N E B COPY

FINAL WELL REPORT

PARAMOUNT RESOURCES LTD.

PARA ET AL CAMERON F-77

Grid: 60° 10' 117° 15'

WID 2065

UWI 300F776010117150

DATE: June 16, 2010

COMPANY REPRESENTATIVE:
Dick Heenan, P. Eng.

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A. INTRODUCTION

Executive Summary

Paramount Resources Ltd. (Paramount) drilled Para et al Cameron F-77 as 1422 meter vertical well. The well was spudded 20100206 01:00 and the drilling rig was released on 20100215 08:00. The purpose of the well was to evaluate hydrocarbon potential. The primary target was the Sulphur Point Dolomite formation with a secondary target in the Slave Point formation.

The drilling contractor was Precision's Rig #254.

The well was drilled on Production License No PL-019.

A cellar and conductor were pre-installed, and a diverter system was employed during the drilling of surface hole to 380 mKB. Other than minor losses @ 152-172m and , there were no significant drilling events on surface hole. A string of 219 mm surface casing was run to and cemented.

The casing and conductor were trimmed and the casing bowl was welded on. The BOP's were installed and function tested. The BOP's and manifold were pressure tested to 1500 kPa low pressure and 14,000 kPa high pressure (except annular preventer to 10,500 Kpa high).

The float collar and shoe were drilled out. No leak off test was performed as per waiver received 20091217 from the Chief Conservation Officer of the National Energy Board. A 200 mm hole was drilled with a flocculated water system to below the Wabamun and then mudded up. No significant losses were encountered. Five hours circulating and a wiper trip were needed to clean the hole @ TD. The well drilled to TD without any other significant incidents.

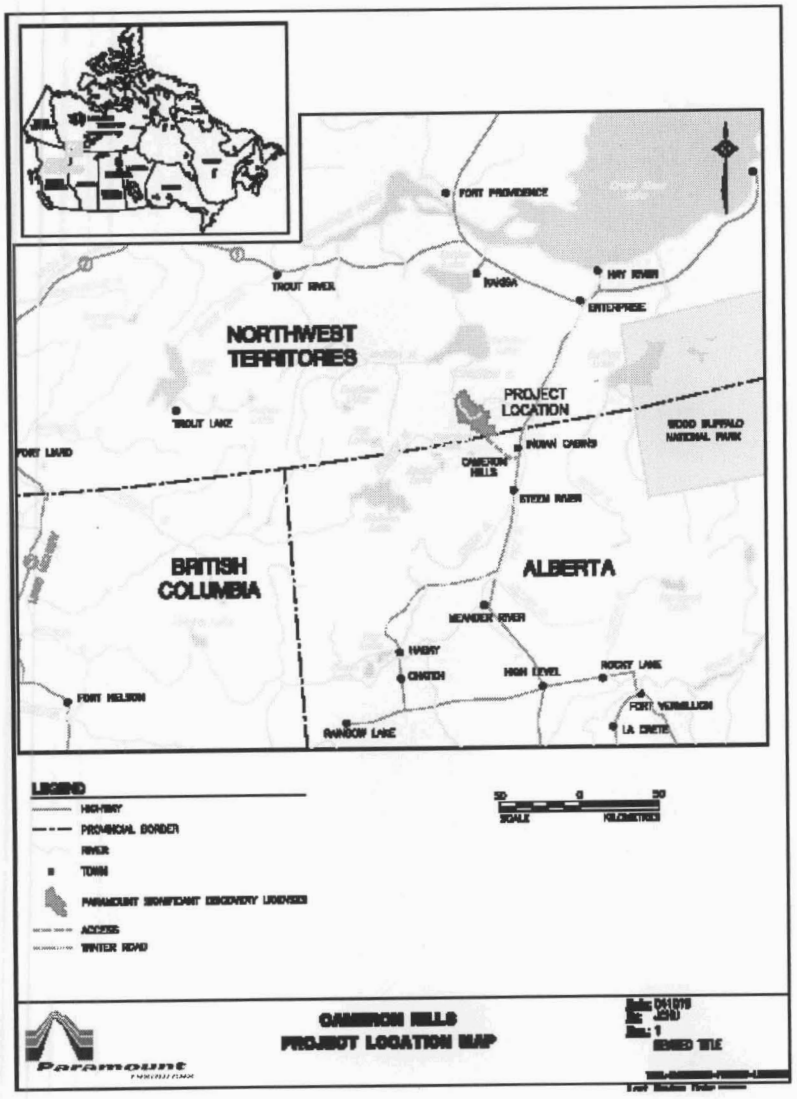
Weatherford Wireline ran induction, density, dipole sonic, and micro-resistivity logs from bottom to surface casing. (1.5m fill was encountered on wiper trip – loggers tagged 11m fill).

Production casing (139.7 mm) was run and set and cemented at 1417 mMD.

Completions Summary

The well was perforated in Sulphur Pt. The zone proved extremely tight, and the fluid that was produced was essentially all water. The tubing was removed, and the well suspended with bridge plug and 30 meters of cement. The wellhead was left in place.

Locality Map – Cameron Hills NWT



B. GENERAL DATA

1. Well Name: Para et al Cameron F-77

   Well Identification Number (WID): 2065

   Production License: PL-019

   Location Unit: F

   Section: 77

   Grid Area: 60° 10' 117° 15'

   Classification: Delineation

2. Surface Coordinates:
   Latitude: 60° 06' 23.3"
   Longitude: 117° 29' 4.7"

3. Unique Well Identifier: 300F776010117150

4. Operator: Paramount Resources Ltd.

5. Contractor: Precision Drilling

6. Drilling Unit: Precision Rig # 245,
   (conventional mechanical double land rig rated for 2000 m)
   Mud system capacity of 66 m3.
   BOP - 229mm 21MPa Class VI BOP system with NACE trim.
   A remote choke manifold with NACE trim was also contracted for & supplied.
   A second mud pump was added to improve surface hole drilling performance.

