

N.E.B. COPY

**PARAMOUNT RESOURCES LTD.**

**PARA et al MOUNT COTY**

**I-02**

**100/I-02-60-20-123-30/00**

**FANTASQUE**

**MAR 11-13, 2001**

**Well Test Data**

**Contact**

**GRANT HARTER  
Well Testing Manager**

**Nisku: (780) 955-7525**

## GENERAL INFORMATION

### Client Information:

Company: PARAMOUNT RESOURCES LTD.  
Contact: PARAMOUNT RESOURCES LTD.  
Phone: 403-290-3626 Fax: 403-266-6032 e-mail:

### Site Information:

Contact: WAYNE TOMM/ AL IRONSIDE  
Phone: Fax: e-mail:

### Well Information:

Name: PARA et al MOUNT COTY I-02  
Operator: PARAMOUNT RESOURCES LTD.  
Location-Downhole: I-02-60-20-123-30  
Location-Surface: I-02

### Test Information:

Company: SOLID PRODUCITON SERVICES LTD.  
Representative: GRANT HARTER  
Supervisor: RYAN WHITE  
Test Type: SINGLE POINT TEST Job Number: 074  
Test Unit: PT-501  
Start Date: 2001/03/11 Start Time: 07:30:00  
End Date: 2001/03/13 End Time: 10:50:00  
Report Date: 2001/04/11 Prepared By: LAURA D. DOMINICK  
Remarks: Qualified By:

# WELL INFORMATION

**Well Name : PARA et al MOUNT COTY I-02**

**Well Operator : PARAMOUNT RESOURCES LTD.**

**Well Location : I-02-60-20-123-30**

**Location-Surface : I-02**

**Field : MOUNT CODY**

**Well Type : Vertical**

**Pool : UNDEFINED**

**Formation : FANTASQUE**

Perforation Type :			Producing Through : Tubing	Size	73.00 mm
Pool Datum	m	KB	Elevation Referenced From	379.50 m	KB
Datum Depth	m	KB	Elevation Referenced To	367.90 m	GL
			Offset	11.60 m	

## Production Intervals

Production Interval & MPP Reference To : KB

MPP Pressure Reference : None

	From - m	To - m		Depth - m	Pressure - kPa
1.	897.00	917.00	1.	907.00	
2.			2.		
3.			3.		
4.			4.		
5.			5.		
6.			6.		
7.			7.		
8.			8.		
9.			9.		
10.			10.		
11.			11.		
12.			12.		

Remarks :

PARAMOUNT RESOURCES LTD.  
I-02-60-20-123-30  
Start Test Date: 2001/03/11  
Final Test Date: 2001/03/13

## FieldNotes METER REPORT

PARA et al MOUNT COTY I-02  
Formation: FANTASQUE  
Pool: UNDEFINED  
Job Number: 074

### Gas Meter 1

Meter Type:	Orifice Meter
Meter Size:	146.30 mm
Previous Gas Production:	0.000 10 <sup>3</sup> m <sup>3</sup>
Tap Type:	Flange
Tap Location:	Downstream
Gas Gravity (G):	0.727
CO <sub>2</sub> :	6.38 %
H <sub>2</sub> S:	0.00 %
N <sub>2</sub> :	3.71 %
Critical Temperature (T <sub>C</sub> ):	212.57 K
Critical Pressure (P <sub>C</sub> ):	4753.93 kPa

### Oil Meter 1

Meter Type:	Measured Rate
Measurement Type:	Cumulative
Columns for Measured Rate:	
Previous Oil Production:	0.000 m <sup>3</sup>
Previous Water Production:	0.000 m <sup>3</sup>

### Oil Meter 2

Meter Type:	Produced Volume
Measurement Type:	Cumulative
Columns for Produced Volume:	
Previous Oil Production:	0.000 m <sup>3</sup>
Previous Water Production:	0.000 m <sup>3</sup>

PARAMOUNT RESOURCES LTD.

