

PARAMOUNT RESOURCES LTD.

DATE 80-03-09

TEST NO. 4

PARAMOUNT HB ET AL CAMERON J-62

FORMATION TWIN FALLS

# Drill Stem Test Report



QUINN TESTERS LTD.



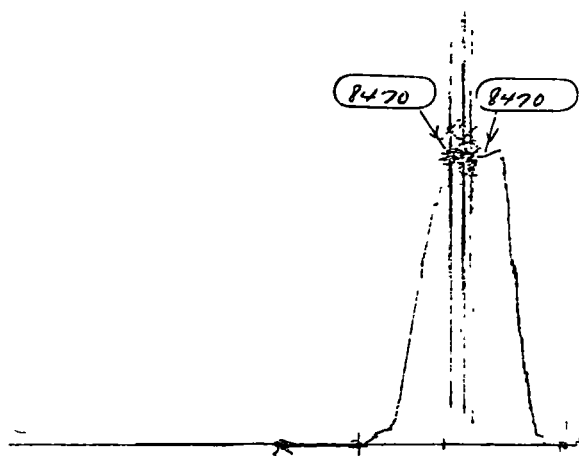
# QUINN TESTERS LTD.

CALGARY, ALBERTA

TEST CHARTS

PHONE 232-1704

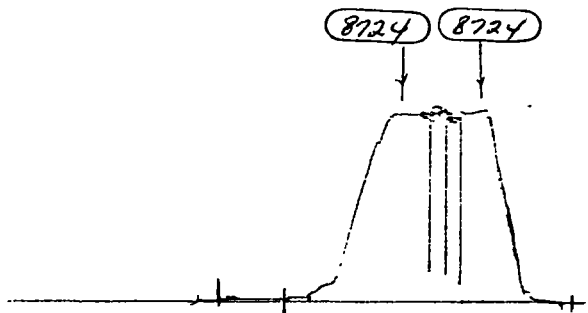
INSIDE RECORDER #14032



INITIAL HYDR 8470  
IN. PREFLOW \_\_\_\_\_  
F PREFLOW \_\_\_\_\_  
1st SHUT-IN \_\_\_\_\_  
1st IN FLOW \_\_\_\_\_  
1st F FLOW \_\_\_\_\_  
2nd SHUT-IN \_\_\_\_\_  
2nd IN FLOW \_\_\_\_\_  
2nd F FLOW \_\_\_\_\_  
3rd SHUT-IN \_\_\_\_\_  
3rd IN FLOW \_\_\_\_\_  
3rd F FLOW \_\_\_\_\_  
4th SHUT-IN \_\_\_\_\_  
FINAL HYDR 8470

PARAMOUNT HB ET AL CAMERON J-62 DST# 4

OUTSIDE RECORDER #15365



INITIAL HYDR. 8724  
IN PREFLOW \_\_\_\_\_  
F PREFLOW \_\_\_\_\_  
1st SHUT-IN \_\_\_\_\_  
1st IN FLOW \_\_\_\_\_  
1st F FLOW \_\_\_\_\_  
2nd SHUT-IN \_\_\_\_\_  
2nd IN FLOW \_\_\_\_\_  
2nd F FLOW \_\_\_\_\_  
3rd SHUT-IN \_\_\_\_\_  
3rd IN FLOW \_\_\_\_\_  
3rd F FLOW \_\_\_\_\_  
4th SHUT-IN \_\_\_\_\_  
FINAL HYDR 8724

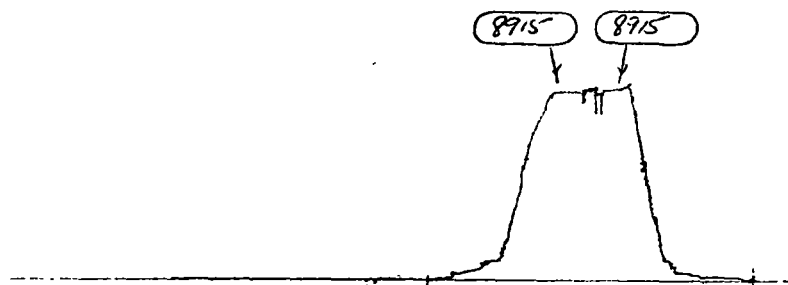
# QUINN TESTERS LTD.

