



**PARAMOUNT RESOURCES LTD.****DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-03-20-08:00**  
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT ET AL NETLA**LOCATION **M23****OPERATIONS DETAIL:**

COUGAR TOOL: 6 DAYS -75.00- + CUTTER CHARGE.

DUCHARME WELLSITE UNIT SENT BACK BY DUCHARME TRUCK - 1ST AID UNIT.

COOPER BARGDEN WELLSITE UNIT SENT IN TO F NELSON BY DUCHARME TRUCK.

AT APPROX. 22.30 19-03-98. 48 1/4 HRS AFTER CEMENTING SURF WELL STARTED TO  
FLOW FRESH WATER EST.100 M3. PR HR. BETWEEN SURF CSG & COND.PIPE  
CEMENTED WITH 80 FT OF 1 " STINGER PIPE BY SANJEL WITH 4 TONNS G + 3% CACL2.3-CEL  
SEAL FLOW STOPPED FOR A SHORT TIME BUT STARTED AGAIN BEFOR A PLATE COULD BE  
WELDED ON. WILL TRY AGAIN WHEN MORE CEMENT GETS ON LOC :SANJEL WILL BRING  
OUT 10 TONNS G + 3% CACL2. & 3 TONNS OF QUICK SET CEMENT.  
WILL BE ON LOC : APPROX 14:00-16:00.

14:00-19-03-98 +12 DAY TIME TEMP.

**WANT LIST:**WEATHER: **-8**ROAD: **GOOD NIGHT COND.****IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

Mon Day-Time

HRS OB

**PARAMOUNT RESOURCES LTD.****DAILY DRILLING REPORT (page 2)**

FOR 24 HR PERIOD ENDING 98-03-19-08:00

Yr Mon Day Time

WELL NAME PARAMOUNT ET AL NETLA

LOCATION M23

## OPERATIONS DETAIL:

08:00-12:00 LAY DOWN DIVERTER SYST. (B.O.P.) CUT COND &amp; SURF CSG. CAP SURF CSG.

12:00-24:00 RIG OUT.

00:00-08:00 RIG OUT.

SENT ALL CAN AIR DRILLING EQPT TO EDM BY BOREK 6 LOADS. + 2 WILLIAMS ROTATING HEADS WITH RELATED EQUIP. ALL ON 6 BOREK TRUCKS.

MOVED 1-400 BBL TANK TO STORE CUTTER D IN @ FORT LEARD.

RELEASED ONE WATER TRUCK.

RIG RELEASED @ 12:00 19-03-98.

SENT LYKAL PRE-MIX TANK BY LYKAL TO RED DEER.

CUT OFF ON PASON 19-03-98. EQUIP. REMOVED.

DRILLING MUD LOADED ON HIGH BOY, & MUD VAN TO FORT ST JOHN BY FORMULA TRANS  
HUSKY CLEANING MUD TANKS VACTRUCK, STREEPER REMOVED CAN RIG TOP DRIVE  
FROM THE DERRICK

HUSKY TO HAUL CUTTER D TO FORT LEARD.

STREEPER HAULED EXTRA SLEEPER TO BEAVERS YARD @ FORT LEARD.

14:00-18-03-98 +10 DAY TIME TEMP.

## WANT LIST:

WEATHER: -1

ROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE &amp; RENTAL ITEMS (WHERE, WHEN, HOW)

DRL-RPY.148

..... **FAX** .....

**PARAMOUNT RESOURCES LTD.**

4000, 350 - 7th Avenue S.W.  
Calgary, Alberta  
T2P 3W5

Main Fax Number: (403) 262-7994

Drilling Department Fax Number: (403) 266-6032

**PLEASE DELIVER THE FOLLOWING PAGES TO:**

NAME: Ed Royken / Rubal Birgman  
FAX NO.: \_\_\_\_\_  
FIRM: NEB  
DATE: March 18, 98  
FROM: D. Carrico

TOTAL NUMBER OF PAGES 3 INCLUDING COVER PAGE.

**DESCRIPTION OF DATA:**

This report for M23 is  
today's report. We are still  
missing a report for March  
18<sup>th</sup>. I will fax it to you  
as soon as we receive  
it.

IF THERE ARE ANY PROBLEMS, PLEASE CALL (403) 266-2047.

**PARAMOUNT RESOURCES LTD.****DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-03-17-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al NETLA**LOCATION **M23**Day **11**Depth **500**

Metres last 24 hr

HRS OB

Activity at report time **CIRC COND HOLE TO RUN CSG.****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt 1270 Vis 130 WL Gels Solids PV YP pH 9  
 Oil % Sand S Cake PPMCL PPMCa

**BIT RECORD**

| BIT NO. | SIZE mm | MAKE & TYPE | SER. NO. | BIT  |        | DEPTH OUT m | m DRLD TODAY | CUM m. DRLD | Rot hrs TODAY | CUM. Rot hr | m/hr | Dull Cond. |   |   |
|---------|---------|-------------|----------|------|--------|-------------|--------------|-------------|---------------|-------------|------|------------|---|---|
|         |         |             |          | WT   | RPM    |             |              |             |               |             |      | T          | B | G |
| 3ARR    | 444     | RTMS51AM    | U70131   | 8/12 | 80-120 |             | 100          | 500         | 17.75         | 63.5        | 7.87 | R          | N | G |

**CIRCULATION RECORD**

| BIT NO. | JETS - mm |    |    | PUMP   |       |       |                     | ANN VEL. |    | JET VEL. | HHP | SURF. PRESS. kPa |
|---------|-----------|----|----|--------|-------|-------|---------------------|----------|----|----------|-----|------------------|
|         | 1         | 2  | 3  | STROKE | SPM   | LINER | m <sup>3</sup> /MIN | DP       | DC |          |     |                  |
| 3ARR    | 23        | 23 | 23 | 254    | 110*2 | 152   | 3                   | 49       | 89 |          |     | 8900             |

**DEVIATION SURVEYS**

|        |        |
|--------|--------|
| ° at m | ° at m |
| ° at m | ° at m |
| ° at m | ° at m |
| ° at m | ° at m |

**MUD & CHEMICALS ADDED**

GELL 41  
 CAUSTIC 1  
 BARITE 25

**BOTTOM HOLE ASSEMBLY**

| TOOL                | ID mm | OD mm | LENGTH m | WEIGHT daN |
|---------------------|-------|-------|----------|------------|
| BIT                 |       | 444   | 0.45     |            |
| XO                  |       |       |          |            |
| 6 DC                |       | 222   | 54.3     | 14624      |
| XO                  |       |       | 0.78     |            |
| JARS                |       |       | 4.93     |            |
| 18DC                |       | 171   | 162.7    | 16270      |
| XO                  |       |       | 0.82     |            |
| <b>TOTAL LENGTH</b> |       |       | 224.1    | 30894      |

**TIME ANALYSIS**

| OPERATION                      |  |  |  | TODAY | CUM. |
|--------------------------------|--|--|--|-------|------|
| 1. Drilling                    |  |  |  |       |      |
| 2. Trips                       |  |  |  | 12.00 |      |
| 3. Rig Service                 |  |  |  | 0.50  |      |
| 4. Deviation Surveys           |  |  |  |       |      |
| 5. Room & Cond. Hole           |  |  |  | 4.00  |      |
| 6. Mix & Cond. Mud             |  |  |  |       |      |
| 7. Circulation                 |  |  |  | 2.00  |      |
| 8. Rig Repair                  |  |  |  |       |      |
| 9. Run Casing & Cement         |  |  |  |       |      |
| 10. Slip and Cut Drilling Line |  |  |  |       |      |
| 11. Logging                    |  |  |  | 5.00  |      |
| 12. Rig up / tearout Loggers   |  |  |  |       |      |
| 13. Work Stuck Casing          |  |  |  |       |      |
| 14. Rig to & Set Liner Hanger  |  |  |  |       |      |
| 15. Spot LCM Pill              |  |  |  |       |      |
| 16. Drilling Out               |  |  |  |       |      |
| 17. B.O.P. DRILL               |  |  |  |       |      |
| 18. MONITOR WELL               |  |  |  |       |      |
| 19. CIRC. AND MUD UP           |  |  |  |       |      |
| 20. HANDEL TOOLS               |  |  |  | 0.50  |      |
| 21. WAIT ON LOGGERS            |  |  |  |       |      |
| <b>TOTAL</b>                   |  |  |  | 24.00 |      |

**COSTS**

DAILY COR. \$57,585  
 CUMULATIVE \$1,077,639  
 GR ELEV. 279 K.B. 285.7

SUPERVISOR **ROD MacEACHERN**  
 1-403-210-0371

DRL-RPT.12A

**PARAMOUNT RESOURCES LTD.****DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-03-17-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT ET AL NETLA**LOCATION **M23****OPERATIONS DETAIL:**

08:00- 10:30- TRIP OUT ON CLEAN OUT TRIP . TIGHT HOLE.

10:30-11:00 CLEAN &amp; INSPECT BIT &amp; NEAR BIT REAMER.

11:00-12:30 RUN IN HOLE TO 440M .

12:30-16:00 CIRC &amp; REAM FM:440 TO 500M.

16:00-16:30 CIRC.

16:30-19:00 WIPER TRIP 10 STD.

19:00-19:30 CLEAN TO BOTTOM 470 TO 500M.

19:30-21:00 CIRC &amp; COND TO LOG.

21:00-23:45 HOIST TO LOG.

23:45-24:00 RIG SERV.

00:00-05:00 RIG TO &amp; LOG WITH SCHLUMBERGER=RUN P-EXPRESS W/ AIT-H

BHCS-GR , CNLLDT.

05:00-08:00 RUN IN CLEAN OUT TRIP CIRC TO COND TO RUN CSG.

BOTTOM HOLE TEMP @ 500M IS 51C.

500 M TD. ON LOGS.

,+4 DEG C @ 16:00-16-03-98. DAY TIME TEMP.

**WANT LIST:**WEATHER: **-17**ROAD: **GOOD WINTER COND.****IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

Wellname : Paramount et al Netla M21  
 Location : Lat 60 50' Long 123 00'  
 Date : 03-17-98  
 Contact : Paul Collens

## AM REPORT

Depth @ 0800hrs: 500m      24 hr Progress: 0m  
 Rotating hrs:

Present operations: circ and condition to run casing

ROP:      m/hr  
 Drill fluid: gelchem dens: 1270      Vis: 100 WL:      pH: 9.5

## Surveys:

FORMATION TOPS      KB: 279.6M  
 Formation      Prognosis      Sample      Subsea

|              |      |      |
|--------------|------|------|
| Cret Scatter | 211m | 247m |
| Cret Garbutt | 249m | 290m |
| Miss Banff   | 417m |      |
| Miss Exshaw  | 519m | 487m |

## SHOW SUMMARY:

| Formation | Interval | Gas show/BOG | Lith/por/shows/remarks |
|-----------|----------|--------------|------------------------|
| n/a       |          |              |                        |

Remarks: Log sfc hole (500m-22m) CNE-LDT, AII-SP, BHCS-CR;  
 RIH to circ and condition hole to run casing.

Geologist: D. Ferguson  
 Phone: 210-0371

# DAILY DRILLING REPORT

Yr - Mon - Day - Time

**LOCATION M23**

HRS OB 17.75

D 2 M 444MM

|                    |                   |                 |                   |                     |                 |                    |               |
|--------------------|-------------------|-----------------|-------------------|---------------------|-----------------|--------------------|---------------|
| <b>Wt</b> 1240     | <b>Vis</b> 150    | <b>WL</b> _____ | <b>Gels</b> _____ | <b>Solids</b> _____ | <b>PV</b> _____ | <b>YP</b> _____    | <b>pH</b> 9.5 |
| <b>Oil</b> _____ % | <b>Sand</b> _____ | <b>S</b> _____  | <b>Cake</b> _____ | <b>PPMCL</b> _____  |                 | <b>PPMca</b> _____ |               |

| BIT NO. | SIZE mm | MAKE & TYPE | SER. NO. | BIT  |        | DEPTH OUT m | m DRLLD TODAY | CUM m. DRLLD | Rot hrs TODAY | CUM. Rot hr | m/hr | Dull Cond. |   |   |
|---------|---------|-------------|----------|------|--------|-------------|---------------|--------------|---------------|-------------|------|------------|---|---|
|         |         |             |          | WT   | RPM    |             |               |              |               |             |      | T          | B | G |
| 3ARR    | 444     | RTMS51AM    | U70131   | 8/12 | 80-120 |             | 100           | 500          | 17.75         | 63.5        | 7.87 | R          | N | G |
| 5A      | 311     | RDHP51H     | FD1963   | 5/7  | 150    | 498         | 78            | 375          | 16.50         | 59.00       | 6.35 | 4          | 4 | O |

[illegible]

|         |            |         |            |           |
|---------|------------|---------|------------|-----------|
| _____ ° | at _____ m | _____ ° | at _____ m | GELL 15   |
| _____ ° | at _____ m | _____ ° | at _____ m | CAUSTIC 2 |
| _____ ° | at _____ m | _____ ° | at _____ m |           |
| _____ ° | at _____ m | _____ ° | at _____ m |           |

| TOOL         | ID<br>mm | OD<br>mm | LENGTH<br>m | WEIGHT<br>daN | OPERATION                      | TODAY | CUM. |
|--------------|----------|----------|-------------|---------------|--------------------------------|-------|------|
|              |          |          |             |               |                                |       |      |
| BIT          |          | 444      | 0.45        |               | 2. Trips                       | 1.25  |      |
| 1-NBRR       |          | 444      | 1.85        |               | 3. Rig Service                 | 0.50  |      |
| 6 DC         |          | 222      | 54.3        | 14624         | 4. Deviation Surveys           |       |      |
| XO           |          |          | 0.78        |               | 5. Ream & Cond. Hole           | 17.75 |      |
| JARS         |          |          | 4.93        |               | 6. Mix & Cond. Mud             |       |      |
| 18DC.        |          | 171      | 162.7       | 16270         | 7. Circulation                 |       |      |
| XO           |          |          | 0.82        |               | 8. Rig Repair                  | 0.50  |      |
|              |          |          |             |               | 9. Run Casing & Cement         |       |      |
|              |          |          |             |               | 10. Slip and Cut Drilling Line |       |      |
|              |          |          |             |               | 11. Logging                    |       |      |
|              |          |          |             |               | 12. Rig up / tearout Loggers   |       |      |
|              |          |          |             |               | 13. Work Stuck Casing          |       |      |
| TOTAL LENGTH |          |          | 225.9       | 30894         | 14. Rig to & Set Liner Hanger  |       |      |

|                    |                |             |       |                            |              |  |
|--------------------|----------------|-------------|-------|----------------------------|--------------|--|
| <b>DAILY</b>       | COR.           | \$29,184    |       | 17. B.O.P. DRILL           |              |  |
| <b>CUMMULATIVE</b> |                | \$1,020,053 |       | 18. MONITOR WELL           | 2.25         |  |
| GR ELEV.           | 279            | K.B.        | 285.7 | 19. CIRC. AND MUD UP       |              |  |
|                    |                |             |       | 20. MONITOR WELL FOR LOSES |              |  |
| <b>SUPERVISOR</b>  | ROD MacEACHERN |             |       | 21. WAIT ON LOGGERS        |              |  |
|                    | 1-403-210-0371 |             |       | <b>TOTAL</b>               | <b>24.00</b> |  |

**PARAMOUNT RESOURCES LTD.****DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING 98-03-16-08:00  
Yr - Mon - Day - TimeWELL NAME PARAMOUNT ET AL NETLALOCATION M23**OPERATIONS DETAIL:**

08:00-11:45 REAM 311MM PILOT HOLE TO 444MM SURF HOLE FM:352M TO 422M.

11.45-12:00 RIG SERV.

12:00-23:45 REAM 311MM PILOT HOLE TO 444MM SURF HOLE FM:442M TO 483 M

23:45-24:00 RIG SERV.

00:00-02:15 REAM 311MM PILOT HOLE TO 444MM SURF HOLE FM: 483 M TO 498M

02:15-04:00 DRILL 444MM SURF HOLE FM: 498 TO 500M KB.

04:00- 04:30 REPAIR MUD PUMP #1

04:30-06:45 GAS INFLUX, MONITOR WELL ,FLOW CHECKS

06:45-08:00 WIPER TRIP TO LOG.

AFTER DRILLING FROM 498M TO 500M ,WITH BOTTOMS UP 1.4 TOTAL GAS READING WAS RECORDED ON THE PASON UNIT & A SLIGHT FLOW INCREASE, DRILLING WAS STOPPED FLOW DIVERETED TO TRIP TANK AND WELL MONITORED FOR FLOW 15MINS NO FLOW AFTER DRILLING MUD STABILIZED.

