

Completion Report

January 28, 1981 to January 29, 1981.

1000 - 2330 hours Move rig and camp from 12-26, 13 loads.
All trucks had to be pulled up hill with cat.
Set up camp, etc.

2330 - 0800 hours Wait for day light to do dirt work with cat to
set up rig.
Surface casing bowl flange about 2 to 3 feet
lower than the rest of the lease.

January 29, 1981 to January 30, 1981.

0800 - 1200 hours Spot rig equipment.
Dig flare pit.
Level lease around wellhead.
Received verbal approval from Hal Flanders.
Conservation Engineer in Yellowknife, to proceed
with completion.

1200 - 1700 hours Continue to rig up.
Rained derriek.
Cut off 179 mm casing and install tubing spool.
Pressure test secondary seals to 18960 kPa for
15 minutes. Held ok.

1700 - 2300 hours Put on BOP's.
Change rams over to 73 mm.
Lay pump lines and flare lines.
Change slips, tongues and elevators to 73 mm.
Tally - 180 joints, 73 mm tubing.

2300 - 0600 hours Start in hole with 120.65 mm workover bit and
casing scraper for 139.7 mm, 23.06 kg/m casing
on 73 mm tubing.
Hit ice plug in casing at 14 metres.
Pull out of hole.
Ran steam hose into hole on ice plug for 30 mins.
Pull out steam hose and run bit and casing scraper
on 73 mm tubing to plug back total depth of
1481 - 1475 metres.
Pull up 5 metres.

0600 - 0800 hours Circulate hole clean at 0.5 m³/min. and 4500 kPa
for 45 minutes.
Rig up to pressure test casing and BOP's.

Daily Cost: \$53,795

**includes: tubing, wellhead and rig move
to J-62 well.**

CUM. Cost: \$53,795

Completion Report14:50
TIME

BY

NAME

January 30, 1981 to January 31, 1981.

0800 - 0900 hours Pressure test casing and pipe rams to 15 500 kPa for 15 minutes.
Held ok.

0900 - 1200 hours Pull 73 mm tubing, bit and casing scraper.
Lay down 12 singles.
Stand 71 stands in derrick.

1200 - 1300 hours Wait on McCullough Logging.

1300 - 0800 hours Logging with McCullough.
Calibrated GRN from plug back total depth (1472 - 700 metres).
Cement Bond Log regular pass and pressure pass from plug back total depth (1472 - 700 metres).

DAILY \$ 17,500.00

CUM \$ 71,345.00

January 31, 1981 to February 1, 1981

0800 - 0900 hours Ran junk basket and 117.91 mm gauge ring from surface to plug back total depth on McCullough electric line.
Hole is clear.

0900 - 1000 hours Dwell and McCullough assemble Baker PB-1 packer, tail pipe and setting tool.

1000 - 1200 hours Run in hole with Baker PB-1 packer on electric line.
Set packer at 1375.52 m K.B.
Top of packer at 1375.15 m K.B.
Bottom of tail pipe at 1381.50 m K.B.

1200 - 1530 hours Assemble sliding sleeve and seal assembly on 73 mm tubing.
Found bottom of seal assembly to wrong size.
Had to file out 50.04 mm ID to 60.3 mm ID.

1530 - 1700 hours Run in hole with seal assembly, sliding sleeve and 73 mm tubing.
Tag top of packer at 1375.15 metres.

1700 - 1800 hours Space out tubing using 142 joints and 4 pups.

1800 - 1900 hours Displace annulus to inhibited water.
Continued .5% Newcor 100.
Spot 410 litres of diesel fuel on top.

1900 - 2000 hours Land tubing in packer with 26.70 day compression.
Remove BOP's and install wellhead.

CONT'D..... Paramount HB et al Cameron J-62

Completion Report

January 31, to February 1, 1981.

2000 - 2100 hours	Pressure test annulus to 14 000 kPa for 15 mins. Held ok.
2100 - 2215 hours	Swab out 1.6m ³ water from tubing lowering fluid level to 500 m K.B.
2215 - 0430 hours	Rig up McCullough to perforate. Had two misruns. Perforated interval 1384.5 - 1389.0 m K.B. using 13.7 mm OD through tubing retrievable gun at 13 jet shots per metre. All 60 shots were fired.
0430 - 0500 hours	Rig out McCullough. Shut in tubing pressure - 931 kPa.
0515 hours	Open well up on 12.7 mm choke. Well unloads 2.54m ³ water then gas with water spray.
0615 hours	Well flowing 12.7 mm choke. Flowing tubing pressure - 2070 kPa. Water spray and slight blue color (H ₂ S) Estimated rate - 55.21 10 ³ m ³ /day.
0800 hours	Well flowing on 12.7 mm choke. Flowing tubing pressure - 1965 kPa. Water spray and the odd slug. Estimated rate 52.39 10 ³ m ³ /day. Water level in flare pipe staying even.
	Daily \$25,150.00 CUH \$96,495.00

February 1, 1981 to February 2, 1981.