7. Position Keeping: N/A

8. Support Craft (Helicopter): N/A

9. Drilling Unit Performance: Fair (crews not familiar with NWT level of expectation)

10. Difficulties and Delays:
    No significant difficulties or delays.

11. Total Well Cost:

Drilling	$1,040,000
Completion	$ 180,000

12. Bottom Hole Co-ordinates:
Assumed as vertical well
Latitude: 60° 06' 23.3"
Longitude: 117° 29' 4.7"

C. SUMMARY OF DRILLING OPERATIONS

1. Elevations:
   Ground: 722.0 m above sea level (final "as built" survey)
   KB: 726.6 m above sea level
   KB to Casing Flange: 4.6 m

2. Total Depth: 1421.6 mMD

3. Date and Hour Spudded: 20100206 01:00

4. Date of Rig Release: 20100215 08:00

5. Well status: Cased and Suspended

6. Hole Sizes and Depths:

Conductor Hole:	610 mm to 24.4 m
(Formations in conductor)	0 – 1.2 mGL – snow
	1.2 – 24.4 mGL - solid clay & rock – no water
	Permafrost reported to 10.7m
Surface Hole:	311 mm to 379 mKB
Main Hole:	200 mm to 1421 mMD

7. Casing and Cementing Record:

Conductor Hole:

Casing Size:	406 mm
Depth Set:	24.8 m
Cement Volume:	100 sacks
Cement Type:	Portland

Surface Hole:

Casing Size:	219.1 mm
Casing Weight:	35.7 kg/m
Casing Grade:	J-55
Thread:	ST&C
Depth Set:	379 mKB
Cement Volume:	33 Tonnes
Cement Type:	Class 'G'
Additives:	1.5% $CaCl_2$
	Celloflake
Cement Returns:	5m3 to surface
Bumped Plug:	7MPa

Main Hole:

Casing Size:	139 mm
Casing Weight:	20.8 kg/m
Casing Grade:	J-55
Thread:	ST&C

Depth Set:	1417 mMD
Plug Back Depth:	1403 mMD
Cement Volume 1:	23.9 Tonnes
Cement Type 1:	Thixlite
Additives 1:	0.04% LTR
Cement Volume 2:	8 Tonnes
Cement Type 2:	Expandomix LWL
Additives 2:	0.15% CFL-3 + 0.3% LTR.
Cement Returns:	0.5m3
Bumped Plug:	15.5 MPa

8. Sidetracked Hole: No

9. Drilling Fluid: See detailed mud reports in appendix

Conductor Hole: Dry drilled (auger)

Surface Hole:	Shure Shale/PHPA	
Properties:	Viscosity:	33-40 sec/L
	Weight:	1050 - 1060 kg/m^3
	PH:	8.0
Remarks:	Gravel, rocks, loose sand 30-120m Foaming & sticky natural clays	

Main (379– 1000 m):	Floc water	
Properties:	Viscosity:	28-58 sec/L
	Weight:	1000 - 1450 kg/m^3
	PH:	8.0 - 10
	Remarks:	No lost circulation in Wabamun

Main (1000 m – TD):	Shure Shale/PHPA	
Properties:	Viscosity:	32 - 37 sec/L
	Weight:	1040 - 1050 kg/m^3
	PH:	9.0 – 10.5
	Remarks:	Lots of fill on bottom

10. Fishing Operations: None

11. Well Kicks and Well Control Operations: None

12. Formation Leak Off Tests:
No leak off test was performed as per waiver received 20091217 from the Chief Conservation Officer of the National Energy Board.

13. Time Distribution Down by Activity:

IADC Code	Activity	Hours	Percentage
1	Move in / rig up:	39.0	12.5
2	Drill	98.2	31.5
3	Ream	0	0
4			
5	Circulate and condition mud:	14.0	4.5
6	Trip	30.2	9.7
7	Rig Service	6	1.9
8	Repair Rig	0	0.0
9	Slip & cut line	1.8	0.6
10	Survey	6.8	2.2
11	Wireline logs	9.2	2.9
12	Casing & Cement	13.5	4.3
13	WOC	5.8	1.8
14	Nipple up	13.2	4.2
15	Test BOP	7.5	2.4
16	Drillstem Test		
17			
18	Squeeze Cement	0	0
19			
20	Directional Work	0	0
21	Safety Meeting	11.0	3.5
22	Tear out	21.5	6.9
23	Wait on (other than cement)	0	0
24			
25	Other (diverter install, W/O license, etc)	34.2	11.0

14. Deviation Survey: Vertical Well

15. Abandonment Plugs: N/A for drilling
Well was cased and cemented full length for completion & testing

16. Composite Well Record: See the copy of the strip log in the Geological Report in the Attachments Section

17. Wellhead: GE Vetco
Casing Bowl: 228 mm x 219 mm x 21 MPa
Top Section: 179.4mm - 20.7MPa X 65.1mm - 34.5MPa
DD Sour Service trim with ext. neck hanger

18. Completion:

Currently perforated in Sulphur Pt Dolomite and suspended with bridge plug and 30 meters of cement

Completion Operations

- Moved in & rigged up Concord 41 service rig, test equipment & flare stack on 20100228
- Displaced well to fresh water with 3% KCL (used as completion fluid)
- Cement bond log – cement top @ surface – good bond throughout
- Perforated with wireline guns – underbalanced (negligible pressure response)
  Sulphur Pt Dolomite 1366-1370 mKB
- Swab & evaluate – negligible fluid (0.84 m3 – 15% oil) – fluid subsequently turned to 100% water
- Pull 73mm tubing
- Suspend well with bridge plug set @ 1361mKB and topped with 30m cement
- Released completion rig 201003204

Further details including completions schematic "as built" are located in the appendices

D: GEOLOGY

Formation Tops

FORMATION	PROGNOSIS TOPS		SAMPLE/LOG TOPS		COMMENTS
MSL–RKB: 725.92m	m TVD	m SubSea	m TVD	m SubSea	m Isopach
Wabamun FM	498.92	228.00	495.50	230.42	169.00
Jean Marie Mbr	655.92	70.00	664.50	61.42	6.00
Fort Simpson Fm	662.92	63.00	670.50	55.42	110.00
Twin Falls Fm	780.92	-55.00	780.50	-54.58	159.00
Hay River Fm	941.92	-216.00	939.50	-213.58	333.00
Beaverhill Lake Fm	1275.92	-550.00	1272.5	-546.58	23.00
Slave Point Fm	1297.92	-572.00	1295.5	-569.58	41.00
F4 Marker Fm	1338.92	-613.00	1336.5	-610.58	10.00
Watt Mountain Fm	1346.92	-621.00	1346.0	-620.08	4.50
Sulphur Pt Ls Fm	1351.92	-626.00	1350.5	-624.58	9.50
Sulphur Pt Dol	1361.92	-636.00	1359.5	-633.58	11.50
Muskeg Fm	1373.92	-648.00	1371.0	-645.08	49.00
Total Depth	1393.92	-668.00	1420.0	-694.08	-

(From Geological Report – full version in the Attachments Section)

Sample Descriptions: See the Geological Report in the Attachments Section.

