYPE: Daniels Snr | STATIC PRESSURE RANGE : 0–1500 PSIG | GAS SPECIFIC GRAVITY (SG) = .808

METER RUN SIZE : 3.826" | DIFFERENTIAL PRESS. RANGE: 0–200 IN WC | FG $\sqrt{(1/SG)}$ = 1.1124

SEPARATOR NO : # 37 | STANDARD CONDITIONS : 14.73 PSI @ 60°F | C_2 (FU × FG) = 26.699

DATE / TIME	FLOW TIME (HOURS)	CHOKE SIZE %	STATIC PRESS P_F (PSIA)	DIFF PRESS H_W (IN WC)	GAS FLOW TEMP (°F)	ORIF. PLATE SIZE (IN)	$\sqrt{(P_F \times H_W)}$	$C_1 = F_B \times F_{TF} \times F_{PV} \times Y_2$				C_1	C ($C = C_1 \times C_2$)	GAS FLOW RATE $Q = \sqrt{(P_F \times H_W)} \times C$	
								F_B	F_{TF}	F_{PV}	Y_2			(MMSCFD)	($m^3 10^3/D$)
30th september 1993															
1600	5	100	129	71	117	2.00	95.602	849.409	.9493	1.0133	1.0032	819.847	21889.6	2.092	58.96
1800	7	1	130	74	117		97.980		.9493	1.0134	1.0034	820.026	21894.4	2.145	60.44
1st october 1993															
0600	19		130	72	111		96.646		.9542	1.0139	1.0033	824.630	22017.4	2.127	59.95
0800	21		133	72	118		97.758		.9485	1.0137	1.0032	819.375	21877.0	2.138	60.25
1000	23	↓	135	72	120		98.491		.9468	1.0137	1.0031	817.965	21839.4	2.150	60.60
1200	25	20	128	70	113		94.557		.9526	1.0135	1.0032	822.849	21969.8	2.077	58.53
1300	26	20	135	70	115		97.114		.9509	1.0141	1.0031	821.764	21940.8	2.130	60.03
1500	28	100	132	72	117		97.389		.9493	1.0137	1.0032	820.082	21895.9	2.132	60.08
1600	29		135	72	117		98.491		.9493	1.0140	1.0031	820.281	21901.2	2.157	60.77
1700	30		131	72	115		97.018		.9509	1.0137	1.0032	821.567	21935.6	2.128	59.96
1800	31		132	72	117		99.389		.9493	1.0137	1.0032	820.082	21895.9	2.132	60.08
2nd october 1993															
0600	43		133	68	115		95.003		.9509	1.0139	1.0030	821.554	21935.2	2.083	58.71
0800	45		132	67	113		93.946		.9526	1.0140	1.0030	823.010	21974.1	2.064	58.16
0900	46	↓	133	67	113	↓	94.302	↓	.9526	1.0141	1.0030	823.080	21975.9	2.072	58.39
			L.E.T rate ② completed.												
													RATE 2, Qg:	2.116	59.624

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00283

EXPERTEST PTY. LTD.

LIQUID PRODUCTION

CUSTOMER : Santos Ltd | PERFORATIONS: 6485' - 6772' KB | PAGE: 1 OF 2

WELL NAME: Kidman # 3 | FORMATION : Toolachee | DATE: 28th Sept 1993

TEST TYPE : 2 - rate L.E.T. & F.G.S | OPR : B. Potter

TANK NUMBER: #1 = # 65; #2 = # 70

TANK CAPACITY: #1 = 56.6 m^3 ~~bbls/m³~~; #2 = bbls/m^3

TANK SCALE: #1 = 1" = 0.267 m^3 ~~bbls/in - m³/cm~~; #2 = bbls/in - m^3/cm

OIL API GRAVITY = 52.7 @ 60°F

DATE / TIME	FLOW TIME (HOURS)	TANK USED (NUMBER)	TOTAL TANK DIP (IN/~~CM~~)	OIL/CONDENSATE PRODUCTION				WATER PRODUCTION			
				TANK DIP (IN/~~CM~~)	TANK PRODUCTION (~~BBLS~~/m^3)	FLOW RATE (~~BPD~~/m^3D)	CUMULATIVE PRODUCTION (~~BBLS~~/m^3)	TANK DIP (IN/~~CM~~)	TANK PRODUCTION (~~BBLS~~/m^3)	FLOW RATE (~~BPD~~/m^3D)	CUMULATIVE PRODUCTION (~~BBLS~~/m^3)
28th September 1993											
1600	0	# 1	0.75	0.75	Initial	oil Dip		0.0	Initial	water Dip.	
1800	2		2.0	1.25	.134	1.60	.134	0.75	.200	2.40	.200
29th September	1993										
0600	14		11.0	6.0	1.268	2.54	1.402	5.0	1.135	2.27	1.335
0800	16		12.75	7.25	.334	4.01	1.736	5.5	.134	1.60	1.469
1000	18		14.5	8.0	.200	2.40	1.936	6.5	.267	3.20	1.736
1200	20		15.75	8.75	.200	2.40	2.136	7.0	.134	1.60	1.870
1400	22		17.5	10.0	.334	4.01	2.470	7.5	.134	1.60	2.004
1600	24		19.0	10.75	.200	2.40	2.670	8.25	.200	2.40	2.204
1800	26		20.75	12.0	.334	4.01	3.004	8.75	.133	1.60	2.337
30th September	1993										
0600	38		29.5	16.5	1.201	2.40	4.205	13.0	1.135	2.27	3.472
0800	40		30.75	17.0	.134	1.60	4.339	13.75	.200	2.40	3.672
0900	41		31.5	17.5	.134	3.20	4.473	14.0	.067	1.60	3.739
41 HRS TOTAL		Bypass	separator	Rate ①		completed.	RATE # 1 : Qc → 2.618 m^3/d, Qw → 2.188 m^3/d				
1100	0	# 1	31.5	17.5	Initial	oil dip		14.0	Initial	water dip.	
1200	1		32.5	18.25	.200	4.81	.200	14.25	.067	1.60	.067
1400	3		33.75	18.75	.134	1.60	.334	15.0	.200	2.40	.267
1600	5		35.25	19.5	.200	2.40	.534	15.75	.200	2.40	.467
1800	7		36.25	20.0	.134	1.60	.668	16.25	.134	1.60	.601

00284

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EXPERTEST PTY. LTD.

