

APPENDIX 4

EAST MEREENIE NO. 7

DRILL STEM TEST RESULTS

D.S.T. No.1	4559 to 4628 feet
D.S.T. No.2	4630 to 4683 feet
D.S.T. No.3	4692 to 4736 feet
D.S.T. No.4	4742 to 4800 feet

DRILL STEM TEST REPORT

Report No.

1

Well EAST MEREENIE NO. 7 Elevation K.B. 2430' Elevation G.L. 2410' Date 13th June 1982Test No. 1 Interval 4559 - 4628 Operator HALLIBURTONTester Size & Type 5" HYDROSPRING Packer Size & Type 7-3/4 OH #3 ASSEMBLYAnchor Length & O.D. 66.55 Drill collar footage above Packer 603Capacity Bbls/ft. Drill Pipe 0.0142 Collars 0.00519Pressure Recorders Type BOURDON Position TOP Depth 4043.08 FTType BOURDON Position BOTTOM Depth 4624.72 FTPerforated Anchor from 4593.5 to 4628Choke Size: Top 1/2" Bottom 3/4" Water Cushion NIL Mud Wt. 9.0 Vis. 47Hole Size 8-5/8" CSG to 4573 FT Rat hole size 7-7/8" to 4628 FT

(7.921 ID)

Mud Level: Before valve opened 3 FT BELOW BELL NIPPLE After valve opened 3 FT BELOW BELL NIPPLE

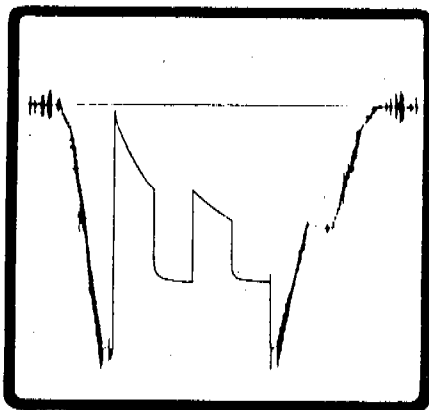
13.01 BTM

TOP CLOCK 12 HRS

Time Record: Started clocks at 11.57 TOP Hrs. Started in hole at 13.26 Hrs. BTM CLOCK 48 HRSOpened Valve at 18.18 Hrs. Shut in at 18.29 Hrs. Opened at 19.28 Hrs. Shut in at 21.00 Hrs.Pulled Packer at 23.00 Hrs. Out of hole at _____ Hrs. Recovered chart at 3.15 Hrs.Nature of Blow INITIAL BLOW VERY WEAK SLOWLY INCREASING - END VERY WEAK NO GAS TO SURFACE. MODERATE BLOW INCREASED TO STRONG 19.55 HRS, BLOW DECREASING 20.05 HRS.Fluid flow (details) 20.20 WEAK BLOW. GAS TO SURFACE AT 20.20 HRS. TSTM. COLLECTED GAS SAMPLE FROM FLOW PROVER. (SAMPLE BOMB)Recovery 470 FT GAS CUT MUD. VERY SLIGHT OIL CUTPressures I.H.P. 2155.5 psig IFP 9.3 psig ISIP 1484 psig FFP 192 psig FSIP 1650 psigF.H.P. 2150 psigElapsed Times: Initial flow 10 mins. Initial Shut in 59 mins.Final flow 92 mins. Final Shut in 120 mins.Maximum Temperature 136° F Samples Taken MUD SAMPLE AT TOP & BOTTOM OF FLUID LEVELRemarks PULL OUT OF HOLE CHECKING FOR FLUID LEVELBOTTOM CHART DID NOT WORKTOP CHART INDICATES FORMATION IS TIGHT

DAVID WARNER

FORMATION TESTING SERVICE REPORT



Duncan, Oklahoma 73536

A Halliburton Company

NOMENCLATURE

B	= Formation Volume Factor (Res Vol / Std Vol)	—
c_t	= System Total Compressibility	(Vol / Vol) / psi
DR	= Damage Ratio	—
h	= Estimated Net Pay Thickness	Ft
k	= Permeability	md
m	{ = (Liquid) Slope Extrapolated Pressure Plot	psi/cycle
	(Gas) Slope Extrapolated m(P) Plot	MM psi ² /cp/cycle
m(P*)	= Real Gas Potential at P*	MM psi ² /cp
m(P _f)	= Real Gas Potential at P _f	MM psi ² /cp
AOF ₁	= Maximum Indicated Absolute Open Flow at Test Conditions	MCFD
AOF ₂	= Minimum Indicated Absolute Open Flow at Test Conditions	MCFD
P*	= Extrapolated Static Pressure	Psig
P _f	= Final Flow Pressure	Psig
Q	= Liquid Production Rate During Test	BPD
Q ₁	= Theoretical Liquid Production w/ Damage Removed	BPD
Q _g	= Measured Gas Production Rate	MCFD
r _i	= Approximate Radius of Investigation	Ft
r _w	= Radius of Well Bore	Ft
S	= Skin Factor	
t	= Total Flow Time Previous to Closed-in	Minutes
Δt	= Closed-in Time at Data Point	Minutes
T	= Temperature Rankine	R
φ	= Porosity	—
μ	= Viscosity of Gas or Liquid	cp
Log	= Common Log	



TICKET NO. 19972000

13-JUL-82

ADELAIDE

FORMATION TESTING SERVICE REPORT

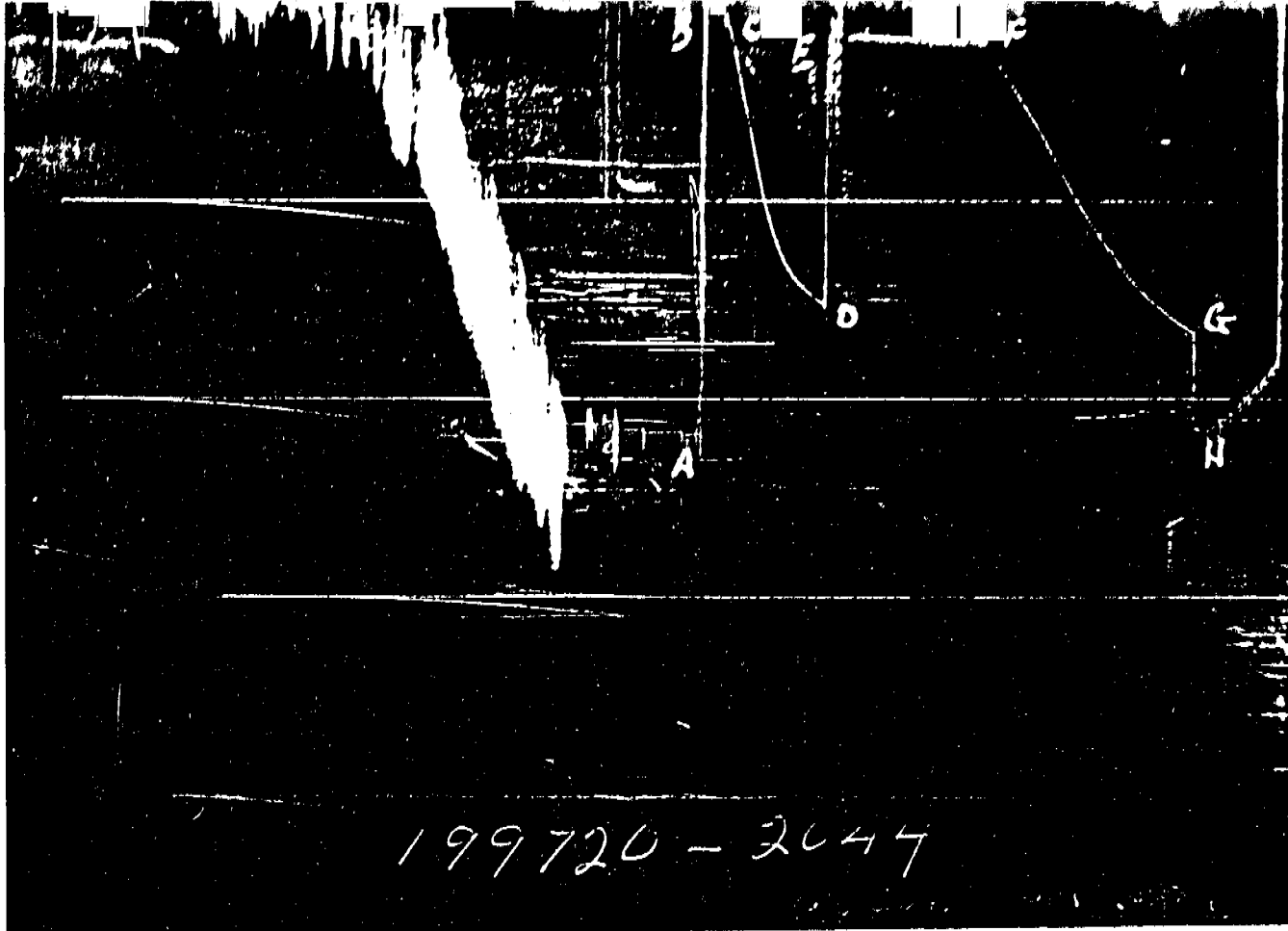
LEASE NAME		WELL NO.		TEST NO.		TESTED INTERVAL		LEASE OWNER/COMPANY NAME	
EAST MERENIE		7		1		4557.1 - 4628.1		OILMIN. N.L.	
LEGAL LOCATION		FIELD AREA		COUNTY		STATE		DRSM	
SEC. - TWP. - RNC.		AMEDEUS		NORTH TERRITORY		AUSTRALIA			

199720-2043

Bottom

GAUGE NO: 2043 DEPTH: 4625.0 BLANKED OFF: YES HOUR OF CLOCK: 48

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC					
B	INITIAL FIRST FLOW			11.0		F
C	FINAL FIRST FLOW					
C	INITIAL FIRST CLOSED-IN			60.0		C
D	FINAL FIRST CLOSED-IN					
E	INITIAL SECOND FLOW			91.0		F
F	FINAL SECOND FLOW					
F	INITIAL SECOND CLOSED-IN			121.0		C
G	FINAL SECOND CLOSED-IN					
H	FINAL HYDROSTATIC					



GAUGE NO: 2044 DEPTH: 4533.9 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2171.7			
B	INITIAL FIRST FLOW		34.7			
C	FINAL FIRST FLOW		88.7	11.0	11.8	F
C	INITIAL FIRST CLOSED-IN		88.7			
D	FINAL FIRST CLOSED-IN		1516.4	60.0	57.9	C
E	INITIAL SECOND FLOW		171.2			
F	FINAL SECOND FLOW		200.8	91.0	93.0	F
F	INITIAL SECOND CLOSED-IN		200.8			
G	FINAL SECOND CLOSED-IN		1661.4	121.0	120.3	C
H	FINAL HYDROSTATIC		2155.9			

EQUIPMENT & HOLE DATA

FORMATION TESTED: PACKOUIA
 NET PAY (ft): _____
 GROSS TESTED FOOTAGE: 71.0
 ALL DEPTHS MEASURED FROM: KELLY BUSHING
 CASING PERFS. (ft): _____
 HOLE OR CASING SIZE (in): 7.875
 ELEVATION (ft): 2430
 TOTAL DEPTH (ft): 4628.0
 PACKER DEPTH(S) (ft): 4549, 4557
 FINAL SURFACE CHOKE (in): 0.500
 BOTTOM HOLE CHOKE (in): 0.750
 MUD WEIGHT (lb/gal): 9.00
 MUD VISCOSITY (sec): _____
 ESTIMATED HOLE TEMP. (°F): _____
 ACTUAL HOLE TEMP. (°F): 138 @ 4624.0 ft

TICKET NUMBER: 19972000

DATE: 6-12-82 TEST NO: 1

TYPE DST: OPEN HOLE

HALLIBURTON CAMP:
ADFLAIDE

TESTER: M. JENKINS
J. NILON

WITNESS: DAVID WARNER

DRILLING CONTRACTOR:
MEREENIE PARTNERS

FLUID PROPERTIES FOR RECOVERED MUD & WATER

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

SAMPLER DATA

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

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): 47.0 @ 60°F
 GAS/OIL RATIO (cu.ft. per bbl): _____
 GAS GRAVITY: 0.650

CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

RECOVERED:

475 FEET OF MUD CUT GAS WITH A MINUTE CUTTING OF OIL

MEASURED FROM
TESTER VALVE

REMARKS:

CLOCK STOPPED ON BT # 2043, NO READINGS AVAILABLE.

INSIDE DIAMETERS OF DRILL PIPE AND DRILL COLLARS WERE NOT REPORTED WITH TEST...ALSO DIAMETERS OF CROSSOVER NOT REPORTED.



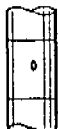














NO CALCULATION PERFORMED DUE TO INSUFFICIENT CLOSURE OF CLOSED IN PRESSURE FOR RELIABLE EXTRAPOLATIONS.