GAS DETECTION REPORT

A gas detector was utilized from the drill out of the conductor pipe to total depth. The gas detector readings are included on the composite geological log in the Attachments Section.

DRILL STEM TESTS:

No Drillstem tests were run

WELL EVALUATION

The following logs were run:

Simultaneous Triple Induction Shallow Focused Log:	378 - 1408 mMD
Spectral Density Compensated Neutron Log:	0 - 1389 mMD
Dipole Sonic Log:	378 - 1396 mMD
Micro-Resistivity Log:	1250 - 1377 mMD

COMPLETION AND TESTING DATA

The following are found in the appendices
(to the extent that they were obtained/performed on this well)
Swab reports

E. ENVIRONMENTAL CONSIDERATIONS

There are no known outstanding environmental considerations on this well.

WEATHER SUMMARY

Typical winter weather for Northern Alberta & the southern NWT was encountered during the drilling & completion of this well. After an unseasonably warm November, cold weather and snow facilitated construction of winter snow roads in December. During drilling (early February), temperatures ranged from -8C to -20C. Conditions were generally clear and calm. During completions (early March) temperatures were warmer (-5 - -10C), but the longer hours of daylight softened the roads and road travel was limited to night time.

ENVIRONMENTAL PROTECTION

Fuel tanks were all double walled.
Minor "drips & spills" were cleaned up and recorded on the "Spill Log".
There were no spills exceeding the reporting threshold to the NWT Spill Line.

Significant challenges (minor spills) were encountered due to differences in expectation between crews trained and experienced with practices in Alberta, and Paramount's much higher expectations in the NWT. This is a difficult challenge due to the short operating season due to the requirements for "winter only" operations in the NWT, and the transient nature of the upstream petroleum workforce. There was one reportable spill (10-038).

WASTE HANDLING

The `well was drilled sumpless with all drilling fluids being held in tanks on the lease. At the end of the job the water was stripped from the mud system and hauled to the subsequent wells for re-use.
The solids were hauled to a remote site at B-08 60^0 10' N, 117^0 30' W where they were disposed of in cell 'B' using the mix/bury/cover technique. Due to the nature of the formations drilled, it was essentially impossible to avoid carry-over of liquids with the solids taken to the sump. Solids that appeared relatively "dry" when hauled to the sump subsequently separated, leaving a small quantity of liquid on the surface. An attempt was made to use a "high G dryer" to reduce this effect, but if was not very successful. To prevent the freezing and subsequent incorporation of liquids into the sump (a violation of the Land Use Permit), a "bell hole" was dug in the sump material and the excess fluid sucked off with a vacuum truck and returned to the active drilling fluid system.

Liquid waste generated during the completions operations (spent KCL and produced

water) was hauled to a deep well disposal site in Alberta for injection.

Sewage generated on site was trucked to the central camp @ H-03 where it was treated stored and tested prior to discharge. Treated effluent, passing discharge criteria, was discharged to the land, avoiding water course and water bodies. Material that did not pass was either re-processed until satisfactory or hauled to an approved municipal sewage facility in Hay River.

Solid waste was segregated, stored in covered bins, hauled to Ft Nelson by a waste handling and recycling company.

SPILLS

There was one reportable spill (10-038) on the drilling location consisting of 0.25 m3 drilling mud. This spill occurred when a vacuum hose contacted a valve and accidentally opened it. Most of the mud was sucked up immediately with a vacuum truck. Remaining material was scraped up when the rig was moved. Mud along with contaminated snow was stored in the steel "shale bin" and was reprocess into the mud system on the next well.

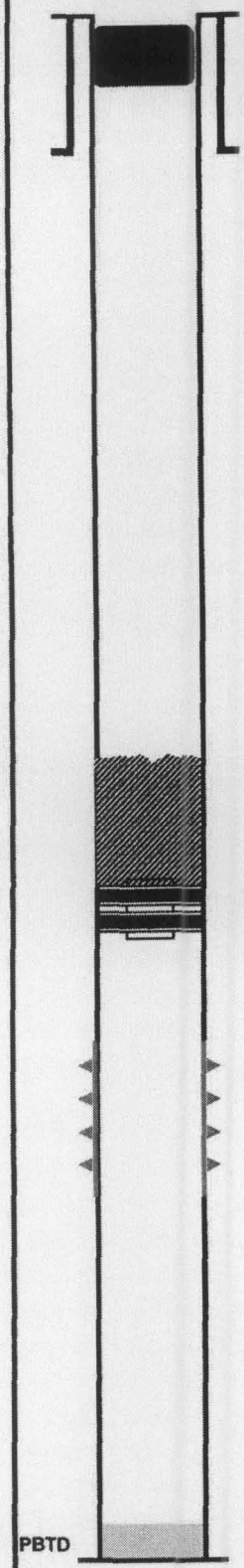
APPENDICES

1. Wellbore Schematic
2. Wellhead Schematic
3. Geological report & geological composite log (strip log)
4. Survey plan.
5. Rathole Report
6. Paramount Daily Reports (drilling)
7. Tour Sheets (drilling)
8. Drilling Fluid Reports
9. Paramount Daily Reports (completion)
10. Tour Sheets (completion)
11. Swab Reports

PARAMOUNT RESOURCES LTD.

Existing

DOWNHOLE DIAGRAM



WELL NAME:	Para et al Cameron F - 77			WID : 2065	
Prepared by	Kim MacLeod		Date Start :		
Elevations :					
KB [m]	725.40	KB to CF [m]	4,6	TD [m]	1421m
GL [m]	720.80	PBTD [m]	1400.50		
Tubulars	Size [mm]	Wt - Kg/m	Grade	Landing Depth [m]	
Surface Casing	219.10	35.70	J - 55 , ST&C	379m	
Product. Casing	139.70	20.80	J - 55 , ST&C	1417m	
Wellhead Description:					
Make / Type:	BARBER	Vetco Gray			
Size / Rating :	279mm X	21,000 kPa	179mm X 21,0 00 kPa		
Tubing String:	73mm , J - 55 , 9.67 Kg / m , E U E			(m)	(m)
Date of Tubing Description:				Length	Top @