WHEN CIRC WAS RESUMED ,A GAS SHOW WAS RECORDED ON THE PASON UNIT WITH BOTTOMS UP. T.D. WAS CALLED @ 500.7M FOR SURF.

WIPER TRIPPING TO COND HOLE TO LOG .

LOGGERS WILL BE ON LOC. @ APP 12:00. FM FORT NELSON.

,+3- 14:00-15-03-98 DAY TIME TEMP.

WANT LIST: \_\_\_\_\_

WEATHER: -13ROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE &amp; RENTAL ITEMS (WHERE, WHEN, HOW)

Wellname : Paramount et al Netia M21  
 Location : Lat 60 50' Long 123 00'  
 Date : 03-16-98  
 Contact : Paul Collens

## AM REPORT

DFS:

Depth @ 0800hrs: 500.7m 24 hr Progress: 2.7m  
 Rotating hrs:

Present operations: condition and trip for logs

ROP: m/hr  
 Drill fluid: gel chem Dens: 1240 Vis: 150 WL: pH:

Surveys:

FORMATION TOPS KR:279.8M  
 Formation Prognosis Sample Subsea

|              |      |        |
|--------------|------|--------|
| Cret Scatter | 211m | 247m   |
| Cret Garbutt | 249m | 290m   |
| Miss Banff   | 417m | 485m ? |

## SHOW SUMMARY:

| Formation | Interval  | Gas show/BGG    | Lith/por/shows/remarks                                                                |
|-----------|-----------|-----------------|---------------------------------------------------------------------------------------|
| Banff     | 498-500.7 | 120-140 / 27BGG | SH- dk gy brn, sfis<br>tr pyr, petrolif ip,<br>yel wh C ip, tr LS<br>frags (cavings?) |

Remarks: ream pilot hole to 498m; made new 411mm hole to 500.7m  
 with lazy increase in gas show to 120 units; flow check with  
 small flow in annulus and 180 unit gas show; TD surface hole  
 at 500.7m; Schlumberger alerted at 0500 hrs; expect to be on  
 location at 1000 hrs to log sfc hole.

Geologist: D.Ferguson  
 Phone: 210-0371

**PARAMOUNT RESOURCES LTD.****DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-03-15-08:00**  
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT et al NETLA**LOCATION **M23**Day **10**Depth **400 REAM**Metres last 24 hr **160**HRS OB **23.50**Activity at report time **REAM 311MM PILOT HOLE TO 444MM SURF HOLE.****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt 1250 Vis 240 WL Gels Solids PV YP pH 9.5  
 Oil % Sand S Cake PPMCL PPMCa

**BIT RECORD**

| BIT NO. | SIZE mm | MAKE & TYPE | SER. NO. | BIT  |        | DEPTH OUT m | m DRLD TODAY | CUM m. DRLD | Rot hrs TODAY | CUM. Rot hr | m/hr | Dull Cond. |   |   |
|---------|---------|-------------|----------|------|--------|-------------|--------------|-------------|---------------|-------------|------|------------|---|---|
|         |         |             |          | WT   | RPM    |             |              |             |               |             |      | T          | B | G |
| 3ARR    | 444     | RTMS51AM    | U70131   | 8/12 | 80-120 |             | 160          | 400         | 23.5          | 45.75       | 8.74 | R          | N | G |
| 5A      | 311     | RDHP51H     | FD1963   | 5/7  | 150    | 498         | 78           | 375         | 16.50         | 59.00       | 6.35 | 4          | 4 | O |

**CIRCULATION RECORD**

| BIT NO. | JETS - mm |    |    | PUMP   |       |       |                     | ANN. VEL. |    | JET VEL. | HHP | SURF. PRESS. kPa |
|---------|-----------|----|----|--------|-------|-------|---------------------|-----------|----|----------|-----|------------------|
|         | 1         | 2  | 3  | STROKE | SPM   | LINER | m <sup>3</sup> /MIN | DP        | DC |          |     |                  |
| 3ARR    | 23        | 23 | 23 | 254    | 110*2 | 152   | 3                   | 49        | 89 |          |     | 9100             |
| 5A      | 19        | 19 | 19 | 254    | 110*3 | 152   | 3.08                | 49        | 89 |          |     | 9700             |

**DEVIATION SURVEYS**

|        |        |
|--------|--------|
| ° at m | ° at m |
| ° at m | ° at m |
| ° at m | ° at m |
| ° at m | ° at m |

**MUD & CHEMICALS ADDED**

GELL 36  
 CAUSTIC 1  
 S.A.P.P. 1  
 DETERGENT 1

**BOTTOM HOLE ASSEMBLY**

| TOOL                | ID mm | OD mm | LENGTH m | WEIGHT daN |
|---------------------|-------|-------|----------|------------|
| BIT                 |       | 444   | 0.45     |            |
| 1-NBRR              |       | 444   | 1.85     |            |
| 6 DC                |       | 222   | 54.3     | 14624      |
| XO                  |       |       | 0.78     |            |
| JARS                |       |       | 4.93     |            |
| 18DC                |       | 171   | 162.7    | 16270      |
| XO                  |       |       | 0.82     |            |
| <b>TOTAL LENGTH</b> |       |       | 225.9    | 30894      |

**TIME ANALYSIS**

| OPERATION                      |  |  |  | TODAY        | CUM. |
|--------------------------------|--|--|--|--------------|------|
| 1. Drilling                    |  |  |  |              |      |
| 2. Trips                       |  |  |  |              |      |
| 3. Rig Service                 |  |  |  | 0.50         |      |
| 4. Deviation Surveys           |  |  |  |              |      |
| 5. Ream & Cond. Hole           |  |  |  | 23.50        |      |
| 6. Mix & Cond. Mud             |  |  |  |              |      |
| 7. Circulation                 |  |  |  |              |      |
| 8. Rig Repair                  |  |  |  |              |      |
| 9. Run Casing & Cement         |  |  |  |              |      |
| 10. Slip and Cut Drilling Line |  |  |  |              |      |
| 11. Logging                    |  |  |  |              |      |
| 12. Rig up / tearout Loggers   |  |  |  |              |      |
| 13. Work Stuck Casing          |  |  |  |              |      |
| 14. Rig to & Set Liner Hanger  |  |  |  |              |      |
| 15. Spot LCM Pill              |  |  |  |              |      |
| 16. Drilling Out               |  |  |  |              |      |
| 17. B.O.P. DRILL               |  |  |  |              |      |
| 18. SHUT IN MONITOR WELL       |  |  |  |              |      |
| 19. CIRC. AND MUD UP           |  |  |  |              |      |
| 20. MONITOR WELL FOR LOSSES    |  |  |  |              |      |
| 21. WAIT ON LOGGERS            |  |  |  |              |      |
| <b>TOTAL</b>                   |  |  |  | <b>24.00</b> |      |

**COSTS**

DAILY \$48,497

CUMMULATIVE \$1,019,498

GR ELEV. 279 K.B. 285.7

SUPERVISOR **ROD MacEACHERN**  
 1-403-210-0371

**PARAMOUNT RESOURCES LTD.****DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING 98-03-15-08:00  
Yr - Mon - Day - TimeWELL NAME PARAMOUNT ET AL NETLALOCATION M23**OPERATIONS DETAIL:**

08:00-11:45 REAM 311MM PILOT HOLE TO 444MM SURF HOLE, FM: 227 TO 257M KB.

11:45-12:00 RIG SERV.

12:00-23:45 REAM 311MM PILOT HOLE TO 444MM SURF HOLE, FM: 257 TO 352M KB.

23:45-24:00 RIG SERV.

00:00-08:00 REAM 311MM PILOT HOLE TO 444MM SURF HOLE, FM: 352 TO 400M KB.

WANT LIST: \_\_\_\_\_

WEATHER: -17ROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE &amp; RENTAL ITEMS (WHERE, WHEN, HOW)

Wellname : Paramount et al Netla M23  
Location : Lat 60 50' Long 123 00'  
Date : 03-15-98  
Contact : Paul Collens

AM REPORT  
DFS: 10

Depth @ 0800hrs: 400m      24 hr Progress: 160m reaming  
Rotating hrs: 23.5

Present operations: reaming at 400m

ROP:      m/hr  
Drill fluid: gelchem    Dens:1250    Vis:240    WL:      pH: 9.5

Surveys:

FORMATION TOPS      KB:279.8M  
Formation      Prognosis      Sample      Subsea

|              |      |        |  |
|--------------|------|--------|--|
| Cret Scatter | 211m | 247m   |  |
| Cret Garbutt | 249m | 290m   |  |
| Miss Banff   | 417m | 485m ? |  |

SHOW SUMMARY:

| Formation | Interval | Gas show/BOG | Lith/por/shows/remarks |
|-----------|----------|--------------|------------------------|
| reaming   | 240-400m | avg 10-20BOG |                        |

Remarks:

Geologist: D.Ferguson  
Phone: 210-0371

# DAILY DRILLING REPORT

Yr - Mon - Day - Time

LOCATION M23

HRS OB 22.25

**Activity at report time** REAM 311MM PILOT HOLE TO 444MM SURF HOLE.

|     |      |     |      |    |  |      |  |        |  |    |  |       |  |    |     |
|-----|------|-----|------|----|--|------|--|--------|--|----|--|-------|--|----|-----|
| Wt  | 1195 | Vis | 140  | WL |  | Gels |  | Solids |  | PV |  | YP    |  | pH | 9.5 |
| Oil | %    |     | Sand | S  |  | Cake |  | PPMCL  |  |    |  | PPMca |  |    |     |

| BIT NO. | SIZE mm | MAKE & TYPE | SER. NO. | BIT  |        | DEPTH OUT m | m DRLD TODAY | CUM m. DRLD | Rot hrs TODAY | CUM. Rot hr | m/hr | Dull Cond. |   |   |
|---------|---------|-------------|----------|------|--------|-------------|--------------|-------------|---------------|-------------|------|------------|---|---|
|         |         |             |          | WT   | RPM    |             |              |             |               |             |      | T          | B | G |
| 3ARR    | 444     | RTMS51AM    | U70131   | 8/12 | 80-120 |             | 240          | 240         | 22.25         | 22.25       | 10.8 | R          | N | G |
| 5A      | 311     | RDHP51H     | FD1963   | 5/7  | 150    |             | 78           | 375         | 16.50         | 59.00       | 6.35 | 4          | 4 | 0 |

[illegible]

|               |   |    |     |   |               |   |    |     |   |
|---------------|---|----|-----|---|---------------|---|----|-----|---|
| $\frac{1}{2}$ | ° | at | 280 | m | $\frac{1}{2}$ | ° | at | 395 | m |
| $\frac{1}{2}$ | ° | at | 309 | m | $\frac{3}{4}$ | ° | at | 424 | m |
| $\frac{3}{4}$ | ° | at | 338 | m | $\frac{1}{2}$ | ° | at | 452 | m |
| $\frac{1}{4}$ | ° | at | 366 | m | $\frac{1}{2}$ | ° | at | 490 | m |

|           |
|-----------|
| GELL 24   |
| CAUSTIC 1 |
|           |
|           |

| TOOL         | ID<br>mm | OD<br>mm | LENGTH<br>m | WEIGHT<br>daN | OPERATION                      | TODAY | CUM. |
|--------------|----------|----------|-------------|---------------|--------------------------------|-------|------|
|              |          |          |             |               |                                |       |      |
| BIT          |          | 444      | 0.45        |               | 1. Drilling                    |       |      |
| 1-NBRR       |          | 444      | 1.85        |               | 2. Trips                       |       |      |
| 6 DC         |          | 222      | 54.3        | 14624         | 3. Rig Service                 | 0.50  |      |
| XO           |          |          | 0.78        |               | 4. Deviation Surveys           |       |      |
| JARS         |          |          | 4.93        |               | 5. Ream & Cond. Hole           | 22.25 |      |
| 18DC.        |          | 171      | 162.7       | 16270         | 6. Mix & Cond. Mud             |       |      |
| XO           |          |          | 0.82        |               | 7. Circulation                 |       |      |
|              |          |          |             |               | 8. Rig Repair                  | 0.50  |      |
|              |          |          |             |               | 9. Run Casing & Cement         |       |      |
|              |          |          |             |               | 10. Slip and Cut Drilling Line | 0.75  |      |
|              |          |          |             |               | 11. Logging                    |       |      |
|              |          |          |             |               | 12. Rig up / tearout Loggers   |       |      |
|              |          |          |             |               | 13. Work Stuck Casing          |       |      |
| TOTAL LENGTH |          |          | 225.9       | 30894         | 14. Rig to & Set Liner Hanger  |       |      |

|                |                |
|----------------|----------------|
| DAILY          | \$32,484       |
| CUMMULATIVE    | \$972,601      |
| GR ELEV.       | K.B.           |
| SUPERVISOR     | ROD MacEACHERN |
| 1-403-210-0371 |                |

|                             |              |  |
|-----------------------------|--------------|--|
| 15. Spot LCM Pill           |              |  |
| 16. Drilling Out            |              |  |
| 17. B.O.P. DRILL            |              |  |
| 18.SHUT IN MONITOR WELL     |              |  |
| 19. CIRC. AND MUD UP        |              |  |
| 20. MONITOR WELL FOR LOSSES |              |  |
| 21. WAIT ON LOGGERS         |              |  |
| <b>TOTAL</b>                | <b>24.00</b> |  |

**PARAMOUNT RESOURCES LTD.****DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING 98-03-14-08:00  
Yr - Mon - Day - TimeWELL NAME PARAMOUNT ET AL NETLALOCATION M23**OPERATIONS DETAIL:**

08:00-08:45 SLIP &amp; CUT DRILLING LINE.

08:45-09:00 RIG SERV.

09:00-12:00 REAM 311MM PILOT HOLE TO 444MM SURF HOLE FM:30 TO 36M.

12:00-23:45 REAM 311MM PILOT HOLE TO 444MM SURF HOLE FM:36M TO 153M

23:45-24:00 RIG SERV.

00:00-06:00 REAM 311MM PILOT HOLE TO 444MM SURF HOLE FM:153M TO 227M

06:00-06:30 REPAIR ELECT. DOG HOUSE CORD.

06:30-08:00 REAM 311MM PILOT HOLE TO 444MM SURF HOLE FM:227M TO 240M.

IT HAS BEEN APPROVED BY :ED REYVEN 'N.E.B.' TO SET SURF CSG BEYOND THE LICENCE  
DEPTH OF 450M. TO 540M MAX.

