



CALGARY

EDMONTON

GRANDE PRAIRIE

WATER ANALYSIS

OTTAWA COPY

CONTAINER IDENTIFICATION

PB#1

OPERATOR NAME

PARAMOUNT RESOURCES LTD.

UNIQUE WELL IDENTIFIER

WELL NAME

ELEVATIONS
KB m GRD m

PARAMOUNT et al SWEDE A-52

697.18

692.60

FIELD OR AREA

POOL OR ZONE

NAME OF SAMPLER

COMPANY

SWEDE

KEG RIVER

B.O.T.

TEST TYPE

NO

TEST RECOVERY

DST

2

1020m

SAMPLING POINT

AMT & TYPE OF CUSHION

MUD RESISTIVITY/ Ω m

BHS

@ 25° C

TEST INTERVAL OR PERFS

1475.0-1486.0
mKB

TYPE OF PRODUCTION

PUMPING

FLOWING

GAS LIFT

SWAB

PRODUCTION RATES

WATER

m³/d

OIL

m³/d

GAS

10³ m³/d

SEPARATOR

TREATER

RESERVOIR

SOURCE

SAMPLED

RECEIVED

GAUGE PRESSURE kPa

TEMPERATURE ° C

DATE SAMPLED (Y-M-D)

DATE RECEIVED (Y-M-D)

DATE REPORTED (Y-M-D)

ANALYST

OTHER INFORMATION

91-02-23

91-03-01

91-03-08

C

20°N 117 30°W

ION	mg/L	MASS FRACTION	mmol/L
Na	3090.0	0.227	134.0
K	50.0	0.004	1.3
Ca	344.0	0.025	8.6
Mg	73.8	0.005	3.0
Ba	N.A.	N.A.	N.A.
Sr	N.A.	N.A.	N.A.
Fe	6.0	TRC*	0.1

ION	mg/L	MASS FRACTION	mmol/L
Cl	2950.0	0.217	83.2
Br	N.A.	N.A.	N.A.
I	N.A.	N.A.	N.A.
HCO ₃	816.0	0.060	13.3
SO ₄	6220.0	0.458	64.8
CO ₃	39.0	0.003	0.7
OH	NIL	NIL	NIL
H ₂ S	N.D.	N.D.	N.D.

DISSOLVED

TOTAL SOLIDS mg/L

EVAPORATED AT 110° C

EVAPORATED AT 180° C

AT IGNITION

CALCULATED

13600.0

RELATIVE DENSITY

REFRACTIVE INDEX

1.006 @ 25° C

N.A. @ 25° C

OBSERVED pH

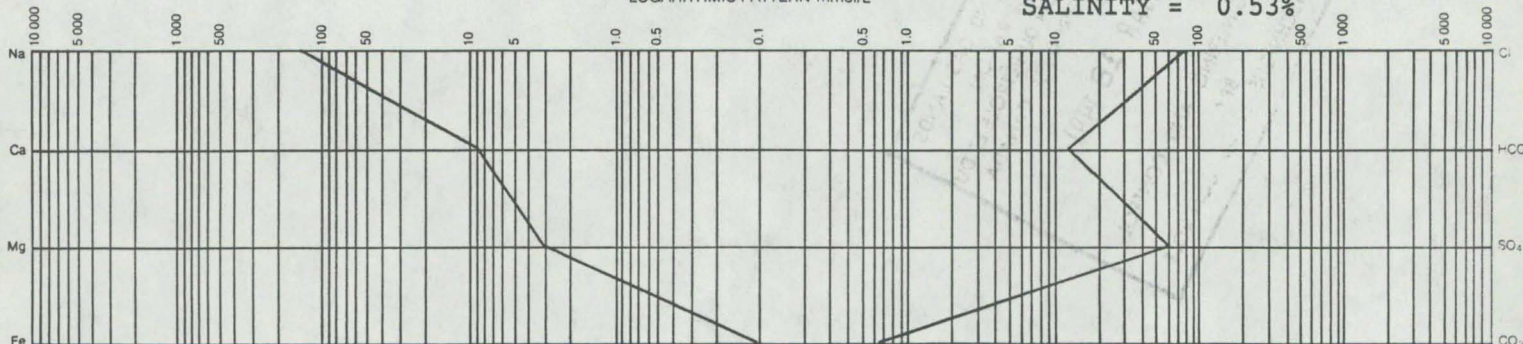
RESISTIVITY/OHM *m

8.35 @ 25° C

0.68 @ 25° C

THE "30 MINUTE" API MUD FIL-
TRATE LOSS IS 10mls. THE
ABOVE RESULTS PERTAIN TO THE
WATER EXTRACTED FROM THE MUD
SALINITY = 0.53%

LOGARITHMIC PATTERN mmol/L



REMARKS:

TRC+= LESS THAN 0.1 N.D.= NOT DETECTED NIL= 0.0 TRC*= LESS THAN 0.001 N.A.= NOT ANALYZED

D.S.T.#2 B.H.S.#Not Indicated O.P. = 1500 kPa Recovery= 2000 ml Water & Gas Spl

CANADA OIL AND GAS LANDS
ADMINISTRATION
ADMINISTRATION DU PÉTROLE ET DU
GAZ DES TERRES DU CANADA
MAR 18 1991
ENGINEERING AND CONTROL
BP+
TECHNIQUE ET DU CONTRÔLE