No.Jts.	Description	K.B.--Tbg. Flg.	4.05	KB Depth
			0	0.00
			0	0.00
			0.00	0.00
			0	0.00
			0	0.00
			0	0.00
			0	0.00
			0.00	0.00
			0.00	0.00
			0.00	0.00
			0.00	0.00
			0.00	0.00
			0.00	0.00
				0.00
	Bottom of Tubing mKB			

SUCKER ROD'S FROM BOTTOM UP

Perforations :			
Zone	Sulphur Point	Interval :	1366m - 1370.5mKB
Zone		Interval :	
Zone		Interval :	
Stimulation :	Acid Squeeze		

GE Oil & Gas
710, 530 - 8th Ave S.W. Calgary, Alberta T2P 3S8
Phone: (403) 264-4146 Fax (403) 269-4224
Toll Free: 1-800-925-6024

Quotation **10-16881** Rev 0

	Date:	March 1, 2010
	Sold To:	**Paramount Res.**
	Attention	Mr. Dick Heenan
	Reference:	Cameron Hills
	Currency:	CAD
	Payment Terms:	Net 30 days
	Delivery:	Stock as Required
x	F.O.B. Point	Edmonton
	F.C.A. Point	
	Quotation Validity:	45 days
	Account Representative	Al Stratulate

Quotation 10-16881 Rev 0

Item	Qty	Part No	Description	Unit Price	Total
			EQUIPMENT QUOTED HEREIN ARE BASED ON:		
			MATERIAL CLASS: DD-NL TEMPERATURE RATING: L-U PSL 1, PR 1 UNLESS OTHERWISE NOTED		
1	1		CASING HEAD ASSEMBLY, VG-SOW, 9 3000 (228.6mm20.7MPa) X 8-5/8 (219.1mm) SOW, C/W (2) 2-1/16 3000 (52.4mm20.7MPa) SSO W/ 1.900 (48.3mm) VRT, API 6A 19TH ED., TC L-U, MC CDD, PR-1, PSL-1	1762.50	1762.50
2	1		CASING SLIP ASSEMBLY, VGS, 9 (228.6mm) X 5-1/2 (139.7mm), MANUAL SLIP, API 6A 19TH ED., TC L-U, MC DD, PR-1, PSL-1	413.10	413.10
3	2		PRIMARY SEAL ASSEMBLY, VGS, 9 (228.6mm) X 5-1/2 (139.7mm), API 6A 19TH ED., TC L-U, MC DD, PR-1, PSL1	255.15	510.30
4	1		GATE VALVE ASSY, VGC, 2-1/16 5000 (52mm 34.5MPa) FLANGED, FULL PORT. API 6A 19TH ED PSL-1, PR-1 TC L-U, MC DD	2,020.75	2020.75
5	2		COMPANION FLANGE, 2-1/16 5000 (52mm 34.5MPa) X 2 (50mm) LP API 6A 19TH ED PSL-1, PR-1, TC L-U, MC DD	107.73	215.46
6	1		BULL PLUG XXH 2 (50mm) LP X 1/2 (12.7mm) NPT TAPPED	26.73	26.73
7	1		NEEDLE VALVE 1/2 (12.7mm) NPT MXF STRAIGHT 316 S.S. 10000 WP	109.35	109.35

Quotation 10-16881 Rev 0					
Item	Qty	Part No	Description	Unit Price	Total
8	1		PRESSURE GAUGE 0 - 3000 (20.7MPa) CW 4 (101.6mm) DIAL 1/2 (12.7mm) NPT BTM NACE	75.33	75.33
9	1		RING GASKET R-49 316 S.S.	116.64	116.64
10	3		RING GASKET R-24 316 S.S.	39.69	119.07
11	1		STUD/NUT L7|2H 7/8 (22.2mm) X 6 (152.4mm) LONG SET OF 8	34.86	34.86
			EQUIPMENT TOTAL		$5,404.09

Additional information: Contact **Corey Canniff @ 403-264-4146**

Authorized By: _____

For Vetco Gray

_____

_____

_____

**Remanufactured wellhead equipment carries full warranty and is subject to prior sale

All deliveries are from receipt of order and subject to prior sale

No product may be returned for credit without the written consent of an authorized VGC employee.

Quotation 10-16881 Rev 0					
Item	Qty	Part No	Description	Unit Price	Total

Product returned more than 30 days after shipment date is subject to a 15% restocking charge.

Products purchased from other O.E.Ms is subject to their actual restocking charge.
Equipment returned for credit that requires disassembly is subject to a tear down charge
Credit will not be issues on assembly, test and paint.
Product returned requiring clean-up is subject to shop charge.
Expendable items such as nipples, ring gaskets and boltings that are part of assemblies are subject to 100% restocking charge.
Components requiring special coating for injection wells will be subject to a 15% restocking charge.
Products manufactured to a PSL-3 is subject to a 15% restocking charge.
Specialty equipment (considered to be a non-stocking item) is subject to a 100% restocking charge.
Fuel or steel surcharge, if applicable will be added to invoice amount.

VETCO GRAY CANADA INC.
STANDARD TERMS AND CONDITIONS

1. Acceptance

1.1 Acceptance of any offer to sell by VGC is limited to Purchaser completely and exclusively accepting all terms and conditions hereof ("Terms"). The acknowledgment Sales Agreement constitutes the entire agreement between the parties and takes precedence over any and all previous verbal or written arrangements in connection with this Agreement. Any deletions, modifications, alterations of or additions to the Terms, to be binding, shall be in writing and signed by an authorized representative of VGC and the Purchaser. Without limiting the foregoing, it is expressly acknowledged that any Purchaser document received is for order identification convenience only. Any and all provisions on the face or reverse side of any purchase order which Purchaser may send to VGC in connection herewith are expressly objected to by VGC and waived by Purchaser and made inapplicable to any such purchase, unless both parties expressly agree in writing to include any such terms and conditions in this Agreement.

1.2 Purchaser's acceptance is hereby expressly limited to the Terms, and acceptance of any part of the products covered hereunder shall be deemed to constitute such acceptance. (If this order constitutes an acceptance of an offer, such acceptance is expressly made conditional on Purchaser's assent to the Terms and any additional or different terms contained herein, and acceptance of any part of the products covered shall be deemed to constitute such assent.) VGC may provide the products from its affiliated company, in which event these Terms will apply. Purchaser may not assign this Agreement without the prior written consent

1.3 For any item of VGC equipment leased to Purchaser, VGC's standard terms and conditions of equipment lease shall apply.