0815 hours	Cut choke from 12.7 mm to 9.53 mm after 3 hrs. of flow. Flowing tubing pressure - 3103 kPa. Estimated rate - 44.39 10 ³ m ³ /day. Less water spray.
1115 hours	Well flowing on 9.53 mm choke. Flowing tubing pressure - 3103 kPa. Estimated rate - 44.39 10 ³ m ³ /day. Very little water spray.
1400 hours	Well flowing on 9.53 mm choke. Flowing tubing pressure - 3068 kPa. Estimated rate - 43.92 10 ³ m ³ /day. All 12.72m ³ of water in flare pit that displaced from hole is gone. Very little water spray.

CONT'D..... Paramount HB et al Cameron J-62

Completion Report

February 1, 1981 to February 2, 1981

1600 hours	Well flowing on 9.53 mm choke. Flowing tubing pressure - 3060 kPa. Estimated rate - 43.92 $10^3 m^3/day$. Very little water spray. Flowing tubing pressure stable for last 8 hours.
1800 hours	Well flowing on 9.53 mm choke. Flowing tubing pressure - 2896 kPa. Very little water spray.
2000 hours	Same conditions as at 1800 hours.
2015 hours	Shut well in. Flowed total of 15 hours including 12 hours on 9.53 mm choke. Hydrates present in flare line and wellhead gauge.
2045 hours	Shut in tubing pressure - 7860 kPa.
2100 hours	Shut in tubing pressure - 8102 kPa.
2125 hours	Shut in tubing pressure - 8102 kPa.
2200 hours	Shut in tubing pressure - 8102 kPa.
0745 hours	Shut in tubing pressure - 8275 kPa. Release service rig and rig out. Ready for move to Paramount HB et al Cameron K-31 on February 2, 1981.
	Daily \$ 9,350.00 Cum. \$ 105,845.00

D.S.T. RECORD

- DST #1: 1515 - 1529 Keg River
Times 10, 30, 60, 120
Recovered 1090 m. total fluid consisting of
50 m. mud
115 m. sulphur salt water
925 m. gas cut sulphur water (30,400 ppm)
Mud 12,000 ppm

Pressures HP 16148/15714
SIP 10330/10330
FP 5642/10330
- DST #2: 1383 - 1395 Sulphur Point
Times 10, 60, 300, 600
G.T.S. 2 1/2 min. on pre-flow
On V.O. fluid to surface in 2 min.
Fine mist after 4 hours, ppm 25,000
68853 cu.m./day (2.289 MMcf/d)
H2S 400 ppm.
HP 14659/14488
FP 3341/4033 PF 1993
SIP 9531/9531
Rec. 12 m. ammonia water
28 m. sulphurous salt water (26,800 ppm)
- DST #3: 1319 - 1348 Slave Point
Times 10, 60, 60, 120
W.A.B. on pre-flow
On V.O. W.A.B. increasing to strong then decreasing
to dead in 40 min.
Recovered 30 m. inhibited water,
40 m. drilling mud
100 m. mud-cut salt water (28,600 ppm)
HP 14030/13915
FP 1583/1876 PF 1465
SIP 8218/9246
- DST #4: 812 - 835 Twin Falls
Misrun, count not seal packer.



EQ-1925-3

PARAMOUNT RESOURCES LTD.

PARAMOUNT HB ET AL CAMERON J-62

755 751.9

CAMERON

KEG RIVER

QUINN TESTER

TEST TYPE NO 1

1095 M. 50 M DRILLING FLUID, 115 M MUDDY SULPHUROUS WATER
925 M GAS CUT SULPHUROUS WATER.

MULTIPLE RECOVERY ☒ X

SAMPLING POINT 0.305 M ABOVE SIT

TYPE OF PRODUCTION PUMPING FLOWING GAS LIFT SWAB

PRODUCTION RATES

WATER m³/d Oil m³/d GAS 10³ m³/d

SEPARATOR TREATER RESERVOIR SOURCE

GAUGE PRESSURE kPa

TEMPERATURE °C

DATE SAMPLED (Y-M-D) 80/03/07 DATE RECEIVED (Y-M-D) 80/03/14 DATE REPORTED (Y-M-D) 80/03/28 ANALYST A.L.