TYPE & SIZE MEASURING DEVICE: POSITIVE CHOKE TICKET NO: 10072500

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[illegible]

		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500		3896.1	
3		DRILL COLLARS.....	6.500		564.3	
50		IMPACT REVERSING SUB.....	5.000	2.000	1.0	4457.4
3		DRILL COLLARS.....	6.500		62.3	
5		CROSSOVER.....			3.3	
12		DUAL CIP VALVE.....	5.000	0.870	4.9	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	4531.9
80		AP RUNNING CASE.....	5.000	2.250	4.1	4533.9
15		JAR.....	5.000	1.750	5.0	
16		VR SAFETY JOINT.....	5.000	1.000	2.8	
70		OPEN HOLE PACKER.....	7.750	1.750	5.8	4548.8
70		OPEN HOLE PACKER.....	7.750	1.750	5.8	4557.0
5		CROSSOVER.....			1.0	
3		DRILL COLLARS.....	6.500		31.1	
5		CROSSOVER.....			0.9	
20		FLUSH JOINT ANCHOR.....	5.000	2.370	30.0	
81		BLANKED-OFF RUNNING CASE.....	5.000	2.440	4.5	4625.0
TOTAL DEPTH						4628.0

EQUIPMENT DATA

TICKET NO: 19972000
CLOCK NO: 7411 HOUR: 12



GAUGE NO: 2044
DEPTH: 4533.9

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	34.7			
2	2.0	38.3	3.6		
3	4.0	44.8	6.5		
4	6.0	55.4	10.6		
5	8.0	66.2	10.7		
6	10.0	79.0	12.9		
C 7	11.8	88.7	9.7		
FIRST CLOSED-IN					
C 1	0.0	88.7			
2	6.0	261.9	173.2	4.0	0.473
3	12.0	526.1	437.4	6.0	0.297
4	18.0	797.2	708.5	7.1	0.220
5	24.0	1046.9	958.2	7.9	0.174
6	30.0	1224.8	1136.1	8.5	0.144
7	36.0	1334.7	1246.0	8.9	0.123
8	42.0	1408.2	1319.5	9.2	0.108
9	48.0	1454.9	1366.2	9.5	0.096
10	54.0	1497.7	1409.0	9.7	0.086
D 11	57.9	1516.4	1427.6	9.8	0.081
SECOND FLOW					
E 1	0.0	171.2			
2	15.0	174.9	3.7		
3	30.0	174.9	0.0		
4	45.0	181.0	6.1		
5	60.0	189.8	8.8		
6	75.0	194.6	4.8		
7	90.0	198.1	3.6		
F 8	93.0	200.8	2.7		
SECOND CLOSED-IN					
F 1	0.0	200.8			
2	10.0	324.8	124.0	9.2	1.058
3	20.0	467.4	266.6	16.8	0.795
4	30.0	617.6	416.8	23.3	0.653
5	40.0	778.4	577.6	29.0	0.553
6	50.0	941.7	740.9	33.8	0.491
7	60.0	1098.4	897.6	38.2	0.437
8	70.0	1231.3	1030.5	42.0	0.397
9	80.0	1349.2	1148.4	45.4	0.364
10	90.0	1448.0	1247.2	48.4	0.335
11	100.0	1529.5	1328.7	51.2	0.311
12	110.0	1600.9	1400.1	53.7	0.291
G 13	120.3	1661.4	1460.6	56.0	0.272

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

REMARKS:

EQUATIONS FOR DST LIQUID WELL ANALYSIS

Transmissibility	$\frac{kh}{\mu} = \frac{162.6 Q_B}{m}$	$\frac{\text{md-ft}}{\text{cp}}$
Indicated Flow Capacity	$kh = \frac{kh}{\mu} \mu$	md-ft
Average Effective Permeability	$k = \frac{kh}{h}$	md
Damage Ratio	$DR = .183 \frac{P^* - P_I}{m}$	—
Theoretical Potential w / Damage Removed	$Q_I = Q DR$	BPD
Approx. Radius of Investigation	$r_i = 4.63 \sqrt{kt}$	ft

EQUATIONS FOR DST GAS WELL ANALYSIS

Indicated Flow Capacity	$kh = \frac{1637 Q_g T}{m}$	md-ft
Average Effective Permeability	$k = \frac{kh}{h}$	md
Skin Factor	$S = 1.151 \left[\frac{m(P^*) - m(P_I)}{m} - \text{LOG} \frac{kt}{\phi \mu c_i r_w^2} + 3.23 \right]$	—
Damage Ratio	$DR = \frac{m(P^*) - m(P_I)}{m(P^*) - m(P_I) - 0.87 mS}$	—
Indicated Flow Rate (Maximum)	$AOF_1 = \frac{Q_g m(P^*)}{m(P^*) - m(P_I)}$	MCFD
Indicated Flow Rate (Minimum)	$AOF_2 = Q_g \sqrt{\frac{m(P^*)}{m(P^*) - m(P_I)}}$	MCFD
Approx. Radius of Investigation	$r_i = 0.032 \sqrt{\frac{kt}{\phi \mu c_i}}$	ft

DRILL STEM TEST REPORT

Report No. 2

Well EAST MEREENIE NO. 7 Elevation K.B. 2430 Elevation G.L. 2410 Date 16/6/82

Test No. 2 Interval 4630 - 4683 Operator HALLIBURTON

Tester Size & Type 5" HYDROSPRING Packer Size & Type 6-3/4" NO. 2 ASSEMBLY

Anchor Length & O.D. 15 FT. - 5" Drill collar footage above Packer 626.59

Capacity Bbls/ft. Drill Pipe 0.0142 Collars 0.00519

Pressure Recorders Type BOURDON Position TOP Depth 4613

Type BOURDON Position BTM Depth 4683

Perforated Anchor from 4678.5 to 4663.5

Choke Size: Top 1/2" Bottom 3/4" Water Cushion NIL Mud Wt. 9.0 Vis. 5.1

Hole Size 8-5/8 CSG to 4573' Rat hole size 7-7/8" to 4682'

Mud Level: Before valve opened 3' BELOW BELL NIPPLE After valve opened SAME
BTM 20.21

Time Record: Started clocks at TOP 21.34 Hrs. Started in hole at 20.30 Hrs.

Opened Valve at 1.15 Hrs. Shut in at 1.26 Hrs. Opened at 2.33 Hrs. Shut in at 4.21 Hrs.

Pulled Packer at 09.20 Hrs. Out of hole at 14.20 Hrs. Recovered chart at 14.10 Hrs.

Nature of Blow IMMEDIATE STRONG BLOW. RAPID INCREASE TO VERY STRONG. GAS TO SURFACE 6 MINS

Fluid flow (details) OIL AND MUD TO SURFACE 10 MINS.

SWITCH FLOW TO STOCK TANK 2.48 HRS

STABILIZED FLOW OIL AND GAS AT 390 PSI ON 1/2" SURFACE CHOKE

Recovery 9600 LITRES IN STOCK TANK (50.2 BBLS) IN 93 MINS

TOTAL OIL FLOWED ~110 BBLS

Pressures I.H.P. 2208 psig IFP 751 psig ISIP 1757 psig FFP 1209 psig FSIP 1767 psig
F.H.P. 2155 psig

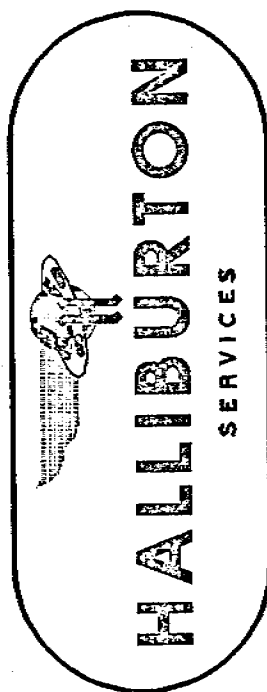
Elapsed Times: Initial flow 11 mins. Initial Shut in 67 mins.
Final flow 112 mins. Final Shut in 319 mins.

Maximum Temperature 140 Samples Taken 3 TINS OF OIL SAMPLE

Remarks MAX. STRING WT. 17,000 LBS ABOVE STRING WT. EMPTY INDICATES STRING FULL OF OIL
(~ 66 BBLS). OIL IS 48° API at 67°F. ESTIMATE FLOW RATE (FLOW INTO STOCK TANK) ~777 BBLS/
DAY. CONSERVATIVE ESTIMATE REPORTED ~600 BBLS/DAY. BOTH CHARTS ESSENTIALLY THE SAME.

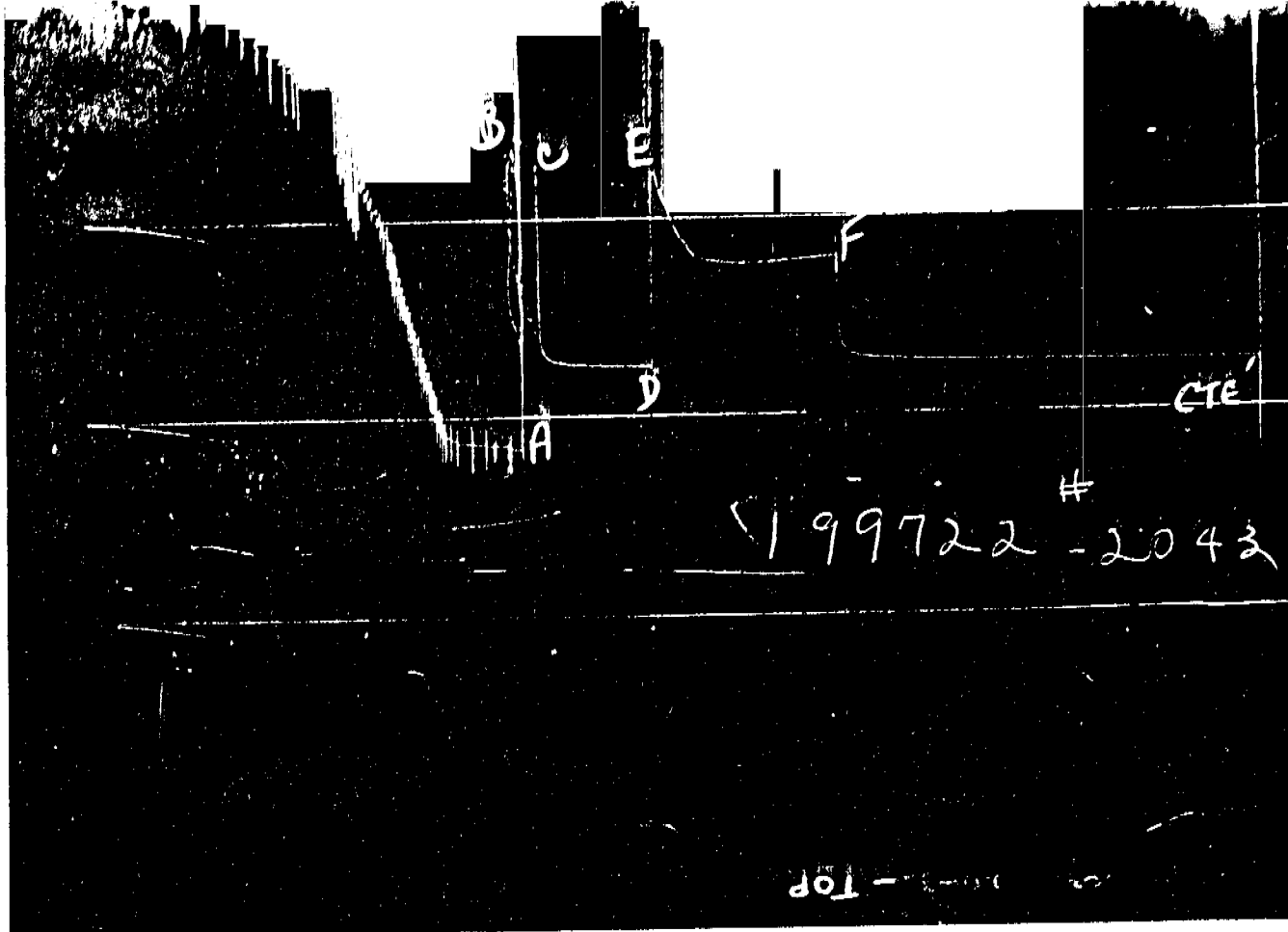
DAVID WARNER

EAST MEREENIE LEASE NAME	7 WELL NO.	2 TEST NO.	4627.' - 4683.' TESTED INTERVAL	DILMIN N.L. LEASE OWNER/COMPANY NAME	
LEGAL LOCATION SEC. - TWP. - RNG.	FIELD AREA		AMEBEUS	COUNTY	N. TERRITORY
			STATE AUSTRALIA N/J		



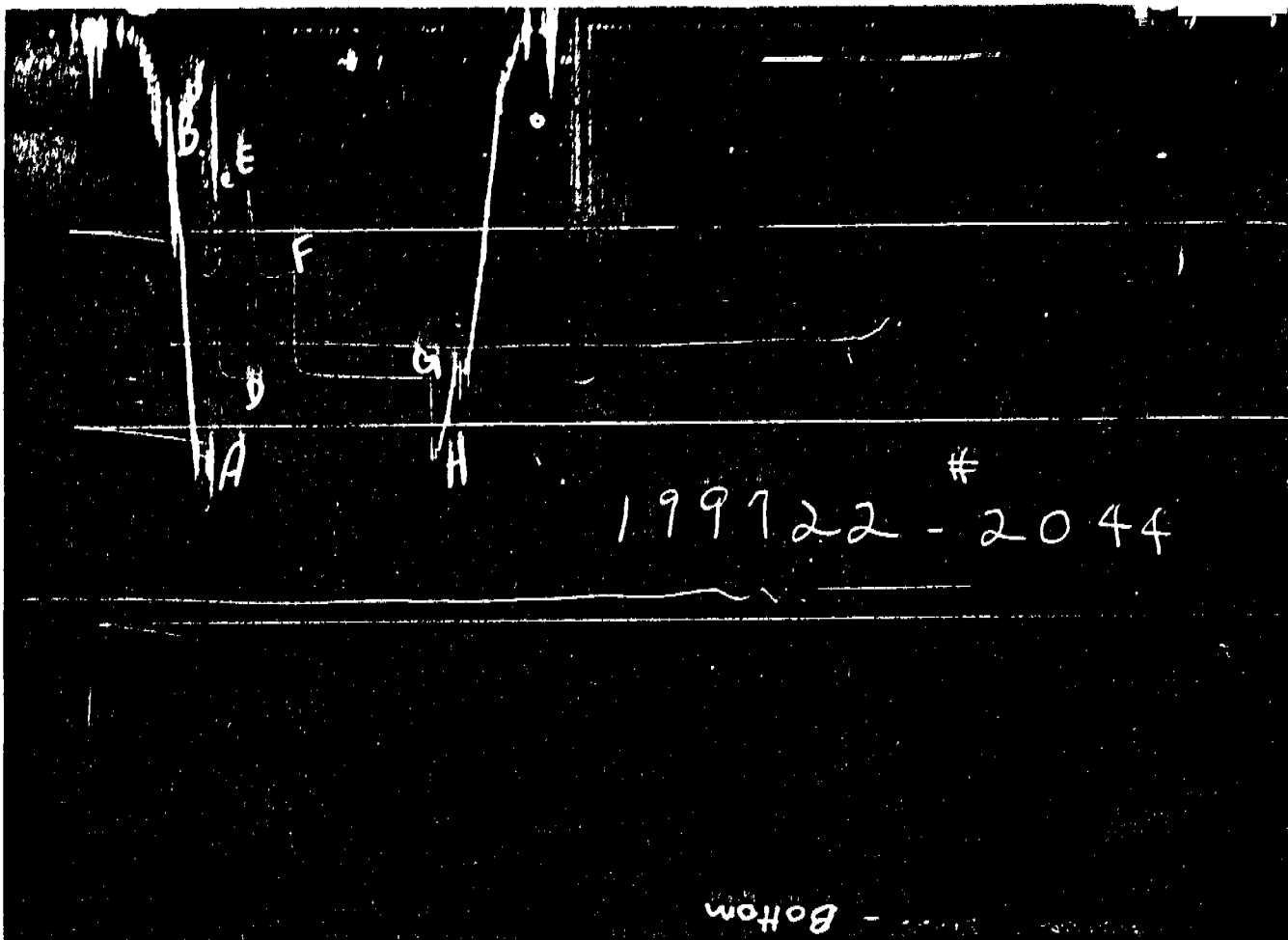
TICKET NO. 19972200
13-JUL-82
ADELAIDE

FORMATION TESTING SERVICE REPORT



GAUGE NO: 2043 DEPTH: 4612.8 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2165.9			
B	INITIAL FIRST FLOW		380.5			
C	FINAL FIRST FLOW		752.6	11.0	12.2	F
C	INITIAL FIRST CLOSED-IN		752.6			
D	FINAL FIRST CLOSED-IN		1755.4	67.0	65.2	C
E	INITIAL SECOND FLOW		828.4			
F	FINAL SECOND FLOW		1205.8	108.0	106.9	F
F	INITIAL SECOND CLOSED-IN		1205.8			
G	FINAL SECOND CLOSED-IN			319.0		C
H	FINAL HYDROSTATIC					