2. Limited Warranties

VGC hereby warrants that all products manufactured by VGC are free of defects of material and workmanship for a period of twelve (12) months from the date shipped, providing that the products are used in the service specified and are properly installed, used and maintained and not altered after initial delivery, corrosion and erosion and normal wear and tear excepted. Purchaser shall give written notice to VGC of any defects within thirty (30) days of their discovery by Purchaser, within said twelve (12) month period, with a report detailing failure and defects. VGC reserves the right to require prepaid return of the allegedly defective product to establish a warranty claim. VGC will, at its option, repair any product found defective during the warranty period without charge, replace the product F.O.B. manufacturing facility, or refund the purchase price paid for the products upon return to VGC. VGC shall not be responsible for retrieving or removing defective items (whether manufactured by VGC or not), or any part thereof, or for reinstalling the same when repaired or replaced, or for any cost incurred in connection with such retrieval, removal or reinstallation. In the case of items or parts not wholly of VGC's manufacture, but supplied by VGC, VGC's liability shall be limited t the warranty of the manufacturer of the items or parts. VGC will not be responsible for repairs made by other than VGC without prior written consent. This warranty is EXCLUSIVE AND, EXCEPT AS STATED HEREIN, VGC MAKES NO EXPRESS OR IMPLIED WARRANTIES AS TO ANY MATTER WHATSOEVER, INCLUDING, WITHOUT LIMITATION, THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE, WHICH EXCEED THE FOREGOING WARRANTY. PURCHASER'S SOLE REMEDY AND VGC'S SOLE OBLIGATION ARISING OUT OF OR IN CONNECTION WITH DEFECTS IN MATERIALS, WORKMANSHIP OR SERVICES, WHICH ARE BASED ON WARRANTY, CONTRACT NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL BE THOSE STATED IN THIS SECTION. The Purchaser acknowledges that any affirmation of fact or promise made byVGC shall not be deemed to create an express warranty, that Purchaser is not relying on VGC's skill or judgment in selecting or furnishing a system suitable for any particular purpose, and there are no warranties which extend beyond the description on the face hereof.

3. Liability

VGC is not an insurer and insurance, if any, shall be obtained by the Purchaser. The Purchaser acknowledges that it is impracticable and extremely difficult to affix the actual damages, if any, which may proximately result from a failure on the part of VGC to perform any of the obligations contained herein, or the failure of the product to operate properly, with resulting loss to the Purchaser, and that the price is established on use of these Terms. The Purchaser agrees that if VGC should be found liable for loss or damage due to a failure of service or equipment in any respect whatsoever,VGC's liability, whether based on breach of warranty, breach of contract, tort, strict liability or otherwise, shall be limited to its warranty obligation, but in no event shall exceed the purchase price paid. In the event that those products or parts which are defective in either material or workmanship are not wholly of VGC's manufacture, VGC's liability shall be limited exclusively to the extent of VGC's recovery from the manufacturer of such products or parts The replacement cost or VGC's recovery from the manufacturer, as the case may be, shall be the exclusive obligation and liability of VGC and the sole remedy of Purchaser. Further, the provisions of this section shall apply if loss or damage, irec or indirectly to persons or property, from performance or nonperformance of the obligations imposed by this Agreement or from negligence, active or otherwise, of VGC, its agents, assigns or employees. In no event shall VGC be liable for damages arising from delays, loss of use or of profits or for other incidental or consequential damages of any kind, including, by way of example and not of limitation, pollution, hydrocarbon spillage or discharge, blowout, seepage, damage to underground reservoirs or any uncontrolled flow of hydrocarbons or other substances.

4. Subrogation

The Purchaser hereby releases, discharges and agrees to hold VGC harmless from any and all claims, liabilities, damages, losses or expenses arising from or caused by any hazard covered by insurance, whether said claim is made by Purchaser, its agents and insurance company, or by any other parties claiming under or through Purchaser. Purchaser agrees to indemnify VGC against, defend and hold VGC harmless from any liability, loss or damage, including costs or attorney's fees which VGC may incur as a result of any action or subrogation which may be brought against VGC by an insurer or insurance company, or its agents or

5. Price and Payment

5.1 All products are priced in U.S. dollars, unless otherwise stated, and will be invoiced upon shipment. Net payment is due within thirty (30) days after invoice date. Interest charges at eighteen percent (18%) per annum (or at maximum lawful rate) will be applicable to delinquent accounts unpaid after due date. Prices quoted are subject to change without notice if not accepted within thirty (30) days, unless specifically stated

5.2 Unless otherwise quoted, Purchaser will pay, in addition to the purchase price of the products, all charges for export packing and processing, insurance and transportation, and the price of products does not include personnel or equipment required to install the products.

6. Transportation

Unless otherwise specified in VGC's sales quotation, transportation charges, including transportation documents and contracts with carriers, shall be based upon the point of manufacture and shall be paid by Purchaser. All taxes, surcharges, customs duties, consular fees, assessments imposed by any governmental authority, insurance charges and other applicable charges, shall be borne by the Purchaser. Title to and risk of loss for goods sold shall pass to the Purchaser ex_works (INCOTERMS), point of manufacture warehouse, unless otherwise specifically agreed to by VGC in writing.

7. Delivery

Purchaser acknowledges that delivery dates, while given as accurately as conditions permit, are tentative only and, while every effort will be made to male deliveries as scheduled, VGC assumes no liability whatsoever or damages arising out of the failure to deliver the goods described herein on the dates stated. Delay in delivery shall not give Purchaser the right to cancel order. Delivery dates may be changed at VGC's

8. Cancellation or Rescheduling of Orders

8.1 Purchaser's orders, once placed and accepted, may be canceled only with VGC's written consent and upon terms which will save VGC from loss. No products may be returned for credit, warranty claim or adjustment without the written consent of authorized VGC employees.

8.2 VGC may, but is not obligated to, accept a written request by Purchaser to delay shipment of the products. If rescheduling is accepted by VGC, Purchaser shall pay any additional costs incurred by the delay and the price for the balance of the order shall be adjusted to reflect prices and costs in effect at time of actual shipment.

9. Taxes, Licenses or Other Charges

9.1 All taxes or other charges imposed by law on the sale or production of goods or the performance of services under this Agreement, including, but not limited to, those from all governmental authorities, as well as all foreign taxes, surcharges, duties, assessments or charges, if any, shall be borne by the Purchaser, unless the law specifically provides that such payment must be borne by VGC. Purchaser shall pay for and hold VGC harmless from all such governmental charges.