ION	$\frac{m \cdot V}{g \cdot m^3}$	Mass Fraction	$\frac{c}{mol \cdot m^3}$	ION	$\frac{m \cdot V}{g \cdot m^3}$	Mass Fraction	$\frac{c}{mol \cdot m^3}$
Na	7 729	0.1811	336.21	Cl	21 280	0.4986	600.10
K	6 846	0.1604	175.26	Br			
Ca	2 721	0.0638	67.89	I			
Mg	340	0.0080	13.98	HCO ₃	715	0.0168	11.73
Ba				SO ₄	3 047	0.0713	31.69
Sr				CO ₃	0	0.0000	0.00
Fe	TRACE			OH	0	0.0000	0.00
				H ₂ S	PRESENT		

TOTAL SOLIDS $\frac{m \cdot V}{g \cdot m^3}$

EVAPORATED @ 110°C 54 440

AT 100°C 40 070

ORGANICS: PRESENT

RELATIVE DENSITY 1.029 @ 20°C

REFRACTIVE INDEX 1.3391 @ 20°C

OBSERVED pH 7.6° 21°C

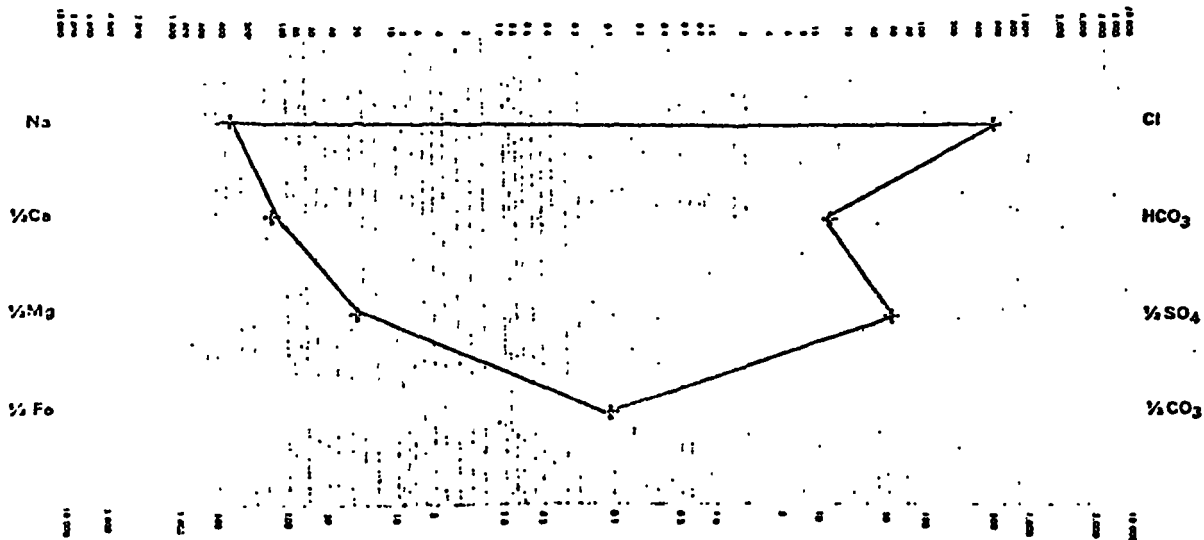
RESISTIVITY (Ω-cm) 0.172 @ 25°C

REMARKS

The sample consists of muddy salt water. The analysis indicates some KO mud filtrate contamination.

continued.....

LOGARITHMIC PATTERN $c/mol \cdot m^3$



PARAMOUNT RESOURCES LTD

LABORATORY REPORT NUMBER: F80-1995

E80-1090-1:

Sample taken from 1090 Above Sit

RESISTIVITY: 0.222 OHM/Meters @ 25°C

Watery mud.

E80-1090-2:

Sample taken from 800 Above Sit

RESISTIVITY: 0.103 OHM/Meters @ 25°C

Muddy water. H₂S Present

GAS ANALYSIS

E80-1996-3

6854

OPERATOR NAME

PARAMOUNT RESOURCES LTD.

WELL NAME

PARAMOUNT H.B. ET AL CAMERON J-62

755. 751.9

SULPHUR POINT

QUINN TESTERS

40 M: 12 AMMONIA WATER, 28 SULPHEROUS SALT WATER.

CAMERON

D.S.T. 2

X

1383 - 1395

BUBBLE HOSE

TYPE OF PRODUCTION

PRODUCTION RATES

WATER	SEPARATOR	TREAT	RESERVOIR	SOURCE	SAMPLED	RECEIVED

TEMPERATURE C

DATE SAMPLED (Y M D)

DATE RECEIVED (Y M D)

DATE REPORTED (Y M D)