WANT LIST: \_\_\_\_\_

WEATHER: -13ROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE &amp; RENTAL ITEMS (WHERE, WHEN, HOW)

Wellname : Paramount et al Netla M23  
Location : Lat 60 50' Long 123 00'  
Date : 03-14-98  
Contact : Paul Collens

## AM REPORT

DFS: 9

Depth @ 08:00 hrs: 498m Progress last 24 hrs: 0 m  
Rotating hrs: 22.5

Present operations: Reaming sfc pilot hole @ 238m

ROP: .m/hr

Drill fluid: gelchem. Dens: 1195 vis: 140 WL: pH:

SURVEYS W90 1°

## FORMATION TOPS

KB: 279.8m

| Formation | Prognosis | Sample | Subsea |
|-----------|-----------|--------|--------|
|-----------|-----------|--------|--------|

|              |      |        |  |
|--------------|------|--------|--|
| Cret Scatter | 211m | 247m   |  |
| Cret Garbutt | 249m | 290m   |  |
| Miss Banff   | 417m | 485m ? |  |

## SHOW SUMMARY:

| Formation | Interval | gas show/BGG | Lith/por/shows/remarks |
|-----------|----------|--------------|------------------------|
|-----------|----------|--------------|------------------------|

|         |          |                 |  |
|---------|----------|-----------------|--|
| reaming | sfc-230m | avg 15 unit BGG |  |
|---------|----------|-----------------|--|

## REMARKS:

Geologist: D. Ferguson

Cell: 1-403-210-2951

130 DRILLING  
135 PRODUCTION CSG / CMT.  
140 WELLHEAD

AFE NO : 13577  
DATE : 16/03/98  
FOREMAN : HARVEY PARCELS

TO 22/03/98

RIG : PREC.622E

SPUD IN DATE :  
RIG RELEASE DATE :  
SPUD TO RIG RELEASE :  
BOILER HOURS :

| COST DESCRIPTION : |                                     | MON.<br>16 | TUES.<br>17 | WED.<br>18 | THURS.<br>19 | FRI.<br>20 | SAT.<br>21 | SUN.<br>22 | TOTALS :    |
|--------------------|-------------------------------------|------------|-------------|------------|--------------|------------|------------|------------|-------------|
| 130 01             | SITE / ACCESS SURFACE LEASE         |            |             |            |              |            |            |            | 0           |
| 2                  | SITE / ACCESS PREP. AND REST.       | 4912       |             |            |              |            |            |            | 4912        |
| 3                  | DRILLING RIG / CAMP - MOVE IN / OUT |            |             |            |              |            |            |            | 0           |
| 4                  | FUEL                                |            |             |            |              |            |            |            | 0           |
| 5                  | DRILLING - DAYWORK                  | 10752      |             |            |              |            |            |            | 10752       |
| 6                  | DRILLING BITS AND ACCESSORIES       |            |             |            |              |            |            |            | 0           |
| 7                  | WATER TRUCK                         | 1250       |             |            |              |            |            |            | 1250        |
| 8                  | VAC TRUCK                           | 5533       |             |            |              |            |            |            | 5533        |
| 9                  | MUD ADDITIVES                       | 1233       |             |            |              |            |            |            | 1233        |
| 10                 | INTERMEDIATE CASING @ \$ 53.56 / M. |            |             |            |              |            |            |            | 0           |
| 11                 | EQUIPMENT RENTALS                   | 5115       |             |            |              |            |            |            | 5115        |
| 12                 | DRILLING SUPERVISION                | 700        |             |            |              |            |            |            | 700         |
| 13                 | COMMUNICATIONS                      | 100        |             |            |              |            |            |            | 100         |
| 15                 | DRILL STEM TESTING                  |            |             |            |              |            |            |            | 0           |
| 16                 | CAMP / CREW SUBSISTENCE             | 2400       |             |            |              |            |            |            | 2400        |
| 17                 | MEDIC AND SAFETY                    | 525        |             |            |              |            |            |            | 525         |
| 18                 | AIR DRILLING SERVICES -             | 13481      |             |            |              |            |            |            | 13481       |
| 19                 | INTERMEDIATE CASING AND ACC.        |            |             |            |              |            |            |            | 0           |
| 20                 | PRESSURE TEST                       |            |             |            |              |            |            |            | 0           |
| 21                 | INTERMEDIATE CEMENTING              |            |             |            |              |            |            |            | 0           |
| 22                 | MISCELLANEOUS TRANSPORT             |            |             |            |              |            |            |            | 0           |
| 23                 | CONTRACT SERVICES                   |            |             |            |              |            |            |            | 0           |
| 24                 | WELL SITE / GEOLOGY SUPERVISION     | 700        |             |            |              |            |            |            | 700         |
| 25                 | WELL CONTROL INSURANCE              | 100        |             |            |              |            |            |            | 100         |
| 80                 | PROVINCIAL SALES TAX                |            |             |            |              |            |            |            | 0           |
| 86                 | CMT PLUG                            |            |             |            |              |            |            |            | 0           |
| 90                 | MISCELLANEOUS EXPENSES              |            |             |            |              |            |            |            | 0           |
| 99                 | ADMINISTRATION OVERHEAD             | 500        |             |            |              |            |            |            | 500         |
| 135 02             | PRODUCTION CASING @ 28.03 / M.      |            |             |            |              |            |            |            | 0           |
| 135 19             | PRODUCTION CEMENTING                |            |             |            |              |            |            |            | 0           |
| 140 01             | WELL HEAD                           |            |             |            |              |            |            |            | 0           |
| DAILY TOTALS :     |                                     | 47,301     | 0           | 0          |              | 0          | 0          | 0          |             |
| CUMULATIVE TOTAL : |                                     | 2,600,024  | 2,600,024   | 2,600,024  | 2,600,024    |            | 0          | 0          | \$47,301.00 |

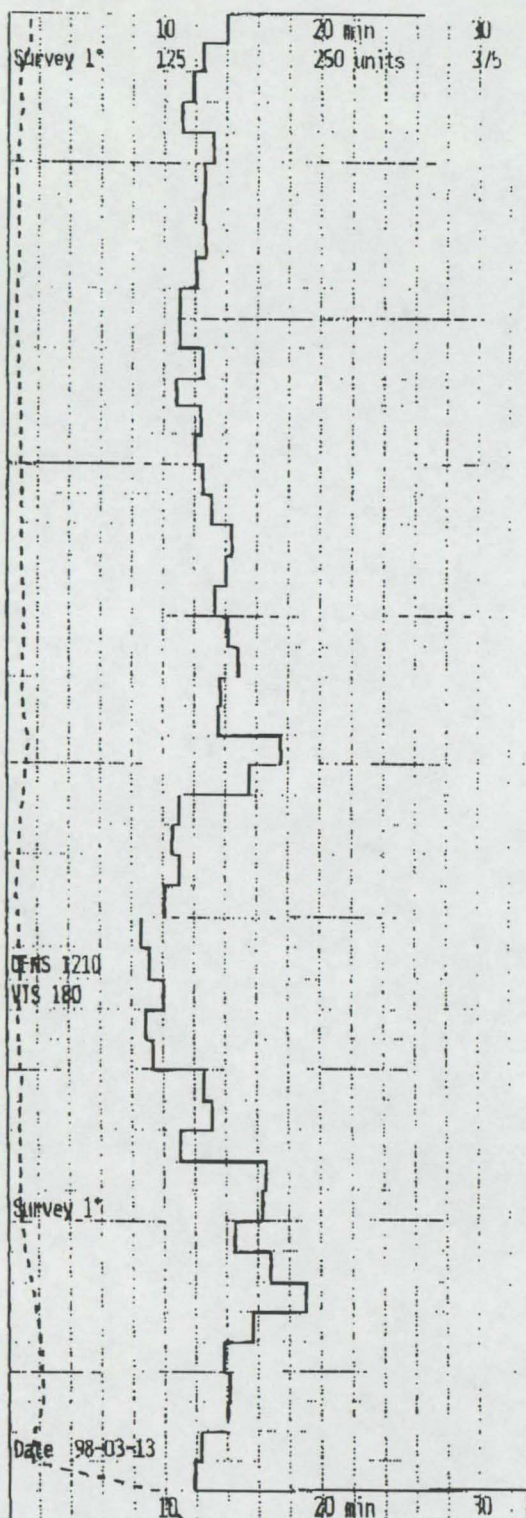
FINAL WELL COSTS :

DRILLED : \$47,301.00

CASED : \$47,301.00

DAILY DRILLING COST SHEET

PAGE 1 OF 1



4/5

SH- to dk gy, sfis ip, occ ma;

SH- to dk gy, sfis ip, occ ma;

SH-dk gy, dk brn ip, sfis to fis;

SH-dk gy, dk brn ip, sfis to fis, mod pet ip  
brn o stn, yel wh C ip, scat pyr;

**PARAMOUNT RESOURCES LTD.****DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-03-13-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al NETLA**LOCATION **M23**Day **8**Depth **498**Metres last 24 hr **78**HRS OB **16.5**Activity at report time **DRILL 311MM PILOT HOLE ( SURF)****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PT**

Wt 1210 Vis 180 WL Gels Solids PV YP pH  
 Oil % Sand S Cake PPMCL PPMCa

**BIT RECORD**

| BIT NO. | SIZE mm | MAKE & TYPE | SER. NO. | BIT |     | DEPTH OUT m | m DRLD TODAY | CUM m. DRLD | Rot hrs TODAY | CUM. Rot hr | m/hr | Dull Cond. |   |   |
|---------|---------|-------------|----------|-----|-----|-------------|--------------|-------------|---------------|-------------|------|------------|---|---|
|         |         |             |          | WT  | RPM |             |              |             |               |             |      | T          | B | G |
| 5A      | 311     | RDHP51H     | FD1963   | 5/7 | 150 | 498         | 78           | 375         | 16.50         | 59.00       | 6.35 | R          | N | G |

**CIRCULATION RECORD**

| BIT NO. | JETS - mm |    |    | PUMP   |       |       |                     | ANN. VEL. |    | JET VEL. | HHP | SURF. PRESS. |  |  |
|---------|-----------|----|----|--------|-------|-------|---------------------|-----------|----|----------|-----|--------------|--|--|
|         | 1         | 2  | 3  | STROKE | SPM   | LINER | m <sup>3</sup> /MIN | DP        | DC |          |     | kPa          |  |  |
| 5A      | 19        | 19 | 19 | 254    | 110*3 | 152   | 3.08                | 49        | 89 |          |     | 9700         |  |  |

**DEVIATION SURVEYS**

|       |    |       |       |    |       |
|-------|----|-------|-------|----|-------|
| 1/2 ° | at | 280 m | 1 °   | at | 395 m |
| 1/2 ° | at | 309 m | 3/4 ° | at | 424 m |
| 3/4 ° | at | 338 m | 1 °   | at | 452 m |
| 1/4 ° | at | 366 m | 1 "   | at | 490 m |

**MUD & CHEMICALS ADDED**

GELL 38  
CAUSTIC 1

**BOTTOM HOLE ASSEMBLY**

| TOOL                | ID mm | OD mm | LENGTH m     | WEIGHT daN   |
|---------------------|-------|-------|--------------|--------------|
| BIT                 |       | 311   | 0.35         |              |
| BIT SUB             |       |       | 1.23         |              |
| 6 DC                |       | 222   | 54.3         | 14624        |
| XO                  |       |       | 0.78         |              |
| JARS                |       |       | 4.93         |              |
| 18DC                |       | 171   | 162.7        | 16270        |
| XO                  |       |       | 0.82         |              |
| <b>TOTAL LENGTH</b> |       |       | <b>225.2</b> | <b>30894</b> |

**TIME ANALYSIS**

| OPERATION                      |  | TODAY        | CUM. |
|--------------------------------|--|--------------|------|
| 1. Drilling                    |  | 16.50        |      |
| 2. Trips                       |  | 3.50         |      |
| 3. Rig Service                 |  | 0.50         |      |
| 4. Deviation Surveys           |  | 1.75         |      |
| 5. Ream & Cond. Hole           |  |              |      |
| 6. Mix & Cond. Mud             |  | 1.00         |      |
| 7. Circulation                 |  |              |      |
| 8. Rig Repair                  |  | 0.75         |      |
| 9. Run Casing & Cement         |  |              |      |
| 10. Slip and Cut Drilling Line |  |              |      |
| 11. Logging                    |  |              |      |
| 12. Rig up / tearout Loggers   |  |              |      |
| 13. Work Stuck Casing          |  |              |      |
| 14. Rig to & Set Liner Hanger  |  |              |      |
| 15. Spot LCM Pill              |  |              |      |
| 16. Drilling Out               |  |              |      |
| 17. B.O.P. DRILL               |  |              |      |
| 18. SHUT IN MONITOR WELL       |  |              |      |
| 19. CIRC. AND MUD UP           |  |              |      |
| 20. MONITOR WELL FOR LOSSES    |  |              |      |
| 21. WAIT ON LOGGERS            |  |              |      |
| <b>TOTAL</b>                   |  | <b>24.00</b> |      |

**COSTS**

DAILY \$32,494  
 CUMULATIVE \$938,517  
 GR ELEV. K.B.

SUPERVISOR **ROD MacEACHERN**  
 1-403-210-0371

# PARAMOUNT RESOURCES LTD.

## DAILY DRILLING REPORT (page 2)

FOR 24 HR PERIOD ENDING 98-03-13-08:00

Yr - Mon - Day - Time

WELL NAME PARAMOUNT ET AL NETLA

LOCATION M23

### OPERATIONS DETAIL:

08:00-08:45 DRILL 311MM PILOT HOLE FM:396 TO 425M KB.

08:45-09:15 SURVEY @ 425M 3/4 DEG.

09:15-11:45 DRILL 311 PILOT HOLE FM:425 TO 438M. KB.

11:45-12:00 RIG SERV.

12:00-16:15 DRILL 311MM PILOT HOLE FM:438 TO 453M KB.

16:15-16:45 SURVEY @ 452M 1 DEG.

16:45-22:00 DRILL 311MM PILOT HOLE FM:453 TO 482M KB.

22:00-22:45 CHANGE HEAD & LINER IN #1 MUD PUMP.

22:45-23:00 SURVEY @ 481 MISRUN

23:00-23:45 DRILL 311MM PILOT HOLE FM:482 TO 486M KB.

23:45-24:00 RIG SERV.

00:00-03:00 DRILL 311MM PILOT HOLE FM:486 TO 498M KB.

03:00-03:30 SURV @ 490M 1 DEG.

03:30-04:30 CIRC HOLE CLEAN.

04:30-08:00 HOIST TO & PICKUP 445MM BIT & NBR REAMER TO OPEN HOLE TO 445 MM.

### WANT LIST:

WEATHER: -16

ROAD: GOOD WINTER COND.

IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)

DRL-RPT.88

MAR-13-1998 09:35

403 266 6032

95%

P.03

Wellname : Paramount et al Netla M23  
 Location : Lat 60 50' Long 123 00'  
 Date : 03-13-98  
 Contact : Paul Collens

## AM REPORT

DFS: 8

Depth @ 08:00 hrs: 498m

Progress last 24 hrs: 78 m

Rotating hrs: 16.5

Present operations: Tripping

ROP: .m/hr

Drill fluid: gel chem Dens: 1210 Vis: 180 W.L. pH:

SURVEYS: 424m 3/4deg: 452m 1deg: 490m 1 deg:

## FORMATION TIPS

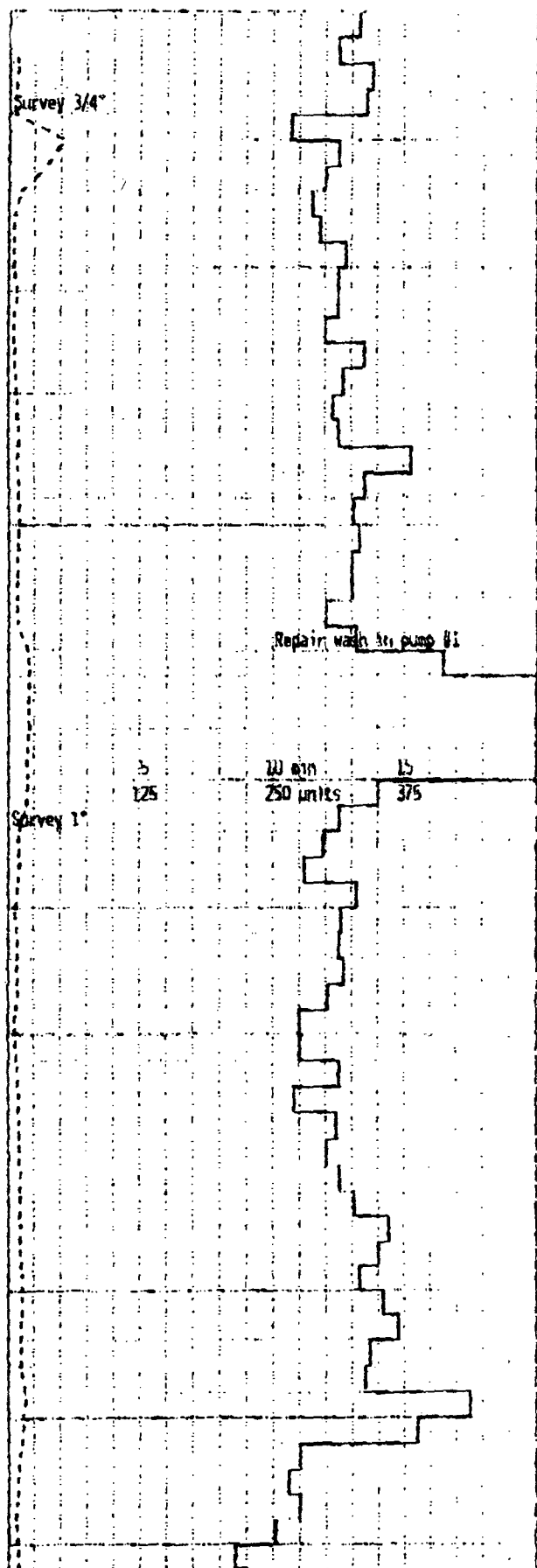
| Formation    | Prognosis | Sample | KB:279.8m<br>Subsea |
|--------------|-----------|--------|---------------------|
| Cret Scatter | 211m      | 247m   |                     |
| Cret Garbutt | 249m      | 290m   |                     |
| Miss Banff   | 417m      | ?      |                     |

## SHOW SUMMARY:

| Formation     | Interval | gas show/BCC | lith/por/shows/remarks                                                                |
|---------------|----------|--------------|---------------------------------------------------------------------------------------|
| Garbutt/Banff | 400-478m | 10-20avg BCC | SH m-dk gy, bcmg dk gy<br>hyn ip, shis - fis,<br>mod cons, tr dis pyr<br>ip, tr mm ip |

REMARKS: comm cavings:

Geologist: D. Ferguson  
 Cell: 1-403-210-0371



425

430

475

SH-m to dk gy, mod hd, blk, sfis ip, occ ma;

SH-m to dk gy, sfis ip, occ ma;

SH-m to dk gy, sfis ip, occ ma;

SH-m to dk gy, sfis ip, occ ma;

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**PARAMOUNT RESOURCES LTD.****DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-03-12-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al NETLA**LOCATION **M23**Day **7**Depth **420**Metres last 24 hr **130**HRS OB **21 1/4**Activity at report time **DRILL 311MM PILOT HOLE ( SURF)****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt 1190 Vis 150 WL Gels Solids PV YP pH  
 Oil % Sand S Cake PPMCL PPMCa

**BIT RECORD**

| BIT NO. | SIZE mm | MAKE & TYPE | SER. NO. | BIT |     | DEPTH OUT m | m DRLD TODAY | CUM m. DRLD | Rot hrs TODAY | CUM. Rot hr | m/hr | Dull Cond. |   |   |
|---------|---------|-------------|----------|-----|-----|-------------|--------------|-------------|---------------|-------------|------|------------|---|---|
|         |         |             |          | WT  | RPM |             |              |             |               |             |      | T          | B | G |
| 5A      | 311     | RDHP51H     | FD1963   | 2/6 | 150 |             | 130          | 297         | 21.25         | 42.50       | 7.00 | R          | N | G |

**CIRCULATION RECORD**

| BIT NO. | JETS - mm |    |    | PUMP   |       |       |                     | ANN. VEL. |    | JET VEL. | HHP | SURF. PRESS. kPa |
|---------|-----------|----|----|--------|-------|-------|---------------------|-----------|----|----------|-----|------------------|
|         | 1         | 2  | 3  | STROKE | SPM   | LINER | m <sup>3</sup> /MIN | DP        | DC |          |     |                  |
| 5A      | 19        | 19 | 19 | 254    | 110*3 | 152   | 3.08                | 49        | 89 |          |     | 9400             |

**DEVIATION SURVEYS**

1/2 ° at 280 m 1 ° at 395 m  
 1/2 ° at 309 m ° at m  
 3/4 ° at 338 m ° at m  
 1/4 ° at 366 m ° at m

**MUD & CHEMICALS ADDED**

34 GELL  
 DRILLING DETERGENT 1 PAIL  
 CAUSTIC 1.

**BOTTOM HOLE ASSEMBLY**

| TOOL                | ID mm | OD mm | LENGTH m     | WEIGHT daN   |
|---------------------|-------|-------|--------------|--------------|
| BIT                 |       | 311   | 0.35         |              |
| BIT SUB             |       |       | 1.23         |              |
| 6 DC                |       | 222   | 54.3         | 14624        |
| XO                  |       |       | 0.78         |              |
| JARS                |       |       | 4.93         |              |
| 18DC                |       | 171   | 162.7        | 16270        |
| XO                  |       |       | 0.82         |              |
| <b>TOTAL LENGTH</b> |       |       | <b>225.2</b> | <b>30894</b> |

**TIME ANALYSIS**

| OPERATION                      | TODAY        | CUM. |
|--------------------------------|--------------|------|
| 1. Drilling                    | 21.25        |      |
| 2. Trips                       |              |      |
| 3. Rig Service                 | 0.50         |      |
| 4. Deviation Surveys           | 1.75         |      |
| 5. Ream & Cond. Hole           |              |      |
| 6. Mix & Cond. Mud             |              |      |
| 7. Circulation                 |              |      |
| 8. Rig Repair                  | 0.50         |      |
| 9. Run Casing & Cement         |              |      |
| 10. Slip and Cut Drilling Line |              |      |
| 11. Logging                    |              |      |
| 12. Rig up / tearout Loggers   |              |      |
| 13. Work Stuck Casing          |              |      |
| 14. Rig to & Set Liner Hanger  |              |      |
| 15. Spot LCM PU                |              |      |
| 16. Drilling Out               |              |      |
| 17. B.O.P. DRILL               |              |      |
| 18. SHUT IN MONITOR WELL       |              |      |
| 19. CIRC. AND MUD UP           |              |      |
| 20. MONITOR WELL FOR LOSSES    |              |      |
| 21. WAIT ON LOGGERS            |              |      |
| <b>TOTAL</b>                   | <b>24.00</b> |      |

**COSTS**

DAILY \$44,692  
 CUMMULATIVE \$915,445  
 GR ELEV. K.B.

SUPERVISOR **ROD MacEACHERN**

1-403-210-0371

**PARAMOUNT RESOURCES LTD.****DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-03-12-08:00**  
Yr - Mon - Day - TimeWELL NAME **PARAMOUNT ET AL NETLA**LOCATION **M23****OPERATIONS DETAIL:**

08:00-11:15 DRILL 311MM PILOT HOLE FM:290 TO 310M KB.

11:15-11:30 SURVEY 309M, 1/2 DEG.

11:30-11:45 RIG SERV.

11:45-14:15 DRILL 311MM PILOT HOLE FM: 310M TO 323M KB.

14:15-14:45 REPAIR PUMP CLUTCHES.

14:45-16:45 DRILL 311MM PILOT HOLE FM: 323 TO 339M KB.

16:45-17:15 SURVEY @ 338M, 3/4 DEG.

17:15-17:30 RIG SERV.

17:30-22:00 DRILL 311MM PILOT HOLE FM:339 TO 367M KB.

22:00-22:30 SURVEY @ 366M, 1/4 DEG.

22:30-02:30 DRILL 311MM PILOT HOLE FM:367 TO 396M KB.

02:30-03:00 SURVEY @ 395M 1 DEG.

03:00-08:00 DRILL 311MM PILOT HOLE FM:396 TO 420 M KB.

WANT LIST:

WEATHER: **-18**ROAD: **GOOD WINTER COND.**IN DETAIL: **MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

DRL-RPT.78

Vesselname : Paramount et al Netla M21  
 Location : Lat 60 50' Long 123 00'  
 Date : 03-12-98  
 Contact : Paul Collens

## AM REPORT

DFS:

Depth @ 08:00 hrs: 420m Progress last 24 hrs: 147 m  
 Rotating hrs:

Present operations: drill ahead 311mm pilot hole - sfc

ROP: 5m/hr

Drill fluid: gel chem Dens: 1195 Vls: 150 WL: pH: 10

SURVEYS: 252m 1/2deg; 280m 1/2 deg; 338m 3/4deg; 366m 1/4deg;  
 395m 1deg;

## FORMATION TOPS

RM: 279.0m

Formation Prognosis

Sample

Subsea

Cret Scatter 211m  
 Cret Garbutt 249m  
 Miss Banff 417m

## SHOW SUMMARY:

| Formation | Interval | gas show/EGG | Lith/por/shows/remarks                       |
|-----------|----------|--------------|----------------------------------------------|
|           | 270-400  | avg 9-15 EGG | SH- m-dk cy. sfs,<br>occ sl silty ip. m cons |

## REMARKS:

Geologist: D. Ferguson  
 Cell: 1-403-210-2951

| WELLM23 PARAMOUNT ET AL NETLA |                                | Field    | A/E  | Funds     | Percent   | #13557 |        |        |        |
|-------------------------------|--------------------------------|----------|------|-----------|-----------|--------|--------|--------|--------|
| Code                          | Description                    | Estimate | Cost | Remaining | Remaining | Day #  | 0      | 9      | 10     |
| 10                            | Logistics                      |          |      |           |           |        |        |        |        |
| 101                           | Surveying                      | 10000    |      | -10000    | #DIV/0!   |        | 10000  |        |        |
| 102                           | Legal and Licence              | 2000     |      | 2000      | #DIV/0!   |        | 2000   |        |        |
| 103                           | Access Preparation             | 67500    |      | 67500     | #DIV/0!   |        | 67500  |        |        |
| 104                           | Wellsite Preparation           | 86756    |      | 86756     | #DIV/0!   |        | 86756  |        |        |
| 106                           | Conductor, Rathole             | 12000    |      | 12000     | #DIV/0!   |        | 12000  |        |        |
| 108                           | Wellsite Restoration           | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 109                           | Access Restoration             | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 116                           | Maintenance                    | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 117                           | Towing                         | 12847    |      | 12847     | #DIV/0!   |        | 12847  |        |        |
| 119                           | Supervision                    | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 200                           | Drilling Costs                 |          |      |           |           |        |        |        |        |
| 201                           | Move In - Rig up               | 184981   |      | 184981    | #DIV/0!   |        | 184981 |        |        |
| 203                           | Drilling Rig Daywork           | 113674   |      | 113674    | #DIV/0!   |        | 82672  | 10334  | 10334  |
| 205                           | Boller                         | 9504     |      | 9504      | #DIV/0!   |        | 6912   | 864    | 864    |
| 206                           | Tear out - Rig out             | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 210                           | Camp and Catering              | 27500    |      | 27500     | #DIV/0!   |        | 20000  | 2500   | 2500   |
| 212                           | Aviation Support               | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 214                           | Fuel                           | 39906    |      | 39906     | #DIV/0!   |        | 28884  |        |        |
| 216                           | Communications                 | 1760     |      | 1760      | #DIV/0!   |        | 1280   | 160    | 160    |
| 218                           | Water                          | 17200    |      | 17200     | #DIV/0!   |        | 11200  | 2000   | 2000   |
| 219                           | Vacuum Truck                   | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 220                           | Drilling Fluids                | 11060    |      | 11060     | #DIV/0!   |        | 6260   | 3000   | 500    |
| 222                           | Air Drilling                   | 54805    |      | 54805     | #DIV/0!   |        | 43555  | 3750   | 3750   |
| 223                           | Underbalanced Drilling         | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 224                           | Technical Support              | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 225                           | Drilling Supervision           | 11200    |      | 11200     | #DIV/0!   |        | 7200   | 1600   | 1600   |
| 228                           | Directional Drilling & Surveys | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 230                           | Medical & Safety Services      | 11000    |      | 11000     | #DIV/0!   |        | 8000   | 1000   | 1000   |
| 232                           | Fishing                        | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 234                           | Contract Services              | 11303    |      | 11303     | #DIV/0!   |        | 11303  |        |        |
| 236                           | Transportation                 | 34033    |      | 34033     | #DIV/0!   |        | 22233  | 9000   |        |
| 240                           | Equipment Rentals              | 52469    |      | 52469     | #DIV/0!   |        | 35783  | 5562   | 5562   |
| 242                           | Drilling Bits                  | 91255    |      | 91255     | #DIV/0!   |        | 61255  |        | 30000  |
| 244                           | Abandonment & Plugback         | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 246                           | Lost Equipment                 | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 250                           | Miscellaneous Materials        | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 252                           | Surface Casing                 | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 254                           | Cement Surface Casing          | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 256                           | Intermediate Casing            | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 258                           | Cement Intermediate Casing     | II       |      | #VALUE!   | #VALUE!   |        |        |        |        |
| 262                           | Wireline - Slickline           | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 300                           | Evaluations                    |          |      |           |           |        |        |        |        |
| 301                           | Coring                         | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 302                           | Logging                        | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 303                           | Formation Testing              | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 304                           | Geological Supervision         | 8000     |      | 8000      | #DIV/0!   |        | 4000   | 800    | 800    |
| 305                           | Analyses                       | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 310                           | Production/AOF Testing         | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 400                           | Production Casing              |          |      |           |           |        |        |        |        |
| 401                           | Casing Accessories             | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 402                           | Production Casing              | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 403                           | Cement Production Casing       | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 404                           | Production Casing Services     | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 800                           | Well Equipment                 |          |      |           |           |        |        |        |        |
| 801                           | Drilling Wellhead Parts        | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 802                           | Completion Wellhead Parts      | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 803                           | Tubing                         | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| 805                           | Tubing Accessories             | 0        |      | 0         | #DIV/0!   |        |        |        |        |
| Total                         |                                | 870753   | 0    |           |           |        | 726621 | 40570  | 59070  |
| Cum Total                     |                                |          |      |           |           |        | 726621 | 767191 | 827861 |

## WELLM23 PARAMOUNT ET AL NETLA

Jan 28/98

| Code      | Description                    | 11     | 12     | 14     | 15     | 16     | 17     | 18     | 19     |
|-----------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| 100       | Logistics                      |        |        |        |        |        |        |        |        |
| 101       | Surveying                      |        |        |        |        |        |        |        |        |
| 102       | Legal and Licence              |        |        |        |        |        |        |        |        |
| 103       | Access Preparation             |        |        |        |        |        |        |        |        |
| 104       | Wellsite Preparation           |        |        |        |        |        |        |        |        |
| 106       | Conductor, Rathole             |        |        |        |        |        |        |        |        |
| 108       | Wellsite Restoration           |        |        |        |        |        |        |        |        |
| 109       | Access Restoration             |        |        |        |        |        |        |        |        |
| 116       | Maintenance                    |        |        |        |        |        |        |        |        |
| 117       | Towing                         |        |        |        |        |        |        |        |        |
| 119       | Supervision                    |        |        |        |        |        |        |        |        |
| 200       | Drilling Costs                 |        |        |        |        |        |        |        |        |
| 201       | Move in - Rig up               |        |        |        |        |        |        |        |        |
| 203       | Drilling Rig Daywork           | 10334  |        |        |        |        |        |        |        |
| 205       | Boller                         | 864    |        |        |        |        |        |        |        |
| 206       | Tear out - Rig out             |        |        |        |        |        |        |        |        |
| 210       | Camp and Catering              | 2500   |        |        |        |        |        |        |        |
| 212       | Aviation Support               |        |        |        |        |        |        |        |        |
| 214       | Fuel                           | 11022  |        |        |        |        |        |        |        |
| 216       | Communications                 | 160    |        |        |        |        |        |        |        |
| 218       | Water                          | 2000   |        |        |        |        |        |        |        |
| 219       | Vacuum Truck                   |        |        |        |        |        |        |        |        |
| 220       | Drilling Fluids                | 1300   |        |        |        |        |        |        |        |
| 222       | Air Drilling                   | 3750   |        |        |        |        |        |        |        |
| 223       | Underbalanced Drilling         |        |        |        |        |        |        |        |        |
| 224       | Technical Support              |        |        |        |        |        |        |        |        |
| 225       | Drilling Supervision           | 800    |        |        |        |        |        |        |        |
| 228       | Directional Drilling & Surveys |        |        |        |        |        |        |        |        |
| 230       | Medical & Safety Services      | 1000   |        |        |        |        |        |        |        |
| 232       | Fishing                        |        |        |        |        |        |        |        |        |
| 234       | Contract Services              |        |        |        |        |        |        |        |        |
| 236       | Transportation                 | 2800   |        |        |        |        |        |        |        |
| 240       | Equipment Rentals              | 5562   |        |        |        |        |        |        |        |
| 242       | Drilling Bits                  |        |        |        |        |        |        |        |        |
| 244       | Abandonment & Plugback         |        |        |        |        |        |        |        |        |
| 246       | Lost Equipment                 |        |        |        |        |        |        |        |        |
| 250       | Miscellaneous Materials        |        |        |        |        |        |        |        |        |
| 252       | Surface Casing                 |        |        |        |        |        |        |        |        |
| 254       | Cement Surface Casing          |        |        |        |        |        |        |        |        |
| 256       | Intermediate Casing            |        |        |        |        |        |        |        |        |
| 258       | Cement Intermediate Casing     |        |        |        |        |        |        |        |        |
| 262       | Wireline - Slickline           |        |        |        |        |        |        |        |        |
| 300       | Evaluations                    |        |        |        |        |        |        |        |        |
| 301       | Coring                         |        |        |        |        |        |        |        |        |
| 302       | Logging                        |        |        |        |        |        |        |        |        |
| 303       | Formation Testing              |        |        |        |        |        |        |        |        |
| 304       | Geological Supervision         | 800    |        |        |        |        |        |        |        |
| 305       | Analyses                       |        |        |        |        |        |        |        |        |
| 310       | Production/AOF Testing         |        |        |        |        |        |        |        |        |
| 400       | Production Casing              |        |        |        |        |        |        |        |        |
| 401       | Casing Accessories             |        |        |        |        |        |        |        |        |
| 402       | Production Casing              |        |        |        |        |        |        |        |        |
| 403       | Cement Production Casing       |        |        |        |        |        |        |        |        |
| 404       | Production Casing Services     |        |        |        |        |        |        |        |        |
| 800       | Well Equipment                 |        |        |        |        |        |        |        |        |
| 801       | Drilling Wellhead Parts        |        |        |        |        |        |        |        |        |
| 802       | Completion Wellhead Parts      |        |        |        |        |        |        |        |        |
| 803       | Tubing                         |        |        |        |        |        |        |        |        |
| 805       | Tubing Accessories             |        |        |        |        |        |        |        |        |
| Total     |                                | 42892  | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Cum Total |                                | 870753 | 870753 | 870753 | 870753 | 870753 | 870753 | 870753 | 870753 |