GAUGE NO: 2044 DEPTH: 4680.0 BLANKED OFF: YES HOUR OF CLOCK: 48

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2182.3			
B	INITIAL FIRST FLOW		376.3			
C	FINAL FIRST FLOW		773.3	11.0	12.2	F
C	INITIAL FIRST CLOSED-IN		773.3			
D	FINAL FIRST CLOSED-IN		1761.4	67.0	65.2	C
E	INITIAL SECOND FLOW		814.1			
F	FINAL SECOND FLOW		1214.3	108.0	106.9	F
F	INITIAL SECOND CLOSED-IN		1214.3			
G	FINAL SECOND CLOSED-IN		1214.3	319.0	320.7	C
H	FINAL HYDROSTATIC		2168.2			

EQUIPMENT & HOLE DATA

FORMATION TESTED: PA10010
NET PAY (ft): _____
GROSS TESTED FOOTAGE: 56.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft): _____
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 2430
TOTAL DEPTH (ft): 4683.0
PACKER DEPTH(S) (ft): 4627
FINAL SURFACE CHOKE (in): 0.500
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.00
MUD VISCOSITY (sec): _____
ESTIMATED HOLE TEMP. (°F): _____
ACTUAL HOLE TEMP. (°F): 140 @ 4683.0 ft

TICKET NUMBER: 19972200

DATE: 6-16-82 TEST NO: 2

TYPE DST: OPEN HOLE

HALLIBURTON CAMP:
ADELAIDE

TESTER: J. NILON
M. JENKINS

WITNESS: DAVID WARNER

DRILLING CONTRACTOR:
MEREENIE PARTNERS

FLUID PROPERTIES FOR RECOVERED MUD & WATER

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

SAMPLER DATA

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

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): 47.0 @ 60°F
GAS/OIL RATIO (cu.ft. per bbl): _____
GAS GRAVITY: 0.650

CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

RECOVERED:

50 BARRELS OF CRUDE ??
60 BARRELS OF GAS OUT CRUDE ??
AVERAGE RATE OF 666 BARRELS PER DAY FOR OIL

MEASURED FROM
TESTER VALVE

REMARKS:

INSIDE DIAMETERS OF DRILL PIPE AND COLLARS WERE NOT REPORTED.
DIAMETERS OF CROSSOVERS WERE ALSO NOT REPORTED.

TYPE & SIZE MEASURING DEVICE: _____ CHOKLE HIRPLE _____ TICKET NO: 19972200

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
6-15-82					
2021					BOTTOM BT LOADED.
2030					TOOLS STARTED IN HOLE.
2134					TOP BT LOADED.
2200					RIG WENT IN HOLE.
6-16-82					
0050					HEAD ON STRING.
0100					TAGGED BOTTOM.
0109					PACKER SET.
0115					TOOL OPENED.
0115	.50"				MEDIUM BUBBLE-MANIFOLD OPENED.
0119					VERY STRONG BUBBLE.
0121					GAS TO SURFACE.
0123					GAS - SMALL BUBBLE.
0125		125			OIL TO SURFACE.
0126					DUAL CIP CLOSED.
0233		110			DUAL CIP OPENED.
0234		120			
0237		150			
0240		200			
0245		225			
0250		290			
0255		325			
0300		350			
0305		350			
0310		350			
0315		350			
0320		375			
0330		375			
0340		380			
0345		390			
0350		390			
0355		390			
0400		390			
0410		390			
0421		390			DUAL CIP CLOSED.
0411					REVERSE CIRCULATION DUAL CIP

TICKET NO: 19972200

[illegible]

TICKET NO: 19972200

CLOCK NO: 7411 HOUR: 12


HALLIBURTON
SERVICES

GAUGE NO: 2043

DEPTH: 4612.8

REF	MINUTES	PRESSURE	ΔP	$\frac{1 \times \Delta t}{1 + \Delta t}$	$\log \frac{1 + \Delta t}{\Delta t}$
FIRST FLOW					
B 1	0.0	380.5			
2	2.0	616.6	236.2		
3	4.0	609.0	-7.7		
4	6.0	628.5	19.5		
5	8.0	657.0	28.5		
6	10.0	690.5	33.5		
C 7	12.2	752.6	62.1		
FIRST CLOSED-IN					
C 1	0.0	752.6			
2	1.0	1586.3	833.7	0.9	1.123
3	2.0	1661.6	908.9	1.7	0.854
4	3.0	1683.4	930.8	2.4	0.705
5	4.0	1696.4	943.8	3.0	0.608
6	5.0	1705.1	952.5	3.5	0.538
7	6.0	1712.9	960.3	4.0	0.482
8	7.0	1717.6	965.0	4.4	0.441
9	8.0	1722.9	970.3	4.8	0.403
10	9.0	1725.9	973.3	5.2	0.373
11	10.0	1728.8	976.2	5.5	0.348
12	12.0	1732.9	980.3	6.1	0.305
13	14.0	1736.4	983.8	6.5	0.272
14	16.0	1738.8	986.2	6.9	0.246
15	18.0	1741.3	988.7	7.3	0.225
16	20.0	1742.6	990.0	7.6	0.207
17	22.0	1743.9	991.3	7.9	0.192
18	24.0	1745.0	992.4	8.1	0.179
19	26.0	1746.3	993.7	8.3	0.167
20	28.0	1747.1	994.5	8.5	0.157
21	30.0	1747.5	994.9	8.7	0.149
22	35.0	1749.2	996.6	9.1	0.130
23	40.0	1750.4	997.8	9.4	0.116
24	45.0	1751.2	998.5	9.6	0.104
25	50.0	1751.6	998.9	9.8	0.095
26	55.0	1753.2	1000.5	10.0	0.087
27	60.0	1753.4	1000.8	10.2	0.081
D 28	65.2	1755.4	1002.8	10.3	0.075
SECOND FLOW					
E 1	0.0	828.4			
2	10.0	983.4	155.0		
3	20.0	1145.3	161.9		
4	30.0	1217.1	71.8		
5	40.0	1229.2	12.1		
6	50.0	1236.7	7.5		
7	60.0	1235.3	-1.4		
8	70.0	1231.7	-3.6		

REF	MINUTES	PRESSURE	ΔP	$\frac{1 \times \Delta t}{1 + \Delta t}$	$\log \frac{1 + \Delta t}{\Delta t}$
SECOND FLOW - CONTINUED					
9	80.0	1223.3	-8.4		
10	90.0	1216.8	-6.4		
11	100.0	1209.9	-7.0		
F 12	106.9	1205.8	-4.1		
SECOND CLOSED-IN					
F 1	0.0	1205.8			
2	1.0	1527.8	322.0	1.0	2.094
3	2.0	1616.4	410.7	2.0	1.777
4	3.0	1651.3	445.5	3.0	1.603
5	4.0	1668.9	463.2	3.9	1.490
6	5.0	1680.5	474.7	4.8	1.395
7	6.0	1689.1	483.3	5.7	1.317
8	7.0	1695.4	489.6	6.6	1.255
9	8.0	1700.3	494.5	7.5	1.203
10	9.0	1703.7	497.9	8.3	1.155
11	10.0	1707.0	501.2	9.2	1.112
12	12.0	1711.7	505.9	10.9	1.038
13	14.0	1715.0	509.2	12.5	0.978
14	16.0	1717.6	511.8	14.1	0.927
15	18.0	1719.6	513.8	15.7	0.881
16	20.0	1721.6	515.8	17.1	0.843
17	22.0	1723.3	517.5	18.6	0.807
18	24.0	1724.7	518.9	19.9	0.776
19	26.0	1726.2	520.4	21.3	0.747
20	28.0	1727.4	521.6	22.7	0.721
21	30.0	1727.8	522.0	23.9	0.697
22	35.0	1730.0	524.2	27.1	0.644
23	40.0	1732.1	526.3	29.9	0.600
24	45.0	1733.4	527.6	32.7	0.562
25	50.0	1735.4	529.6	35.2	0.530
26	55.0	1736.6	530.8	37.6	0.501
27	60.0	1737.9	532.1	39.9	0.475
28	70.0	1740.0	534.2	44.1	0.432
29	80.0	1741.8	536.1	47.8	0.396
30	90.0	1743.2	537.4	51.3	0.366
31	100.0	1744.6	538.8	54.4	0.341
32	110.0	1745.3	539.5	57.2	0.319
33	120.0	1746.6	540.8	59.8	0.300
34	135.0	1748.4	542.6	63.3	0.275
35	150.0	1749.3	543.6	66.4	0.254
36	165.0	1750.5	544.7	69.2	0.236
37	180.0	1752.2	546.4	71.7	0.221
38	195.0	1752.4	546.6	74.0	0.207
39	210.0	1752.6	546.8	76.0	0.195
40	225.0	1752.9	547.1	77.9	0.185
41	240.0	1754.2	548.4	79.6	0.175
[1] 42	246.2	1755.0	549.2	80.3	0.171
G 43	NO DATA FOR THIS POINT				

LEGEND:

1.0000000000000000

REMARKS:

TICKET NO: 19972200

CLOCK NO: 8256 HOUR: 48

HALLIBURTON
SERVICES

GAUGE NO: 2044

DEPTH: 4680.0

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

B	1	0.0	376.3		
	2	2.0	480.8	104.5	
	3	4.0	568.0	87.2	
	4	6.0	645.6	77.6	
	5	8.0	672.8	27.2	
	6	10.0	715.4	42.6	
C	7	12.2	773.3	57.9	

FIRST CLOSED-IN

C	1	0.0	773.3		
	2	1.0	1681.3	907.9	0.9 1.138
	3	2.0	1698.1	924.8	1.7 0.845
	4	3.0	1709.6	936.3	2.4 0.706
	5	4.0	1716.1	942.8	3.0 0.612
	6	5.0	1721.7	948.4	3.5 0.539
	7	6.0	1726.6	953.3	4.0 0.483
	8	7.0	1730.6	957.3	4.5 0.438
	9	8.0	1734.0	960.7	4.8 0.402
	10	9.0	1736.2	962.8	5.2 0.373
	11	10.0	1738.2	964.8	5.5 0.347
	12	12.0	1741.5	968.2	6.1 0.305
	13	14.0	1744.7	971.4	6.5 0.272
	14	16.0	1747.2	973.9	6.9 0.247
	15	18.0	1749.3	976.0	7.3 0.225
	16	20.0	1751.2	977.9	7.6 0.207
	17	22.0	1752.0	978.7	7.9 0.192
	18	24.0	1752.9	979.6	8.1 0.179
	19	26.0	1754.0	980.7	8.3 0.167
	20	28.0	1754.4	981.1	8.5 0.157
	21	30.0	1754.9	981.6	8.7 0.148
	22	35.0	1756.3	982.9	9.1 0.130
	23	40.0	1757.6	984.3	9.4 0.116
	24	45.0	1758.4	985.1	9.6 0.104
	25	50.0	1759.2	985.9	9.8 0.095
	26	55.0	1759.4	986.1	10.0 0.087
	27	60.0	1760.5	987.2	10.2 0.081
D	28	65.2	1761.4	988.1	10.3 0.075

SECOND FLOW

E	1	0.0	814.1		
	2	10.0	1003.4	189.4	
	3	20.0	1172.3	168.8	
	4	30.0	1227.2	54.9	
	5	40.0	1240.5	13.3	
	6	50.0	1246.4	6.0	
	7	60.0	1244.0	-2.4	
	8	70.0	1239.5	-4.5	
	9	80.0	1231.4	-8.1	