I-02-60-20-123-30

Start Test Date: 2001/03/11

Final Test Date: 2001/03/13

PARA et al MOUNT COTY I-02

Formation: FANTASQUE

Pool: UNDEEFINED

Job Number: 074

	Date	Clock Time	Cum Time	Choke Size	Orifice Size	Tbg Pres	Tbg Tem	Csg Pres	Static Pres	Diff Pres	Mete Tem	Gas Rate	Cum Gas	Fld Vol	BSW %	Inc Fld	Cum Fld	Inc Oil	Cum Oil	Inc BSW	BSW Vol	
	yyyy/mm/d	hh:mm:ss	hr	mm	mm	kPa(g)	°C	kPa(g)	kPa(g)	kPa	°C	10 <sup>3</sup> m <sup>3</sup>	10 <sup>3</sup> m <sup>3</sup>	m <sup>3</sup>	%	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	
1	2001/03/11	07:02:00	0:00	0.00	0.00	0	0	0	0	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2		07:30:00	0.47			10800		0														
3		07:45:00	0.72	Open tubing to bleed pressure to 0 Kpa.																		
4		09:00:00	1.97	Tubing bleed off.																		
5		13:20:00	6.30	Rig up to circulate.																		
6		14:35:00	7.55	Finished circulating 21.5 m <sup>3</sup> .																		
7	2001/03/12	00:30:00	17.47																			
8		07:02:00	24.00																			
9	2001/03/12	07:15:00	24.22	140 Kpa on casing.																		
10		07:30:00	24.47	Bleed pressure to vessel.																		
11		15:55:00	32.88	Bar dropped.																		
12		15:55:20	32.89	Perforations shot.																		
13		16:00:00	32.97			330		200														
14		16:05:00	33.05			420		200														
15		16:10:00	33.13			470		200														
16		16:15:00	33.22			520		200														
17		16:30:00	33.47			590		225														
18		16:45:00	33.72			680		250														
19		17:00:00	33.97			820		300														
20		17:30:00	34.47			1120		350														
21		18:00:00	34.97			1410		350														
22		19:00:00	35.97			1920		400														
23		19:00:00	35.97	Bleed off casing.																		
24		20:00:00	36.97			2040		0														
25		21:00:00	37.97			2040		0														
26		22:00:00	38.97			2040		0														
27		23:00:00	39.97			2040		0														
28		23:59:59	40.97			2040		0														
29	2001/03/13	01:00:00	41.97			2040		0														
30		02:00:00	42.97			2040		0														
31		03:00:00	43.97			2040		0														