LIQUID PRODUCTION

CUSTOMER : Santos Ltd | PERFORATIONS: 6485' - 6772' KB | PAGE: 2 OF 2

WELL NAME: Kidman # 3 | FORMATION : Toolachee | DATE: 1st october 1993

TEST TYPE : 2- rate L.E.T & F.G.S. | OPR : B. Potter

TANK NUMBER	#1 = # 65	TANK CAPACITY	#1 = 56.6 m³ ~~bbls/m³~~	TANK SCALE	#1 = 1" = 0.267 m³ ~~bbls/in - m³/cm~~	OIL API GRAVITY = 52.7 @ 60°F
	#2 = # 70		#2 = bbls/m³		#2 = bbls/in - m³/cm	

DATE / TIME	FLOW TIME (HOURS)	TANK USED (NUMBER)	TOTAL TANK DIP (IN/~~CM~~)	OIL/CONDENSATE PRODUCTION				WATER PRODUCTION			
				TANK DIP (IN/~~CM~~)	TANK PRODUCTION (~~BBLS~~/m³)	FLOW RATE (~~BPD~~/m³D)	CUMULATIVE PRODUCTION (~~BBLS~~/m³)	TANK DIP (IN/~~CM~~)	TANK PRODUCTION (~~BBLS~~/m³)	FLOW RATE (~~BPD~~/m³D)	CUMULATIVE PRODUCTION (~~BBLS~~/m³)
1st october 1993											
0600	19	# 1	43.25	22.75	.734	1.47	1.402	20.5	1.135	2.27	1.736
0800 (12)	21		44.5 (6)	23.25	.134	1.60	1.536	21.25	.200	2.40	1.936
1000	23		45.75	24.25	.267	3.20	1.803	21.5	.067	.80	2.003
1200	25		47.0	24.75	.134	1.60	1.937	22.25	.200	2.40	2.203
1300	26		47.5	25.0	.067	1.60	2.004	22.5	.067	1.60	2.270
1500	28		48.5	25.25	.067	.80	2.071	23.25	.200	2.40	2.470
1600	29		49.25	25.75	.134	3.20	2.205	23.5	.067	1.60	2.537
1700	30		50.0	26.0	.067	1.60	2.272	24.0	.134	3.20	2.671
1800 (16)	31		50.5	26.25	.067	1.60	2.339	24.25	.067	1.60	2.738
2nd october 1993			(4.75)				(5.75)				
0600	43		57.5	29.5	.867	1.74	3.206	28.0	1.001	2.00	3.739
0800	45		58.5	29.75	.067	.80	3.273	28.75	.200	2.40	3.939
0900	46		59.0	30.0	.067	1.60	3.340	29.0	.067	1.60	4.006
		L.E.T	Rate ② completed.								
40 HRS	TOTAL		RATE #2 : Qc → 1.722 m³/d , Qw → 2.083 m³/d								

00285

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EXPERTEST PTY. LTD.

SAMPLING DATA

CUSTOMER : Santos Ltd | PERFORATIONS: 6485' – 6772' KB | PAGE: 1 OF 2

WELL NAME: Kidman # 3 | FORMATION : Toolachee | DATE: 29th sept 1993

TEST TYPE : 2-rate L.E.T & F.G.S. | OPR : B. Potter

SAMPLE #

TIME SAMPLE COLLECTED	CYLINDER SERIAL NO.	CYLINDER VOLUME (CC)	SAMPLE TYPE	SAMPLING DURATION (MINS)	CYLINDER INITIALLY FILLED WITH	OUTAGE (CC)	VOLUME OF FILL REMAINING WITH SAMPLE (CC)	SAMPLE POINT	SAMPLE PRESS (PSI/KPa)	SAMPLE TEMP (~~°F~~/°C)	AMBIENT PRESS (PSI/~~KPa~~)	AMBIENT TEMP (~~°F~~/°C)
18:00	# 1	500	Water	1	Ambient	–	–	Sight glass	–	46	14.73	30

WELLHEAD DATA				SEPARATOR DATA			GRAVITIES		FLOW RATES			RATIOS	BOTTOM HOLE	
TUBING PRESS (~~PSI~~/KPa)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE	BS&W (%)	SEPARATOR PRESS (~~PSI~~/KPa)	SEPARATOR TEMP (~~°F~~/°C)	FPV	GAS SPECIFIC GRAVITY	OIL API GRAV @60°F	GAS ~~MMSCFD~~ $m^3 10^3/D$	OIL ~~BPD~~ m^3/D	WATER ~~BPD~~ m^3/D	L.G.R $m^3/10^6 m^3$	PRESSURE (PSI/KPa)	TEMPERATURE (°F/°C)
3103	57	100%	–	2972	46	–	.808		49.48	4.01	1.60	113		

REMARKS:

SAMPLE #

TIME SAMPLE COLLECTED	CYLINDER SERIAL NO.	CYLINDER VOLUME (CC)	SAMPLE TYPE	SAMPLING DURATION (MINS)	CYLINDER INITIALLY FILLED WITH	OUTAGE (CC)	VOLUME OF FILL REMAINING WITH SAMPLE (CC)	SAMPLE POINT	SAMPLE PRESS (PSI/KPa)	SAMPLE TEMP (~~°F~~/°C)	AMBIENT PRESS (PSI/~~KPa~~)	AMBIENT TEMP (~~°F~~/°C)
18:00	# 2	500	Water	1	Ambient	–	–	Sight glass	–	46	14.73	30

WELLHEAD DATA				SEPARATOR DATA			GRAVITIES		FLOW RATES			RATIOS	BOTTOM HOLE	
TUBING PRESS (~~PSI~~/KPa)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE	BS&W (%)	SEPARATOR PRESS (~~PSI~~/KPa)	SEPARATOR TEMP (~~°F~~/°C)	FPV	GAS SPECIFIC GRAVITY	OIL API GRAV @60°F	GAS ~~MMSCFD~~ $m^3 10^3/D$	OIL ~~BPD~~ m^3/D	WATER ~~BPD~~ m^3/D	L.G.R $m^3/10^6 m^3$	PRESSURE (PSI/KPa)	TEMPERATURE (°F/°C)
3103	57	100%	–	2972	46	–	.808		49.48	4.01	1.60	113		

REMARKS:

SAMPLE #

TIME SAMPLE COLLECTED	CYLINDER SERIAL NO.	CYLINDER VOLUME (CC)	SAMPLE TYPE	SAMPLING DURATION (MINS)	CYLINDER INITIALLY FILLED WITH	OUTAGE (CC)	VOLUME OF FILL REMAINING WITH SAMPLE (CC)	SAMPLE POINT	SAMPLE PRESS (PSI/KPa)	SAMPLE TEMP (°F/°C)	AMBIENT PRESS (PSI/KPa)	AMBIENT TEMP (°F/°C)

WELLHEAD DATA				SEPARATOR DATA			GRAVITIES		FLOW RATES			RATIOS	BOTTOM HOLE	
TUBING PRESS (PSI/KPa)	WELLHEAD TEMP (°F/°C)	CHOKE SIZE	BS&W (%)	SEPARATOR PRESS (PSI/KPa)	SEPARATOR TEMP (°F/°C)	FPV	GAS SPECIFIC GRAVITY	OIL API GRAV @60°F	GAS MMSCFD $m^3 10^3/D$	OIL BPD m^3/D	WATER BPD m^3/D		PRESSURE (PSI/KPa)	TEMPERATURE (°F/°C)

REMARKS:

ET 107

EXPERTEST PTY. LTD.

SAMPLING DATA

CUSTOMER : Santos Ltd | PERFORATIONS: 6485' - 6772' KB | PAGE: 2 OF 2

WELL NAME: Kidman # 3 | FORMATION : Toolachee | DATE: 1st october 1993

TEST TYPE : 2-rate L.E.T # | F.G.S. | OPR : B. Potter

SAMPLE #

TIME SAMPLE COLLECTED	CYLINDER SERIAL NO.	CYLINDER VOLUME (CC)	SAMPLE TYPE	SAMPLING DURATION (MINS)	CYLINDER INITIALLY FILLED WITH	OUTAGE (CC)	VOLUME OF FILL REMAINING WITH SAMPLE (CC)	SAMPLE POINT	SAMPLE PRESS (PSI/KPa)	SAMPLE TEMP (~~°F~~/°C)	AMBIENT PRESS (PSI/~~KPa~~)	AMBIENT TEMP (~~°F~~/°C)
15:00	# 3	500	Water	1	Ambient	–	–	Sight glass	–	47	14.73	20

WELLHEAD DATA				SEPARATOR DATA			GRAVITIES		FLOW RATES			RATIOS	BOTTOM HOLE	
TUBING PRESS (~~PSI~~/KPa)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE	BS&W (%)	SEPARATOR PRESS (~~PSI~~/KPa)	SEPARATOR TEMP (~~°F~~/°C)	FPV	GAS SPECIFIC GRAVITY	OIL API GRAV @60°F	GAS ~~MMSCF~~D $m^3 10^3/D$	OIL ~~BPD~~ m^3/D	WATER ~~BPD~~ m^3/D	L.G.R. $m^3/10^6 m^3$	PRESSURE (PSI/KPa)	TEMPERATURE (°F/°C)
1214	56	100%	–	807	47	–	.808	52.7	60.08	.80	2.40	53		

REMARKS:

SAMPLE #

TIME SAMPLE COLLECTED	CYLINDER SERIAL NO.	CYLINDER VOLUME (CC)	SAMPLE TYPE	SAMPLING DURATION (MINS)	CYLINDER INITIALLY FILLED WITH	OUTAGE (CC)	VOLUME OF FILL REMAINING WITH SAMPLE (CC)	SAMPLE POINT	SAMPLE PRESS (PSI/KPa)	SAMPLE TEMP (~~°F~~/°C)	AMBIENT PRESS (PSI/~~KPa~~)	AMBIENT TEMP (~~°F~~/°C)
15:00	# 4	500	Water	1	Ambient	–	–	Sight glass	–		14.73	20