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



SECOND FLOW - CONTINUED

	10	90.0	1224.0	-7.4	
	11	100.0	1218.3	-5.7	
F	12	106.9	1214.3	-4.0	

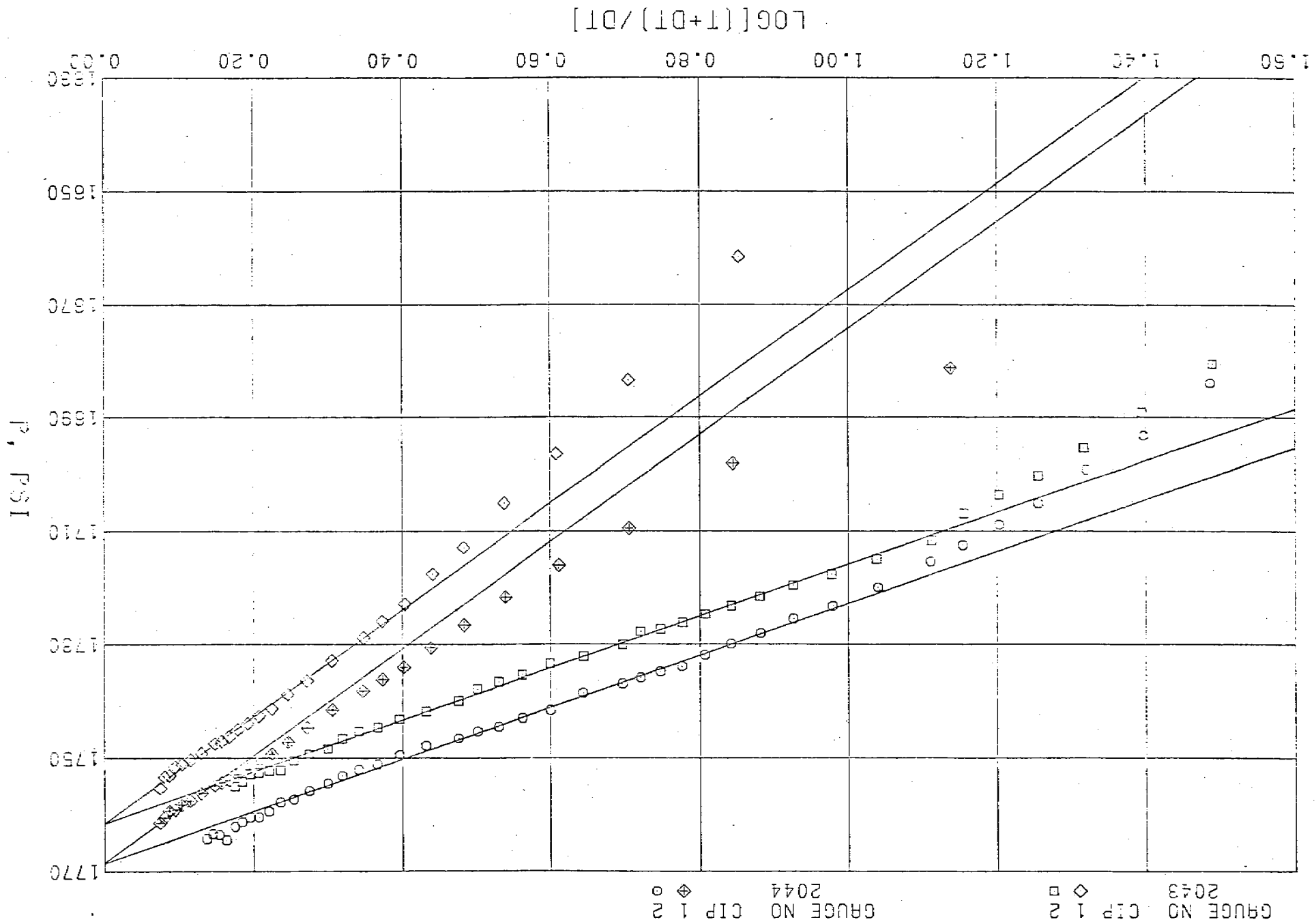
SECOND CLOSED-IN

F	1	0.0	1214.3		
	2	1.0	1574.7	360.4	1.0 2.098
	3	2.0	1639.8	425.4	2.0 1.775
	4	3.0	1668.0	453.6	2.9 1.610
	5	4.0	1683.9	469.6	3.9 1.487
	6	5.0	1693.2	478.9	4.8 1.397
	7	6.0	1699.2	484.9	5.7 1.320
	8	7.0	1705.2	490.9	6.6 1.255
	9	8.0	1708.9	494.6	7.5 1.203
	10	9.0	1712.5	498.2	8.4 1.154
	11	10.0	1715.4	501.1	9.2 1.111
	12	12.0	1719.9	505.6	10.9 1.039
	13	14.0	1723.3	508.9	12.5 0.979
	14	16.0	1725.5	511.2	14.1 0.927
	15	18.0	1728.1	513.7	15.6 0.883
	16	20.0	1729.9	515.6	17.1 0.842
	17	22.0	1731.9	517.6	18.6 0.807
	18	24.0	1733.9	519.6	20.0 0.775
	19	26.0	1734.8	520.5	21.3 0.747
	20	28.0	1735.9	521.6	22.7 0.721
	21	30.0	1737.0	522.6	24.0 0.696
	22	35.0	1738.6	524.2	27.1 0.643
	23	40.0	1741.6	527.3	29.9 0.600
	24	45.0	1743.0	528.6	32.7 0.562
	25	50.0	1744.5	530.2	35.2 0.529
	26	55.0	1745.3	531.0	37.6 0.501
	27	60.0	1746.5	532.2	39.9 0.475
	28	70.0	1747.9	533.5	44.1 0.432
	29	80.0	1749.5	535.1	47.9 0.396
	30	90.0	1751.2	536.9	51.3 0.366
	31	100.0	1752.1	537.8	54.4 0.341
	32	110.0	1753.2	538.9	57.2 0.319
	33	120.0	1754.5	540.2	59.8 0.300
	34	135.0	1755.9	541.5	63.3 0.275
	35	150.0	1757.3	543.0	66.4 0.254
	36	165.0	1757.8	543.5	69.2 0.236
	37	180.0	1759.4	545.1	71.7 0.221
	38	195.0	1760.5	546.2	74.0 0.207
	39	210.0	1760.5	546.2	76.0 0.195
	40	225.0	1761.3	547.0	77.9 0.185
	41	240.0	1762.1	547.8	79.6 0.175
	42	260.0	1764.5	550.2	81.7 0.164
	43	280.0	1763.6	549.2	83.6 0.154
	44	300.0	1763.4	549.1	85.3 0.145
G	45	320.7	1764.2	549.9	86.9 0.137

REMARKS:

		O.D.	I.D.	LENGTH	DEPTH
1		4.500		3972.0	
1		6.500		564.3	
10		5.000	2.000	1.0	4536.3
1		6.500		62.3	
5				3.3	
12		5.000	0.870	4.9	
60		5.000	0.750	5.0	4607.8
80		5.000	2.250	4.1	4612.8
15		5.000	1.750	5.0	
16		5.000	1.000	2.8	
70		6.750	1.750	5.8	4627.0
5				1.0	
3		6.500		31.1	
5				0.4	
20		5.000	2.370	15.0	
81		5.000	2.440	4.5	4680.0
TOTAL DEPTH					4683.0

EQUIPMENT DATA



SUMMARY OF RESERVOIR PARAMETERS USING HORNER METHOD

OIL GRAVITY <u>47.0</u> $^{\circ}\text{API}$	WATER % SALT <u>0.0</u>
GAS GRAVITY <u>0.650</u>	FLUID GRADIENT <u>0.3435</u> psi/ft
GAS/OIL RATIO <u>0.0</u> cu. ft/bbl	FORMATION VOL FACTOR <u>1.000</u> vol/vol
TEMPERATURE <u>140.0</u> $^{\circ}\text{F}$	FLUID PROPERTIES AT <u>1768.6</u> Pstg
VISCOSITY <u>1.058</u> cp	NET PAY <u>56.0</u> ft
PIPE CAPACITY FACTOR(S) _____ bbl/ft	

GAUGE NUMBER	2043	2043	2044	2044			
GAUGE DEPTH	4612.8	4612.8	4680.0	4680.0			
FLOW AND CIP PERIOD	1	2	1	2			UNITS
FINAL FLOW PRESSURE P_f	752.6	1205.8	773.3	1214.3			Pstg
TOTAL FLOW TIME t	12.2	119.2	12.2	119.2			min
EXTRAPOLATED PRESSURE P^*	1761.6	1761.6	1768.5	1768.6			Pstg
ONE CYCLE PRESSURE	1667.4	1715.9	1674.2	1722.8			Psig
PRODUCTION RATE Q		666.0		666.0			BPD
TRANSMISSIBILITY kh/μ		2368.65		2364.88			$\frac{\text{md-ft}}{\text{cp}}$
FLOW CAPACITY kh		2505.08		2501.09			md-ft
PERMEABILITY k		44.7335		44.6623			md
DAMAGE RATIO DR		2.22		2.22			
POTENTIAL RATE Q_i		1481.7		1475.3			BPD
RADIUS OF INVESTIGATION r_i		338.0		337.8			ft

REMARKS:

NOTICE:

THESE CALCULATIONS ARE BASED UPON INFORMATION FURNISHED BY YOU AND TAKEN FROM DRILL STEM PRESSURE CHARTS, AND ARE FURNISHED TO YOU FOR YOUR INFORMATION. IN FURNISHING SUCH CALCULATIONS AND EVALUATIONS, HALLIBURTON IS MERELY EXPRESSING ITS OPINION. YOU AGREE THAT HALLIBURTON MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY OF SUCH CALCULATIONS OR OPINIONS, AND THAT HALLIBURTON SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, WHETHER FOR NEGLIGENCE OR OTHERWISE, IN CONNECTION WITH SUCH CALCULATIONS.

DRILL STEM TEST REPORT

Report No. 3

Well EAST MEREENIE NO. 7 Elevation K.B. 2430 Elevation G.L. 2410 Date 18/6/82

Test No. 3 Interval 4692 - 4736 Operator HALLIBURTON

Tester Size & Type 5" HYDROSPRING Packer Size & Type 6-3/4" OH # 2 ASSEMBLY

Anchor Length & O.D. 43.09 - 5" Drill collar footage above Packer 475

Capacity Bbls/ft. Drill Pipe 0.0142 Collars 0.00519

Pressure Recorders Type BOURDON Position TOP Depth 4672

Type BOURDON Position BTM Depth 4732

Perforated Anchor from 4716 to 4731

Choke Size: Top 1/2" Bottom 3/4" Water Cushion NIL Mud Wt. 9.0 Vis. 53

Hole Size 8-5/8" CSG to 4573 Rat hole size 7-7/8 to 4736

Mud Level: Before valve opened 3" BELOW FLOW LINE After valve opened SAME

Time Record: Started clocks at TOP 16.54 BTM 16.08 Hrs. Started in hole at 16.15 Hrs.

Opened Valve at 20.14 Hrs. Shut in at 20.25 Hrs. Opened at 21.30 Hrs. Shut in at 23.20 Hrs.

Pulled Packer at 07.10 Hrs. Out of hole at 11.20 Hrs. Recovered chart at 11.15 Hrs.

Nature of Blow VERY WEAK ON 1ST FLOW VERY WEAK INCREASING TO MODERATE ON 2ND FLOW

Fluid flow (details) NO FLUIDS TO SURFACE - NO GAS TO SURFACE - SLIGHT ODOUR. BACK CIRCULATE

AFTER P.O.H. TO 3 STD OF H.W. DRILL PIPE

Recovery APPROX 603 FT. (3.3 BBLS) SLIGHTLY GAS CUT MUD. PUMPED TOTAL 11 BBLS ON BACK

CIRCULATION. RECOVERED 3.35 FT. OIL AND FORMATION SAND FROM X OVER ABOVE DCIP

Pressures I.H.P. 2203.3 psig IFP 38.7 psig ISIP 1772.3 psig FFP 170.4 psig FSIP 1743.4 psig

F.H.P. 2190.2 psig

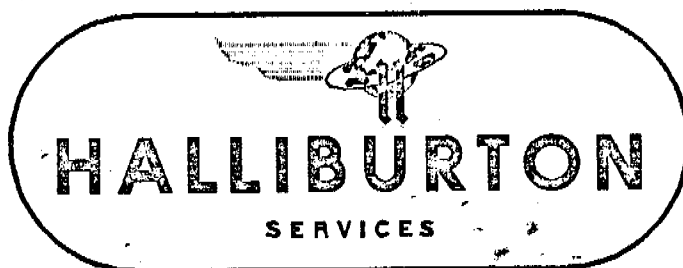
Elapsed Times: Initial flow 11 mins. Initial Shut in 65 mins.

Final flow 110 mins. Final Shut in 470 mins.