9.2 Purchaser shall, at its own expense, obtain all licenses, permissions or authorizations to use, purchase, export or import the products, as may be required by any governmental authority.

10. Services

Upon the request of the Purchaser, VGC will provide appropriate services and/or technical information, as available, regarding the products and their uses, and will use reasonable efforts to provide personnel to assist the Purchaser in effecting field installations. The Purchaser acknowledges that any such information, service or assistance so provided, whether with or without charge, shall be in an advisory capacity only. The Purchaser further agrees that VGC assumes no liability for any damage or loss at any location arising out of, resulting from or caused, in whole or in part, by any information, service, advice or assistance provided by VGC, its agents, assigns, employees or subcontractors.

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11.1 When obligated to do so in the specifications, VGC shall attempt to pack and prepare all shipments in such a manner as to prevent breakage, rust or deterioration in transit. VGC does not, however, guarantee against such damage and the risk of any damage to the products in transit shall be borne by the Purchaser at all times.

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VGC hereby reserves the right to change or modify the specification and construction of any of its products without incurring any obligation to furnish or install such changes or modifications on products previously or subsequently sold.

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The Purchaser acknowledges that VGC does not warrant that any of the materials, equipment or apparatus sold by it, if used or sold in combination with any other equipment, or used in Purchaser's methods or processes, will not, by virtue of such combination or use, infringe patents of others, and VGC shall not be liable for any patent infringement arising from or by reason of any such use or sale. On any item sold by VGC, but specified or designed and/or manufactured by others, VGC shall endeavor, for protection of Purchaser, to obtain the most advantageous patent guarantee, which shall run directly to Purchaser, with VGC's liability limited to rendering to Purchaser reasonable assistance in enforcing such guarantees. Further, VGC shall not be liable for the use or sale of any material, equipment or apparatus specially made, in whole or in part, to the Purchaser's design specifications and, in such instances, all patent liabilities shall be borne by the Purchaser. If an injunction is issued enjoining use of products designed by VGC, VGC, at its own expense, shall either procure for Purchaser the right to continue to use such products, design and specify non_infringing products, or design and specify modifications so that the product becomes non_infringing, as VGC's sole and limit

14. Shortages

Subject to Paragraphs 6.1, 11.1 and 11.2, all claims regarding shortages in any shipment must be made within thirty (30) days from the receipt of such shipment, and must be accompanied by the packing list or lists covering the shipment.

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16. Force Majeure

If the Purchaser or VGC is prevented, directly or indirectly, from carrying out the provisions of this Agreement by reason of any act of God, war, revolution, blockade, strike, riot, earthquake, cyclone or flood, or delay by carrier, fuel shortage, embargo, walkout or other labor disturbance, actual or potential, the operation of laws, interference of civil or military authority, or other cause, existing or future, beyond the reasonable control of the party affected, interfering with production or receipt of goods as herein contemplated, the party so prevented or interfered with shall be excused from making or taking deliveries to the extent of such prevention or interference, excluding the obligation to pay monies owed, provided prompt written notice is given to the other party.

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17.1 The validity, interpretation and performance of this Agreement with respect to goods delivered or to be delivered under this Agreement shall be governed by the laws of the Canada and the Province of Alberta and any dispute arising hereunder shall be referred to the courts of the Province of Alberta or, at VGC's sole discretion, to the courts where the Purchaser's business is situated.

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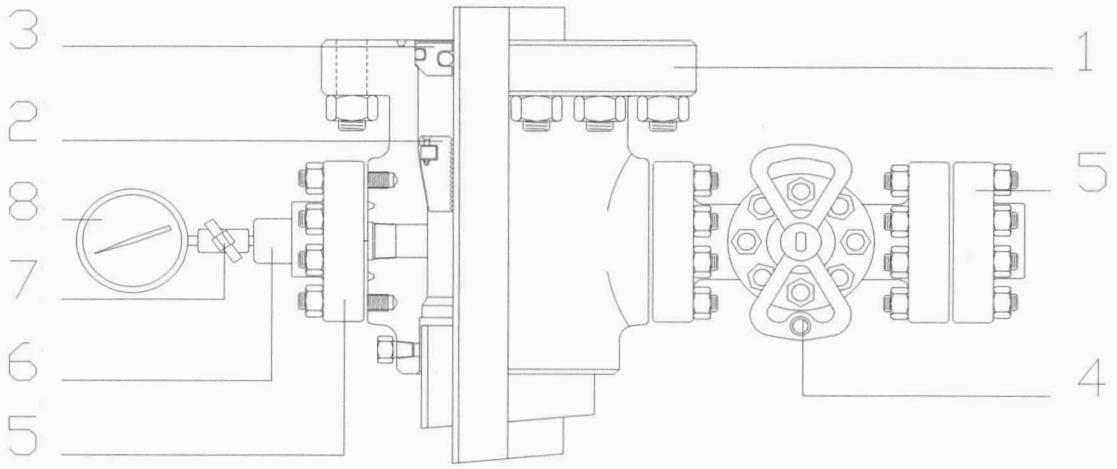
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GE Oil & Gas
710, 530 - 8th Ave S.W. Calgary, Alberta T2P 3S8
Phone: (403) 264-4146 Fax (403) 269-4224
Toll Free: 1-800-925-6024

Quotation **10-16880** Rev 0

	Date:	February 26, 2010
	Sold To:	**Paramount Resources**
	Attention	Mr. Dick Heenan
	Reference:	Cameron Hills
	Currency:	CAD
	Payment Terms:	Net 30 days
	Delivery:	Stock as Required
x	F.O.B. Point	Edmonton
	F.C.A. Point	
	Quotation Validity:	45 days
	Account Representative	Al Stratulate