WELLHEAD DATA				SEPARATOR DATA			GRAVITIES		FLOW RATES			RATIOS	BOTTOM HOLE	
TUBING PRESS (~~PSI~~/KPa)	WELLHEAD TEMP (~~°F~~/°C)	CHOKE SIZE	BS&W (%)	SEPARATOR PRESS (~~PSI~~/KPa)	SEPARATOR TEMP (~~°F~~/°C)	FPV	GAS SPECIFIC GRAVITY	OIL API GRAV @60°F	GAS ~~MMSCF~~D $m^3 10^3/D$	OIL ~~BPD~~ m^3/D	WATER ~~BPD~~ m^3/D	L.G.R. $m^3/10^6 m^3$	PRESSURE (PSI/KPa)	TEMPERATURE (°F/°C)
1214	56	100%	–	807	47	–	.808	52.7	60.08	.80	2.40	53		

REMARKS:

SAMPLE #

TIME SAMPLE COLLECTED	CYLINDER SERIAL NO.	CYLINDER VOLUME (CC)	SAMPLE TYPE	SAMPLING DURATION (MINS)	CYLINDER INITIALLY FILLED WITH	OUTAGE (CC)	VOLUME OF FILL REMAINING WITH SAMPLE (CC)	SAMPLE POINT	SAMPLE PRESS (PSI/KPa)	SAMPLE TEMP (°F/°C)	AMBIENT PRESS (PSI/KPa)	AMBIENT TEMP (°F/°C)

WELLHEAD DATA				SEPARATOR DATA			GRAVITIES		FLOW RATES			RATIOS	BOTTOM HOLE	
TUBING PRESS (PSI/KPa)	WELLHEAD TEMP (°F/°C)	CHOKE SIZE	BS&W (%)	SEPARATOR PRESS (PSI/KPa)	SEPARATOR TEMP (°F/°C)	FPV	GAS SPECIFIC GRAVITY	OIL API GRAV @60°F	GAS MMSCFD $m^3 10^3/D$	OIL BPD m^3/D	WATER BPD m^3/D		PRESSURE (PSI/KPa)	TEMPERATURE (°F/°C)

REMARKS:

ET 107

EXPERTEST PTY. LTD.

BHP/BHT GAUGE RUN DATA

CUSTOMER : Santos Ltd
WELL NAME: Kidman # 3
TEST TYPE : Flowing Gradient & L.E.T

PERFORATIONS: 6485' - 6772' KB
FORMATION : Toolachee.

PAGE: 1 OF 3
DATE: 29th sept 1993
OPR : B. Potter

GAUGE DATA	UPPER PRESSURE GAUGE	LOWER PRESSURE GAUGE	TEMPERATURE GAUGE
ELEMENT SERIAL NO.	56429	56432	
ELEMENT RANGE (PSI)	3000	3000	
RECORDING SECTION SERIAL NO.	14628	70544	
DATE OF CALIBRATION: @ 290°F	6·1·93	6·1·93	
CLOCK SERIAL NO.	K3054	25511	
CLOCK RANGE (hr)	3	3	
LEAD SCREW TYPE	15 TLS	15 TLS	
ENGAGE STYLUS DATE 29·9·93 TIME	14:20	14:20	
DISENGAGE STYLUS DATE 29·9·93 TIME	16:39	16:39	

RUN DATA	TIME (HOURS)	TUBING PRESSURE (~~PSI~~/KPa)	ANNULUS PRESSURE (~~PSI~~/KPa)
DATE : 29·9·93			
PRESSURE LUBRICATOR :	1426	3089	7529
RUN IN HOLE :	1441	3089	7536
ON DEPTH AT : 6749 FT/~~M~~	1542	3110	7550
DATE : 29·9·93			
PULL OUT OF HOLE :	1557	3110	7550
AT SURFACE :	1618	3117	7550
DEPRESSURE LUBRICATOR :	1633	3117	7550

MAXIMUM BHT AT 6749 FT/~~M~~ = 278 °F/~~C~~

N.B. ALL DEPTHS ARE MEASURED FROM K.B.

DATE	TIME	REMARKS
		Rate ① well flowing 100% choke in-line

ET 108

00288

EXPERT

WIRELINE & WELL TESTING SERVICE

PO BOX 354 COWANDILLA 5033

PH. (08) 354 0488 TELEX AA87183
FAX (08) 43 7408

138 RICHMOND ROAD MARLESTON
SOUTH AUSTRALIA 5033

Tested Wednesday, 29th September 1993.

FLOWING PRESSURE GRADIENT REPORT

CLIENT	LOCATION	FORMATION
SANTOS LTD.	KIDMAN #3	TOOLACHEE

PRESSURE ELEMENT DATA

POSITION	SERIAL NO.	RANGE	CALIBRATED
Top	56429	3000	6/ 1/93
Bottom	56432	3000	6/ 1/93

WELL DATA

PARAMETER	VALUE
DWT In	447 PSIG
DWT Out	452 PSIG
Max BHT	278 DEG F

	TOP ELEMENT			BOTTOM ELEMENT		
DEPTH FT KB	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT
LUB.	0.2880	441.8	-	0.2890	436.7	-
1000	0.3290	505.1	0.063	0.3320	503.2	0.067
2000	0.3690	566.9	0.062	0.3730	566.6	0.064
3000	0.4050	622.4	0.056	0.4080	620.8	0.054
4000	0.4430	681.1	0.059	0.4470	681.2	0.060
5000	0.4750	730.5	0.049	0.4790	730.8	0.050
5500	0.4880	750.5	0.040	0.4910	749.4	0.037
6000	0.5030	773.7	0.046	0.5070	774.2	0.050
6490	0.5130	789.1	0.032	0.5170	789.7	0.032
6550	0.5160	793.7	0.077	0.5190	792.8	0.052
6749	0.5310	816.9	0.116	0.5350	817.6	0.125
LUB.	0.2920	448.0	-	0.2950	446.0	-

GENERAL REMARKS

RATE #1 WELL FLOWING 100% CHOKE IN LINE.

EXPERTEST PTY. LTD.