Maximum Temperature 141⁰F Samples Taken 3 SAMPLES GAS CUT MUD. 1 GAS SAMPLE

1 SAMPLE OIL AND FORMATION SAND

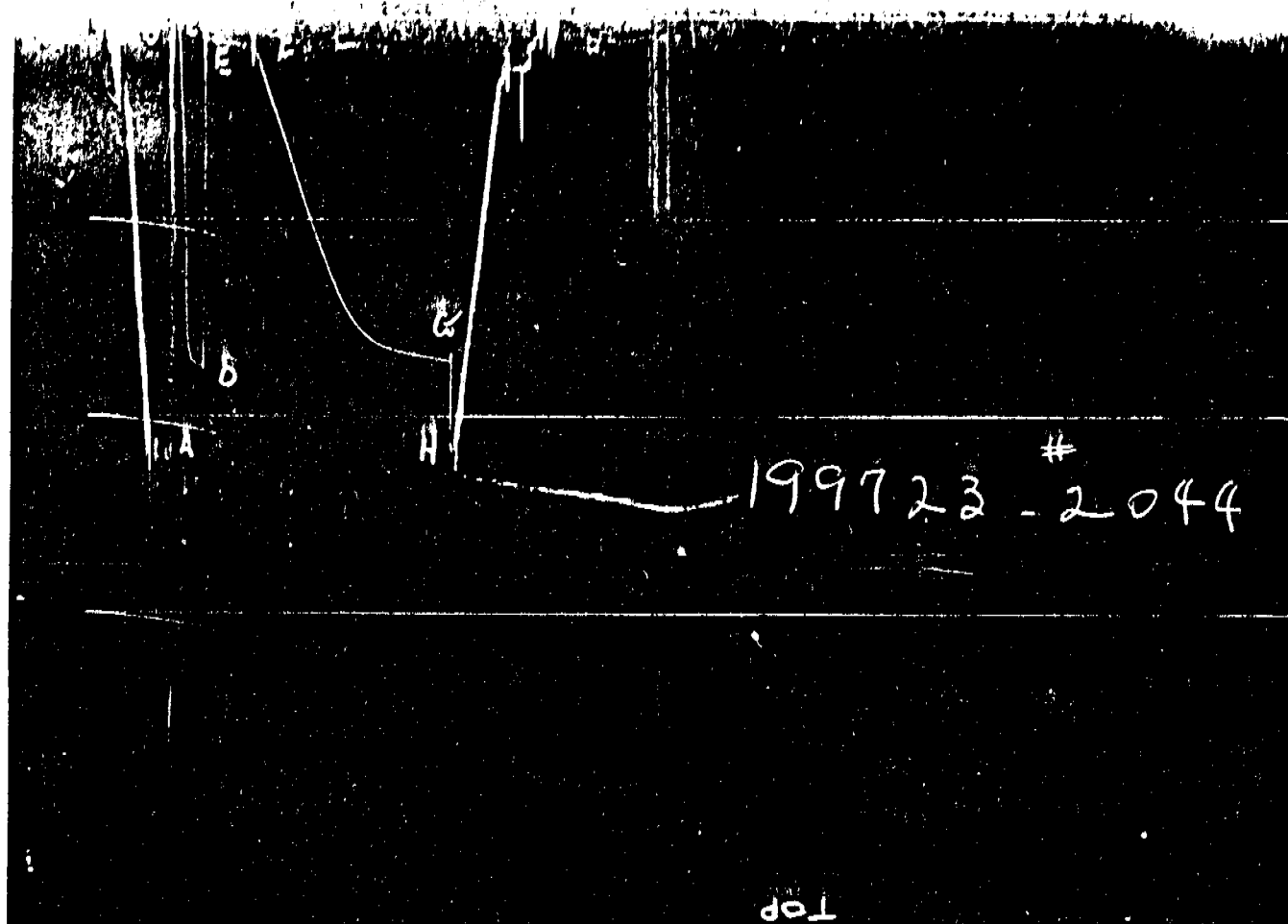
Remarks



TICKET NO. 19972300
14-JUL-82
ADELAIDE

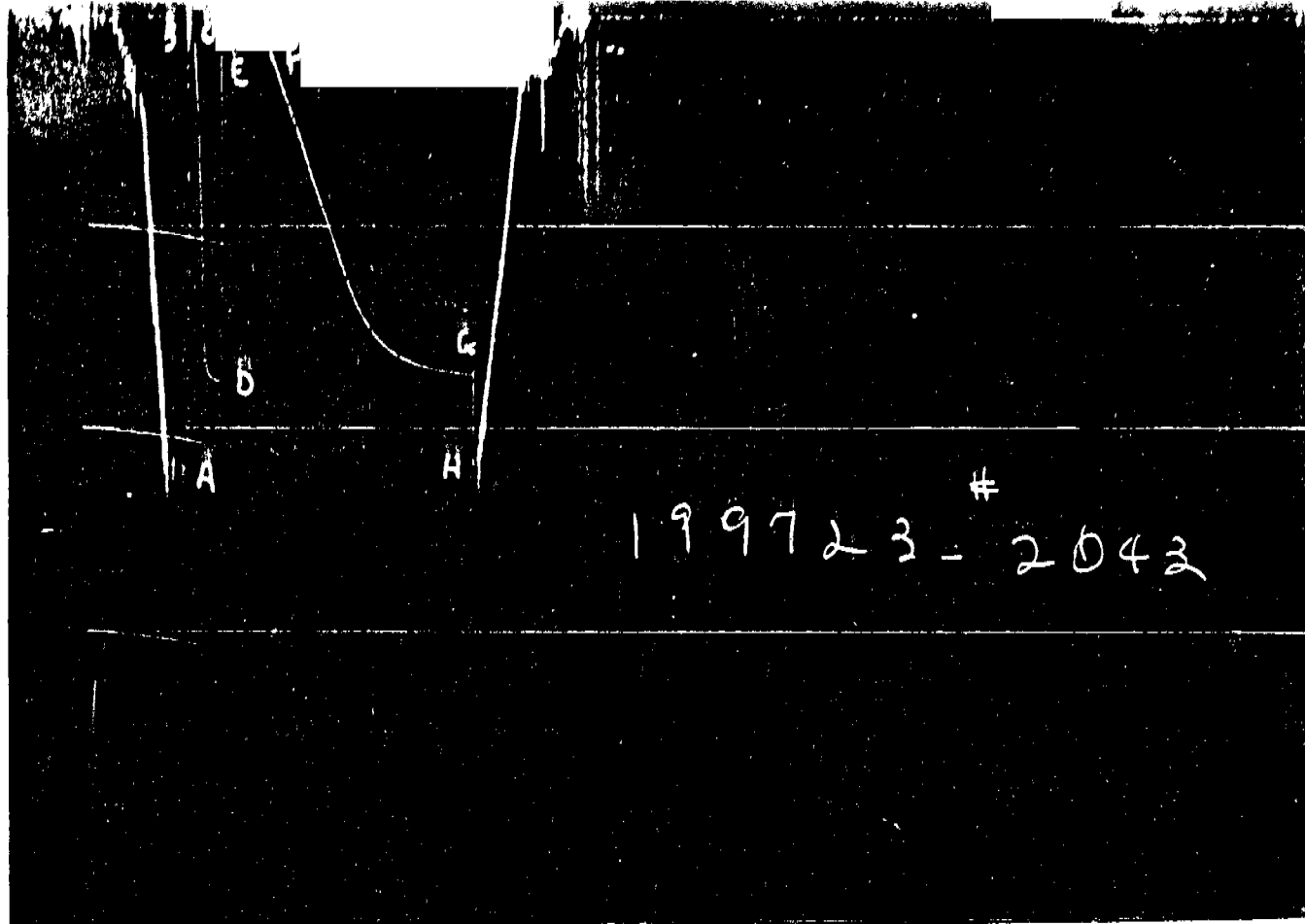
FORMATION TESTING SERVICE REPORT

EAST MERRENNIE		7		3		4692.1' - 4736.1'		OLIMIN N.L.	
LEASE NAME		WELL NO.		TEST NO.		TESTED INTERVAL		LEASE OWNER/COMPANY NAME	
LEGAL LOCATION SEC. - TWP. - RNC.		FIELD AREA		ANEDEUS		COUNTY		N. TERRITORY	
								STATE AUSTRALIA	
								1/1	



GAUGE NO: 2044 DEPTH: 4671.4 BLANKED OFF: NO HOUR OF CLOCK: 48

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2176.7			
B	INITIAL FIRST FLOW		14.9			
C	FINAL FIRST FLOW		24.5	11.0	10.4	F
C	INITIAL FIRST CLOSED-IN		24.5			
D	FINAL FIRST CLOSED-IN		1752.4	65.0	66.9	C
E	INITIAL SECOND FLOW		94.7			
F	FINAL SECOND FLOW		143.9	110.0	110.8	F
F	INITIAL SECOND CLOSED-IN		143.9			
G	FINAL SECOND CLOSED-IN		1726.6	470.0	467.9	C
H	FINAL HYDROSTATIC		2167.6			



GAUGE NO: 2043 DEPTH: 4733.0 BLANKED OFF: YES HOUR OF CLOCK: 48

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2203.9			
B	INITIAL FIRST FLOW		30.7			
C	FINAL FIRST FLOW		44.2	11.0	10.4	F
C	INITIAL FIRST CLOSED-IN		44.2			
D	FINAL FIRST CLOSED-IN		1775.9	65.0	66.9	C
E	INITIAL SECOND FLOW		122.7			
F	FINAL SECOND FLOW		160.3	110.0	110.8	F
F	INITIAL SECOND CLOSED-IN		160.3			
G	FINAL SECOND CLOSED-IN		1739.7	470.0	467.9	C
H	FINAL HYDROSTATIC		2186.1			

EQUIPMENT & HOLE DATA

FORMATION TESTED: PATOOOLA
NET PAY (ft): _____
GROSS TESTED FOOTAGE: 43.5
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft): _____
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 2430
TOTAL DEPTH (ft): 4736.0
PACKER DEPTH(S) (ft): 4687. 4692
FINAL SURFACE CHOKE (in): 0.750
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.00
MUD VISCOSITY (sec): _____
ESTIMATED HOLE TEMP. (°F): _____
ACTUAL HOLE TEMP. (°F): 141 @ 4732.0 ft

TICKET NUMBER: 19972300DATE: 6-17-82 TEST NO: 3TYPE DST: OPEN HOLEHALLIBURTON CAMP:
ADELAIDETESTER: J. NILON
M. JENKINSWITNESS: DAVID WARNERDRILLING CONTRACTOR:
MEREENIE PARTNERSFLUID PROPERTIES FOR
RECOVERED MUD & WATER

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

SAMPLER DATA

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

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): 47.0 @ 60°F
GAS/OIL RATIO (cu.ft. per bbl): _____
GAS GRAVITY: 0.650

CUSHION DATA

TYPE AMOUNT WEIGHT

RECOVERED:

603.05 FEET OF GAS CUT MUD.
3.35 FEET OF SAND AND CRUDE ABOVE DUAL CIP.

MEASURED FROM
TESTER VALVE

REMARKS:

UNABLE TO CALCULATE - DUE TO NO DRILL PIPE AND DRILL COLLARS INSIDE
DIAMETERS REPORTED ON THE TEST.
DIAMETERS OF CROSSOVER WAS NOT REPORTED ON TEST.

TYPE & SIZE MEASURING DEVICE:

POSITIVE CHOKE

TICKET NO: 19972300

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
6-17-82					
1608					BOTTOM BT LOADED.
1615					TOOLS STARTED IN HOLE.
1654					TOP BT LOADED.
1940					HEAD ON STRING.
1945					TOUCHED BOTTOM.
2004					SET PACKER.
2014	.50				TOOL OPENED.
2014					VERY WEAK BUBBLE, MANIFOLD CLOSED.
2020					VERY WEAK BUBBLE.
2025					DUAL CIP CLOSED IN.
2130					DUAL CIP OPENED.
2130					VERY WEAK BUBBLE.
2135					WEAK BUBBLE INCREASING.
2140					MODERATE BUBBLE INCREASING.
2153					MODERATE BUBBLE INCREASING.
					MANIFOLD OPENED.
2155					STRONG MODERATE BUBBLE IN- CREASING.
2200					STRONG MODERATE BUBBLE.
2210					STEADY.
2215					STEADY.
2220					STEADY.
2230					STEADY.
2235					BUBBLE HOSE CLOSED IN. RIG MANIFOLD BLOCKED BY OBSTRUCTION
2247	.75				CHANGED MANIFOLD OVER TO .75" CHOKE.
2320					CLOSED IN DUAL CIP.
6-18-82					
0710					PACKER UNSEATED.
0715					HEAD OF STRING. RIG PULLED OUT OF HOLE.
0820					RIG PULLED OUT TO BOTTOM HOLE ASSEMBLY, SETTING UP TO REVERSE CIRCULATE.

TICKET NO: 19972300

CLOCK NO: 27316 HOUR: 48


HALLIBURTON
SERVICES

GAUGE NO: 2044

DEPTH: 4671.3

REF	HINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B 1	0.0	14.9			
2	2.0	14.1	-0.8		
3	4.0	14.6	0.5		
4	6.0	16.3	1.7		
5	8.0	19.1	2.8		
C 6	10.4	24.5	5.4		

FIRST CLOSED-IN

C 1	0.0	24.5			
2	1.0	42.7	18.2	0.9	1.059
3	2.0	69.2	44.7	1.7	0.794
4	3.0	107.7	83.2	2.4	0.644
5	4.0	138.5	113.9	2.9	0.553
6	5.0	181.2	156.6	3.4	0.486
7	6.0	227.1	202.5	3.8	0.435
8	7.0	271.1	246.6	4.2	0.394
9	8.0	315.9	291.4	4.5	0.361
10	9.0	368.4	343.9	4.8	0.333
11	10.0	418.7	394.2	5.1	0.309
12	12.0	507.5	483.0	5.6	0.271
13	14.0	619.8	595.3	6.0	0.241
14	16.0	756.8	732.3	6.3	0.217
15	18.0	903.8	879.2	6.6	0.198
16	20.0	1167.1	1142.6	6.8	0.182
17	22.0	1361.9	1337.4	7.0	0.168
18	24.0	1481.6	1457.0	7.2	0.156
19	26.0	1573.7	1549.1	7.4	0.146
20	28.0	1627.4	1602.9	7.6	0.137
21	30.0	1664.0	1639.4	7.7	0.129
22	35.0	1708.8	1684.2	8.0	0.113
23	40.0	1727.4	1702.9	8.2	0.100
24	45.0	1736.6	1712.0	8.4	0.090
25	50.0	1741.9	1717.4	8.6	0.082
26	55.0	1745.9	1721.3	8.7	0.075
27	60.0	1749.2	1724.7	8.8	0.069
D 28	66.9	1752.4	1727.9	9.0	0.063

SECOND FLOW

E 1	0.0	94.7			
2	4.0	101.5	6.8		
3	8.0	114.1	12.6		
4	12.0	116.3	2.3		
5	16.0	117.0	0.7		
6	20.0	118.3	1.3		
7	24.0	119.9	1.6		
8	28.0	121.2	1.3		
9	32.0	122.3	1.1		
10	36.0	123.9	1.6		

REF	HINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND FLOW - CONTINUED					
11	40.0	125.2	1.3		
12	44.0	126.8	1.6		
13	48.0	128.5	1.7		
14	52.0	129.8	1.3		
15	56.0	131.3	1.5		
16	60.0	133.0	1.7		
17	64.0	134.2	1.2		
18	68.0	135.0	0.8		
19	72.0	135.5	0.5		
20	76.0	136.7	1.2		
21	80.0	137.7	0.9		
22	84.0	139.3	1.6		
23	88.0	139.8	0.5		
24	92.0	141.2	1.5		
25	96.0	143.0	1.7		
26	100.0	143.0	0.0		
27	104.0	143.2	0.3		
28	108.0	143.2	0.0		
F 29	110.8	143.9	0.7		

SECOND CLOSED-IN

F 1	0.0	143.9			
2	1.0	152.4	8.5	1.0	2.075
3	2.0	156.1	12.2	2.0	1.791
4	3.0	161.4	17.5	2.9	1.614
5	4.0	166.4	22.5	3.9	1.497
6	5.0	170.6	26.7	4.8	1.406
7	6.0	174.7	30.8	5.7	1.328
8	7.0	178.2	34.4	6.6	1.262
9	8.0	182.4	38.5	7.5	1.209
10	9.0	186.2	42.3	8.4	1.160
11	10.0	190.1	46.2	9.2	1.119
12	12.0	197.6	53.7	10.9	1.044
13	14.0	210.7	66.8	12.5	0.986
14	16.0	225.2	81.3	14.1	0.933
15	18.0	237.3	93.4	15.7	0.888
16	20.0	252.0	108.1	17.2	0.849
17	22.0	265.4	121.5	18.6	0.814
18	24.0	277.6	133.7	20.0	0.782
19	26.0	290.7	146.8	21.4	0.753
20	28.0	303.7	159.8	22.8	0.726
21	30.0	316.3	172.4	24.1	0.702
22	35.0	348.5	204.6	27.2	0.649
23	40.0	379.4	235.5	30.1	0.605
24	45.0	412.7	268.8	32.8	0.567
25	50.0	444.0	300.1	35.4	0.535
26	55.0	476.7	332.8	37.8	0.505
27	60.0	507.2	363.3	40.1	0.480
28	70.0	570.2	426.3	44.4	0.436
29	80.0	637.5	493.6	48.2	0.401
30	90.0	702.3	558.4	51.6	0.370
31	100.0	770.6	626.7	54.8	0.345

REMARKS:

TYPE & SIZE MEASURING DEVICE:

POSITIVE CHOKE

TICKET NO: 19972300

TIME

CHOKE
SIZESURFACE
PRESSURE
PSIGAS
RATE
MCFLIQUID
RATE
BPD

REMARKS

1120

TOOLS OUT OF HOLE.