## TEST CHARTS

CALGARY, ALBERTA

PHONE 232-1704

OUTSIDE RECORDER #15372



PARAMOUNT HB ET AL CAMERON

J-62

DST# 4

INITIAL HYDR 8915  
IN PREFLOW \_\_\_\_\_  
F PREFLOW \_\_\_\_\_  
1st SHUT-IN \_\_\_\_\_  
1st IN FLOW \_\_\_\_\_  
1st F FLOW \_\_\_\_\_  
2nd SHUT-IN \_\_\_\_\_  
2nd IN FLOW \_\_\_\_\_  
2nd F FLOW \_\_\_\_\_  
3rd SHUT-IN \_\_\_\_\_  
3rd IN. FLOW \_\_\_\_\_  
3rd F FLOW \_\_\_\_\_  
4th SHUT-IN \_\_\_\_\_  
FINAL HYDR 8915

INITIAL HYDR \_\_\_\_\_  
IN PREFLOW \_\_\_\_\_  
F PREFLOW \_\_\_\_\_  
1st SHUT-IN \_\_\_\_\_  
1st IN. FLOW \_\_\_\_\_  
1st F FLOW \_\_\_\_\_  
2nd SHUT-IN \_\_\_\_\_  
2nd IN FLOW \_\_\_\_\_  
2nd F FLOW \_\_\_\_\_  
3rd SHUT-IN \_\_\_\_\_  
3rd IN FLOW \_\_\_\_\_  
3rd F FLOW \_\_\_\_\_  
4th SHUT-IN \_\_\_\_\_  
FINAL HYDR \_\_\_\_\_



PARAMOUNT RESOURCES LTD.

DATE 80-03-09 TEST NO. 3

PARAMOUNT HB ET AL CAMERON J-62

FORMATION SLAVE POINT

# Drill Stem Test Report



QUINN TESTERS LTD.

PHONE 232-1704

CUSTOMER		PARAMOUNT RESOURCES LTD.		DATE		80-03-09		TEST NO.		3					
LOCATION		PARAMOUNT HB ET AL CAMERON J-62		FORMATION		SLAVE POINT									
TEST INTERVAL		1319		TO		1348		TD		1605		TEST TYPE		DSBP	
CUSTOMER REP.		KARY WILSON		TESTER		WITTMACK & HOPPUS									
IN OR OUT & NO. TIME & RANGE RECORDER DEPTH		IN Rec./No 14032		OUT Rec./No 15365		OUT Rec./No 15372		Rec./No.							
		24 Hr. 24132		24 Hr. 35853		24 Hr. 36887		Hr.							
		1313.421 Metres		1325.761 Metres		1357.151 Metres		Metres							
Bottom Hole Temperature °C		49		K.B.		755		Gr		751.9		No. of Reports Required		6	
PERCENTAGE OF POROSITY		METRES OF NET PAY													
D.P. Size, mm		88.9		Wght. kg/m		21.58		D.C.I.D. mm		73		D.C. Above Tool, m		37.89	
Main Hole, mm		222		Rat Hole, mm				Rat Hole Depth, m				P O Sub		.305	
Mud Wght. kg/m <sup>3</sup>		1090		Viscosity, s/L		50		Water Loss cm <sup>3</sup>		13.40		<del>Blank</del> /Blank		.305	
Bottom Choke, mm		12.7		Rubber Size, mm		196.8		Anchor Size, mm		127		Recorder			
Amount and Type of Cushion												Shut-In		1.600	
												Sampler			
												Sampler			
												Hydraulic		1.661	
												Jars		1.417	
												Recorder		1.524	
												Recorder			
												Temp Rec.			
												By-Pass		.305	
												Safety Jt		.610	
												Packer		2.000	
												Packer		1.445 1319.055	
												Packer		.305	
												Perfs		6.096	
												By-Pass		.305	
												Recorder		1.219	
												Recorder			
												X Over		.305	
												<del>Blank</del> /D.C		19.570	
												X Over		.305	
												Packer		1.000 1348.16	
												Packer		1.000	
												Packer		1.750	
												Perfs		6.096	
												Recorder		1.524	
												X Over		.305	
												D P / <del>Blank</del>		245.250	
												X Over		.305	
												Perfs			
												Bullnose		.610 1605	
TOTAL FLUID RECOVERY		170		Metres		Sampler #				#		Total Interval		29.105 m	
Sampled @		.305		90		160				Above Tool		Total Tail Pipe		256.840 m	
30		Metres of		INHIBITOR WATER								Tool Makeup Time		2.000 Hr.	
40		Metres of		DRILLING MUD											
100		Metres of		MUD CUT SALT WATER (28 600 ppm)											
		Metres of													
REMARKS. Misrun _____ Ok <u>X</u> Tool Opened @ 0545 _____ Hrs															
WEAK AIR BLOW INCREASING TO GOOD ON PREFLOW. WEAK AIR BLOW INCREASING TO STRONG FOR 10 MINUTES ON VALVE OPEN. THEN DECREASING TO WEAK. DEAD IN 40 MINUTES.															