FLOWING PRESSURE GRADIENT SURVEY

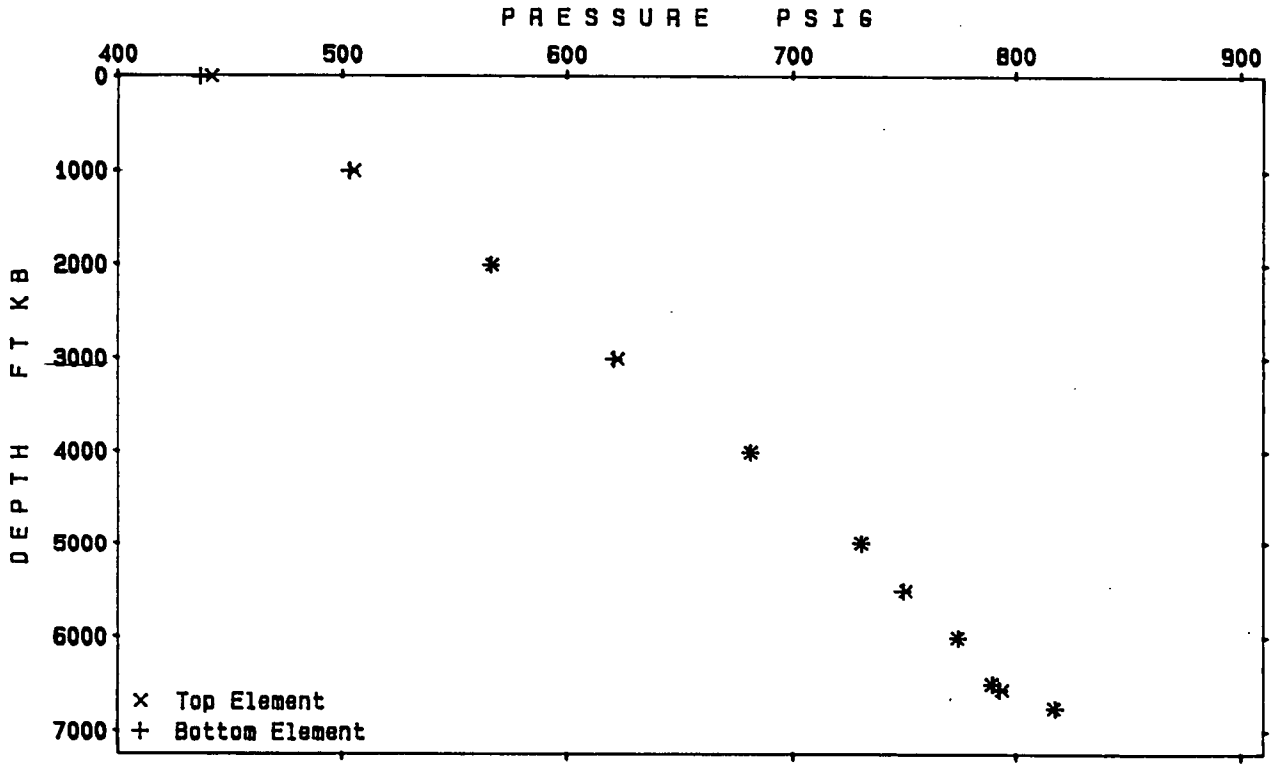
Location: KIDMAN #3	Tested: 29th September 1993.
Formation: TOOLACHEE	Client: SANTOS LTD.

PRESSURE ELEMENT DATA

Position	Serial No	Range	Calibrated
Top	56429	3000	6/ 1/93
Bottom	56432	3000	6/ 1/93

WELL DATA

DWT In	447 PSIG
DWT Out	452 PSIG
Max BHT	278 DEG F



Depth FT KB	TOP ELEMENT Deflection Inches	Pressure PSIG	Gradient PSI/FT	BOTTOM ELEMENT Deflection Inches	Pressure PSIG	Gradient PSI/FT
LUB.	0.2880	441.8	-	0.2890	436.7	-
1000	0.3290	505.1	0.063	0.3320	503.2	0.067
2000	0.3690	566.9	0.062	0.3730	566.6	0.064
3000	0.4050	622.4	0.056	0.4080	620.8	0.054
4000	0.4430	681.1	0.059	0.4470	681.2	0.060
5000	0.4750	730.5	0.049	0.4790	730.8	0.050
5500	0.4880	750.5	0.040	0.4910	749.4	0.037
6000	0.5030	773.7	0.046	0.5070	774.2	0.050
6490	0.5130	789.1	0.032	0.5170	789.7	0.032
6550	0.5160	793.7	0.077	0.5190	792.8	0.052
6749	0.5310	816.9	0.116	0.5350	817.6	0.125
LUB.	0.2920	448.0	-	0.2950	446.0	-

GENERAL REMARKS

RATE #1 WELL FLOWING 100% CHOKE IN LINE.

EXPERTEST PTY. LTD.

BHP/BHT GAUGE RUN DATA

CUSTOMER : Santos Ltd
WELL NAME: Kidman # 3
TEST TYPE : Flowing gradient & L.E.T.