TICKET NO: 19972300

CLOCK NO: 27316 HOUR: 48

**HALLIBURTON**
SERVICES

GAUGE NO: 2044

DEPTH: 4671.3

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
32	110.0	835.7	691.8	57.7	0.323
33	120.0	904.7	760.8	60.3	0.303
34	135.0	1004.6	860.7	63.9	0.278
35	150.0	1102.0	958.1	67.0	0.257
36	165.0	1191.5	1047.6	69.9	0.239
37	180.0	1277.7	1133.8	72.4	0.224
38	195.0	1352.0	1208.1	74.7	0.210
39	210.0	1419.6	1275.7	76.8	0.198
40	225.0	1479.8	1335.9	78.8	0.187
41	240.0	1528.5	1384.6	80.5	0.177
42	260.0	1579.0	1435.1	82.6	0.166
43	280.0	1617.4	1473.5	84.6	0.156
44	300.0	1643.5	1499.6	86.3	0.147
45	320.0	1661.6	1517.7	87.9	0.139
46	340.0	1674.7	1530.8	89.3	0.132
47	360.0	1684.7	1540.8	90.7	0.126
48	380.0	1692.7	1548.8	91.9	0.120
49	400.0	1701.1	1557.2	93.0	0.115
50	420.0	1708.1	1564.2	94.0	0.110
51	440.0	1716.0	1572.1	95.0	0.106
52	460.0	1723.8	1579.9	95.9	0.102
G 53	467.9	1726.6	1582.7	96.2	0.100

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

REMARKS:

TICKET NO: 19972300

CLOCK NO: 8256 HOUR: 48


HALLIBURTON
SERVICES

GAUGE NO: 2043

DEPTH: 4733.0

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	30.7			
2	2.0	57.9	27.2		
3	4.0	59.5	1.6		
4	6.0	61.8	2.3		
5	8.0	64.3	2.5		
C 6	10.4	44.2	-20.2		

FIRST CLOSED-IN

C 1	0.0	44.2			
2	1.0	84.8	40.6	0.9	1.051
3	2.0	105.6	61.4	1.7	0.787
4	3.0	104.3	60.2	2.4	0.645
5	4.0	160.2	116.0	2.9	0.556
6	5.0	190.7	146.6	3.4	0.487
7	6.0	229.8	185.7	3.8	0.435
8	7.0	245.3	201.1	4.2	0.396
9	8.0	311.0	266.9	4.5	0.361
10	9.0	359.9	315.7	4.8	0.333
11	10.0	404.6	360.4	5.1	0.310
12	12.0	478.7	434.5	5.6	0.270
13	14.0	612.0	567.8	6.0	0.241
14	16.0	738.8	694.6	6.3	0.217
15	18.0	875.6	831.4	6.6	0.198
16	20.0	1022.2	978.1	6.8	0.182
17	22.0	1224.1	1179.9	7.1	0.168
18	24.0	1369.9	1325.7	7.2	0.156
19	26.0	1495.0	1450.8	7.4	0.146
20	28.0	1589.3	1545.2	7.6	0.137
21	30.0	1658.7	1614.5	7.7	0.129
22	35.0	1741.3	1697.2	8.0	0.113
23	40.0	1768.7	1724.5	8.2	0.100
24	45.0	1781.2	1737.0	8.4	0.090
25	50.0	1789.7	1745.6	8.6	0.082
26	55.0	1795.0	1750.8	8.7	0.075
27	60.0	1798.7	1754.5	8.8	0.069
D 28	66.9	1775.9	1731.8	9.0	0.063

SECOND FLOW

E 1	0.0	122.7			
2	4.0	147.5	24.7		
3	8.0	152.3	4.8		
4	12.0	153.2	0.9		
5	16.0	153.9	0.8		
6	20.0	154.6	0.6		
7	24.0	156.1	1.5		
8	28.0	157.6	1.5		
9	32.0	159.5	1.9		
10	36.0	161.5	2.0		

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND FLOW - CONTINUED					
11	40.0	162.8	1.3		
12	44.0	164.3	1.5		
13	48.0	165.7	1.4		
14	52.0	167.3	1.5		
15	56.0	168.8	1.5		
16	60.0	170.8	2.0		
17	64.0	172.0	1.1		
18	68.0	173.5	1.5		
19	72.0	174.9	1.4		
20	76.0	175.9	1.0		
21	80.0	177.5	1.6		
22	84.0	179.2	1.6		
23	88.0	180.5	1.3		
24	92.0	181.3	0.9		
25	96.0	183.1	1.8		
26	100.0	183.9	0.8		
27	104.0	184.3	0.4		
28	108.0	185.4	1.1		
F 29	110.8	160.3	-25.1		

SECOND CLOSED-IN

F 1	0.0	160.3			
2	1.0	189.5	29.2	0.9	2.107
3	2.0	195.2	34.9	2.0	1.784
4	3.0	200.4	40.1	2.9	1.620
5	4.0	205.6	45.3	3.9	1.496
6	5.0	210.3	50.0	4.8	1.401
7	6.0	213.2	52.9	5.7	1.325
8	7.0	217.4	57.1	6.6	1.264
9	8.0	220.3	60.0	7.5	1.209
10	9.0	224.6	64.3	8.4	1.160
11	10.0	228.4	68.1	9.2	1.120
12	12.0	238.5	78.2	10.9	1.046
13	14.0	225.4	65.1	12.5	0.986
14	16.0	239.5	79.2	14.2	0.932
15	18.0	276.3	116.0	15.7	0.888
16	20.0	289.7	129.4	17.1	0.849
17	22.0	302.3	142.0	18.6	0.813
18	24.0	316.8	156.5	20.1	0.781
19	26.0	328.6	168.3	21.4	0.753
20	28.0	341.0	180.7	22.8	0.726
21	30.0	354.3	194.0	24.0	0.702
22	35.0	360.9	200.6	27.2	0.649
23	40.0	416.5	256.2	30.1	0.605
24	45.0	446.7	286.4	32.8	0.567
25	50.0	478.2	317.9	35.4	0.534
26	55.0	483.8	323.5	37.8	0.505
27	60.0	540.6	380.4	40.2	0.480
28	70.0	604.6	444.3	44.4	0.436
29	80.0	644.1	483.8	48.2	0.401
30	90.0	709.8	549.5	51.7	0.370
31	100.0	775.3	615.1	54.8	0.345

REMARKS:

TICKET NO: 19972300

CLOCK NO: 8256 HOUR: 48

**HALLIBURTON**
SERVICES



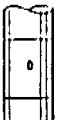














GAUGE NO: 2043

DEPTH: 4733.0

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$	REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED											
32	110.0	841.3	681.0	57.6	0.323						
33	120.0	907.5	747.2	60.3	0.303						
34	135.0	1008.3	848.0	63.9	0.278						
35	150.0	1106.8	946.6	67.0	0.257						
36	165.0	1199.7	1039.5	69.9	0.239						
37	180.0	1287.8	1127.5	72.4	0.224						
38	195.0	1364.7	1204.5	74.7	0.210						
39	210.0	1432.4	1272.1	76.8	0.198						
40	225.0	1491.1	1330.8	78.8	0.187						
41	240.0	1537.9	1377.6	80.5	0.178						
42	260.0	1588.3	1428.0	82.7	0.166						
43	280.0	1625.3	1465.0	84.6	0.156						
44	300.0	1654.9	1494.6	86.3	0.147						
45	320.0	1675.4	1515.1	87.9	0.139						
46	340.0	1691.6	1531.3	89.3	0.132						
47	360.0	1704.2	1543.9	90.7	0.126						
48	380.0	1714.7	1554.5	91.9	0.120						
49	400.0	1722.6	1562.4	93.0	0.115						
50	420.0	1728.7	1568.4	94.0	0.110						
51	440.0	1733.7	1573.4	95.0	0.106						
52	460.0	1738.4	1578.1	95.9	0.102						
G 53	467.9	1739.7	1579.5	96.2	0.100						

REMARKS:

TICKET NO. 19972300

		O.D.	I.D.	LENGTH	DEPTH
1		4.500		3991.8	
3		6.500		603.0	
50				1.0	4594.9
3		6.500		62.3	
5				3.3	
12		5.000	0.870	4.9	
60		5.000	0.750	5.0	4669.4
80		5.000	2.250	4.1	4671.3
15		5.000	1.750	5.0	
16		5.000	1.000	2.8	
70		6.750	1.750	5.8	4686.7
70		6.750	1.750	5.8	4692.5
5				1.0	
1		6.500		19.9	
5				0.9	
20		5.000		15.0	
81		5.000	2.440	4.5	4733.0
TOTAL DEPTH					4736.0

EQUIPMENT DATA

DRILL STEM TEST REPORT

Report No. 4

Well EAST MEREENIE NO. 7 Elevation K.B. 2430 Elevation G.L. 2410 Date 20/6/82

Test No. 4 Interval 4742 - 4800 Operator HALLIBURTON

Tester Size & Type 5" HYDROSPRING Packer Size & Type 6-3/4 NO. 2

Anchor Length & O.D. 30 FT. - 5" Drill collar footage above Packer 665.33

Capacity Bbls/ft. Drill Pipe 0.0142 Collars 0.00519

Pressure Recorders Type BOURDON Position TOP Depth 4721.35

Type BOURDON Position BTM Depth 4801

Perforated Anchor from 4796.5 to 4766.5

Choke Size: Top 1/2" Bottom 3/4" Water Cushion NIL Mud Wt. 9.0 Vis. 55

Hole Size 7-7/8 to 4801 Rat hole size 8-5/8 CASING to 4573

Mud Level: Before valve opened 3" BELOW FLOW LINE After valve opened SAME
TOP 6.38

Time Record: Started clocks at BTM 5.53 Hrs. Started in hole at 6.00 Hrs.

Opened Valve at 10.24 Hrs. Shut in at 10.55 Hrs. Opened at 12.04 Hrs. Shut in at 15.16 Hrs.

Pulled Packer at 18.36 Hrs. Out of hole at 11.20 Hrs. Recovered chart at 11.00 Hrs.

Nature of Blow WEAK INCREASING TO STRONG RAPIDLY. GAS TO SURFACE 10.32 HRS AT 15 PSI. PRESSURE
TO 0 AT 10.55 HRS. GAS MEASURED AT FLOW PROVER AT 15.10 HRS

Fluid flow (details) OIL TO SURFACE AT 13.06 HRS (62 MINS INTO 2 ND FLOW PERIOD) FLOW THROUGH
SEPARATOR. FLOW RATE ESSENTIALLY CONSTANT.

Recovery TOTAL OIL RECOVERED THROUGH SEPARATOR 27 BBLs IN 2 HRS. 8.13 BBLs IN DRILL PIPE
ON BACK CIRCULATION AT 17.45 HRS

Pressures I.H.P. 2271 psig IFP 405.4 psig ISIP 1775 psig FFP 488.1 psig FSIP 1764.4 psig
F.H.P. 2263.7 psig

Elapsed Times: Initial flow 31 mins. Initial Shut in 69 mins.
Final flow 192 mins. Final Shut in 200 mins.

Maximum Temperature 141°F Samples Taken 2 OIL SAMPLES & 1 GAS SAMPLE

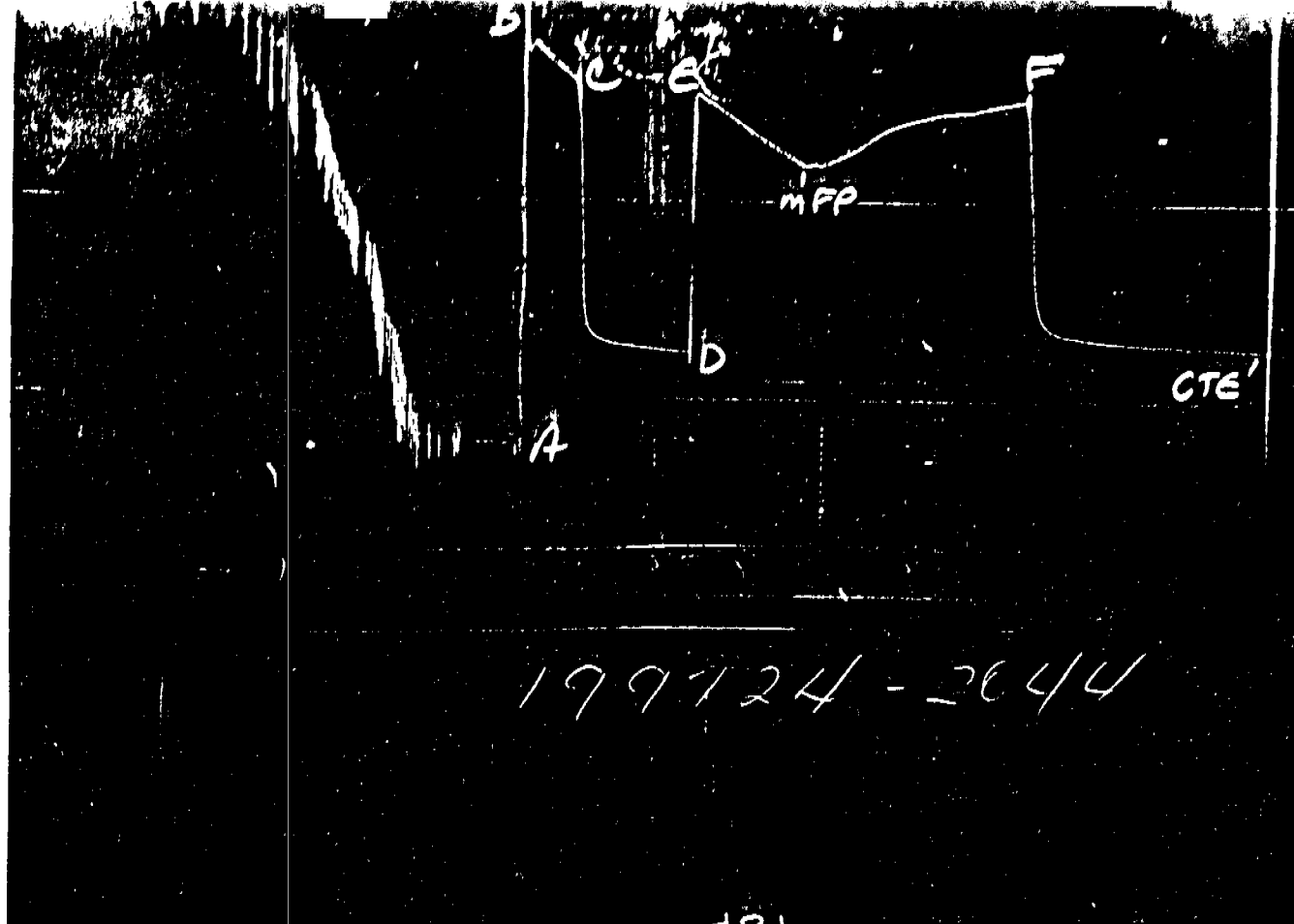
Remarks MEASURE THROUGH SEPARATOR 13.13 HRS - 15.16 HRS (2 HRS)
GAS RATE = 203.91 MCF/DAY
OIL RATE = 324 BBL/DAY