Quotation 10-16880 Rev 0

Item	Qty	Part No	Description	Unit Price	Total
			EQUIPMENT QUOTED HEREIN ARE BASED ON:		
			MATERIAL CLASS: DD-NL TEMPERATURE RATING: LY PSL 1, PR 1 UNLESS OTHERWISE NOTED		
1	1		TUBING HEAD ASSEMBLY, VGOF-GRF, 9 3000 (228.6mm20.7MPa) X 7-1/16 3000 (179.4mm20.7MPa), C/W (2) 2-1/16 5000 (52.4mm34.5MPa) SSO W/ 1.900 (48.3mm) VRT, API 6A 19TH ED., TC L-U, MC AA, PR-1, PSL-1	2280.15	2280.15
2	1		SECONDARY SEAL ASSEMBLY, GRF, 9 (228.6mm) X 5-1/2 (139.7mm), API 6A 19TH ED., TC L-U, MC DD, PR-1, PSL-1	244.62	244.62
3	1		TUBING HANGER ASSEMBLY, XP-1, 7-1/16 (179.4mm) NOM. X 2-7/8 (73.0mm) EUE BOX X BOX C/ EXTENDED NECK & 2-1/2 (63.5mm) HBPV, API 6A 19TH ED., TC L-U, MC DD, PR-1, PSL-1	761.40	761.40
4	1		TUBING HEAD ADAPTER BONNET, XP-1, 7-1/16 3000 (179.4mm20.7MPa) X 2-9/16 5000 (65.1mm34.5MPa) SSU, C/W SEAL POCKET & TEST PORT, API 6A 19TH ED., TC L-U, MC DD, PR-1, PSL-1	1312.20	1312.20
5	2		GATE VALVE ASSY, VGC, 2-9/16 5000 (65.1mm 34.5MPa) FLANGED, FULL PORT. API 6A 19TH ED PSL-1, PR-1 TC L-U, MC DD	2,689.28	5378.56
6	1		STUDDED TEE, 2-9/16 5000 (65.1mm34.5MPa) RISE X 2-1/16 5000 (52.4mm34.5MPa) RUN, API 6A 19TH ED., TC L-U, MC DD, PR-1, PSL-1	1211.76	1211.76

Quotation 10-16880 Rev 0					
Item	Qty	Part No	Description	Unit Price	Total
7	1		B.H.T.A., 2-9/16 5000 (65.1mm34.5MPa), C/W TOP CAP ASSEMBLY W/ 1/2" NPT TAP, API 6A 19TH ED., TC L-U, MC DD, PR-1, PSL-1	822.15	822.15
8	3		GATE VALVE ASSY, VGC, 2-1/16 5000 (52mm 34.5MPa) FLANGED, FULL PORT. API 6A 19TH ED PSL-1, PR-1 TC L-U, MC DD	2020.75	6062.25
9	3		COMPANION FLANGE, 2-1/16 5000 (52mm 34.5MPa) X 2 (50mm) LP API 6A 19TH ED PSL-1, PR-1, TC L-U, MC DD	107.73	323.19
10	3		BULL PLUG XXH 2 (50mm) LP X 1/2 (12.7mm) NPT TAPPED	26.73	80.19
11	4		FORGED STEEL PIPE PLUG 1/2 (12.7mm) NPT	4.46	17.84
12	2		NEEDLE VALVE 1/2 (12.7mm) NPT MXF STRAIGHT 316 S.S. 10000 WP	109.35	218.70
13	2		PRESSURE GAUGE 0 - 3000 (20.7MPa) CW 4 (101.6mm) DIAL 1/2 (12.7mm) NPT BTM NACE	75.33	150.66
14	1		RING GASKET R-49 316 S.S.	116.64	116.64
15	1		RING GASKET R-45 316 S.S.	84.24	84.24
16	4		RING GASKET R-27 316 S.S.	48.60	194.40
17	6		RING GASKET R-24 316 S.S.	39.69	238.14
18	1		STUD/NUT L7|2H 1-3/8 (38.1mm) X 9-1/2 (241.3mm) LONG SET OF 12	196.83	196.83
19	1		STUD/NUT L7|2H 1-1/8 (28.6mm) X 8 (203.2mm) LONG SET OF 12	107.73	107.73
20	1		STUD/NUT L7|2H 1 (25.4mm) X 7 (177.8mm) LONG SET OF 8	53.64	53.64
21	5		STUD/NUT L7|2H 7/8 (22.2mm) X 6 (152.4mm) LONG SET OF 8	34.86	174.30
22	1		CASING VENT ASSEMBLY, 2 (50.8mm) X 2000 (13.8MPa)	192.78	192.78
23	5		LABOUR CHARGE/HR TO ASSEMBLE TEST AND PAINT	60.00	300.00
			EQUIPMENT TOTAL		$20,522.37

Additional information: Contact **Corey Canniff @ 403-264-4146**

Authorized By: _____

For Vetco Gray

_____

_____

Quotation 10-16880 Rev 0					
Item	Qty	Part No	Description	Unit Price	Total

**Remanufactured wellhead equipment carries full warranty and is subject to prior sale

All deliveries are from receipt of order and subject to prior sale

No product may be returned for credit without the written consent of an authorized VGC employee.
Product returned more than 30 days after shipment date is subject to a 15% restocking charge.
Products purchased from other O.E.Ms is subject to their actual restocking charge.
Equipment returned for credit that requires disassembly is subject to a tear down charge
Credit will not be issues on assembly, test and paint.

Product returned requiring clean-up is subject to shop charge.
Expendable items such as nipples, ring gaskets and boltings that are part of assemblies are subject to 100% restocking charge.
Components requiring special coating for injection wells will be subject to a 15% restocking charge.
Products manufactured to a PSL-3 is subject to a 15% restocking charge.
Specialty equipment (considered to be a non-stocking item) is subject to a 100% restocking charge.
Fuel or steel surcharge, if applicable will be added to invoice amount.

VETCO GRAY CANADA INC.
STANDARD TERMS AND CONDITIONS

1. Acceptance

1.1 Acceptance of any offer to sell by VGC is limited to Purchaser completely and exclusively accepting all terms and conditions hereof ("Terms"). The acknowledgment Sales Agreement constitutes the entire agreement between the parties and takes precedence over any and all previous verbal or written arrangements in connection with this Agreement. Any deletions, modifications, alterations of or additions to the Terms, to be binding, shall be in writing and signed by an authorized representative of VGC and the Purchaser. Without limiting the foregoing, it is expressly acknowledged that any Purchaser document received is for order identification convenience only. Any and all provisions on the face or reverse side of any purchase order which Purchaser may send to VGC in connection herewith are expressly objected to by VGC and waived by Purchaser and made inapplicable to any such purchase, unless both parties expressly agree in writing to include any such terms and conditions in this Agreement.