**PARAMOUNT RESOURCES LTD.****DAILY DRILLING REPORT**FOR 24 HR PERIOD ENDING **98-03-11-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al NETLA**LOCATION **M23**Day **6**Depth **290**Metres last 24 hr **167**HRS OB **21.25**Activity at report time **DRILL 311MM PILOT HOLE ( SURF)****DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT**

Wt **1165** Vis **145** WL \_\_\_\_\_ Gels \_\_\_\_\_ Solids \_\_\_\_\_ PV \_\_\_\_\_ YP \_\_\_\_\_ pH \_\_\_\_\_  
 Oil \_\_\_\_\_ % Sand \_\_\_\_\_ S \_\_\_\_\_ Cake \_\_\_\_\_ PPMCL \_\_\_\_\_ PPMCa \_\_\_\_\_

**BIT RECORD**

| BIT NO. | SIZE mm | MAKE & TYPE | SER. NO. | BIT |     | DEPTH OUT m | m DRLD TODAY | CUM m. DRLD | Rot hrs TODAY | CUM. Rot hr | m/hr | Dull Cond. |   |   |
|---------|---------|-------------|----------|-----|-----|-------------|--------------|-------------|---------------|-------------|------|------------|---|---|
|         |         |             |          | WT  | RPM |             |              |             |               |             |      | I          | B | G |
| 5A      | 311     | RDHP51H     | FD1963   | 2/6 | 150 |             | 167          | 167         | 21.25         | 21.25       | 7.85 | R          | N | G |

**CIRCULATION RECORD**

| BIT NO. | JETS - mm |    |    | PUMP   |       |       |                     | ANN. VEL. |    | JET VEL. | HHP | SURF. PRESS. kPa |
|---------|-----------|----|----|--------|-------|-------|---------------------|-----------|----|----------|-----|------------------|
|         | 1         | 2  | 3  | STROKE | SPM   | LINER | m <sup>3</sup> /MIN | DP        | DC |          |     |                  |
| 5A      | 19        | 19 | 19 | 254    | 110*3 | 152   | 3.08                | 49        | 89 |          |     | 8300             |

**DEVIATION SURVEYS**

|       |    |       |       |    |       |
|-------|----|-------|-------|----|-------|
| 1/4 ° | at | 55 m  | 3/4 ° | at | 161 m |
| 1/2 ° | at | 84 m  | 1 °   | at | 188 m |
| 1 °   | at | 110 m | 3/4 ° | at | 205 m |
| 3/4 ° | at | 133 m | 3/4 ° | at | 224 m |

**MUD & CHEMICALS ADDED**

GELL 108 DRILLING DETERGENT 1  
 CAUSTIC 2  
 SAPP 1  
 1/2- DEG @ 252M

**BOTTOM HOLE ASSEMBLY**

| TOOL                | ID mm | OD mm | LENGTH m     | WEIGHT daN   |
|---------------------|-------|-------|--------------|--------------|
| BIT                 |       | 311   | 0.35         |              |
| BIT SUB             |       |       | 1.23         |              |
| 6 DC                |       | 222   | 54.3         | 14624        |
| XO                  |       |       | 0.78         |              |
| JARS                |       |       | 4.93         |              |
| 18DC                |       | 171   | 162.7        | 16270        |
| XO                  |       |       | 0.82         |              |
| <b>TOTAL LENGTH</b> |       |       | <b>225.2</b> | <b>30894</b> |

**TIME ANALYSIS**

| OPERATION                      | TODAY        | CUM. |
|--------------------------------|--------------|------|
| 1. Drilling                    | 21.25        |      |
| 2. Trips                       | 0.50         |      |
| 3. Rig Service                 | 0.25         |      |
| 4. Deviation Surveys           | 2.00         |      |
| 5. Ream & Cond. Hole           |              |      |
| 6. Mix & Cond. Mud             |              |      |
| 7. Circulation                 |              |      |
| 8. Rig Repair WILLIAMS HED.    |              |      |
| 9. Run Casing & Cement         |              |      |
| 10. Slip and Cut Drilling Line |              |      |
| 11. Logging                    |              |      |
| 12. Rig up / tearout Loggers   |              |      |
| 13. Work Stuck Casing          |              |      |
| 14. Rig to & Set Liner Hanger  |              |      |
| 15. Spot LCM Pill              |              |      |
| 16. Drilling Out               |              |      |
| 17. B.O.P. DRILL               |              |      |
| 18. SHUT IN MONITOR WELL       |              |      |
| 19. CIRC. AND MUD UP           |              |      |
| 20. MONITOR WELL FOR LOSSES    |              |      |
| 21. WAIT ON LOGGERS            |              |      |
| <b>TOTAL</b>                   | <b>24.00</b> |      |

**COSTS**

DAILY \$42,892  
 CUMMULATIVE \$870,753  
 GR ELEV. K.B.

SUPERVISOR **ROD MacEACHERN**  
 1-403-210-0371

DRL-RPT.6A

**PARAMOUNT RESOURCES LTD.****DAILY DRILLING REPORT (page 2)**

FOR 24 HR PERIOD ENDING

98-03-11-08:00

Yr - Mon - Day - Time

WELL NAME PARAMOUNT ET AL NETLALOCATION M23**OPERATIONS DETAIL:**

08:00-08:30 TRIP IN WITH NEW BIT #5A.

08:30-12:45 DRILL 311 PILOT HOLE FROM:123 TO 155M KB.

12:45-13:00 SURVEY @ 133M, 3/4.

13:00-15:00 DRILL 311MM, PILOT HOLE FM:155M TO 170M,KB.

15:00-15:15 SURVEY @ 161M 3/4.

15:15-18:45 DRILL 311MM PILOT HOLE FM:170 TO 197M KB.

18:45-19:00 RIG SERV

19:00-19:15 SURVEY @188M 1 DEG.

19:15-20:15 DRILL 311MM PILOT HOLE FM:197M TO 205M KB.

20:15-20:30 SURVEY @ 205M 3/4.

20:30-23:45 DRILL 311MM PILOT HOLE FM:205 TO 233M KB.

23:45-00:00 SURVEY 224M 3/4.

00:00-02:45 DRILL 311MM PILOT HOLE FM:233M TO 253M KB.

02:45-03:00 SURVEY @ 252M 1/2.

03:00-07:00 DRILL 311MM PILOT HOLE FM:253 TO 281M KB.

07:00-07:30 SURVEY @ 281M 3/4.

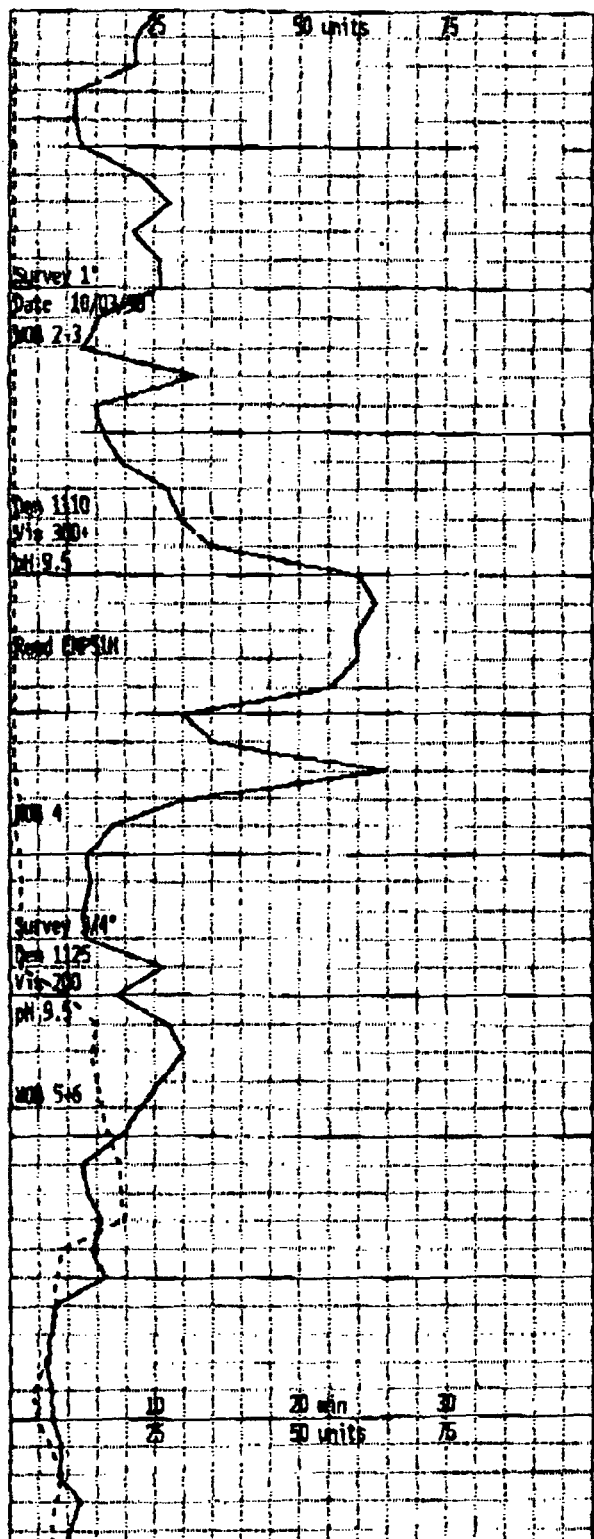
07:30-08:00 DRILL 311MM PILOT HOLE.

WANT LIST:

WEATHER: -14ROAD: GOOD WINTER COND.

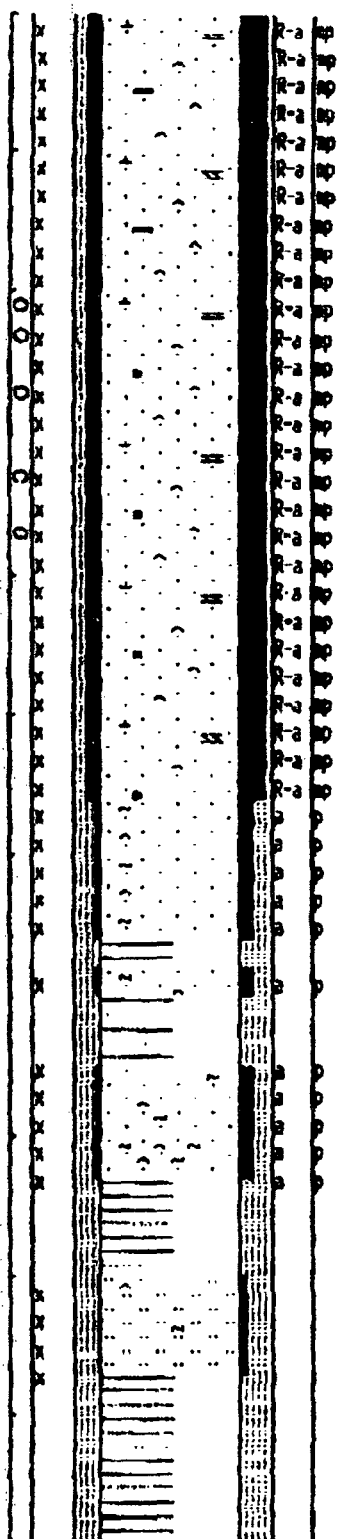
IN DETAIL: MOVEMENT OF PURCHASE &amp; RENTAL ITEMS (WHERE, WHEN, HOW)

DRL-RPT.6B



125

150



SS-wh, clr, amb, occ sp, p catd;

SS-wh, clr, amb, occ sp, p catd;

SS-wh, clr, amb, occ sp, p catd, chty ip;

SS-wh, clr, amb, occ sp, p catd, chty ip;

SS-wh, clr, amb, occ sp, p catd, chty ip;

SS-wh, clr, amb, occ sp, p catd, chty ip;

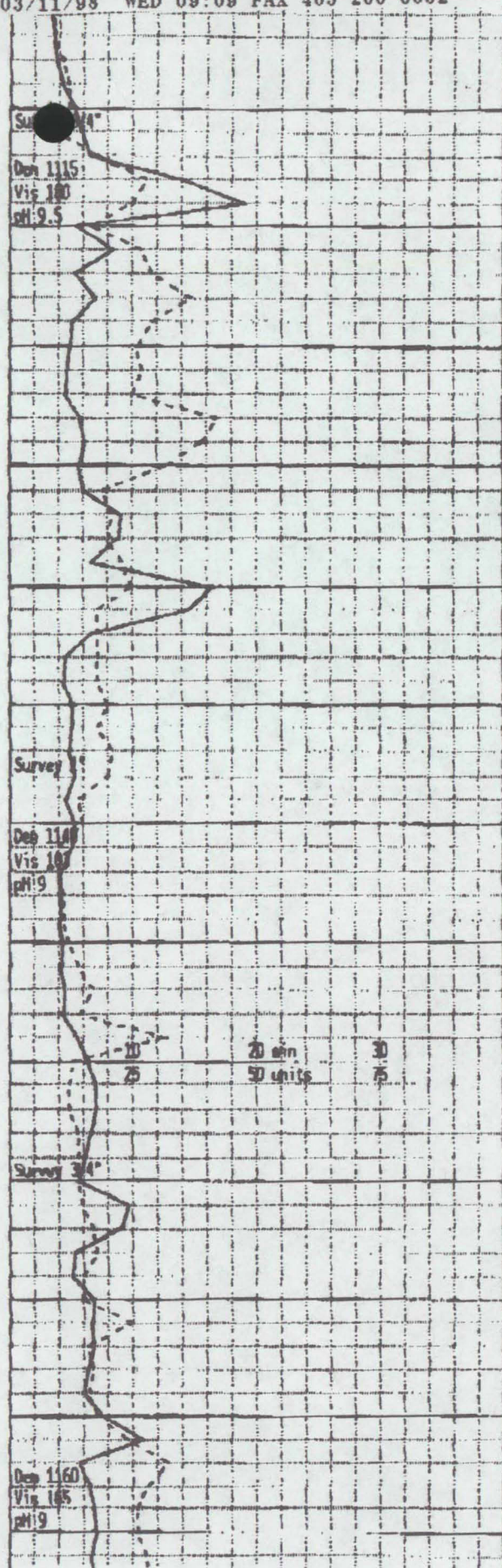
SS-lt brn, tan, p to mod catd, grdg to silt ip;

Sh-a to dk gy, mod hd, blk; SS-lt brn, tan, p to mod catd, grdg to silt ip;

Sh-a to dk gy, mod hd, blk; SS-lt brn, tan, p to mod catd, grdg to silt ip;

Sh-a to dk gy, mod hd, blk; SLT-lt brn, lt gy, gy brn, mod catd, grdg to silty ss,;

Sh-a to dk gy, mod hd, blk;



175

200

Lip

SH-m to dk gy, mod hd, blk; SLT-lt gy brn, lt gy, grdg to slty ss, NWS;  
p to mod catd, grdg to slt ip;

SH-m to dk gy, mod hd, blk; SLT-lt gy brn, lt gy, grdg to slty ss, NWS;

SS-lt brn, tan, p to mod catd, grdg to slt ip; SLT-lt gy brn, lt gy, grdg to slty ss, NWS;

SH-m to dk gy, mod hd, blk; SLT-lt gy brn, lt gy, grdg to slty ss, NWS;

SLT-lt gy brn, lt gy, grdg to slty ss, NWS;  
SH-m to lt gy, mod hd, blk;

SLT-lt gy brn, lt gy, grdg to slty ss, NWS;  
SH-m to lt gy, mod hd, blk;

SH-dk gy, blk, mod hd;

SLT-lt gy brn, lt gy, grdg to slty ss, NWS;  
SH-dk gy, blk, mod hd;