PERFORATIONS: 6485' - 6772' KB
FORMATION : Toolachee

DATE: 1st october 1993
OPR : B. Potter

GAUGE DATA	UPPER PRESSURE GAUGE	LOWER PRESSURE GAUGE	TEMPERATURE GAUGE
ELEMENT SERIAL NO.	56429	56432	
ELEMENT RANGE (P.S.I).	3000	3000	
RECORDING SECTION SERIAL NO.	14628	70544	
DATE OF CALIBRATION: @ 290°F	6·1·93	6·1·93	
CLOCK SERIAL NO.	K3054	25511	
CLOCK RANGE (hr)	3	3	
LEAD SCREW TYPE	15TLS	15TLS.	
ENGAGE STYLUS DATE 1·10·93 TIME	10:30	10:30	
DISENGAGE STYLUS DATE 1·10·93 TIME	13:02	13:02	

RUN DATA	TIME (HOURS)	TUBING PRESSURE (~~PSI~~/KPa)	ANNULUS PRESSURE (~~PSI~~/KPa)
DATE : 1·10·93			
PRESSURE LUBRICATOR :	10:34	1207	7378
RUN IN HOLE :	11:05	1193	7371
ON DEPTH AT : 6749 FT/~~M~~	12:03	1703	7467
DATE : 1·10·93			
PULL OUT OF HOLE :	12:18	1738	7495
AT SURFACE :	12:38	1709	7522
DEPRESSURE LUBRICATOR :	12:55	1682	7529

MAXIMUM BHT AT 6749 FT/~~M~~ = 250 °F/~~C~~
N.B. ALL DEPTHS ARE MEASURED FROM K.B.

DATE	TIME	REMARKS
1·10·93		Rate @ well flowing 100% choke to flare
	10:34	Pressure Lub.
	10:45	Depress Lub.
	10:50	Press Lub, unable to run in hole due to high flow rate.
	10:55	Depress Lub, add more stem wieght.
	11:05	Press Lub, unable to run in hole.
Note: *		Choke well to 20%, continue to run in Hole and perform F.G.S.
	12:03	Bottom Gradient stop @ 6749' KB.
	12:18	P.O.O.H.
	12:38	At surface with gauges. Both charts good.

ET 108

00291

EXPERTEST
WIRELINE & WELL TESTING SERVICE
PO BOX 354 COWANDILLA 5033
PH. (08) 354 0488 TELEX AA87183
FAX (08) 43 7408
138 RICHMOND ROAD MARLESTON
SOUTH AUSTRALIA 5033

Tested Friday, 1st October 1993.

FLOWING PRESSURE GRADIENT REPORT

CLIENT	LOCATION	FORMATION
SANTOS LTD.	KIDMAN #3	TOOLACHEE

PRESSURE ELEMENT DATA

POSITION	SERIAL NO.	RANGE	CALIBRATED
Top	56429	3000	6/ 1/93
Bottom	56432	3000	6/ 1/93

WELL DATA

PARAMETER	VALUE
DWT In	172 PSIG
DWT Out	244 PSIG
Max BHT	250 DEG F

	TOP ELEMENT			BOTTOM ELEMENT		
DEPTH FT KB	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT
LUB.	0.1130	171.4	-	0.1140	166.7	-
1000	0.2410	369.2	0.198	0.2430	365.6	0.199
2000	0.2920	448.0	0.079	0.2960	447.5	0.082
3000	0.3400	522.1	0.074	0.3440	521.8	0.074
4000	0.3780	580.8	0.059	0.3830	582.1	0.060
5000	0.4190	644.0	0.063	0.4240	645.6	0.064
5500	0.4370	671.8	0.056	0.4420	673.5	0.056
6000	0.4530	696.5	0.049	0.4570	696.7	0.047
6490	0.4690	721.2	0.050	0.4740	723.1	0.054
6550	0.4700	722.7	0.026	0.4750	724.6	0.026
6749	0.4820	741.3	0.093	0.4870	743.2	0.094
LUB.	0.1560	237.9	-	0.1570	232.9	-

GENERAL REMARKS

RATE #2 WELL FLOWING 100% TO FLARE.
UNABLE TO ENTER HOLE.CHOKE TO 20% FOR ENTIRE GRADIENT.

EXPERTEST PTY. LTD.

FLOWING PRESSURE GRADIENT SURVEY

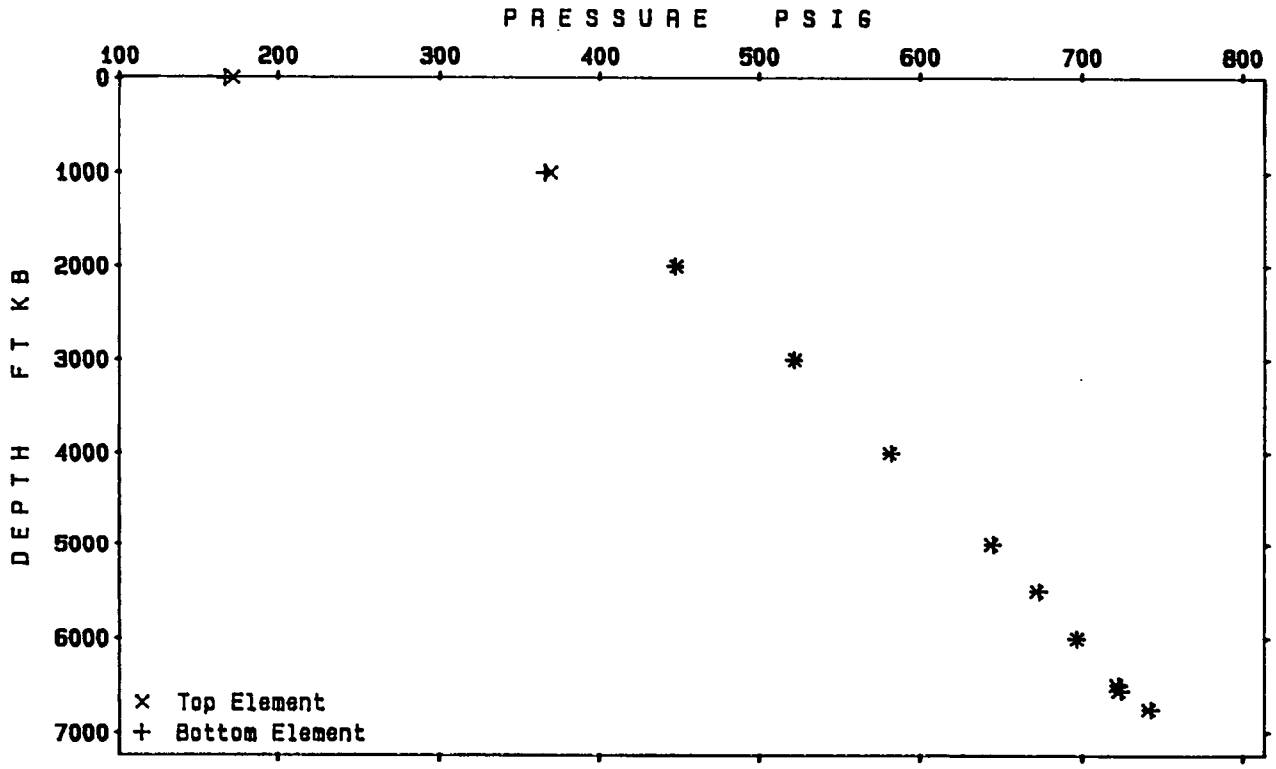
Location: KIDMAN #3	Tested: 1st October 1993.
Formation: TOOLACHEE	Client: SANTOS LTD.