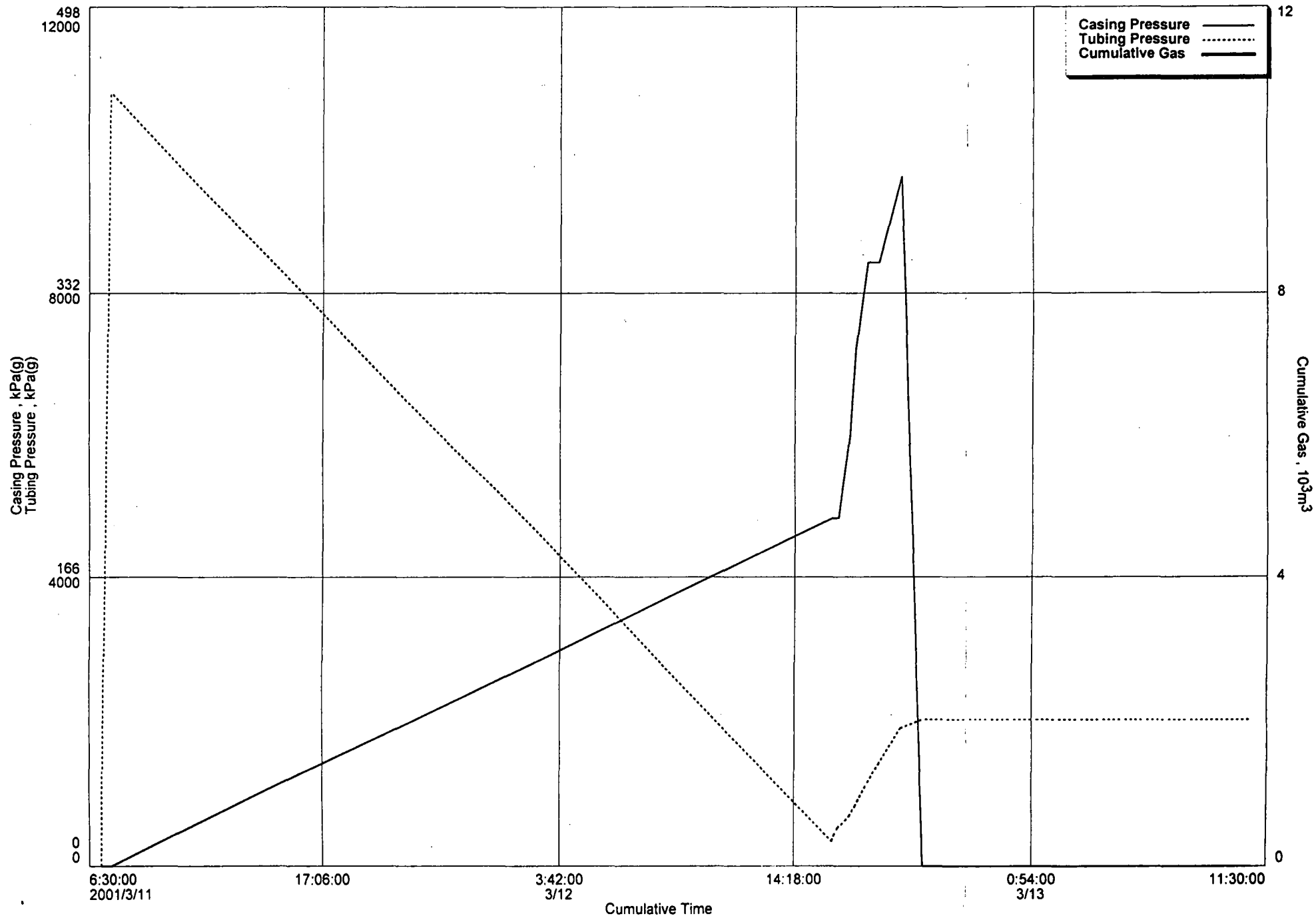
2001/03/11 07:02:00 To 2001/03/12 07:02:00  
 Gas 0.000 Cum. 0.000 10<sup>3</sup>m<sup>3</sup>  
 Oil 0.000 Cum. 0.000 m<sup>3</sup>  
 Water 0.000 Cum. 0.000 m<sup>3</sup>

PARAMOUNT RESOURCES LTD.  
 I-02-60-20-123-30  
 Start Test Date: 2001/03/11  
 Final Test Date: 2001/03/13

PARA et al MOUNT COTY I-02  
 Formation: FANTASQUE  
 Pool: UNDEFINED  
 Job Number: 074

	Date	Clock Time	Cum Time	Choke Size	Orifice Size	Tbg Pres	Tbg Tem	Csg Pres	Static Pres	Diff Pres	Mete Tem	Gas Rate	Cum Gas	Fld Vol	BSW %	Inc Fld	Cum Fld	Inc Oil	Cum Oil	Inc BSW	BSW Vol	
	yyyy/mm/d	hh:mm:ss	hr	mm	mm	kPa(g)	°C	kPa(g)	kPa(g)	kPa	°C	10 <sup>3</sup> m <sup>3</sup>	10 <sup>3</sup> m <sup>3</sup>	m <sup>3</sup>	%	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	
32	2001/03/13	04:00:00	44.97			2040		0														
33		05:00:00	45.97			2040		0														
34		06:00:00	46.97			2040		0														
35		07:00:00	47.97			2040		0														
36		08:00:00	48.97			2040		0														
37		08:00:00	48.97	Wireline on location to drop guns and run gradient.																		
38		10:50:00	51.80			2040		0														
39		10:50:00	51.80	Open well wide open 2".																		
40		10:50:30	51.81	Well dead. Rig up to swab.																		
41				REFER TO SWAB REPORT FOR SWAB INFORMATION.																		