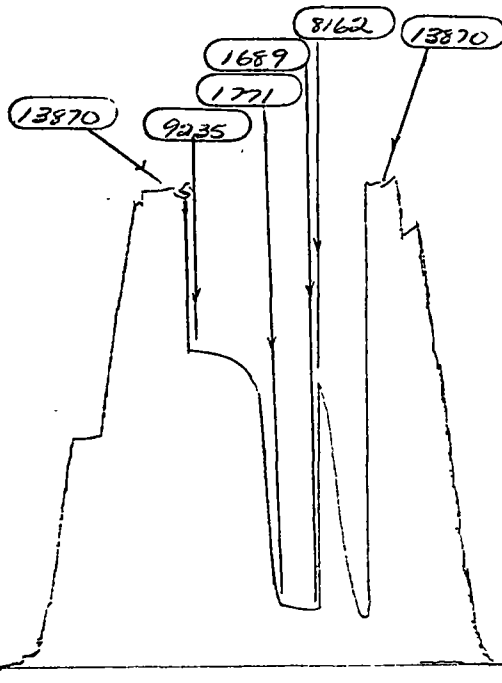
# QUINN TESTERS LTD.

## TEST CHARTS

CALGARY, ALBERTA

PHONE 232-1704

INSIDE RECORDER #14032



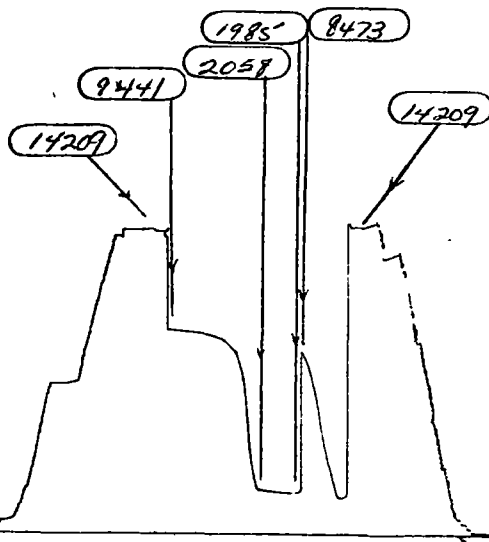
INITIAL HYDR. 13870  
 IN PREFLOW 1427  
 F PREFLOW 1407  
 1st SHUT-IN 8162  
 1st IN FLOW 1689  
 1st F FLOW 1771  
 2nd SHUT-IN 9235  
 2nd IN. FLOW 8162  
 2nd F FLOW             
 3rd SHUT-IN             
 3rd IN FLOW             
 3rd F FLOW             
 4th SHUT-IN             
 FINAL HYDR. 13870

PARAMOUNT HB ET AL CAMERON

J-62

DST# 3

OUTSIDE RECORDER #15365



INITIAL HYDR. 14209  
 IN PREFLOW 1805  
 F PREFLOW 1715  
 1st SHUT-IN 8473  
 1st IN FLOW 1985  
 1st F FLOW 2058  
 2nd SHUT-IN 9441  
 2nd IN FLOW 8473  
 2nd F. FLOW             
 3rd SHUT-IN             
 3rd IN FLOW             
 3rd F. FLOW             
 4th SHUT-IN             
 FINAL HYDR 14209

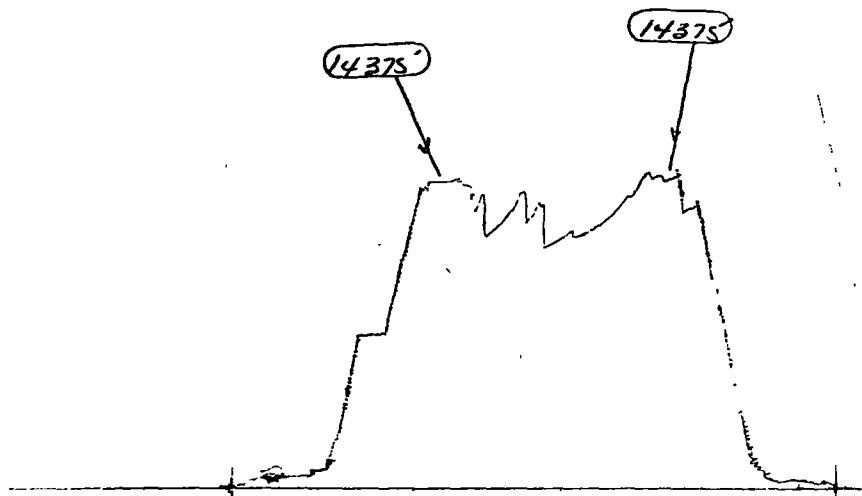
# QUINN TESTERS LTD.

## TEST CHARTS

CALGARY, ALBERTA

PHONE 232-1704

OUTSIDE RECORDER #15372



INITIAL HYDR. 14375  
IN PREFLOW \_\_\_\_\_  
F PREFLOW \_\_\_\_\_  
1st SHUT-IN \_\_\_\_\_  
1st IN FLOW \_\_\_\_\_  
1st F FLOW \_\_\_\_\_  
2nd SHUT-IN \_\_\_\_\_  
2nd IN FLOW \_\_\_\_\_  
2nd F FLOW \_\_\_\_\_  
3rd SHUT-IN \_\_\_\_\_  
3rd IN FLOW \_\_\_\_\_  
3rd F FLOW \_\_\_\_\_  
4th SHUT-IN \_\_\_\_\_  
FINAL HYDR. 14375