ANALYST

OTHER INFORMATION

COMP	MOLE FRACTION	PETROLEUM LIQUID CONTENT
	AIR FREE AS RECEIVED	AIR FREE ACID GAS FREE

H₂ 0.0001 0.0001H₂ 0.0002 0.0002N₂ 0.0226 0.0226CO₂ 0.0000 0.0000H₂S 0.0000 0.0000C₁ 0.9073 0.9073C₂ 0.0590 0.0590C₃ 0.0054 0.0054C₄ 0.0009 0.0009C₅ 0.0021 0.0021C₆ 0.0007 0.0007C₇ 0.0007 0.0007C₈ 0.0008 0.0008C₉ 0.0002 0.0002C₁₀ TRACE TRACE

TOTAL 1.0000 1.0000

MOISTURE AND ACID GAS FREE
MEASURED

GROSS HEATING VALUE MJ/M³
15C AND 101.325 KPa

39.35

DETERMINED
DEW POINTVAPOUR PRESSURE
PENTANES PLUS

88

INSUFFICIENT

RELATIVE DENSITY

PSEUDO CRITICAL PROPERTIES (CALCULATED)

953.1
4618

AS SAMPLED

333
198.7

4618

AND GAS FREE

198.7

H₂S g/m³ 0.00

RELATIVE MOLECULAR MASS

Total Gas

17.6 100.2

C6+ ML/MOL 0.135

GROSS HEATING VALUE AS PER AGA REPORT #5

39.44 MAJ/M³ @ 15C AND 101.325 KPA



CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON FORT ST. JOHN CALGARY



WATER ANALYSIS

LABORATORY NUMBER

E80-1996-1

CONTAINER IDENTITY

LICENCE NUMBER

OPERATOR NAME

PARAMOUNT RESOURCES LTD.

CPANUMBER

WELL NAME

PARAMOUNT H.B. ET AL. CAMERON J-62

755

751

FIELD OR AREA

CAMERON

POOL OR ZONE

SULPHUR POINT

NAME OF SAMPLER

COMPANY

QUINN TESTERS

TEST TYPE

NO

D.S.T.

2

TEST RECOVERY

40 M: 12 AMMONIA WATER, 28 SULPHUROUS SALT WATER.

MULTIPLE
RECOVERY

V H

X

SAMPLING POINT

18 M ABOVE SIT

AMT & TYPE OF CUSHION

MUD RESISTIVITY

Test Interval (metres)

1383 - 1395

Perforations (metres)

TYPE OF PRODUCTION

PUMPING

FLOWING

GAS LIFT

SWAB

PRODUCTION RATES

WATER

m³/d

OIL

m³/d

GAS

10³ m³/d

GAUGE PRESSURE

kPa

SEPARATOR

TREATER

RESERVOIR

SOURCE

SEPARATOR

TREATER

RESERVOIR

SOURCE

TEMPERATURE

°C

DATE SAMPLED (Y/M/D)

80/03/08

DATE RECEIVED (Y/M/D)

80/03/14

DATE REPORTED (Y/M/D)

80/03/31

ANALYST

J.C.

OTHER INFORMATION

ION	$\frac{m \cdot V}{g \cdot m^3}$	Mass Fraction	$\frac{c}{mol \cdot m^3}$	ION	$\frac{m \cdot V}{g \cdot m^3}$	Mass Fraction	$\frac{c}{mol \cdot m^3}$
Na	10 943	0.2934	476.02	Cl	18 660	0.5004	526.21
K	175	0.0047	4.48	Br			
Ca	2 092	0.0561	52.20	I			
Mg	492	0.0132	20.22	HCO ₃	776	0.0208	12.73
Ba				SO ₄	4 154	0.1114	43.20
Sr				CO ₃	0	0.0000	0.00
Fe	TRACE			OH	0	0.0000	0.00
				H ₂ S	NIL		

TOTAL SOLIDS $\frac{m \cdot V}{g \cdot m^3}$

EVAPORATED @ 110°C

42 010

EVAPORATED @ 180°C

CALCULATED

36 850

37 292

ORGANICS: PRESENT

RELATIVE DENSITY

1.026 @ 25°C

REFRACTIVE INDEX

1.3391 @ 25°C

OBSERVED pH

7.4 @ 21°C

RESISTIVITY (Ohm m)