2001/03/12 07:02:00 To 2001/03/13 07:00:00  
 Gas 0.000 Cum. 0.000 10<sup>3</sup>m<sup>3</sup>  
 Oil 0.000 Cum. 0.000 m<sup>3</sup>  
 Water 0.000 Cum. 0.000 m<sup>3</sup>





<b>Container Identification</b> AGAT 19561		<b>Laboratory Number</b> GE69349A				
<b>Operator Name</b> PARAMOUNT RESOURCES LTD.						
<b>Unique Well Identifier</b> NOT AVAILABLE		<b>Well Name</b> PARA et al MOUNT CODY I-02			<b>Elevation</b> KB m 379.50 GRD m 367.90	
<b>Field or Area</b> MOUNT CODY		<b>Pool or Zone</b> FANTASQUE		<b>Sampler's Company</b> SOLID PRODUCTION SERVICES		
<b>Test Type</b>	<b>Test No.</b>	<b>Test Recovery</b>			<b>Name of Sampler</b>	
<b>Test Interval or Perfs</b> 897.00-917.00 mKB		<b>Sampling Point</b> WELLHEAD		<b>Separator</b>	<b>Reservoir</b>	<b>Source</b> 800
				<b>Pressure (kPa)</b>		<b>Sampled</b> 800
				<b>Temperature (°C)</b>		<b>Received</b> 1200 21
<b>Date Sampled</b> Mar 14, 2001		<b>Date Received</b> Mar 20, 2001		<b>Date Reported</b> Apr 03, 2001		<b>Analyst</b> LQ
<b>Other Information</b>						

COMP	MOLE FRACTION		PETROLEUM LIQUID mL · m <sup>3</sup>
	AIR FREE AS RECEIVED	AIR FREE ACID GAS FREE	
H2	0.0010	0.0011	
He	TRACE	TRACE	
N2	0.0371	0.0396	
CO2	0.0638	0.0000	
H2S	0.0000	0.0000	
C1	0.7988	0.8532	
C2	0.0374	0.0399	
C3	0.0355	0.0379	130.4
IC4	0.0045	0.0048	19.6
NC4	0.0140	0.0150	58.9
IC5	0.0027	0.0029	13.2
NC5	0.0027	0.0029	13.1
C6	0.0014	0.0015	7.7
C7+	0.0011	0.0012	6.9
Total	1.0000	1.0000	249.8

GROSS HEATING VALUE MJ/m<sup>3</sup>  
15° C AND 101.325 kPa

Air Free As Received	Moisture & Acid Gas Free
39.60	42.28

RELATIVE DENSITY (CALCULATED)

Moisture Free	Moisture & Acid Gas Free
0.727	0.673

PSEUDO CRITICAL PROPERTIES (CALCULATED)

As Sampled		Acid Gas Free	
pPc (abs) kPa	pTc K	pPc (abs) kPa	pTc K
4704	212.5	4522	206.3

RELATIVE MOLECULAR MASS

Total Gas	C7+
21.1	102.8

VAPOUR PRESSURE  
(Pentanes +)

92.30 kPa

H<sub>2</sub>S g/m<sup>3</sup>

0.00





<b>Container Identification</b> AGAT 21246		<b>Laboratory Number</b> GE69349B																					
<b>Operator Name</b> PARAMOUNT RESOURCES LTD.																							
<b>Unique Well Identifier</b> NOT AVAILABLE	<b>Well Name</b> PARA et al MOUNT CODY I-02		<b>Elevation</b> KB m 379.50 GRD m 367.90																				
<b>Field or Area</b> MOUNT CODY	<b>Pool or Zone</b> FANTASQUE	<b>Sampler's Company</b> SOLID PRODUCTION SERVICES																					
<b>Test Type</b>	<b>Test No.</b>	<b>Test Recovery</b>	<b>Name of Sampler</b>																				
<b>Test Interval or Perfs</b> 897.00-917.00 mKB		<b>Sampling Point</b> WELLHEAD	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Separator</th> <th>Reservoir</th> <th>Source</th> <th>Sampled</th> <th>Received</th> </tr> <tr> <td></td> <td></td> <td>800</td> <td>800</td> <td>1100</td> </tr> <tr> <td colspan="2">Pressure (kPa)</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Temperature (°C)</td> <td></td> <td></td> <td>21</td> </tr> </table>	Separator	Reservoir	Source	Sampled	Received			800	800	1100	Pressure (kPa)					Temperature (°C)				21
Separator	Reservoir	Source	Sampled	Received																			
		800	800	1100																			
Pressure (kPa)																							
Temperature (°C)				21																			
<b>Date Sampled</b> Mar 14, 2001	<b>Date Received</b> Mar 20, 2001	<b>Date Reported</b> Apr 03, 2001	<b>Analyst</b> LQ																				
<b>Other Information</b>																							