PARAMOUNT HB ET AL CAMERON

J-62

DST# 3

INITIAL HYDR. \_\_\_\_\_  
IN PREFLOW \_\_\_\_\_  
F PREFLOW \_\_\_\_\_  
1st SHUT-IN \_\_\_\_\_  
1st IN FLOW \_\_\_\_\_  
1st F FLOW \_\_\_\_\_  
2nd SHUT-IN \_\_\_\_\_  
2nd IN FLOW \_\_\_\_\_  
2nd F FLOW \_\_\_\_\_  
3rd SHUT-IN \_\_\_\_\_  
3rd IN FLOW \_\_\_\_\_  
3rd F FLOW \_\_\_\_\_  
4th SHUT-IN \_\_\_\_\_  
FINAL HYDR. \_\_\_\_\_



PARAMOUNT RESOURCES LTD.

DATE 80-03-07

TEST NO. 2

PARAMOUNT HB ET AL CAMERON J-62

FORMATION SULPHUR POINT

# Drill Stem Test Report



**QUINN TESTERS LTD.**

PHONE 232-1704

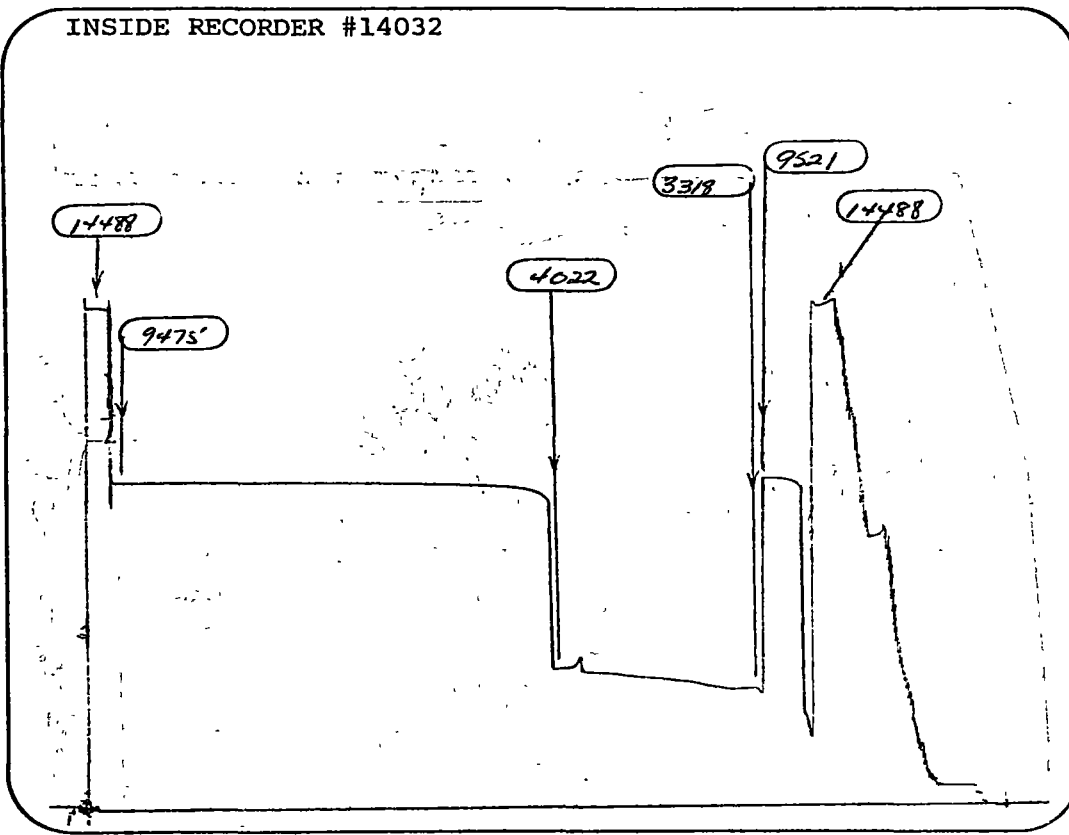
# QUINN TESTERS LTD.