0.244 @ 25°C

REMARKS

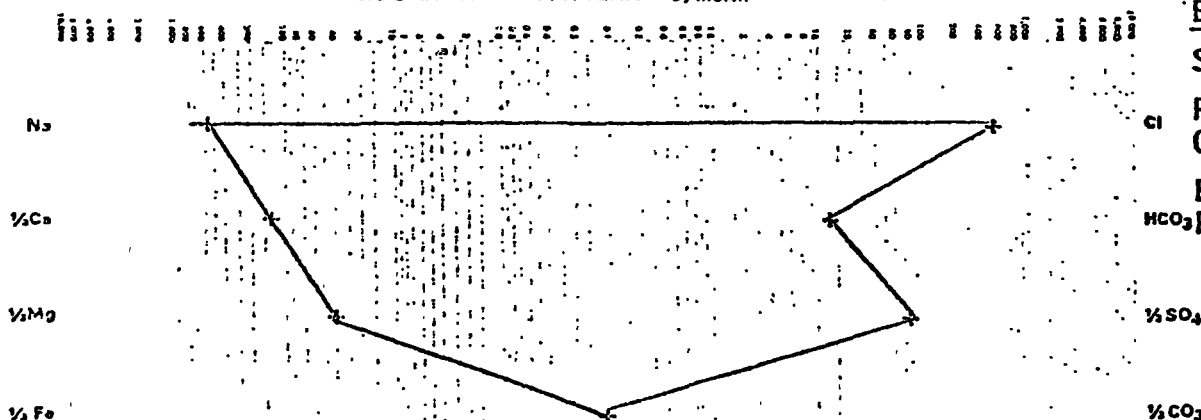
The sample consisted of murky salt water.

E80-1996-2:

SAMPLED FROM 0.305 ABOVE

RESISTIVITY: SI

0.903 Ohm/meters @ 25°C

BLACK MURKY WATER. H₂HCO₃ PRESENT. AMMONIA PRESENTLOGARITHMIC PATTERN $c/mol \cdot m^3$ 

E80-1997-2

PARAMOUNT RESOURCES LTD.

WELL NAME

PARAMOUNT HB ET AL CAMERON J-62

755

751

CAMERON

SLAVE POINT

QUINN TESTERS

TEST TYPE

DST

NO.

3

TEST RECOVERY

170 M: 30 M INHIBITOR WATER, 40 M DRILLING MUD
100 M MUD CUT SALT WATER

MULTIPLE
RECOVERY

Y/N

X

Test Interval (metres)

1319 - 1348

Perforations (metres)

SAMPLING POINT

90 M ABOVE SIT

AMT & TYPE OF CUSHION

MUD RESISTIVITY

TYPE OF PRODUCTION

PUMPING

FLOWING

GAS LIFT

SWAB

PRODUCTION RATES

WATER

m³/d

OIL

m³/d

GAS

10³m³/d

GAUGE PRESSURE

APs

SEPARATOR

TREATER

RESERVOIR

SOURCE

SEPARATOR

TREATER

RESERVOIR

SOURCE

TEMPERATURE

°C

DATE SAMPLED (Y-M-D)

80/03/09

DATE RECEIVED (Y-M-D)

80/03/14

DATE REPORTED (Y-M-D)

80/03/28

ANALYST

A.L.

OTHER INFORMATION

ION	$\frac{m \cdot V}{g \cdot m^3}$	Mass Fraction	$\frac{c}{mol \cdot m^3}$	ION	$\frac{m \cdot V}{g \cdot m^3}$	Mass Fraction	$\frac{c}{mol \cdot m^3}$
Na	1 641	0.0516	71.37	Cl	13 600	0.4276	383.52
K	12 390	0.3896	317.18	Br			
Ca	1 074	0.0338	26.80	I			
Mg	23	0.0007	0.95	HCO ₃	793	0.0249	13.01
Ba				SO ₄	2 284	0.0718	23.76
Sr				CO ₃	0	0.0000	0.00
Fe	NIL			OH	0	0.0000	0.00
				H ₂ S	NIL		