COMP	MOLE FRACTION		PETROLEUM LIQUID mL · m <sup>3</sup>
	AIR FREE AS RECEIVED	AIR FREE ACID GAS FREE	
H2	0.0008	0.0009	
He	TRACE	TRACE	
N2	0.0475	0.0508	
CO2	0.0644	0.0000	
H2S	0.0000	0.0000	
C1	0.7941	0.8487	
C2	0.0363	0.0388	
C3	0.0321	0.0343	117.9
IC4	0.0042	0.0045	18.3
NC4	0.0137	0.0146	57.7
IC5	0.0027	0.0029	13.2
NC5	0.0027	0.0029	13.1
C6	0.0009	0.0010	4.9
C7+	0.0006	0.0006	3.7
Total	1.0000	1.0000	228.8

**GROSS HEATING VALUE MJ/m<sup>3</sup>  
15° C AND 101.325 kPa**

Air Free As Received	Moisture & Acid Gas Free
38.75	41.39

**RELATIVE DENSITY (CALCULATED)**

Moisture Free	Moisture & Acid Gas Free
0.724	0.670

**PSEUDO CRITICAL PROPERTIES (CALCULATED)**

As Sampled		Acid Gas Free	
pPc (abs) kPa	pTc K	pPc (abs) kPa	pTc K
4697	210.7	4512	204.3

**RELATIVE MOLECULAR MASS**

Total Gas	C7+
21.0	100.2

**VAPOUR PRESSURE (Pentanes +)**

102.61 kPa

**H<sub>2</sub>S g/m<sup>3</sup>**

0.00



**SOLID PRODUCTION SERVICES  
PRE-JOB/SAFETY SUMMARY**

**Company:** Paramount Resources Ltd

**Location:** I-02

**Start Date:** 01/03/11

**Company Rep:** Al Ironside

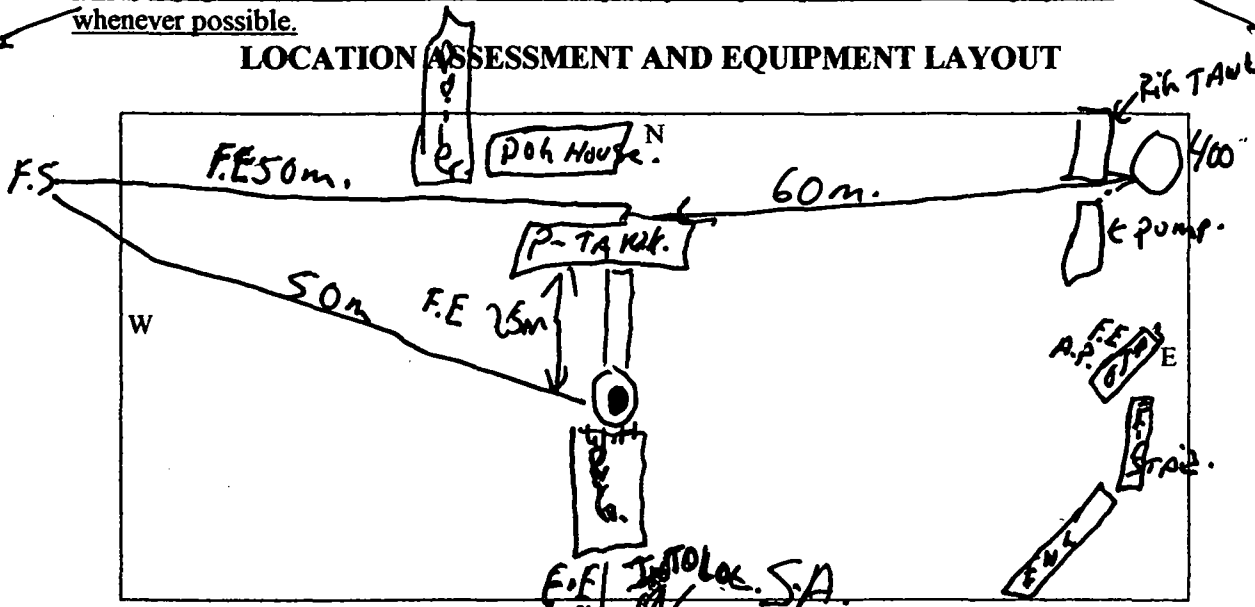
**Directions to Lease:** From Hwy 77 and Liard turnoff. Left towards Liard. Go to bottom of hill. Turn left at Paramount Petita ice bridge. Go across ice bridge and follow for approx 1.0 Km. Go left to Km 5. Right into.