PRESSURE ELEMENT DATA

Position	Serial No	Range	Calibrated
Top	56429	3000	6/ 1/93
Bottom	56432	3000	6/ 1/93

WELL DATA

DWT In	172 PSIG
DWT Out	244 PSIG
Max BHT	250 DEG F



	TOP ELEMENT			BOTTOM ELEMENT		
Depth FT KB	Deflection Inches	Pressure PSIG	Gradient PSI/FT	Deflection Inches	Pressure PSIG	Gradient PSI/FT
LUB.	0.1130	171.4	-	0.1140	166.7	-
1000	0.2410	369.2	0.198	0.2430	365.6	0.199
2000	0.2920	448.0	0.079	0.2960	447.5	0.082
3000	0.3400	522.1	0.074	0.3440	521.8	0.074
4000	0.3780	580.8	0.059	0.3830	582.1	0.060
5000	0.4190	644.0	0.063	0.4240	645.6	0.064
5500	0.4370	671.8	0.056	0.4420	673.5	0.056
6000	0.4530	696.5	0.049	0.4570	696.7	0.047
6490	0.4690	721.2	0.050	0.4740	723.1	0.054
6550	0.4700	722.7	0.026	0.4750	724.6	0.026
6749	0.4820	741.3	0.093	0.4870	743.2	0.094
LUB.	0.1560	237.9	-	0.1570	232.9	-

GENERAL REMARKS

RATE #2 WELL FLOWING 100% TO FLARE.
UNABLE TO ENTER HOLE.CHOKE TO 20% FOR ENTIRE GRADIENT.

EXPERTEST PTY. LTD.

BHP/BHT GAUGE RUN DATA

CUSTOMER : Santos Ltd
WELL NAME: Kidman # 3
TEST TYPE : Modified Flowing Gradient.

PERFORATIONS: 6485' - 6772' KB
FORMATION : Toolachee

DATE: 1st october 1993
OPR : B. Potter

GAUGE DATA	UPPER PRESSURE GAUGE	LOWER PRESSURE GAUGE	TEMPERATURE GAUGE
ELEMENT SERIAL NO.	56429	56432	
ELEMENT RANGE (PSI)	3000	3000	
RECORDING SECTION SERIAL NO.	14628	70544	
DATE OF CALIBRATION: @ 290° F	6·1·93	6·1·93	
CLOCK SERIAL NO.	K3054	25511	
CLOCK RANGE (hr)	3	3	
LEAD SCREW TYPE	15TLS	15TLS	
ENGAGE STYLUS DATE 1·10·93 TIME	15:06	15:06	
DISENGAGE STYLUS DATE 1·10·93 TIME	17:12	17:12	

RUN DATA	TIME (HOURS)	TUBING PRESSURE (~~PSI~~/KPa)	ANNULUS PRESSURE (~~PSI~~/KPa)
DATE : 1·10·93			
PRESSURE LUBRICATOR :	15:11	1214	7419
RUN IN HOLE :	15:21	1186	7419
ON DEPTH AT : 6749 FT/~~M~~	15:41	1207	7419
DATE : 1·10·93			
PULL OUT OF HOLE :	16:41	1186	7419
AT SURFACE :	16:57	1207	7412
DEPRESSURE LUBRICATOR :	17:07	1227	7412

MAXIMUM BHT AT 6749 FT/~~M~~ = 248 °F/~~C~~

N.B. ALL DEPTHS ARE MEASURED FROM K.B.

DATE	TIME	REMARKS
1·10·93		(Modified F.G.S)
	15:11	Press Lub. well flowing to flare 100% choke.
	15:21	R.I.H with gauges. Cut choke to 20%
	15:30	Open choke to 100%
	15:41	Hang depth @ 6749' KB
	16:41	P.O.O.H.
	16:57	At surface. Both charts good.

ET 108

00296

EXPERTEST
WIRELINE & WELL TESTING SERVICE
PO BOX 354 COWANDILLA 5033
PH. (08) 354 0488 TELEX AA87183
FAX (08) 43 7408
138 RICHMOND ROAD MARLESTON
SOUTH AUSTRALIA 5033

Tested Friday, 1st October 1993.