TOTAL SOLIDS $\frac{m \cdot V}{g \cdot m^3}$

EVAPORATED @ 110°C

33 690

AT 100°C

30 650

ORGANICS: MUCH

RELATIVE DENSITY

1.022 @ 20°C

REFRACTIVE INDEX

1.3377 @ 20°C

OBSERVED pH

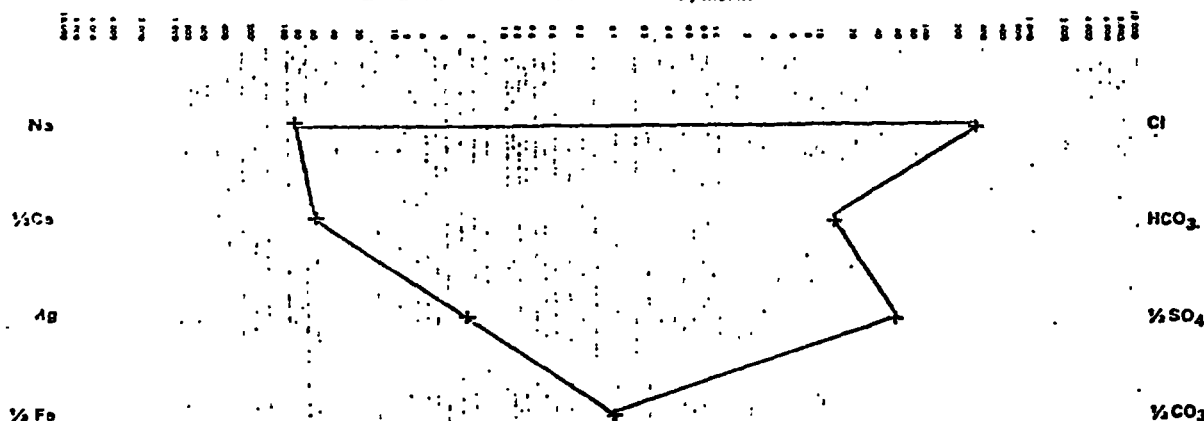
7.5 @ 21°C

RESISTIVITY (Ω·cm)

0.243 @ 21°C

REMARKS

LOGARITHMIC PATTERN $c/mol \cdot m^3$



The analysis was determined on water extracted from mud and is characteristic of a KCl mud filtrate water.

continued...

PARAMOUNT RESOURCES LTD

LABORATORY REPORT NUMBER: E80-1997

E80-1997-1: Sample taken from Top of Fluid

RESISTIVITY OF THE FILTRATE: 0.712 OHM/ Meters @ 25°C

Mud Sample.

E80-1997-3: Sample taken from 0.305 M

RESISTIVITY: 14.02 OHM/Meters @ 25°C

Murky fresh water.

GAS RESERVES SUMMARY

CAMERON HILLS J-62

ZONE	UPSIDE		ESTABLISHED/BEST CURRENT ESTIMATE		
	O.G.I.P. $\times 10^9 \text{ m}^3$	NET PAY m	O.G.I.P. $\times 10^9 \text{ m}^3$	R.F.	MARKETABLE GAS $\times 10^9 \text{ m}^3$
1. SULPHUR POINT		10	.216	.90	.186
2.					
3.					
4.					
TOTAL			.216		.186

COMMENTS:

Date: 80-12-31

GAS RESERVES

Cameron Hills J-62
Sulphur Point Formation

DISCOVERY WELL

Name: Paramount HB et al Cameron J-62
Location: 60° 01' 31" N 117° 26' 50" W
K.B.: 755m
T.D.: 1605m
R.R.: 80-03-11

GEOLOGY

Trap Type:
Stratigraphic-Structural

Reservoir:
Sulphur Point

Other Shows:
None

DEVELOPMENT DATA

Number of wells: 1

Production: Not on Production
as of 80-12-31

RESERVOIR DATA

Type of Gas: Non-associated
Area: 323 ha (Assigned)*
Net Pay: max: 10m avg: 10m
Productive Interval: -222m to -210m
Interface:

AVERAGE RESERVOIR FACTORS

Porosity: 11%
Water Saturation: 35%
Initial Pressure: 9531 kPa
Initial Temperature: 333°K
@ Datum: -216m
Initial Compressibility: -872
Volume G.I.P.: $6.67 \text{ m}^3/\text{m}^3$

GAS RESERVES

O.G.I.P.: $.216 \times 10^9 \text{ m}^3$
R.F.: .90
Marketable Gas: $.186 \times 10^9 \text{ m}^3$

GAS ANALYSIS

Methane: 90.7%
Ethane: 5.9%
Hydrogen Sulphide: 0.00%
Specific Gravity: .608

* pending arrival of additional data
80-12-31

Capped potential gas Tops PARAMOUNT HB & AL

Cameron J-62-60-10-117-15

KB 755

Hay RV	985
BHL	1256
MUSKWA	1291
SLAVE POINT	1310 ¹⁵⁷ - 555
FORT VERMILLION	1346 ✓
WATT MOUNT.	1367
Sulph. Point	1373
MUSKEG	1396
KEG RV	1498
L. HEG RV	1529
CHINCHAGA	1575
P-E	1593

40

323 feet



WELL PARA HB et al CAMERON
STRIP LOG

ELEVATION KB 7.2.80
DATE SPUDDED
SCALE
TECHNICIANS bill M C Aula

W WEIGHT IN kg/m^3
V VISCOSITY
WL WATER LOSS IN CC
FC FILTER CAKE
PH ALKALINITY
 R_m MUD RESISTIVITY IN $\Omega \cdot \text{m} \cdot \text{cm}^2$
 R_{mf} FILTRATE RESISTIVITY IN $\Omega \cdot \text{m} \cdot \text{cm}^2$