## TEST CHARTS

CALGARY, ALBERTA

PHONE 232-1704

### INSIDE RECORDER #14032



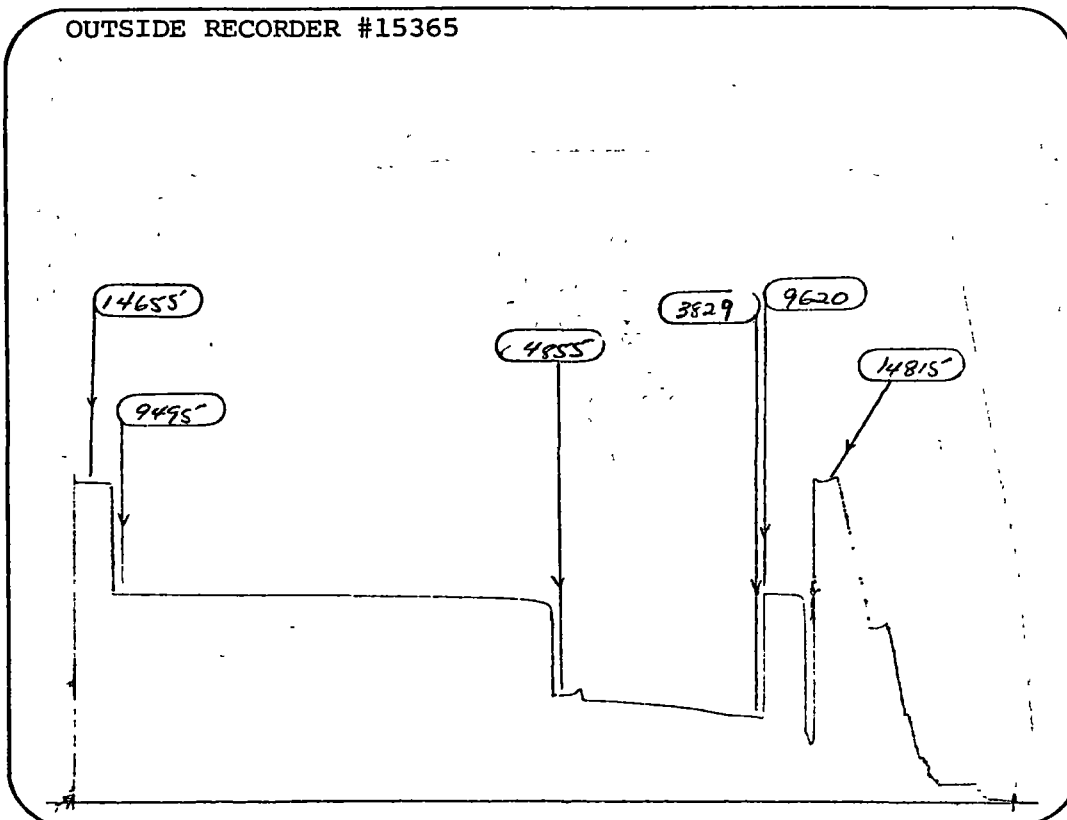
INITIAL HYDR.	<u>14488</u>
IN. PREFLOW	<u>2005'</u>
F. PREFLOW	<u>2697</u>
1st SHUT-IN	<u>9521</u>
1st IN. FLOW	<u>3318</u>
1st F FLOW	<u>4022</u>
2nd SHUT-IN	<u>9475'</u>
2nd IN FLOW	_____
2nd F FLOW	_____
3rd SHUT-IN	_____
3rd IN FLOW	_____
3rd F FLOW	_____
4th SHUT-IN	_____
FINAL HYDR	<u>14488</u>

PARAMOUNT HB ET AL CAMERON

J-62

DST# 2

### OUTSIDE RECORDER #15365



INITIAL HYDR	<u>14815'</u>
IN PREFLOW	<u>2689</u>
F PREFLOW	<u>3195'</u>
1st SHUT-IN	<u>9620</u>
1st IN FLOW	<u>3829</u>
1st F FLOW	<u>4855'</u>
2nd SHUT-IN	<u>9495'</u>
2nd IN FLOW	_____
2nd F FLOW	_____
3rd SHUT-IN	_____
3rd IN FLOW	_____
3rd F FLOW	_____
4th SHUT-IN	_____
FINAL HYDR	<u>14655'</u>