TICKET NO. 19972400
14-JUL-82
ADELAIDE

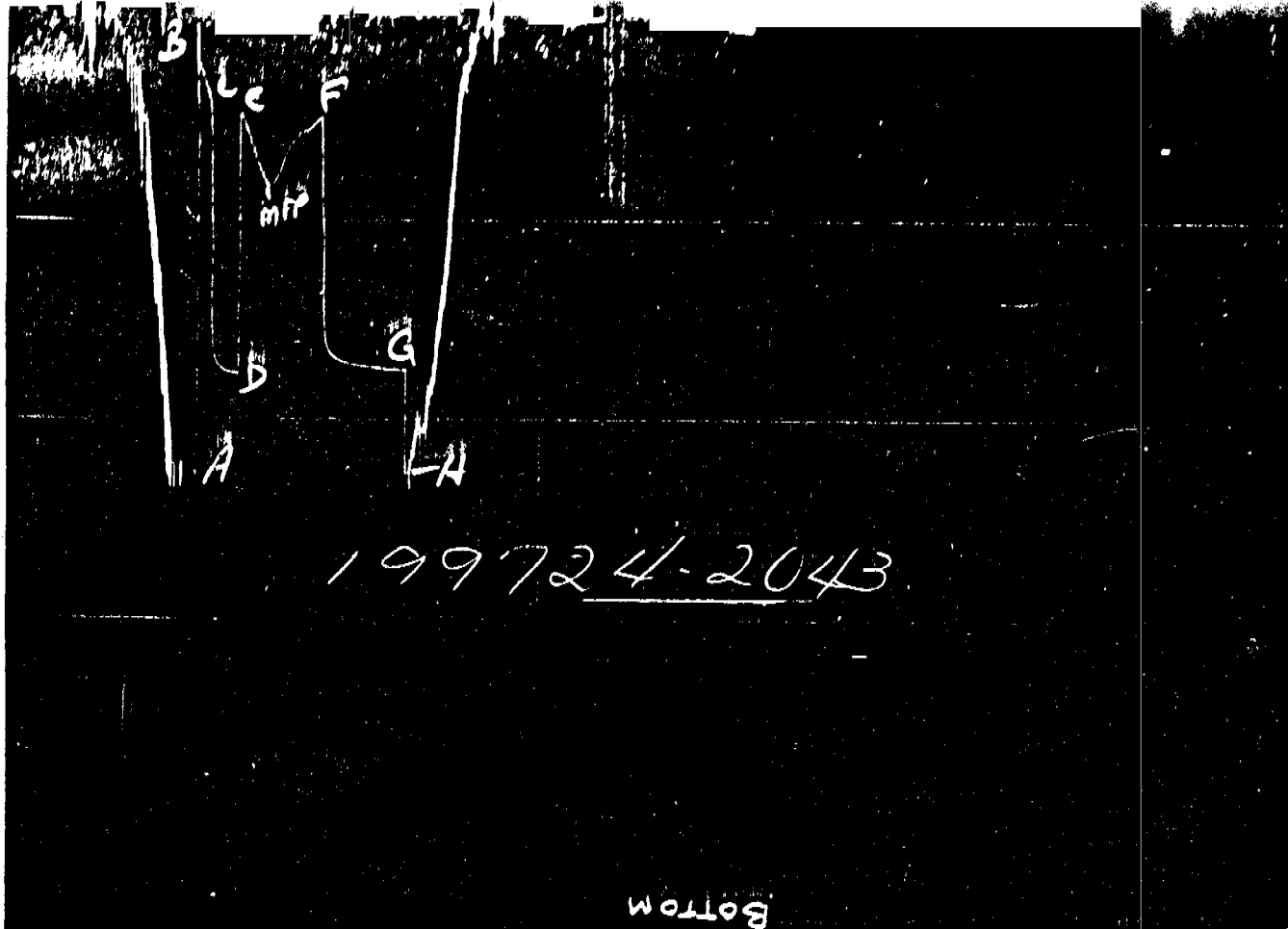
FORMATION TESTING SERVICE REPORT

LEASE NAME		7	4	4742.1 - 4801.1		OILMIN N.L.	
WELL NO.		TEST NO.		TESTED INTERVAL		LEASE OWNER/COMPANY NAME	
LEGAL LOCATION SEC. - TWP. - RMC.	FIELD AREA	BMEDENS		COUNTRY	NORTH TERRITORY	STATE AUSTRALIA SMC	



GAUGE NO: 2044 DEPTH: 4721.0 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2245.6			
B	INITIAL FIRST FLOW		24.3			
C	FINAL FIRST FLOW		398.5	31.0	30.5	F
C	INITIAL FIRST CLOSED-IN		398.5			
D	FINAL FIRST CLOSED-IN		1767.4	69.0	66.4	C
E	INITIAL SECOND FLOW		457.4			
F	FINAL SECOND FLOW		471.5	192.0	195.0	F
F	INITIAL SECOND CLOSED-IN		471.5			
G	FINAL SECOND CLOSED-IN			200.0		C
H	FINAL HYDROSTATIC					



GAUGE NO: 2043 DEPTH: 4797.0 BLANKED OFF: YES HOUR OF CLOCK: 48

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC		2274.7			
B	INITIAL FIRST FLOW		174.2			
C	FINAL FIRST FLOW		402.2	31.0	30.5	F
C	INITIAL FIRST CLOSED-IN		402.2			
D	FINAL FIRST CLOSED-IN		1782.1	69.0	66.4	C
E	INITIAL SECOND FLOW		468.7			
F	FINAL SECOND FLOW		484.4	192.0	195.0	F
F	INITIAL SECOND CLOSED-IN		484.4			
G	FINAL SECOND CLOSED-IN		1761.1	200.0	200.1	C
H	FINAL HYDROSTATIC		2276.9			

EQUIPMENT & HOLE DATA

FORMATION TESTED: PA10010
NET PAY (ft): _____
GROSS TESTED FOOTAGE: 59.0
ALL DEPTHS MEASURED FROM: K8
CASING PERFS. (ft): _____
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 2430
TOTAL DEPTH (ft): 4801.0
PACKER DEPTH(S) (ft): 4736, 4742
FINAL SURFACE CHOKE (in): 0.500
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.00
MUD VISCOSITY (sec): _____
ESTIMATED HOLE TEMP. (°F): _____
ACTUAL HOLE TEMP. (°F): 141 @ 4800.0 ft

TICKET NUMBER: 19972400

DATE: 6-20-82 TEST NO: 4

TYPE DST: OPEN HOLE

HALLIBURTON CAMP:
ADELAIDE

TESTER: NILON
JENKINS

WITNESS: WARNER

DRILLING CONTRACTOR:
MEREENIE PARTNERS

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): 47.0 @ 60°F
GAS/OIL RATIO (cu.ft. per bbl): _____
GAS GRAVITY: 0.650

CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

RECOVERED:

27 BARRELS OF CRUDE FLOW FROM SEPARATOR
8.137 BARRELS OF CRUDE RECOVERED FROM STRING
(AVERAGE RATE OF 203.91 MCF/DAY FOR GAS)
(AVERAGE RATE OF 324 BARRELS/DAY FOR OIL)

MEASURED FROM
TESTER VALVE

REMARKS:

INSIDE DIAMETERS OF DRILL PIPE AND COLLARS WERE NOT REPORTED
DIAMETERS OF CROSSOVERS WERE ALSO NOT REPORTED.

TYPE & SIZE MEASURING DEVICE:				CHOKE HPPH	TICKET NO: 19972400
TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
6-20-82					
0553					BOTTOM B.T. LOADED
0638					TOP B.T. LOADED
0700					STARTED IN HOLE WITH TOOLS
0945					HEAD ON STRING
0950					TOUCHED BOTTOM
1021					SET PACKER
1024					TOOL OPENED, MANIFOLD CLOSED
					WEAK BUBBLE, INCREASING
1025					STRONG BUBBLE
1027					MANIFOLD OPENED
1029	.5	5			
1032		15			GAS TO SURFACE
1035		15			
1040		10			
1045		6			
1050		0			
1055					CLOSED TOOL
1204		10			OPENED TOOL
1209		11			MANIFOLD CLOSED
1210		10			MANIFOLD OPENED
1213		0			STILL FLOWING
1215		0			"
1220		0			"
1230		0			"
1240		0			"
1250		0			"
1300		10			INCREASING
1303		20			
1304		35			
1305		40			MUD TO SURFACE
1306		50			OIL & MUD TO SURFACE
1307		70			OIL TO SURFACE
1308		95			
1309		100			
1310		100			
1313		115			MANIFOLD SHUT IN

[illegible]

TICKET NO: 19972400

CLOCK NO: 7411 HOUR: 12


HALLIBURTON
SERVICES

GAUGE NO: 2044

DEPTH: 4721.0

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	24.3			
2	3.0	235.8	211.5		
3	6.0	203.8	-32.0		
4	9.0	231.2	27.3		
5	12.0	254.8	23.6		
6	15.0	277.2	22.4		
7	18.0	299.5	22.3		
8	21.0	321.6	22.1		
9	24.0	339.9	18.3		
10	27.0	366.4	26.5		
C 11	30.5	398.5	32.1		

FIRST CLOSED-IN					
C 1	0.0	398.5			
2	1.0	583.5	185.0	0.9	1.518
3	2.0	795.3	396.8	1.8	1.218
4	3.0	1181.8	783.3	2.7	1.050
5	4.0	1473.5	1074.9	3.5	0.936
6	5.0	1568.6	1170.1	4.3	0.848
7	6.0	1616.9	1218.3	5.0	0.784
8	7.0	1644.0	1245.5	5.7	0.731
9	8.0	1663.6	1265.0	6.3	0.683
10	9.0	1676.3	1277.8	7.0	0.642
11	10.0	1685.5	1287.0	7.5	0.607
12	12.0	1699.6	1301.1	8.6	0.548
13	14.0	1709.2	1310.6	9.6	0.503
14	16.0	1717.6	1319.0	10.5	0.463
15	18.0	1722.5	1323.9	11.3	0.431
16	20.0	1726.9	1328.3	12.1	0.402
17	22.0	1731.8	1333.2	12.8	0.378
18	24.0	1734.4	1335.9	13.4	0.356
19	26.0	1737.8	1339.2	14.0	0.337
20	28.0	1738.7	1340.2	14.6	0.320
21	30.0	1740.4	1341.9	15.1	0.305
22	35.0	1745.6	1347.1	16.3	0.272
23	40.0	1751.5	1352.9	17.3	0.246
24	45.0	1756.4	1357.8	18.2	0.225
25	50.0	1761.0	1362.5	18.9	0.207
26	55.0	1765.0	1366.5	19.6	0.192
D 27	66.4	1767.4	1368.9	20.9	0.154

SECOND FLOW					
E 1	0.0	457.4			
2	15.0	528.8	71.4		
3	30.0	626.3	97.5		
4	45.0	712.2	85.9		
5	60.0	790.1	77.9		

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND FLOW - CONTINUED					
<input checked="" type="checkbox"/> 6	69.6	810.1	20.0		
7	75.0	804.7	-5.4		
8	90.0	750.4	-54.3		
9	105.0	668.0	-82.4		
10	120.0	602.5	-65.4		
11	135.0	567.3	-35.3		
12	150.0	541.4	-25.9		
<input checked="" type="checkbox"/> 13	164.2	530.2	-11.3		
14	165.0	527.3	-2.8		
15	180.0	496.4	-30.9		
F 16	195.0	471.5	-24.9		

SECOND CLOSED-IN					
F 1	0.0	471.5			
2	1.0	650.0	178.5	1.0	2.341
3	2.0	792.4	320.9	2.0	2.061
4	3.0	990.5	519.0	2.9	1.889
5	4.0	1224.5	753.1	3.9	1.764
6	5.0	1383.3	911.8	4.9	1.661
7	6.0	1480.8	1009.3	5.9	1.584
8	7.0	1532.3	1060.8	6.8	1.519
9	8.0	1564.6	1093.1	7.7	1.467
10	9.0	1589.8	1118.3	8.7	1.415
11	10.0	1606.4	1134.9	9.6	1.373
12	12.0	1629.0	1157.5	11.4	1.296
13	14.0	1643.2	1171.7	13.2	1.232
14	16.0	1653.7	1182.2	14.9	1.179
15	18.0	1662.0	1190.5	16.7	1.131
16	20.0	1668.0	1196.5	18.4	1.089
17	22.0	1673.4	1201.9	20.1	1.051
18	24.0	1677.5	1206.0	21.7	1.017
19	26.0	1680.3	1208.8	23.3	0.985
20	28.0	1683.1	1211.6	24.9	0.957
21	30.0	1685.2	1213.8	26.5	0.930
22	35.0	1692.2	1220.7	30.3	0.871
23	40.0	1697.7	1226.3	34.0	0.822
24	45.0	1704.1	1232.6	37.5	0.779
25	50.0	1708.4	1236.9	40.9	0.741
26	55.0	1710.5	1239.0	44.2	0.707
27	60.0	1713.0	1241.5	47.4	0.678
28	70.0	1718.9	1247.4	53.4	0.625
29	80.0	1721.1	1249.7	59.0	0.582
30	90.0	1725.9	1254.4	64.3	0.545
31	100.0	1731.0	1260.3	69.3	0.512
32	110.0	1733.1	1261.6	73.9	0.484
33	120.0	1736.8	1265.3	78.3	0.459
34	130.0	1742.8	1271.3	82.5	0.437
35	140.0	1745.6	1274.1	86.4	0.417
<input checked="" type="checkbox"/> 36	141.8	1746.1	1274.7	87.1	0.413
G 37	NO DATA FOR THIS POINT				

LEGEND:☒ MAXIMUM FLOW PRESSURE☒ POSSIBLE CHOKE CHANGE☒ CHART TIME EXPIRED**REMARKS:**CHART TIME EXPIRED DURING FINAL CLOSED IN PRESSURE PERIOD...
ONLY 141.8 MINUTES RECORDED.