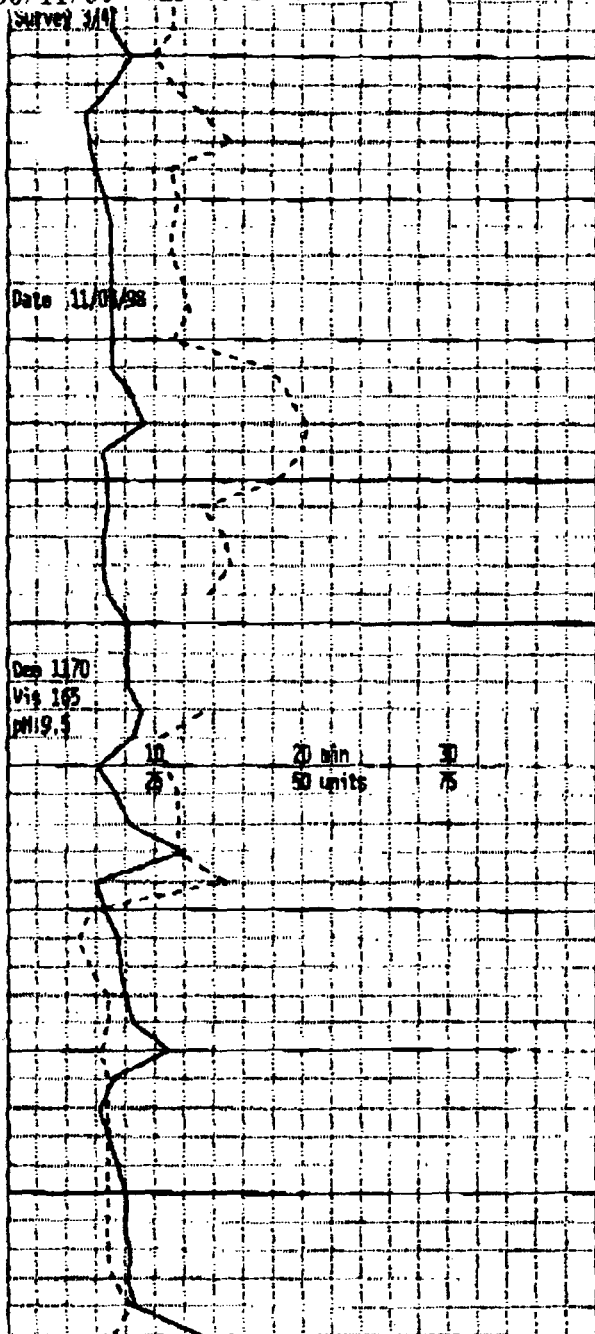
SH-dk gy, blk, mod sft, sfis ip;

SH-dk gy, blk, mod sft, sfis ip;

SH-dk gy, blk, mod sft, sfis ip;

SH-dk gy, blk, mod sft, sfis ip;

SH-dk gy, blk, mod sft, sfis ip;



225

250

SH-dk gy, blk, mod sft, sfis ip;

SH-dk gy, blk, mod sft, sfis ip;

SH-dk gy, blk, mod sft, sfis ip;

SH-dk gy, blk, mod sft, sfis ip;

SH-dk gy, blk, mod sft, sfis ip, blk, ip  
pity; SH-lt gy, occ n gy, blk, and hd;

SH-dk gy, blk, mod sft, sfis ip, blk, ip  
pity; SH-lt to n gy, occ rd brn;

SH-n to dk gy, mod hd, blk;

SH-n to dk gy, mod hd, blk;

SH-n to dk gy, mod hd, blk;

Wellname : Paramount et al Nerla M23  
 Location : Lat 60 50 Long 123 00  
 Date : 03-11-98  
 Contact : Paul Collens

## AM REPORT

Depth @ 06:00 hrs - 273 m Progress last 24 hrs - 151 m

Rig activity : Drill Ahead

Last 24 hrs : Trip for Bit

Drill 311mm pilot hole

Next 24 hrs : Drill 311mm pilot hole to Td

Trip for 444mm bit

Drill fluid : Density: 1170 kg/m3 Vis: 165 Wt: .... ph: 9.5

| Surveys | Depth | Angle |
|---------|-------|-------|
|         | 110   | 1     |
|         | 133   | 3/4   |
|         | 161   | 3/4   |
|         | 188   | 1     |
|         | 205   | 3/4   |
|         | 224   | 3/4   |

## Remarks :

## Background Gas

|           |             |
|-----------|-------------|
| 120 - 139 | 1 - 2 units |
| 139 - 162 | 5 - 10      |
| 162 - 176 | 25 - 40     |
| 176 - 217 | 10 - 20     |
| 217 - 254 | 30 - 40     |
| 254 - 270 | 15 - 20     |

## Peaks

235 - 240 50 / 30 units

## Lithology, Tops, Hotwire:

K.B. 279.80 m

115 - 120 SANDSTONE - white, clear, amber, occasional salt and pepper, fine grained to medium grained and some very fine grained, subangular to rounded, moderately to poorly sorted, 12% intergranular porosity, poor cemented, cherty in part, slightly calcareous, occasional SIDERITE streaks, yellow, silty, abundant quartz grains, unconsolidated, occasional carbonaceous, rare glauconite;

120 - 125 SANDSTONE - white, clear, amber, occasional salt and pepper, fine grained to medium grained and some very fine grained, subangular to rounded, moderately to poorly sorted, 12% intergranular porosity, poor cemented, cherty in part, slightly calcareous, occasional SIDERITE streaks, yellow, silty, abundant quartz grains, uncon. occasional carbonaceous, rare glauconite;

125 - 130 SANDSTONE - white, clear, amber, occasional salt and pepper, fine grained to medium grained and some very fine grained, subangular to rounded, moderately to poorly

in part, slightly calcareous, occasional silty sand, yellow, silty, abundant quartz grns. uncon. occasional carbonaceous. rare glauconite;

128 133

SANDSTONE - light brown, tan, very fine grained to silt grained and some fine grained, subangular, poorly sorted, 3% intergranular porosity, poorly to moderately cemented, grading to silt in part, common glauconite, moderately siliceous;

133 - 140

SHALE - medium to dark gray, moderately hard, blocky, rare micromicaceous; SANDSTONE - light brown, tan, very fine grained to silt grained and some fine grained, subangular, poorly sorted, 3% intergranular porosity, poorly to moderately cemented, grading to silt in part, common glauconite, moderately siliceous;

140 - 145

SHALE - medium to dark gray, moderately hard, blocky, rare micromicaceous; SANDSTONE - light brown, tan, very fine grained to silt grained and some fine grained, subangular, poorly sorted, 3% intergranular porosity, poorly to moderately cemented, grading to silt in part, common glauconite, moderately siliceous;

145 - 150

SHALE - medium to dark gray, moderately hard, blocky, rare micromicaceous; SILTSTONE - light brown, light gray, gray brown, 1% intergranular porosity, moderately cemented, grading to silty sand, slightly siliceous, slightly glauconite;

150 - 155

SHALE - medium to dark gray, moderately hard, blocky, rare micromicaceous;

155 - 160

SHALE - medium to dark gray, moderately hard, blocky, rare micromicaceous; SANDSTONE - light brown, tan, very fine grained to silt grained and some fine grained, subangular, poorly sorted, 3% intergranular porosity, poorly to moderately cemented, grading to silt in part, common glauconite, moderately siliceous;

160 - 165

SHALE - medium to dark gray, moderately hard, blocky, rare micromicaceous; SILTSTONE - light gray brown, light gray, 1% intergranular porosity, grading to silty sand, no visual show, slightly siliceous, slightly glauconite, slightly argillaceous;

165 - 170

SANDSTONE - light brown, tan, very fine grained to silt grained and some fine grained, subangular, poorly sorted, 3% intergranular porosity, poorly to moderately cemented, grading to silt in part, common glauconite, moderately siliceous; SILTSTONE - light gray brown, light gray, 1% intergranular porosity, grading to silty sand, no visual show, slightly siliceous, slightly glauconite, slightly argillaceous;

170 - 180

SHALE - medium to dark gray, moderately hard, blocky, rare micromicaceous; SILTSTONE - light gray brown, light gray, 1% intergranular porosity, grading to silty sand, no visual show, slightly siliceous, slightly glauconite, slightly argillaceous;

180 - 185

SILTSTONE - light gray brown, light gray, 1% intergranular porosity, grading to silty sand, no visual show, slightly siliceous, slightly glauconite, slightly argillaceous; SHALE - medium to light gray, moderately hard, blocky,

- 185 - 190 SILTSTONE - light gray brown, light gray, 1% intergranular porosity, grading to silty sand, no visual show, slightly siliceous, slightly glauconitic, slightly argillaceous; SHALE - medium to light gray, moderately hard, blocky, slightly micromicaceous in part, slightly silty in part;
- 190 - 195 SHALE - dark gray, black, moderately hard, slightly carbonaceous in part;
- 195 - 200 SILTSTONE - light gray brown, light gray, 1% intergranular porosity, grading to silty sand, no visual show, slightly siliceous, slightly glauconitic, slightly argillaceous; SHALE - dark gray, black, moderately hard, slightly carbonaceous in part;
- 200 - 205 SHALE - dark gray, black, moderately soft, subfissile in part;
- 205 - 210 SHALE - dark gray, black, moderately soft, subfissile in part, occasional SANDSTONE streaks very fine to fine grns, s to a, predominantly unconsolidated,;
- 210 - 215 SHALE - dark gray, black, moderately soft, subfissile in part, occasional SANDSTONE streaks very fine to fine grns, s to a, predominantly unconsolidated,;
- 215 - 220 SHALE - dark gray, black, moderately soft, subfissile in part, occasional SANDSTONE streaks very fine to fine grns, s to a, predominantly unconsolidated,;
- 220 - 225 SHALE - dark gray, black, moderately soft, subfissile in part, occasional SANDSTONE streaks very fine to fine grns, s to a, predominantly unconsolidated,;
- 225 - 230 SHALE - dark gray, black, moderately soft, subfissile in part, occasional LIMESTONE streaks white, cryptocrystalline, dense, no visual show;
- 230 - 235 SHALE - dark gray, black, moderately soft, subfissile in part, occasional LIMESTONE streaks white, cryptocrystalline, dense, no visual show;
- 235 - 240 SHALE - dark gray, black, moderately soft, subfissile in part, occasional LIMESTONE streaks white, cryptocrystalline, dense, no visual show;
- 240 - 245 SHALE - dark gray, black, moderately soft, subfissile in part, occasional LIMESTONE streaks white, cryptocrystalline, dense, no visual show;
- 245 - 250 SHALE - dark gray, black, moderately soft, subfissile in part, blocky, in part platy; SHALE - light gray, occasional medium gray, blocky, moderately hard, moderately dolomite, slightly silty in part, rare micromicaceous in part;
- 250 - 255 SHALE - dark gray, black, moderately soft, subfissile in part, blocky, in part platy; SILTSTONE - light to medium gray, occasional red brown, slightly argillaceous, slightly dolomite in part;
- 255 - 260 SHALE - medium to dark gray, moderately hard, blocky, occasional micromicaceous;
- 260 - 265 SHALE - medium to dark gray, moderately hard, blocky, occasional micromicaceous;
- 265 - 270 SHALE - medium to dark gray, moderately hard, blocky, occasional micromicaceous;

STRIP LOG INTERVAL - .... to .... meters

eof - Dave Lawrence - 1-403-210-0371



**PARAMOUNT RESOURCES LTD.****DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-03-10-08:00**

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT ET AL NETLA**LOCATION **M23****OPERATIONS DETAIL:**

08:00-10:00 DRILL 311 PILOT SURF HOLE.

10:00-11:15 REAM ROCKS &amp; GRAVEL 37M TO 49M KB.

11:15-11:45 DRILL 311MM PILOT SURF HOLE.49M TO 60M

11:45-12:00 RIG SERV.

12:00-13:15 DRILL 311MM PILOT SURF HOLE FM:60M TO 70M.

13:15-14:00 CIRC, SURVEY @ 55M, 1/4 DEG.

14:00-14:30 DRILL 311 MM PILOT HOLE FM: 70 TO 77M

14:30-17:00 CIRC HEAVY SAND RETURNS, BLINDING SCREENS ON SHAKERS.

17:00-21:00 DRILL 311MM PILOT SURF HOLE FM:77M TO 93M KB.

21:00-21:30 SURVEY @ 84M 1/2 DEG.

21:30-23:45 DRILL 311 MM PILOT SURF HOLE FM:93M TO 110M KB.

23:45-24:00 RIG SERV.

00:00-02:00 DRILL 311MM PILOT SURF HOLE FM:110M TO 119M KB.

02:00-02:15 SURVEY @ 110M , 1 DEG.

02:15-02:30 RIG SERV.

02:30-03:15 WORK TIGHT HOLE

03:15-04:45 DRILL 311 PILOT SURF HOLE FM:119 TO 123M KB.

04:45-08:00 TRIP FOR BIT.

WANT LIST:

WEATHER: **-24**ROAD: **GOOD WINTER COND.**

IN DETAIL: MOVEMENT OF PURCHASE &amp; RENTAL ITEMS (WHERE, WHEN, HOW)

Wellname : Paramount, et al Neria M23  
 Location : Lat 60 50' Long 123 00'  
 Date : 03-10-98  
 Contact : Paul Collens

## AM REPORT

Depth @ 06:00 hrs - 122 m Progress last 24 hrs - 84 m

Rig activity : Trip for bit

Last 24 hrs : Drill 311 mm pilot hole (associated with reaming)

Next 24 hrs : Ream with 444mm bit (from 37 m)  
 Drill ahead

Drill fluid : Density: 1110 kg/m<sup>3</sup> Vis: 300+ Wl: .... ph: 9.5

Surveys : Depth Angle  
 55 1/4  
 110 1

Remarks : Low gas reading with heavy mud

Lithology, Tops, HotWire:

K.B. 279.80 m

35 - 40 SANDSTONE - white, clear, amber, black, very coarse grained to medium grained, angular, moderately sorted, 15% intergranular porosity, glacial debris, slightly calcareous, occasional cherty, occasional dolomite, microcrystalline to cryptocrystalline, dense, abundant quartz; SHALE - medium to dark gray, moderately, hard, blocky, slightly silty in part, slightly dolomite in part;

40 - 45 SHALE - medium to dark gray, moderately, hard, blocky, slightly silty in part, slightly dolomite in part;  
 SANDSTONE - white, amber, black, medium grained to very coarse grained, angular to subangular, poorly sorted, 5% intergranular porosity, common glacial debris, common chert, white, opaque, very hard, fragments, slightly calcareous, occasional dolomite off white, tan, microcrystalline, slightly calcareous, slightly silty, occasional calcite, white, dense, dolomite in part, silty in part;

45 - 50 SHALE - medium to dark gray, moderately, hard, blocky, slightly silty in part, slightly dolomite in part;  
 SANDSTONE - white, amber, black, medium grained to very coarse grained, angular to subangular, poorly sorted, 5% intergranular porosity, common glacial debris, common chert, white, opaque, very hard, fragments, slightly calcareous, occasional dolomite off white, tan, microcrystalline, slightly calcareous, slightly silty, occasional calcite, white, dense, dolomite in part, silty in part;

50 - 55 SHALE - medium to dark gray, moderately, hard, blocky, slightly silty in part, slightly dolomite in part;  
 SANDSTONE - white, amber, black, medium grained to very coarse grained, angular to subangular, poorly sorted, 5% intergranular porosity, common glacial debris, common chert, white, opaque, very hard, fragments, slightly calcareous, occasional dolomite off white, tan, microcrystalline, slightly calcareous, slightly silty, occasional calcite, white, dense, dolomite in part, silty in part;

- 55 - 60 SHALE - medium to dark gray, moderately, hard, blocky, slightly silty in part, slightly dolomite in part;  
SANDSTONE - white, amber, black, medium grained to very coarse grained, angular to subangular, poorly sorted, 5% intergranular porosity, common glacial debris, common chert, white, opaque, very hard, fragments, slightly calcareous, occasional dolomite off white, tan, microcrystalline, slightly calcareous, slightly silty, occasional calcite, white, dense, dolomite in part, silty in part;
- 60 - 65 SANDSTONE - white, clear, amber, fine grained to medium grained and some very fine grained, subrounded to rounded, moderately sorted, 16% intergranular porosity, poor cemented, slightly calcareous, occasional SIDERITE streaks, yellow, silty, abundant quartz grains, unconsolidated;
- 65 - 70 SHALE - medium to dark gray, moderately, hard, blocky, slightly silty in part, slightly dolomite in part;  
SANDSTONE - white, clear, amber, fine grained to medium grained and some very fine grained, subrounded to rounded, moderately sorted, 16% intergranular porosity, poor cemented, slightly calcareous, occasional SIDERITE streaks, yellow, silty, abundant quartz grains, unconsolidated;
- 70 - 75 SANDSTONE - white, clear, amber, fine grained to medium grained and some very fine grained, subrounded to rounded, moderately sorted, 16% intergranular porosity, poor cemented, slightly calcareous, occasional SIDERITE streaks, yellow, silty, abundant quartz grains, unconsolidated;
- 75 - 80 SANDSTONE - white, clear, amber, occasional salt and pepper, fine grained to medium grained and some very fine grained, subangular to rounded, moderately to poorly sorted, 12% intergranular porosity, poor cemented, slightly calcareous, occasional SIDERITE streaks, yellow, silty, abundant quartz grains, unconsolidated;
- 80 - 85 SANDSTONE - white, clear, amber, occasional salt and pepper, fine grained to medium grained and some very fine grained, subangular to rounded, moderately to poorly sorted, 12% intergranular porosity, poor cemented, slightly calcareous, occasional SIDERITE streaks, yellow, silty, abundant quartz grains, unconsolidated;
- 85 - 90 SANDSTONE - white, clear, amber, occasional salt and pepper, fine grained to medium grained and some very fine grained, subangular to rounded, moderately to poorly sorted, 12% intergranular porosity, poor cemented, slightly calcareous, occasional SIDERITE streaks, yellow, silty, abundant quartz grains, unconsolidated, occasional coal seams black, hard,;
- 90 - 95 SANDSTONE - white, clear, amber, occasional salt and pepper, fine grained to medium grained and some very fine grained, subangular to rounded, moderately to poorly sorted, 12% intergranular porosity, poor cemented, slightly calcareous, occasional SIDERITE streaks, yellow, silty, abundant quartz grains, unconsolidated, occasional coal seams black, hard,;
- 95 - 100 SANDSTONE - white, clear, amber, occasional salt and pepper, fine grained to medium grained and some very fine grained, subangular to rounded, moderately to poorly sorted, 12% intergranular porosity, poor cemented, slightly