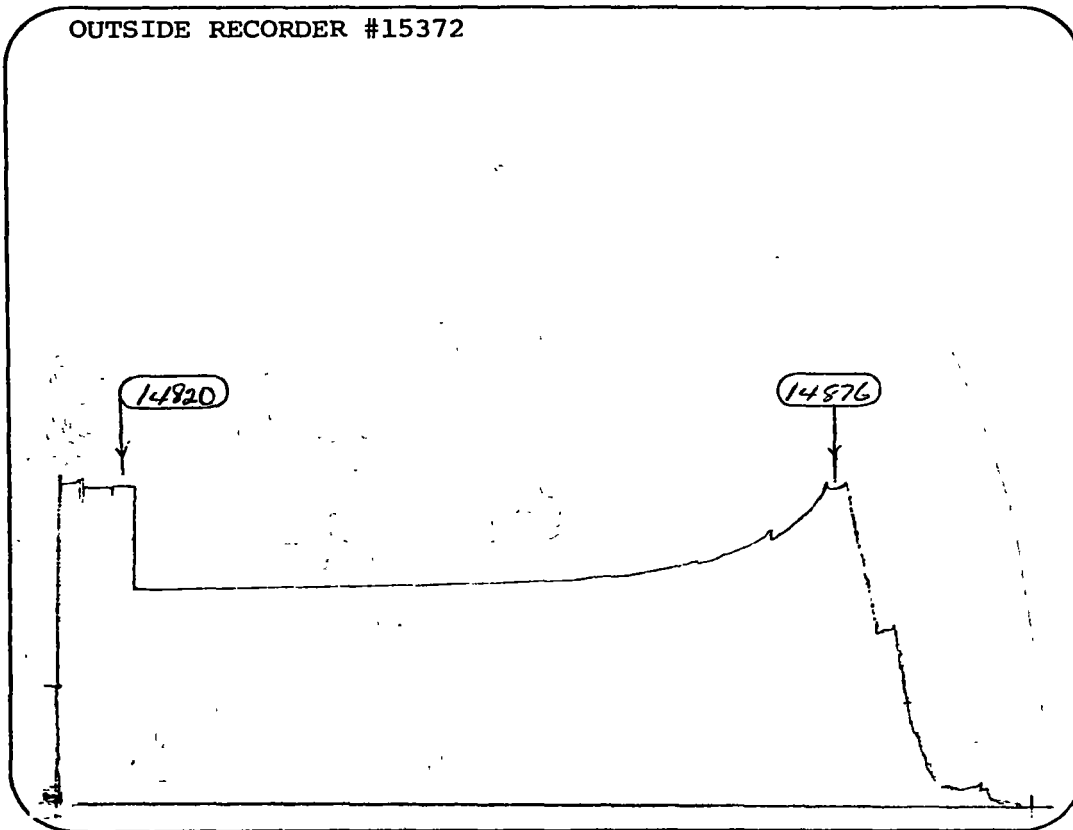
# QUINN TESTERS LTD.

## TEST CHARTS

CALGARY, ALBERTA

PHONE 232-1704

OUTSIDE RECORDER #15372

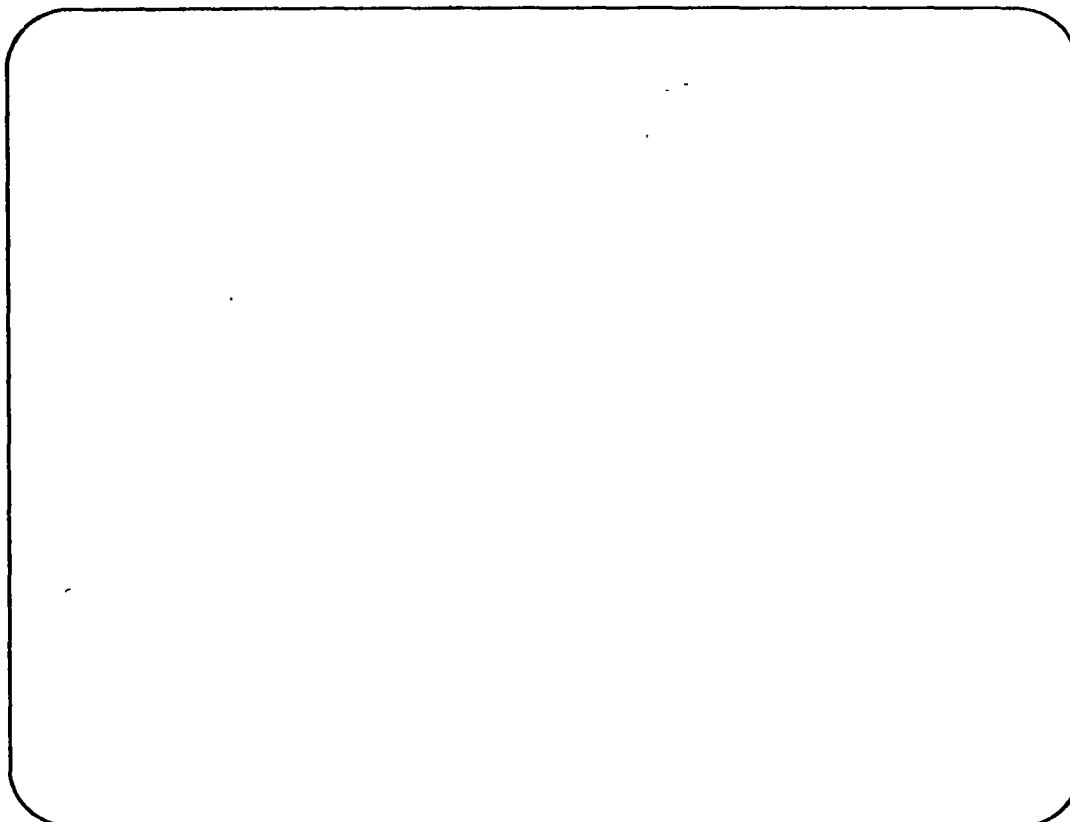


INITIAL HYDR. 14876  
IN PREFLOW \_\_\_\_\_  
F PREFLOW \_\_\_\_\_  
1st SHUT-IN \_\_\_\_\_  
1st IN. FLOW \_\_\_\_\_  
1st F. FLOW \_\_\_\_\_  
2nd SHUT-IN \_\_\_\_\_  
2nd IN. FLOW \_\_\_\_\_  
2nd F. FLOW \_\_\_\_\_  
3rd SHUT-IN \_\_\_\_\_  
3rd IN. FLOW \_\_\_\_\_  
3rd F. FLOW \_\_\_\_\_  
4th SHUT-IN \_\_\_\_\_  
FINAL HYDR. 14820