<u>Phone Numbers</u>	<u>Office</u>	<u>Mobile</u>	<u>Motel</u>
<b>Company Rep</b>		403-861-3845	
<b>Day Supervisor</b>	780-955-7525	780-914-0045	
<b>Night Supervisor</b>	780-955-7525	780-499-2423	
<b>Safety Supervisor</b>			
<b>RCMP</b>	867-770-4221		
<b>Hospital</b>	250-774-6916		
<b>Air Ambulance</b>	867-770-3116		
<b>OHS</b>			

**Pre-Job Discussion**

Safety equipment to be worn at all times. Keep an eye on your partners. Use buddy system whenever possible.

**LOCATION ASSESSMENT AND EQUIPMENT LAYOUT**



Please note the following on your diagram:

- |                              |                          |
|------------------------------|--------------------------|
| 1) Prevailing Wind Direction | 6) Air Pack Locations AP |
| 2) All Sumps or Spills       | 7) Safe Area SA          |
| 3) ESD Locations ESD         | 8) Tree Line             |
| 4) Fire Extinguishers FE     | 9) Distances in Meters   |
| 5) Emergency Exit            |                          |

**SOLID PRODUCTION SERVICES  
SAMPLE INFORMATION & RECEIPT**

COMPANY: Paramount Resources Ltd.  
 LOCATION: I-02  
 OPERATED BY: Paramount  
 SAMPLE DATE: 01/03/14  
 FLOW RATE #: 0  
 FORMATION NAME AND ZONE: Fantasque

JOB #: 74  
 FIELD: Mount Coty  
 TIME: 0700 hrs

SEND RESULTS TO COMPANY ABOVE AND SOLID PRODUCTION SERVICES LTD.  
 ATTN: LYNETTE CHILEEN FAX # 955-3412

	CONTAINER #	PRESSURE	TEMP DEG C
WELLHEAD SAMPLES	<u>1.00019561</u>	<u>800Kpa</u>	
	<u>2.00021246</u>	<u>800Kpa</u>	
HIGH PRESS. GAS	1. _____	_____	
	2. _____	_____	
LOW PRESS. GAS	1. _____	_____	
	2. _____	_____	
HIGH PRESS. LIQUID	1. _____	_____	
	2. _____	_____	
LOW PRESS. LIQUID	1. _____	_____	
	2. _____	_____	

STOCK TANK SAMPLES (WATER): 3  
 NO. OF SAMPLES (OIL OR CONDENSATE): 1

PRODUCTION RATES: GAS 0 E3M<sup>^3</sup>/D OIL/COND \_\_\_\_\_ M3D H2O \_\_\_\_\_ M3D

PRESSURES: TUBING 800  
 CASING 0  
 SEPARATOR 0

SAMPLES DELIVERED TO: Agat

BY: Solid Prod

SAMPLES RECEIVED BY: Lance Olson

DATE:

**SOLID PRODUCTION SERVICES  
PRE-JOB/SAFETY SUMMARY con't**

	<b>H2S</b>	<b>First Aid</b>	<b>CPR</b>	<b>WHMIS</b>	<b>TDGR</b>
<u>R. Whitw</u> <b>Senior Supervisor</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>S. Truscott</u> <b>Night Supervisor</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>T. Peterson</u> <b>Day Operator</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>T. Wells</u> <b>Night Operator</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
_____ <b>Day Assistant</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____ <b>Night Assistant</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Company Rep - Personnel and Equipment Checklist**

**Personnel**

	<b>Poor</b>	<b>Fair</b>	<b>Good</b>	<b>Excellent</b>
<b>Knowledge</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Conduct</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Equipment**

	<b>Poor</b>	<b>Fair</b>	<b>Good</b>	<b>Excellent</b>
<b>Condition</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Performance</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Cleanliness</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Company Rep Comments**

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**COMPANY REPRESENTATIVE**

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**SOLID SENIOR SUPERVISOR**