FLOWING PRESSURE GRADIENT REPORT

CLIENT	LOCATION	FORMATION
SANTOS LTD.	KIDMAN #3	TOOLACHEE

PRESSURE ELEMENT DATA

POSITION	SERIAL NO.	RANGE	CALIBRATED
Top	56429	3000	6/ 1/93
Bottom	56432	3000	6/ 1/93

WELL DATA

PARAMETER	VALUE
DWT In	172 PSIG
DWT Out	178 PSIG
Max BHT	248 DEG F

	TOP ELEMENT			BOTTOM ELEMENT		
DEPTH FT KB	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT	DEFLECTION INCHES	PRESSURE PSIG	GRADIENT PSI/FT
LUB.	0.1100	166.7	-	0.1100	160.5	-
6749	0.4770	733.5	0.084	0.4790	730.8	0.085
LUB.	0.1180	179.1	-	0.1190	174.4	-

GENERAL REMARKS

RATE #2 . WELL FLOWING 100% CHOKE TO FLARE .
MODIFIED GRADIANT . 1 HOUR AT HANG DEPTH ONLY .
REDUCE CHOKE TO 20% ENTERING WELL ,INCREASE BACK TO 100% .

EXPERTEST PTY. LTD.

FLOWING PRESSURE GRADIENT SURVEY

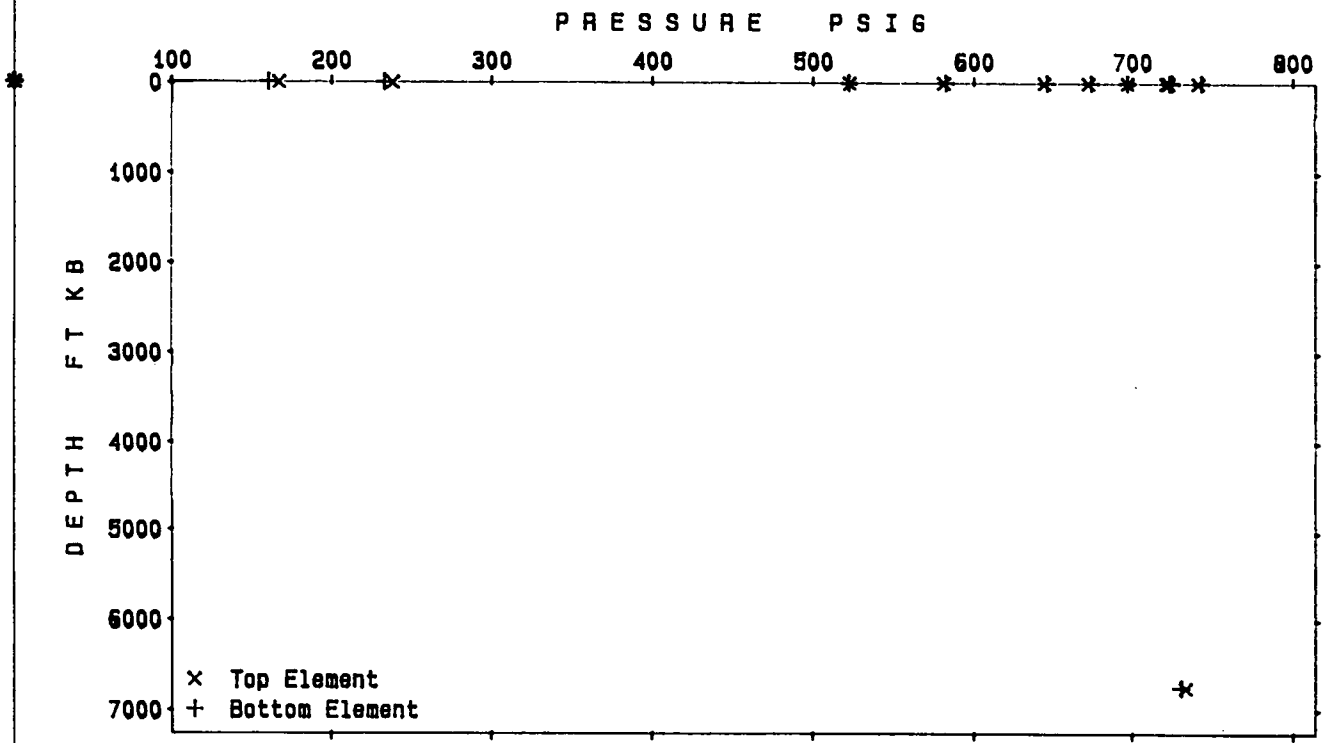
Location: KIDMAN #3	Tested: 1st October 1993.
Formation: TOOLACHEE	Client: SANTOS LTD.

PRESSURE ELEMENT DATA

Position	Serial No	Range	Calibrated
Top	56429	3000	6/ 1/93
Bottom	56432	3000	6/ 1/93

WELL DATA

DWT In	172 PSIG
DWT Out	178 PSIG
Max BHT	248 DEG F



	TOP ELEMENT			BOTTOM ELEMENT		
Depth FT KB	Deflection Inches	Pressure PSIG	Gradient PSI/FT	Deflection Inches	Pressure PSIG	Gradient PSI/FT
LUB.	0.1100	166.7	-	0.1100	160.5	-
6749	0.4770	733.5	0.084	0.4790	730.8	0.084
LUB.	0.1180	179.1	-	0.1190	174.4	-
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GENERAL REMARKS

RATE #2 . WELL FLOWING 100% CHOKE TO FLARE .
MODIFIED GRADIANT . 1 HOUR AT HANG DEPTH ONLY .
REDUCE CHOKE TO 20% ENTERING WELL , INCREASE BACK TO 100% .