PARAMOUNT HB ET AL CAMERON

J-62

DST# 2



INITIAL HYDR. \_\_\_\_\_  
IN. PREFLOW \_\_\_\_\_  
F PREFLOW \_\_\_\_\_  
1st SHUT-IN \_\_\_\_\_  
1st IN. FLOW \_\_\_\_\_  
1st F. FLOW \_\_\_\_\_  
2nd SHUT-IN \_\_\_\_\_  
2nd IN. FLOW \_\_\_\_\_  
2nd F. FLOW \_\_\_\_\_  
3rd SHUT-IN \_\_\_\_\_  
3rd IN. FLOW \_\_\_\_\_  
3rd F. FLOW \_\_\_\_\_  
4th SHUT-IN \_\_\_\_\_  
FINAL HYDR. \_\_\_\_\_



PARAMOUNT RESOURCES LTD.

DATE 80-03-06

TEST NO. 1

PARAMOUNT HB ET AL CAMERON J-62

FORMATION KEG RIVER

# Drill Stem Test Report



QUINN TESTERS LTD.





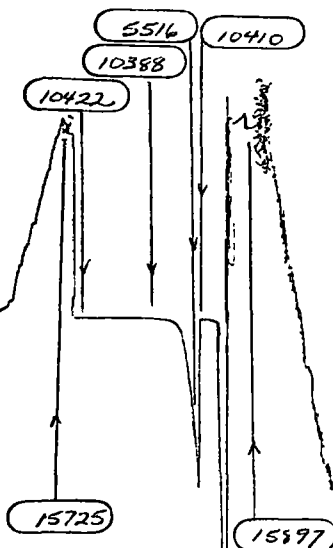
# QUINN TESTERS LTD.

CALGARY, ALBERTA

TEST CHARTS

PHONE 232-1704

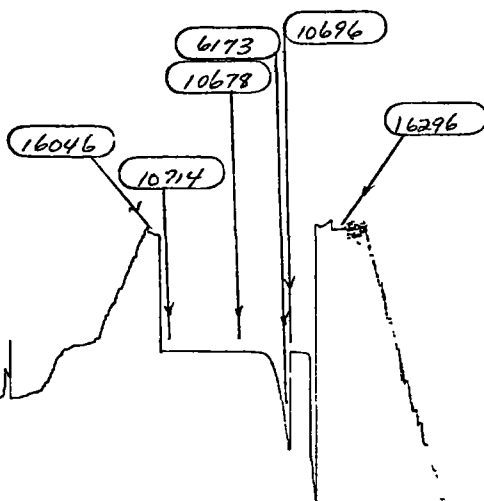
INSIDE RECORDER #14032



INITIAL HYDR. 15897  
 IN PREFLOW 1782  
 F PREFLOW 5102  
 1st SHUT-IN 10410  
 1st IN FLOW 5516  
 1st F FLOW 10388  
 2nd SHUT-IN 10422  
 2nd IN FLOW \_\_\_\_\_  
 2nd F FLOW \_\_\_\_\_  
 3rd SHUT-IN \_\_\_\_\_  
 3rd IN FLOW \_\_\_\_\_  
 3rd F FLOW \_\_\_\_\_  
 4th SHUT-IN \_\_\_\_\_  
 FINAL HYDR 15725

PARAMOUNT HB ET AL CAMERON J-62 DST# 1

OUTSIDE RECORDER #15365



INITIAL HYDR. 16296  
 IN PREFLOW 3520  
 F PREFLOW 5920  
 1st SHUT-IN 10696  
 1st IN FLOW 6173  
 1st F FLOW 10678  
 2nd SHUT-IN 10714  
 2nd IN FLOW \_\_\_\_\_  
 2nd F FLOW \_\_\_\_\_  
 3rd SHUT-IN \_\_\_\_\_  
 3rd IN FLOW \_\_\_\_\_  
 3rd F FLOW \_\_\_\_\_  
 4th SHUT-IN \_\_\_\_\_  
 FINAL HYDR 16046