AGAT Laboratories

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GAS ANALYSIS

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WELL NAME

KB m ELEVATIONS

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PARAMOUNT et al SWEDE A-52

697.18

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FIELD OR AREA

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NAME OF SAMPLER

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TEST TYPE

NO

TEST RECOVERY

DST

2

TEST INTERVAL OR PERFS

1475.0-1486.0

mKB

SAMPLING POINT

BHS

SEPARATOR

TREATER

RESERVOIR

SOURCE

SAMPLED

RECEIVED

GAUGE PRESSURE kPa

TEMPERATURE °C

1500

1500

210

24

DATE SAMPLED (Y-M-D)

DATE RECEIVED (Y-M-D)

DATE REPORTED (Y-M-D)

ANALYST

OTHER INFORMATION

91-02-23

91-03-01

91-03-11

LS

20°N 117 30' W

COMP.	MOLE FRACTION		PETROLEUM LIQUID CONTENT mL · m ⁻³
	AIR FREE AS RECEIVED	AIR FREE ACID GAS FREE	
H ₂	0.0014	0.0014	
He	0.0010	0.0010	
N ₂	0.0611	0.0614	
CO ₂	0.0055	0.0000	
H ₂ S	0.0000	0.0000	
C ₁	0.9005	0.9056	
C ₂	0.0137	0.0138	
C ₃	0.0081	0.0081	29.8
IC ₄	0.0014	0.0014	6.2
NC ₄	0.0031	0.0031	13.1
IC ₅	0.0010	0.0010	5.0
NC ₅	0.0010	0.0010	4.9
C ₆	0.0010	0.0010	5.4
C ₇ +	0.0012	0.0012	7.5
C ₈			
C ₉			
C ₁₀ +			
TOTAL	1.0000	1.0000	71.9

GROSS HEATING VALUE MJ·m⁻³
15° C AND 101.325 kPa

MOISTURE AND ACID GAS FREE

MEASURED

CALCULATED

DETERMINED DEW POINT

VAPOUR PRESSURE PENTANES PLUS

37.20

°C

70.9 kPa

ACTUAL GROSS HEATING VALUE: 36.99

-----RELATIVE DENSITY-----

MOISTURE FREE AS SAMPLED

MOISTURE AND ACID GAS FREE

MEASURED

CALCULATED

MEASURED

CALCULATED

0.614

0.609

-----PSEUDO CRITICAL PROPERTIES (CALCULATED)-----

AS SAMPLED

ACID GAS FREE

pPc (abs)

pTc

pPc (abs)

pTc

4528 kPa

192.2 K

4512 kPa

191.6 K

-----RELATIVE MOLECULAR MASS-----

TOTAL GAS

C₇+

17.8

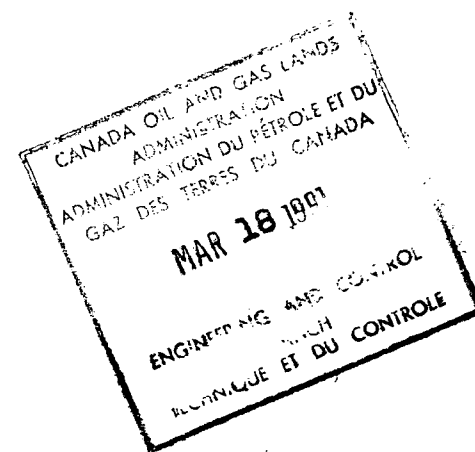
104.4

H₂S g/m³

0.00

REMARKS:

EXCEED NORMAL LIMITS : N2





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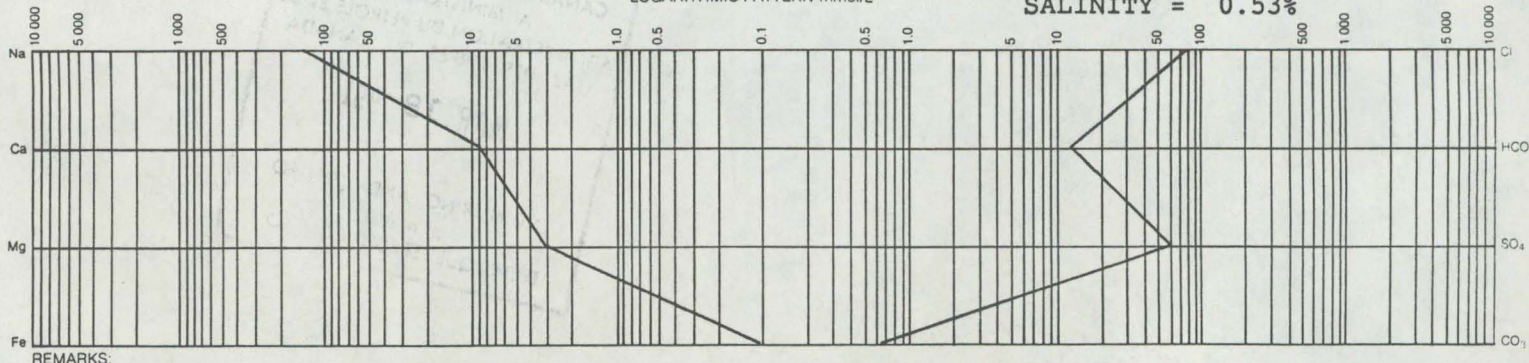
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