100 - 105

SANDSTONE - white, clear, amber, occasional salt and pepper, fine grained to medium grained and some very fine grained, subangular to rounded, moderately to poorly sorted, 12% intergranular porosity, poor cemented, slightly calcareous, occasional SIDERITE streaks, yellow, silty, abundant quartz grains, unconsolidated, occasional coal seams black, hard,;

105 - 110

SANDSTONE - white, clear, amber, occasional salt and pepper, fine grained to medium grained and some very fine grained, subangular to rounded, moderately to poorly sorted, 12% intergranular porosity, poor cemented, slightly calcareous, occasional SIDERITE streaks, yellow, silty, abundant quartz grains, unconsolidated, occasional coal seams black, hard,;

110 - 115

SANDSTONE - white, clear, amber, occasional salt and pepper, fine grained to medium grained and some very fine grained, subangular to rounded, moderately to poorly sorted, 12% intergranular porosity, poor cemented, cherty in part, slightly calcareous, occasional SIDERITE streaks, yellow, silty, abundant quartz grains, unconsolidated, occasional carbonaceous, rare glauconite;

115 - 120

SANDSTONE - white, clear, amber, occasional salt and pepper, fine grained to medium grained and some very fine grained, subangular to rounded, moderately to poorly sorted, 12% intergranular porosity, poor cemented, cherty in part, slightly calcareous, occasional SIDERITE streaks, yellow, silty, abundant quartz grains, unconsolidated, occasional carbonaceous, rare glauconite;

Background Gas

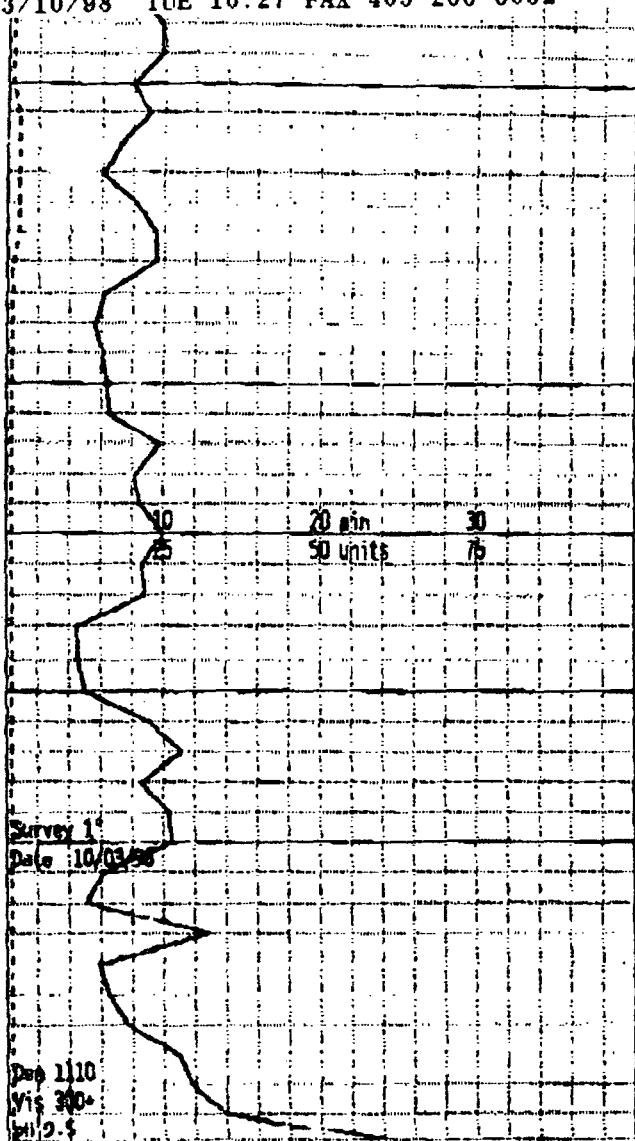
37 - 122 ' 0 - 2 units

Peaks

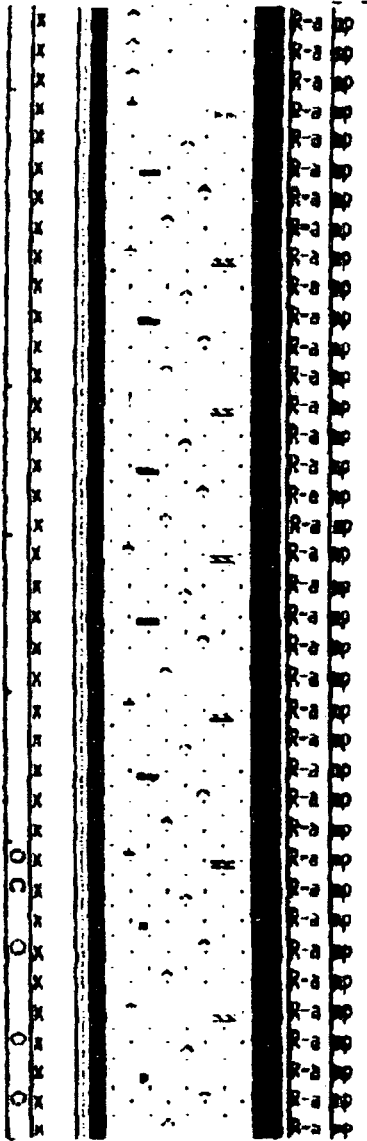
None

STRIP LOG INTERVAL. - 25 to 120 meters

eof - Dave Lawrence - 1-403-210-0371



100



SS-wh, clr, amb, occ sp, p catd;

SS-wh, clr, amb, occ sp, p catd;

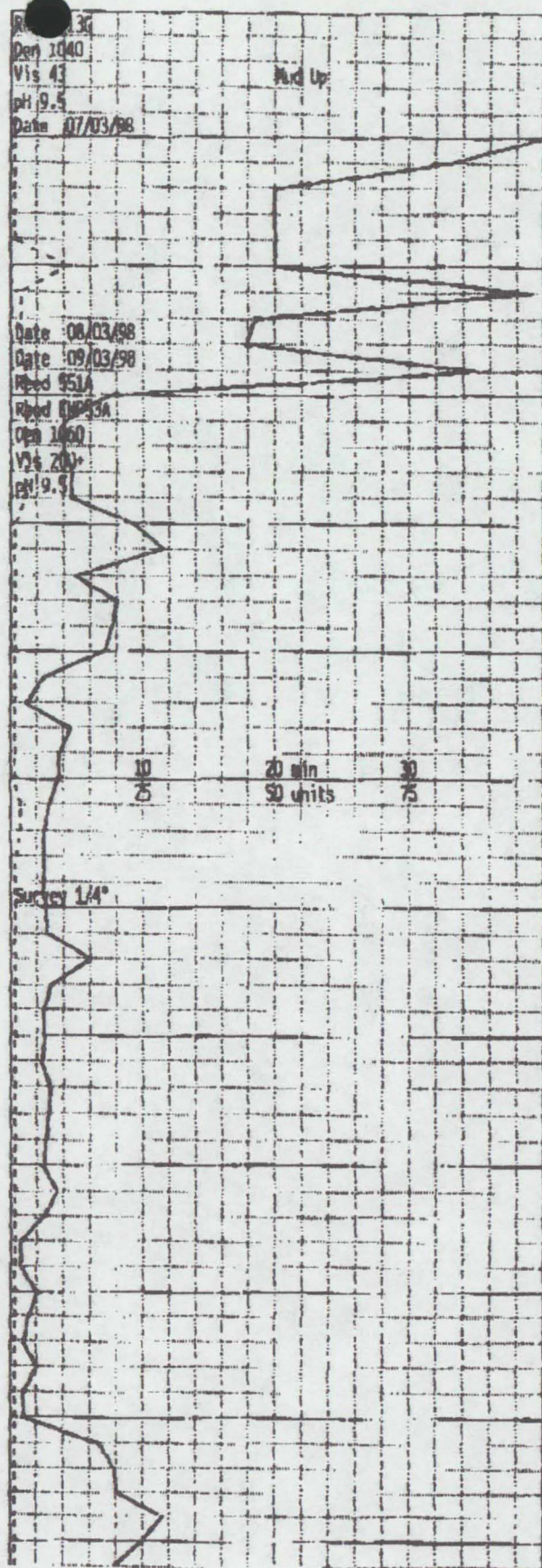
SS-wh, clr, amb, occ sp, p catd;

SS-wh, clr, amb, occ sp, p catd;

SS-wh, clr, amb, occ sp, p catd;

SS-wh, clr, amb, occ sp, p catd, chty lp;

SS-wh, clr, amb, occ sp, p catd, chty lp;



75

50

75

NS;

SS-wh, clr, amber, blk, glacial debris;

CH-wn, op; SS-wh, clr, amber, blk, glacial debris;

SS-wh, clr, amber, blk, glacial debris; SH-a to dk gy, mod, hd, blk;

SH-a to dk gy, mod, hd, blk; SS-wh, amb, blk, com glacial debris;

SH-a to dk gy, mod, hd, blk; SS-wh, amb, blk, com glacial debris;

SH-a to dk gy, mod, hd, blk; SS-wh, amb, blk, com glacial debris;

SH-a to dk gy, mod, hd, blk; SS-wh, amb, blk, com glacial debris;

SS-wh, clr, amb, p catd;

SH-a to dk gy, mod, hd, blk; SS-wh, clr, amb, p catd;

SS-wh, clr, amb, p catd;

SS-wh, clr, amb, occ sp, p catd;

SS-wh, clr, amb, occ sp, p catd;

FOR 24 HR PERIOD ENDING 98-03-09-08:00  
Yr - Mon - Day - Time

**LOCATION M23**

Depth 39

**Metres last 24 hr**

HRS OB 1

### Activity at report time

| Wt 1075 | Vis 200+ | WI | Gels | Solids | PV | YP    | pH |
|---------|----------|----|------|--------|----|-------|----|
| Oil     | % Sand   | S  | Cake | PPMCL  |    | PPMCA |    |

[illegible]

| BIT NO. | JETS. mm |    |    | PUMP   |       |       |                     | ANN. VEL. |    | JET VEL. | HHP | SURF. PRESS. kPa |
|---------|----------|----|----|--------|-------|-------|---------------------|-----------|----|----------|-----|------------------|
|         | 1        | 2  | 3  | STROKE | SPM   | LINER | m <sup>3</sup> /MIN | DP        | DC |          |     |                  |
| 4A      | 19       | 19 | 19 | 254    | 110*2 | 152   | 3.08                | 49        | 89 |          |     | 3800             |

|   |    |    |   |    |    |
|---|----|----|---|----|----|
| " | at | in | " | at | in |
| " | at | in | " | at | in |
| " | at | in | " | at | in |
| " | at | in | " | at | in |

GELL 105

**CAUSTIC 1**

BARITE28

SAWDUST15

| TOOL.        | ID<br>mm | OD<br>mm | LENGTH<br>m | WEIGHT<br>kg | OPERATION                      | TODAY | CUM. |
|--------------|----------|----------|-------------|--------------|--------------------------------|-------|------|
| BIT          |          |          | 0.35        |              | 1. Drilling                    | 1.00  |      |
| BIT SUB      |          |          | 1.23        |              | 2. Trips                       | 1.75  |      |
| 5 DC.        |          | 222      | 45.0        |              | 3. Rig Service                 | 0.50  |      |
|              |          |          |             |              | 4. Deviation Surveys           |       |      |
|              |          |          |             |              | 5. Ream & Cond. Hole           | 20.75 |      |
|              |          |          |             |              | 6. Mix & Cond. Mud             |       |      |
|              |          |          |             |              | 7. Circulation                 |       |      |
|              |          |          |             |              | 8. Rig Repair WITH JAMS BED.   |       |      |
|              |          |          |             |              | 9. Run Casing & Cement         |       |      |
|              |          |          |             |              | 10. Slip and Cut Drilling Line |       |      |
|              |          |          |             |              | 11. Logging                    |       |      |
|              |          |          |             |              | 12. Rig up / tearout Loggers   |       |      |
|              |          |          |             |              | 13. Work Stuck Casing          |       |      |
| TOTAL LENGTH |          |          | 46.58       |              | 14. Rig to & Set Inner Hanger  |       |      |

|              |                 |
|--------------|-----------------|
| <b>DAILY</b> | <b>\$32,080</b> |
|--------------|-----------------|

**CUMMULATIVE** **\$753,310**

GR ELEV. K.B.

**SUPERVISOR** ROD MacEACHERN/KEVIN CAMPBELL

PH.1-403-210-2951

15. Spot LCM PM

## 16. Drilling Out

### 17. B.O.P. DRILL

**18. SHUT IN MONITOR WELL.**

**19. CIRC. AND MUD UP**

## 20. MONITOR WELL FOR LOSSES

## 21. WAIT ON LOGGERS

|       |       |
|-------|-------|
| TOTAL | 24.00 |
|-------|-------|

**PARAMOUNT RESOURCES LTD.****DAILY DRILLING REPORT (page 2)**FOR 24 HR PERIOD ENDING **98-03-09-08:00**  
Yr - Mon - Day TimeWELL NAME **PARAMOUNT ET AL NETLA**LOCATION **M23****OPERATIONS DETAIL:****08:00-14:00 REAM FM. 29M TO 37M****14:00-14:45 PULL OUT CHECK BIT COND. OK.****14:45-15:15 SERV TOP DRIVE****15:15-15:45 RUN IN THE HOLE.****15:45-22:45 REAM FM. 29M TO 37M RAISE VIS TO 200+ CHANGED SHAKER SC. TO 74S****22:45-23:15 PULL OUT CHECK BIT COND. BROKEN INCERTS OK.****23:15-06:30 REAM 29M TO 37M KB.****06:30-08:00 MADE A CONNECTION & DRILL****WANT LIST:****WEATHER: -37****ROAD: GOOD WINTER COND.****IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

Wellname : Paramount, et al Netla M23  
Location : Lat 60 50, Long 123 00  
Date : 03-09-98  
Contact : Paul Collens

## AM REPORT

Depth @ 06:00 hrs - 37 m Progress last 24 hrs - 0 m  
Rig activity : Reaming  
Last 24 hrs : Reaming  
Next 24 hrs : Ream  
Drill 3 singles  
Trip for 444mm bit  
Drill fluid : Density: 1060 kg/m3 Vis: 200+ Wl: .... ph: 9.5  
Surveys :  
Remarks :

Lithology, Tops, Hotwire: K.R. 279.80 m

5 - 25 No sample;

25 - 30 SANDSTONE - white, clear, amber, black, very coarse grained to medium grained, angular, moderately sorted, 15% intergranular porosity, glacial debris, slightly calcareous, occasional cherty, occasional dolomite, microcrystalline to cryptocrystalline, dense, abundant quartz;  
CHERT - white, opaque, very coarse crystalline to coarse crystalline, 10% intergranular porosity, trace quartz;

30 - 35 CHERT - white, opaque, very coarse crystalline to coarse crystalline, 10% intergranular porosity, trace quartz;  
SANDSTONE - white, clear, amber, black, very coarse grained to medium grained, angular, moderately sorted, 15% intergranular porosity, glacial debris, slightly calcareous, occasional cherty, occasional dolomite, microcrystalline to cryptocrystalline, dense, abundant quartz;