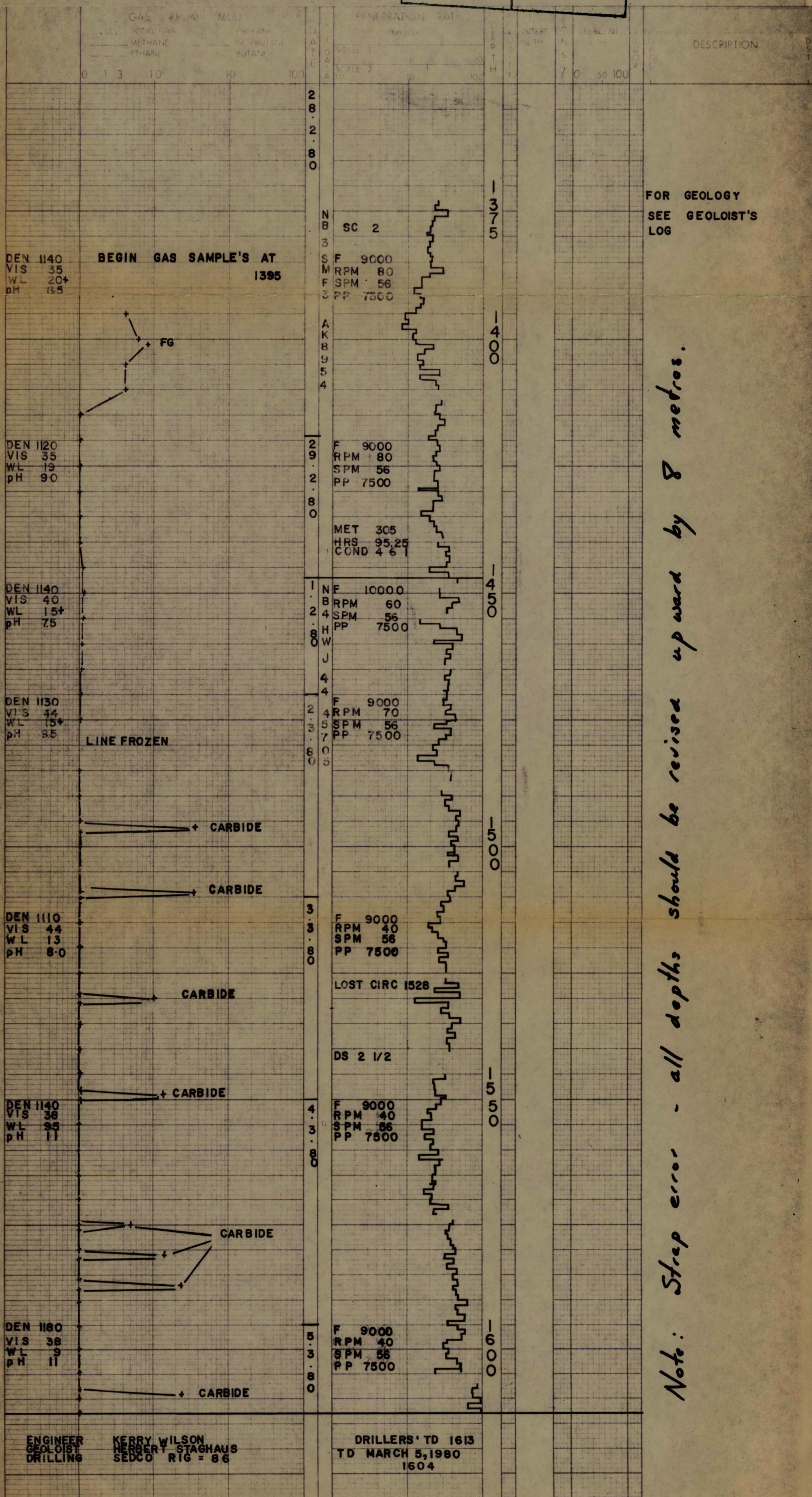
NB NEW A-1
RBB REX A-1
DB DIAMOND A-1
DCB DIAMOND CORE A-1
TB TURBO DRILL
DS DEVIATION SERVICE
W/B WEIGHT ON BIT
RPM ROTATION
PP PUMP PRESSURE
SPM PUMP STROKES
LC LOSS CIRCULATION
NR "RIP" CALL
NP NO RETURNS

[illegible]

CORE NO. _____
 RECOVERY 95%
 DRILLSTEM TEST NO. _____
 DRY
 WATER
 OIL
 GAS

Microfilmed
80-0

Date Released



WELL NAME: - PEAMOUNT Cameron LOCATION: - J-62

FORMATION: - Sulph Pt. R_o - 10

RW @ T°F:
12 @ 60°C

Tests and completion Data

CARBONATE

DST# 2

PARAMOUNT

CAMERON

J-62

DOLOMITE

Depth	$R_{ILD}(R_t)$	Φ_N	EB	Φ_D	Δ_t	Φ_S	LITHOLOGY	Φ_{XPLOT}	R_W	F	R_o	S_W	$\Phi \times S_W$	SP
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1385-86