TICKET NO: 19972400

CLOCK NO: 8256 HOUR: 48

HALLIBURTON

SERVICES

GAUGE NO: 2043

DEPTH: 4797.0

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	174.2			
2	3.0	250.1	75.9		
3	6.0	226.1	-24.0		
4	9.0	244.2	18.0		
5	12.0	265.2	21.1		
6	15.0	286.8	21.6		
7	18.0	308.2	21.4		
8	21.0	329.2	20.9		
9	24.0	348.0	18.8		
10	27.0	373.6	25.6		
C 11	30.5	402.2	28.6		

FIRST CLOSED-IN					
C 1	0.0	402.2			
2	1.0	623.4	221.2	1.0	1.490
3	2.0	786.0	383.9	1.9	1.215
4	3.0	1100.3	698.1	2.7	1.048
5	4.0	1484.5	1082.3	3.5	0.939
6	5.0	1582.9	1180.7	4.3	0.853
7	6.0	1628.9	1226.8	5.0	0.784
8	7.0	1656.8	1254.7	5.7	0.731
9	8.0	1673.3	1271.1	6.4	0.680
10	9.0	1686.3	1284.2	7.0	0.642
11	10.0	1694.5	1292.3	7.5	0.609
12	12.0	1710.3	1308.1	8.6	0.549
13	14.0	1721.8	1319.7	9.6	0.502
14	16.0	1729.5	1327.3	10.5	0.463
15	18.0	1735.4	1333.2	11.3	0.431
16	20.0	1740.3	1338.1	12.1	0.402
17	22.0	1745.0	1342.8	12.8	0.378
18	24.0	1748.6	1346.4	13.4	0.357
19	26.0	1752.6	1350.5	14.0	0.337
20	28.0	1754.7	1352.6	14.6	0.320
21	30.0	1758.0	1355.9	15.1	0.305
22	35.0	1764.2	1362.1	16.3	0.272
23	40.0	1767.9	1365.7	17.3	0.246
24	45.0	1772.1	1369.9	18.2	0.225
25	50.0	1775.4	1373.2	18.9	0.207
26	55.0	1777.6	1375.5	19.6	0.192
D 27	66.4	1782.1	1379.9	20.9	0.164

SECOND FLOW					
E 1	0.0	468.7			
2	15.0	524.3	55.6		
3	30.0	621.2	97.0		
4	45.0	708.2	86.9		
5	60.0	788.4	80.2		

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND FLOW - CONTINUED					
1	6	69.6	822.2	33.8	
7	75.0	818.6	-3.6		
8	90.0	774.4	-44.2		
9	105.0	697.5	-76.9		
10	120.0	627.4	-70.1		
11	135.0	584.7	-42.7		
12	150.0	555.7	-29.0		
2	13	164.2	548.0	-7.7	
14	165.0	547.2	-0.8		
15	180.1	511.1	-36.1		
F 16	195.0	484.4	-26.7		

SECOND CLOSED-IN					
F 1	0.0	484.4			
2	1.0	621.2	136.8	1.0	2.346
3	2.0	748.5	264.2	2.0	2.047
4	3.0	935.1	450.7	3.0	1.881
5	4.0	1125.5	641.1	4.0	1.756
6	5.0	1290.4	806.0	4.9	1.660
7	6.0	1430.0	945.6	5.8	1.586
8	7.0	1502.9	1018.5	6.8	1.520
9	8.0	1551.8	1067.5	7.8	1.463
10	9.0	1582.9	1098.5	8.7	1.416
11	10.0	1601.1	1116.7	9.6	1.371
12	12.0	1631.2	1146.8	11.4	1.296
13	14.0	1646.3	1161.9	13.2	1.234
14	16.0	1657.1	1172.7	15.0	1.176
15	18.0	1666.7	1182.3	16.7	1.131
16	20.0	1672.6	1188.2	18.4	1.089
17	22.0	1679.1	1194.7	20.1	1.051
18	24.0	1684.2	1199.8	21.7	1.018
19	26.0	1688.7	1204.3	23.3	0.986
20	28.0	1692.8	1208.4	24.9	0.956
21	30.0	1696.3	1211.9	26.5	0.930
22	35.0	1703.7	1219.3	30.3	0.872
23	40.0	1708.9	1224.6	34.0	0.822
24	45.0	1713.3	1228.9	37.5	0.779
25	50.0	1717.4	1233.0	40.9	0.741
26	55.0	1721.2	1236.8	44.2	0.706
27	60.0	1723.9	1239.6	47.4	0.677
28	70.0	1729.2	1244.8	53.4	0.625
29	80.0	1733.6	1249.2	59.1	0.582
30	90.0	1737.4	1253.0	64.3	0.545
31	100.0	1740.5	1256.1	69.3	0.512
32	110.0	1743.3	1258.9	73.9	0.484
33	120.1	1746.3	1261.9	78.4	0.459
34	120.0	1746.3	1261.9	78.3	0.459
35	135.0	1749.3	1265.0	84.4	0.427
36	150.0	1754.7	1270.3	90.1	0.399
37	165.0	1756.7	1272.3	95.3	0.374
38	180.0	1758.3	1273.9	100.1	0.353

LEGEND:

[1] MAXIMUM FLOW PRESSURE

[2] POSSIBLE CHOKED CHANGE

REMARKS:

TICKET NO: 19972400

CLOCK NO: 8256 HOUR: 48

MALLIDURTON

SERVICES

GAUGE NO: 2043

DEPTH: 4797.0

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
39	195.0	1760.9	1276.5	104.6	0.334
G 40	200.1	1761.1	1276.7	106.0	0.328

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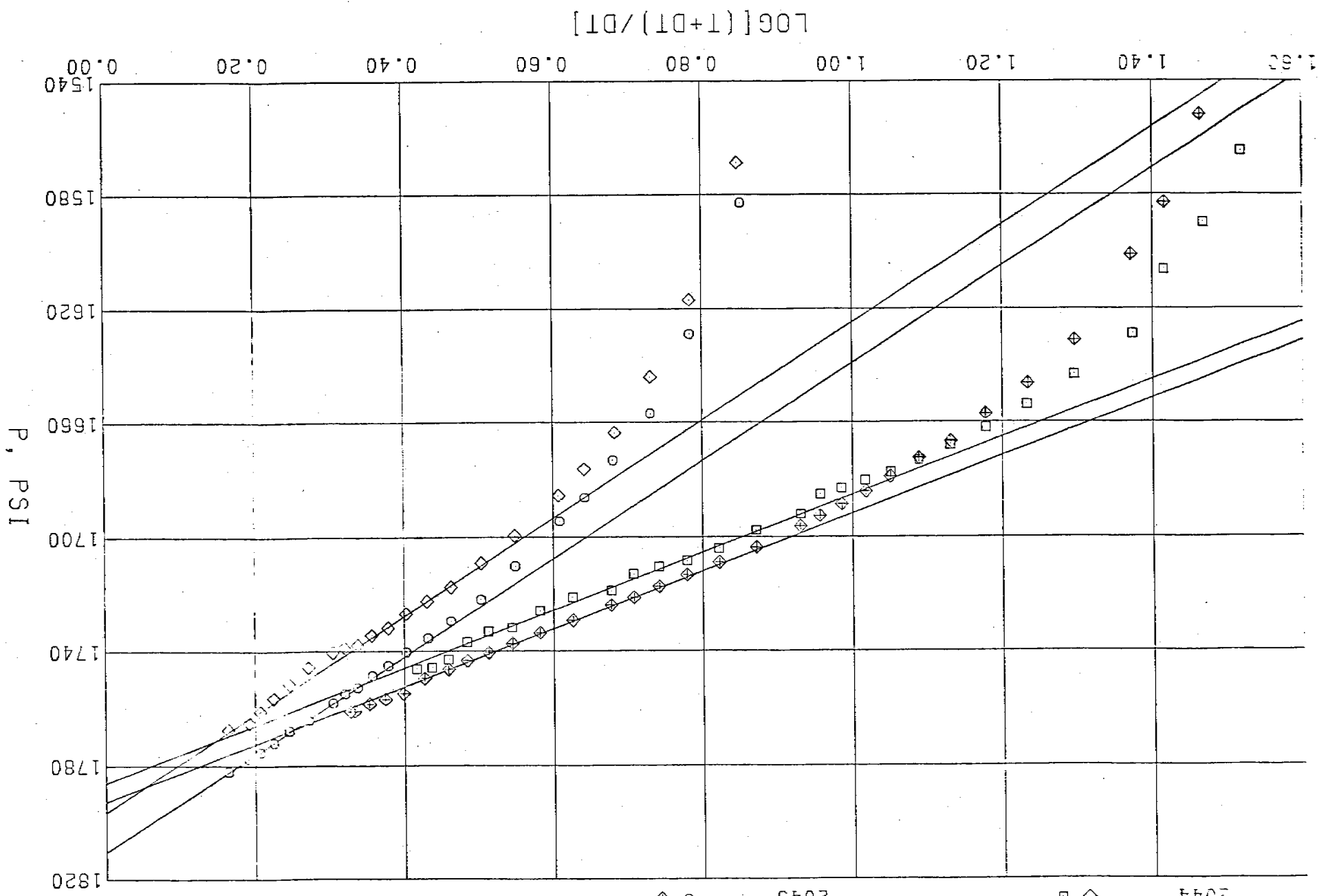
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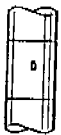














☐ MAXIMUM FLOW PRESSURE☒ POSSIBLE CHOKE CHANGE

REMARKS:

TICKET NO 19972400

GAUGE NO CIP 1 2
2044
GAUGE NO CIP 1 2
2043



		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500		4041.8	
3		DRILL COLLARS.....	6.500		603.0	
50		IMPACT REVERSING SUB.....		1.0	4644.8	
3		DRILL COLLARS.....	6.500		62.3	
5		CROSSOVER.....		3.3		
12		DUAL CIP VALVE.....	5.000	0.870	4.9	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	4716.3
80		AP RUNNING CASE.....	5.000	2.250	4.1	4721.3
15		JAR.....	5.000	1.750	5.0	
16		VR SAFETY JOINT.....	5.000	1.000	2.8	
70		OPEN HOLE PACKER.....	6.750	1.750	5.8	4736.0
70		OPEN HOLE PACKER.....	6.750	1.750	5.8	4742.0
5		CROSSOVER.....		1.0		
1		DRILL PIPE.....	6.500		19.9	
5		CROSSOVER.....			0.9	
20		FLUSH JOINT ANCHOR.....	5.000	2.370	30.0	
81		BLANKED-OFF RUNNING CASE.....	5.000	2.440	4.5	4797.0
TOTAL DEPTH					4801.0	

EQUIPMENT DATA

SUMMARY OF RESERVOIR PARAMETERS USING HORNER METHOD

OIL GRAVITY 47.0 °60° WATER % SALT 0.0
GAS GRAVITY 0.650 FLUID GRADIENT 0.3435 psi/ft
GAS/OIL RATIO 0.0 cu.ft/bbl FORMATION VOL FACTOR 1.000 vol/vol
TEMPERATURE 141.0 °F FLUID PROPERTIES AT 1810.5 Pstg
VISCOSITY 1.043 cp NET PAY 0.0 ft
PIPE CAPACITY FACTOR(S) bbl/ft

GAUGE NUMBER	2044	2044	2043	2043			
GAUGE DEPTH	4721.0	4721.0	4797.0	4797.0			
FLOW AND CIP PERIOD	1	2	1	2			UNIT
FINAL FLOW PRESSURE P_f	398.5	471.5	402.2	484.4			Pstg
TOTAL FLOW TIME t	30.5	225.5	30.5	225.5			min
EXTRAPOLATED PRESSURE P^*	1796.3	1786.1	1810.5	1792.6			Pstg
ONE CYCLE PRESSURE	1624.8	1685.2	1639.2	1691.7			Pstg
PRODUCTION RATE Q		324.0		324.0			BPD
TRANSMISSIBILITY kh/μ		522.039		522.039			md-ft cp
FLOW CAPACITY kh		544.708		544.708			md-ft
PERMEABILITY k		9.23234		9.23234			md
DAMAGE RATIO DR		2.38		2.37			
POTENTIAL RATE Q_i		772.4		768.6			BPD
RADIUS OF INVESTIGATION r_i		211.3		211.3			ft

REMARKS:

NOTICE:

THESE CALCULATIONS ARE BASED UPON INFORMATION FURNISHED BY YOU AND TAKEN FROM DRILL STEM PRESSURE CHARTS, AND ARE FURNISHED TO YOU FOR YOUR INFORMATION. IN FURNISHING SUCH CALCULATIONS AND EVALUATIONS BASED THEREON, HALLIBURTON IS MERELY EXPRESSING ITS OPINION. YOU AGREE THAT HALLIBURTON MAKES NO WARRANTY EXPRESS OR IMPLIED AS TO THE ACCURACY OF SUCH CALCULATIONS OR OPINIONS, AND THAT HALLIBURTON SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, WHETHER DUE TO NEGLIGENCE OR OTHERWISE, IN CONNECTION WITH SUCH OPINIONS.