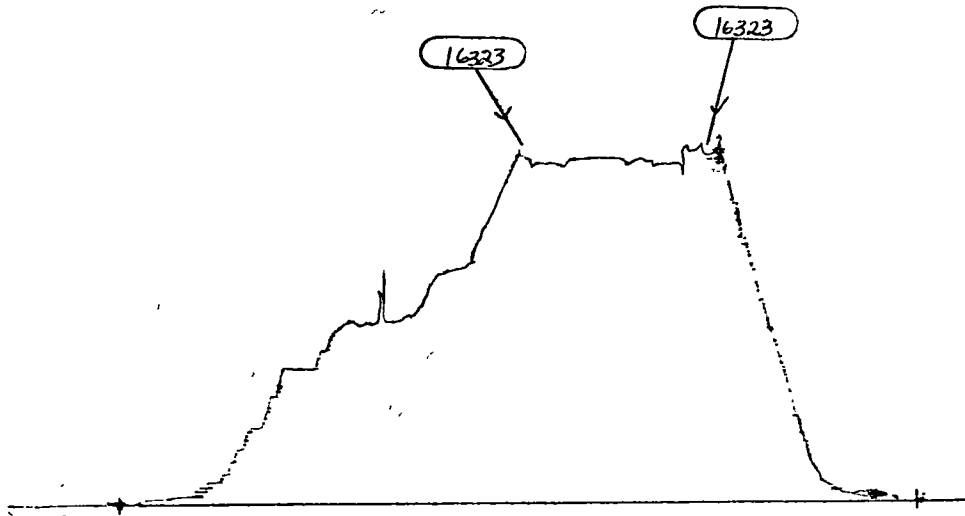
# QUINN TESTERS LTD.

CALGARY, ALBERTA

TEST CHARTS

PHONE 232-1704

OUTSIDE RECORDER #15372



INITIAL HYDR 16323  
IN. PREFLOW \_\_\_\_\_  
F PREFLOW \_\_\_\_\_  
1st SHUT-IN \_\_\_\_\_  
1st IN FLOW \_\_\_\_\_  
1st F FLOW \_\_\_\_\_  
2nd SHUT-IN \_\_\_\_\_  
2nd IN FLOW \_\_\_\_\_  
2nd F FLOW \_\_\_\_\_  
3rd SHUT-IN \_\_\_\_\_  
3rd IN FLOW \_\_\_\_\_  
3rd F FLOW \_\_\_\_\_  
4th SHUT-IN \_\_\_\_\_  
FINAL HYDR 16323

PARAMOUNT HB ET AL CAMERON J-62 DST# 1

INITIAL HYDR \_\_\_\_\_  
IN PREFLOW \_\_\_\_\_  
F. PREFLOW \_\_\_\_\_  
1st SHUT-IN \_\_\_\_\_  
1st IN FLOW \_\_\_\_\_  
1st F. FLOW \_\_\_\_\_  
2nd SHUT-IN \_\_\_\_\_  
2nd IN FLOW \_\_\_\_\_  
2nd F FLOW \_\_\_\_\_  
3rd SHUT-IN \_\_\_\_\_  
3rd IN FLOW \_\_\_\_\_  
3rd F FLOW \_\_\_\_\_  
4th SHUT-IN \_\_\_\_\_  
FINAL HYDR. \_\_\_\_\_

## METRIC CONVERSION TABLE

1 TRADITIONAL UNIT		=		SI UNITS
Depths, Thickness, Elevations	(ft)	=	.304 8	m
Amount of Cushion or Recovery	(ft)	=	.304 8	m
Gauge Depth Temperature	(°F)	=		°C
Casing and Hole Size	(in)	=	25.4	mm
Choke Size	(in)	=	25.4	mm
Drill Pipe and Drill Collar Diameter	(in)	=	25.4	mm
Drill Pipe and Drill Collar Weight	(lbs/ft)	=	1.488 164	kg/m
Hook Loads	(lbs)	=	.444 822	daN
Mud Weight	(ppg)	=	119.826	kg/m <sup>3</sup>
Mud Viscosity	(s/qt)	=	1.056 688	s/L
Pressures	(psi)	=	6.894 757	kPa
Gas Volumes	(MSCF/D)	=	28.173 99	m <sup>3</sup> /day
Oil Volumes	(BPD)	=	.158 987	m <sup>3</sup> /day
Fluid Pressure Gradient	(psi/ft)	=	22.620 593	kPa/m
Flow Capacity	(mD-ft)	=	.304 8	mD.m
Permeability	(mD)	=	1.00	mD
Productivity Index	(bbl/day-psi)	=	.023 059	m <sup>3</sup> / (kPa.d)
	(MSCF/day-psi)	=	4.107 012	m <sup>3</sup> / (kPa.d)
Radius of Investigation	(ft)	=	.304 8	m
Oil Viscosity	(cp)	=	1.00	mPa.s

### STANDARD PRESSURE NOTATION

over 10,000 kPa use MPa

1-10,000 kPa use kPa

under 1 kPa use Pa

(1 kPa = .145 psi)

## QUINN TESTERS LTD.

302, 605 - 7th Street S.W.

CALGARY, ALBERTA

T2P 1Z3

General Office 232-1704

Chart Analysis 232-1708

### BRANCH AND FIELD OFFICES

EDMONTON, ALBERTA	403 - 465-9686
BROOKS, ALBERTA	403 - 362-6543
FORT ST. JOHN, BRITISH COLUMBIA	604 - 785-8071
MANNING, ALBERTA	403 - 836-3221