18

18

86-87

9

87-88

9

88-89

13

89-90

7

90-91

9

91-92

9

92-93

12

93-94

18

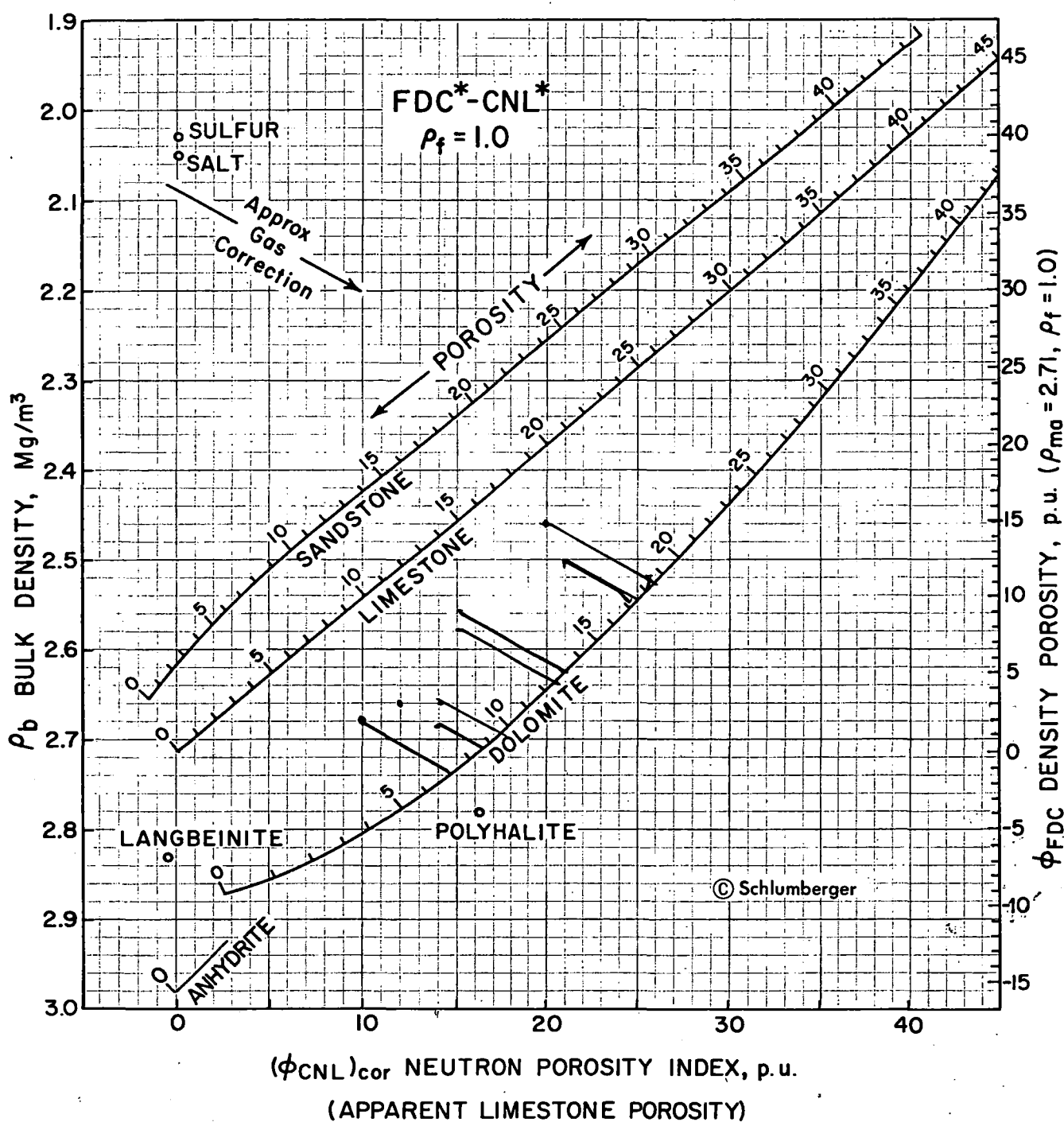
94-95

9

ΔV.

POROSITY AND LITHOLOGY DETERMINATION FROM FORMATION DENSITY LOG AND COMPENSATED NEUTRON LOG (CNL*)

FRESH WATER, LIQUID-FILLED HOLES



*Mark of Schlumberger

CP-1c

Gen

SP

Por

CP

Rxo

Rcor

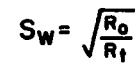
Rint

T_{cor}

Sw

k

M

[illegible]

Sw-1