## Background Gas

21. - 39 ' 0 - 2 units

## Peaks

.... - ....' .. / .. units

STRIP LOG INTERVAL - .... to .... meters

eof - Dave Lawrence - 1-403-210-0371

# PARAMOUNT RESOURCES LTD.

## DAILY DRILLING REPORT

FOR 24 HR PERIOD ENDING **98-03-08 @ 08:00**  
Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al NETLA**

LOCATION **M-23**

Day **3**

Depth **37mKB**

Metres last 24 hr **8**

Rotating hrs **9**

Activity at report time **REAMING BACK TO BOTTOM**

### DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT

Wt 1060 Vls 115 WL Gels Solids % PV YP pH 10  
Oil % Sand % Cake PPMCL PPMCa

### BIT RECORD

| BIT NO. | SIZE mm | MAKE & TYPE  | SER. NO. | BIT    |         | DEPTH OUT m | m DRLD TODAY | CUM m DRLD | Rot hrs TODAY | CUM. Rot hr | m/hr | Dull Cond. |   |   |
|---------|---------|--------------|----------|--------|---------|-------------|--------------|------------|---------------|-------------|------|------------|---|---|
|         |         |              |          | WT     | RPM     |             |              |            |               |             |      | T          | B | G |
| 3A      | 444     | REED / MS51A | U70131   | 5 / 10 | 45 / 60 | 29          |              |            |               |             |      | 1          | 1 | 1 |
| 4A      | 311     | REED / HP53A | ER3578   | 5 / 10 | 45 / 65 |             | 8            | 37         | 9.25          | 12.75       | 3.00 |            |   |   |

### CIRCULATION RECORD

| BIT NO. | JETS - mm |      |      | PUMP   |      |       |        | ANN. VEL. |    | JET VEL. | HHP | SURF. PRESS. kPa |
|---------|-----------|------|------|--------|------|-------|--------|-----------|----|----------|-----|------------------|
|         | 1         | 2    | 3    | STROKE | SPM  | LINER | m³/MIN | DP        | DC |          |     |                  |
| 3A      | 22.2      | 22.2 | 22.2 |        |      |       |        |           |    |          |     |                  |
| 4A      | 19        | 19   | 19   | 254    | 95x2 | 152   | 2.8    |           | 80 | 55       |     | 3100             |

### DEVIATION SURVEYS

" at m " at m  
" at m " at m  
" at m " at m  
" at m " at m

### MUD & CHEMICALS ADDED

GEL - 55  
SAWDUST - 14  
DRILL DETERGENT - 1

### BOTTOM HOLE ASSEMBLY

| TOOL                | ID mm | OD mm | LENGTH m     | WEIGHT daN |
|---------------------|-------|-------|--------------|------------|
| BIT                 |       |       | 0.35         |            |
| BIT SUB             |       |       | 1.23         |            |
| 4-DCs               |       |       | 35.96        |            |
| <b>TOTAL LENGTH</b> |       |       | <b>37.54</b> |            |

### TIME ANALYSIS

| OPERATION                  | TODAY        | CUM. |
|----------------------------|--------------|------|
| 1. Drilling                | 9.25         |      |
| 2. Trips                   | 1.00         |      |
| 3. Rig Service             |              |      |
| 4. Deviation Surveys       |              |      |
| 5. Ream & Cond. Hole       |              |      |
| 6. Mix & Cond. Mud         |              |      |
| 7. Circulation             |              |      |
| 8. Rig Repair              |              |      |
| 9. Run Casing & Cement     |              |      |
| 10. Fishing                |              |      |
| 11. Logging                |              |      |
| 12. Coring                 |              |      |
| 13. Formation Testing      |              |      |
| 14. Waiting on:            |              |      |
| 15. Nipple Up & Test BOPS  |              |      |
| 16. Drilling Out           |              |      |
| 17. Lost Circ.             |              |      |
| 18. Laying Down DP & BOP's |              |      |
| 19. Plug & Abandon         |              |      |
| 20. Make Up BHA            | 1.00         |      |
| 21. Reaming                | 12.75        |      |
| <b>TOTAL</b>               | <b>24.00</b> |      |

### COSTS

DAILY \$107,019  
CUMMULATIVE \$721,350

SUPERVISOR KEVIN CAMPBELL  
TELEPHONE (403) 210-0371

# **PARAMOUNT RESOURCES LTD.**

## **DAILY DRILLING REPORT (page 2)**

FOR 24 HR PERIOD ENDING 98-03-08 @ 08:00

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al NETLA** LOCATION **M-23**

GROUND ELEV: **273.1 m**

KB to GL: **6.7 m**

KB ELEV: **279.8 m**

### **OPERATIONS DETAIL:**

08:00 - 08:30 MAKE UP NEW BHA

08:30 - 11:45 DRILL 444mm HOLE FROM: 29mKB - 30mKB

11:45 - 12:00 RIG SERVICE

12:00 - 14:00 DRILL 444mm HOLE: NO GAIN IN DEPTH

14:00 - 15:00 POOH LAY DOWN 444mm BIT, PICK UP 311mm BIT FOR PILOT HOLE

15:00 - 19:00 DRILL 311mm PILOT HOLE FROM: 30mKB - 37mKB

19:00 - 23:45 REAMING FROM 29mKB - 32mKB

23:45 - 24:00 RIG SERVICE

24:00 - 08:00 REAMING FROM 32mKB - 34mKB

**NOTE:** 98-03-06 DEPTH SHOULD HAVE BEEN 29mKB

**WANT LIST:**

**WEATHER:** -35

**ROAD:** GOOD WINTER CONDITIONS

**IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

# PARAMOUNT RESOURCES LTD.

## DAILY DRILLING REPORT

FOR 24 HR PERIOD ENDING **98-03-07 @ 08:00**  
Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al NETLA**

LOCATION **M-23**

Day **2**

Depth **36**

Metres last 24 hr **36**

Rotating hrs **4**

Activity at report time **DRILL 444mm HOLE**

### DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT

|         |        |      |      |        |       |       |      |
|---------|--------|------|------|--------|-------|-------|------|
| Wt 1050 | Vls 48 | WL   | Gels | Solids | % PV  | YP    | pH 9 |
| Oil     | %      | Sand | %    | Clay   | PPMCL | PPMCA |      |

### BIT RECORD

| BIT NO. | SIZE mm | MAKE & TYPE  | SER. NO. | BIT  |       | DEPTH OUT m | m DRLD TODAY | CUM m. DRLD | Rot hrs TODAY | CUM. Rot hr | m/hr  | Dull Cond. |   |   |
|---------|---------|--------------|----------|------|-------|-------------|--------------|-------------|---------------|-------------|-------|------------|---|---|
|         |         |              |          | WT   | RPM   |             |              |             |               |             |       | T          | B | G |
| 1A      | 444     | SMITH/HAMMER | C-125    | 1/2  | 20    | 21          | 21           | 10          | 1.50          | 1.50        | 14.00 | 1          |   | 1 |
| 2A      | 444     | REED/S13G    | NP0052   | 3/5  | 50/80 | 36          | 15           | 36          | 2.00          | 3.50        | 7.50  | 8          | 2 | 2 |
| 3A      | 444     | REED/MS51A   | U70131   | 5/10 | 80/90 |             |              |             |               |             |       | R          | U | N |

### CIRCULATION RECORD

| BIT NO. | JETS - mm    |      |      | PUMP   |     |       |        | ANN. VEL. |    | JET VEL | IHIP | SURF. PRESS. kPa |
|---------|--------------|------|------|--------|-----|-------|--------|-----------|----|---------|------|------------------|
|         | 1            | 2    | 3    | STROKE | SPM | LINER | m'/MIN | DP        | DC |         |      |                  |
| 1A      | HAMMER / AIR |      |      | 254    |     | 152   |        | 0         | 0  |         |      |                  |
| 2A      | 22.2         | 22.2 | 22.2 | 254    | 120 | 152   | 1.7    | 12        | 15 | 40      |      | 2500             |
| 3A      | 22.2         | 22.2 | 22.2 | 254    | 120 | 152   | 1.7    | 12        | 15 | 40      |      | 2500             |

### DEVIATION SURVEYS

|   |    |   |   |    |   |
|---|----|---|---|----|---|
| " | at | m | " | at | m |
| " | at | m | " | at | m |
| " | at | m | " | at | m |
| " | at | m | " | at | m |

### MUD & CHEMICALS ADDED

GEL - 115  
KWIK SEAL - 4  
SAWDUST - 54  
LIME - 1  
CAUSTIC - 1

### BOTTOM HOLE ASSEMBLY

| TOOL                | ID mm | OD mm | LENGTH m     | WEIGHT daN |
|---------------------|-------|-------|--------------|------------|
| BIT                 |       |       | 0.45         |            |
| ROLLER REAMER       |       |       | 1.86         |            |
| 3 x DCs             |       |       | 26.91        |            |
| <b>TOTAL LENGTH</b> |       |       | <b>29.22</b> |            |

### TIME ANALYSIS

| OPERATION                      | TODAY        | CUM. |
|--------------------------------|--------------|------|
| 1. Drilling                    | 3.50         |      |
| 2. Trips                       | 0.50         |      |
| 3. Rig Service                 | 0.25         |      |
| 4. Deviation Surveys           |              |      |
| 5. Ream & Cond. Hole           |              |      |
| 6. Mix & Cond. Mud             |              |      |
| 7. Circulation                 |              |      |
| 8. Rig Repair                  | 0.75         |      |
| 9. Run Casing & Cement         |              |      |
| 10. Fishing                    |              |      |
| 11. Logging                    |              |      |
| 12. Coring                     |              |      |
| 13. Formation Testing          |              |      |
| 14. Waiting on:                |              |      |
| 15. Nipple Up & Test BOPS      |              |      |
| 16. Drill Out Cmt In Conductor | 0.75         |      |
| 17. Lost Circ.                 | 5.00         |      |
| 18. Laying Down DP & BOP's     |              |      |
| 19. Repair Reamer              | 2.00         |      |
| 20. Change Over To Mud         | 9.00         |      |
| 21. Handle Hammer BHA          | 2.25         |      |
| <b>TOTAL</b>                   | <b>24.00</b> |      |

### COSTS

|            |                |
|------------|----------------|
| DAILY      | \$55,041       |
| CUMULATIVE | \$614,330      |
| SUPERVISOR | KEVIN CAMPBELL |
| TELEPHONE  | (403) 210-0371 |

DAY

**PARAMOUNT RESOURCES LTD.****DAILY DRILLING REPORT (page 2)**

FOR 24 HR PERIOD ENDING 98-03-07 @ 08:00

Yr - Mon - Day - Time

WELL NAME **PARAMOUNT et al NETLA** LOCATION **M-23**GROUND ELEV: **273.1 m**KB to GL: **6.7 m**KB ELEV: **279.8 m****OPERATIONS DETAIL:**

08:00 - 08:45 MAKE UP HAMMER BHA

08:45 - 09:45 DRILL OUT CMT IN CONDUCTOR

09:45 - 10:30 SPUD AND DRILL 444mm HOLE TO 21mKB, WATERED OUT

10:30 - 12:00 LAY DOWN 228mm DC, HAMMER AND BIT

12:00 - HANG BLOEY LINE, RIG OUT AND LAY DOWN ROTATING HEAD, BUILD FLOW

19:00 NIPPLE W/ WELDER

19:00 - 22:00 MAKE UP NEW BHA, RIH, DISPLACE HOLE TO MUD, SEVERE LOSSES

22:00 - 23:45 MIX UP LCM PILLS AND SPOT

23:45 - 24:00 RIG SERVICE

24:00 - 02:15 FILL MUD TANKS w/WATER, MIX UP LCM PILLS AND SPOT, GET FULL RETURNS

02:15 - 03:00 RIG REPAIR: WORK ON TOP DRIVE

03:00 - 05:00 DRILL 444mm HOLE FROM: 21mKB - 36mKB, ERRATIC TABLE TORQUE

05:00 - 05:30 POOH: BIT DULL AND ONE ROLLER ON ROLLER REAMER IS SEIZED

05:30 - 07:30 REPAIR ROLLER REAMER AND CHANGE BIT

07:30 - 08:00 RIH AND DRILL 444mm HOLE

**WANT LIST:****WEATHER: -39****ROAD: GOOD WINTER CONDITIONS****IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)**

# PARAMOUNT RESOURCES LTD.

## DAILY DRILLING REPORT

FOR 24 HR PERIOD ENDING 98-03-06 @08:00

Yr - Mon - Day - Time

WELL NAME PARAMOUNT et al NETLA

LOCATION M-25

Day 1

Depth 0

Metres last 24 hr -

Rotating hrs -

Activity at report time CHANGE BHA TO DRILL TO BTM OF CONDUCTOR

### DRILLING MUD PROPERTIES AT SHAKER/SUCTION/PIT

Wt Oil      Vis %      Sand      WL %      Gels Cake      Solids PPMCL      % PV      YP PPMCa      pH

### BIT RECORD

| BIT NO. | SIZE mm | MAKE & TYPE | SER. NO. | BIT |     | DEPTH OUT m | m DRLD TODAY | CUM m. DRLD | Rot hrs TODAY | CUM. Rot hr | m/hr | Dull Cond. |   |   |
|---------|---------|-------------|----------|-----|-----|-------------|--------------|-------------|---------------|-------------|------|------------|---|---|
|         |         |             |          | WT  | RPM |             |              |             |               |             |      | T          | B | G |

### CIRCULATION RECORD

| BIT NO. | JETS - mm |   |   | PUMP   |     |       |        | ANN. VEL. |    | JET VEL | IHP | SURF. PRESS. |  |  |
|---------|-----------|---|---|--------|-----|-------|--------|-----------|----|---------|-----|--------------|--|--|
|         | 1         | 2 | 3 | STROKE | SPM | LINER | m'/MIN | DP        | DC |         |     | kPa          |  |  |

254

152

0

0

### DEVIATION SURVEYS

" at m      " at m  
" at m      " at m  
" at m      " at m  
" at m      " at m

### MUD & CHEMICALS ADDED

### BOTTOM HOLE ASSEMBLY

| TOOL | ID | OD | LENGTH | WEIGHT |
|------|----|----|--------|--------|
|      | mm | mm | m      | daN    |

BIT  
HAMMER

0.39  
2.10

TOTAL LENGTH

2.49

### TIME ANALYSIS

| OPERATION | TODAY | CUM. |
|-----------|-------|------|
|-----------|-------|------|

1. Drilling
2. Trips
3. Rig Service
4. Deviation Surveys
5. Exam & Cond. time
6. Mix & Cond. Mud
7. Circulation
8. Rig Repair
9. Run Casing & Cement
10. Fishing
11. Logging
12. Coring
13. Formation Testing
14. Waiting on:
15. Nipple Up & Test BOP's
16. Drilling Out
17. Lost Circ.
18. Laying Down DP & BOP's
19. Drill Out Conductor
20. Rig up - Tear out
21. Make Up BHA

1.50  
14.50  
8.00  
TOTAL 24.00

### COSTS

DAILY \$30,644  
CUMMULATIVE \$559,289

SUPERVISOR KEVIN CAMPBELL  
TELEPHONE (403) 210-0371

# PARAMOUNT RESOURCES LTD.

## DAILY DRILLING REPORT (page 2)

FOR 24 HR PERIOD ENDING 98-03-06 @08:00

Yr - Mon - Day - Time

WELL NAME: PARAMOUNT et al NETLA LOCATION M-23

GROUND ELEV: 273.1 m

KB to GL: 6.7 m

KB ELEV: 279.8 m

### OPERATIONS DETAIL:

08:00 - 12:00 INSTALL HCR SPACER SPOOL, NIPPLE UP HYDRIL AND ROTATING HEAD  
12:00 - RIG UP DIVERTER FOR ROTATING HEAD, BUILD FLOW LINE AND BLOEY  
22:30 LINE WITH WELDER  
22:30 - PULL FLOW BUSHINGS AND MASTER BUSHINGS, PULL INSERT ON ROTATING  
02:00 HEAD THROUGH TABLE AND MAKE UP BHA, INSTALL INSERT & BUSHINGS RIH  
02:00 - HIT PLUG (ICE?) AT 11mKB, NOT DEEP ENOUGH TO GET ROTATING HEAD  
03:30 INSERT IN HEAD, TRY BREAKING THROUGH PLUG  
03:30 - POOH, PULL BOTH SET OF BUSHINGS, PULL ROTATING HEAD INSERT  
THROUGH TABLE, LAY DOWN 9" DC, MAKE UP NEW BHA, RIH, INSTALL  
08:00 HEAD INSERT AND BUSHINGS, DRILL OUT PLUG

### WANT LIST:

WEATHER: -17

ROAD: GOOD WINTER CONDITIONS

### IN DETAIL: MOVEMENT OF PURCHASE & RENTAL ITEMS (WHERE, WHEN, HOW)