1.2 Purchaser's acceptance is hereby expressly limited to the Terms, and acceptance of any part of the products covered hereunder shall be deemed to constitute such acceptance. (If this order constitutes an acceptance of an offer, such acceptance is expressly made conditional on Purchaser's assent to the Terms and any additional or different terms contained herein, and acceptance of any part of the products covered shall be deemed to constitute such assent.) VGC may provide the products from its affiliated company, in which event these Terms will apply. Purchaser may not assign this Agreement without the prior written consent

1.3 For any item of VGC equipment leased to Purchaser, VGC's standard terms and conditions of equipment lease shall apply.

2. Limited Warranties

VGC hereby warrants that all products manufactured by VGC are free of defects of material and workmanship for a period of twelve (12) months from the date shipped, providing that the products are used in the service specified and are properly installed, used and maintained and not altered after initial delivery, corrosion and erosion and normal wear and tear excepted. Purchaser shall give written notice to VGC of any defects within thirty (30) days of their discovery by Purchaser, within said twelve (12) month period, with a report detailing failure and defects. VGC reserves the right to require prepaid return of the allegedly defective product to establish a warranty claim. VGC will, at its option, repair any product found defective during the warranty period without charge, replace the product F.O.B. manufacturing facility, or refund the purchase price paid for the products upon return to VGC. VGC shall not be responsible for retrieving or removing defective items (whether manufactured by VGC or not), or any part thereof, or for reinstalling the same when repaired or replaced, or for any cost incurred in connection with such retrieval, removal or reinstallation. In the case of items or parts not wholly of VGC's manufacture, but supplied by VGC, VGC's liability shall be limited t the warranty of the manufacturer of the items or parts. VGC will not be responsible for repairs made by other than VGC without prior written consent. This warranty is EXCLUSIVE AND, EXCEPT AS STATED HEREIN, VGC MAKES NO EXPRESS OR IMPLIED WARRANTIES AS TO ANY MATTER WHATSOEVER, INCLUDING, WITHOUT LIMITATION, THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE, WHICH EXCEED THE FOREGOING WARRANTY. PURCHASER'S SOLE REMEDY AND VGC'S SOLE OBLIGATION ARISING OUT OF OR IN CONNECTION WITH DEFECTS IN MATERIALS, WORKMANSHIP OR SERVICES, WHICH ARE BASED ON WARRANTY, CONTRACT NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL BE THOSE STATED IN THIS SECTION. The Purchaser acknowledges that any affirmation of fact or promise made byVGC shall not be deemed to create an express warranty, that Purchaser is not relying on VGC's skill or judgment in selecting or furnishing a system suitable for any particular purpose, and there are no warranties which extend beyond the description on the face hereof.

3. Liability

VGC is not an insurer and insurance, if any, shall be obtained by the Purchaser. The Purchaser acknowledges that it is impracticable and extremely difficult to affix the actual damages, if any, which may proximately result from a failure on the part of VGC to perform any of the obligations contained herein, or the failure of the product to operate properly, with resulting loss to the Purchaser, and that the price is established on use of these Terms. The Purchaser agrees that if VGC should be found liable for loss or damage due to a failure of service or equipment in any respect whatsoever,VGC's liability, whether based on breach of warranty, breach of contract, tort, strict liability or otherwise, shall be limited to its warranty obligation, but in no event shall exceed the purchase price paid. In the event that those products or parts which are defective in either material or workmanship are not wholly of VGC's manufacture, VGC's liability shall be limited exclusively to the extent of VGC's recovery from the manufacturer of such products or parts The replacement cost or VGC's recovery from the manufacturer, as the case may be, shall be the exclusive obligation and liability of VGC and the sole remedy of Purchaser. Further, the provisions of this section shall apply if loss or damage, irec or indirectly to persons or property, from performance or nonperformance of the obligations imposed by this Agreement or from negligence, active or otherwise, of VGC, its agents, assigns or employees. In no event shall VGC be liable for damages arising from delays, loss of use or of profits or for other incidental or consequential damages of any kind, including, by way of example and not of limitation, pollution, hydrocarbon spillage or discharge, blowout, seepage, damage to underground reservoirs or any uncontrolled flow of hydrocarbons or other substances.

4. Subrogation

The Purchaser hereby releases, discharges and agrees to hold VGC harmless from any and all claims, liabilities, damages, losses or expenses arising from or caused by any hazard covered by insurance, whether said claim is made by Purchaser, its agents and insurance company, or by any other parties claiming under or through Purchaser. Purchaser agrees to indemnify VGC against, defend and hold VGC harmless from any liability, loss or damage, including costs or attorney's fees which VGC may incur as a result of any action or subrogation which may be brought against VGC by an insurer or insurance company, or its agents or

5. Price and Payment

5.1 All products are priced in U.S. dollars, unless otherwise stated, and will be invoiced upon shipment. Net payment is due within thirty (30) days after invoice date. Interest charges at eighteen percent (18%) per annum (or at maximum lawful rate) will be applicable to delinquent accounts unpaid after due date. Prices quoted are subject to change without notice if not accepted within thirty (30) days, unless specifically stated

5.2 Unless otherwise quoted, Purchaser will pay, in addition to the purchase price of the products, all charges for export packing and processing, insurance and transportation, and the price of products does not include personnel or equipment required to install the products.

6. Transportation

Unless otherwise specified in VGC's sales quotation, transportation charges, including transportation documents and contracts with carriers, shall be based upon the point of manufacture and shall be paid by Purchaser. All taxes, surcharges, customs duties, consular fees, assessments imposed by any governmental authority, insurance charges and other applicable charges, shall be borne by the Purchaser. Title to and risk of loss for goods sold shall pass to the Purchaser ex_works (INCOTERMS), point of manufacture warehouse, unless otherwise specifically agreed to by VGC in writing.

7. Delivery

Purchaser acknowledges that delivery dates, while given as accurately as conditions permit, are tentative only and, while every effort will be made to male deliveries as scheduled, VGC assumes no liability whatsoever or damages arising out of the failure to deliver the goods described herein on the dates stated. Delay in delivery shall not give Purchaser the right to cancel order. Delivery dates may be changed at VGC's

8. Cancellation or Rescheduling of Orders

8.1 Purchaser's orders, once placed and accepted, may be canceled only with VGC's written consent and upon terms which will save VGC from loss. No products may be returned for credit, warranty claim or adjustment without the written consent of authorized VGC employees.

8.2 VGC may, but is not obligated to, accept a written request by Purchaser to delay shipment of the products. If rescheduling is accepted by VGC, Purchaser shall pay any additional costs incurred by the delay and the price for the balance of the order shall be adjusted to reflect prices and costs in effect at time of actual shipment.

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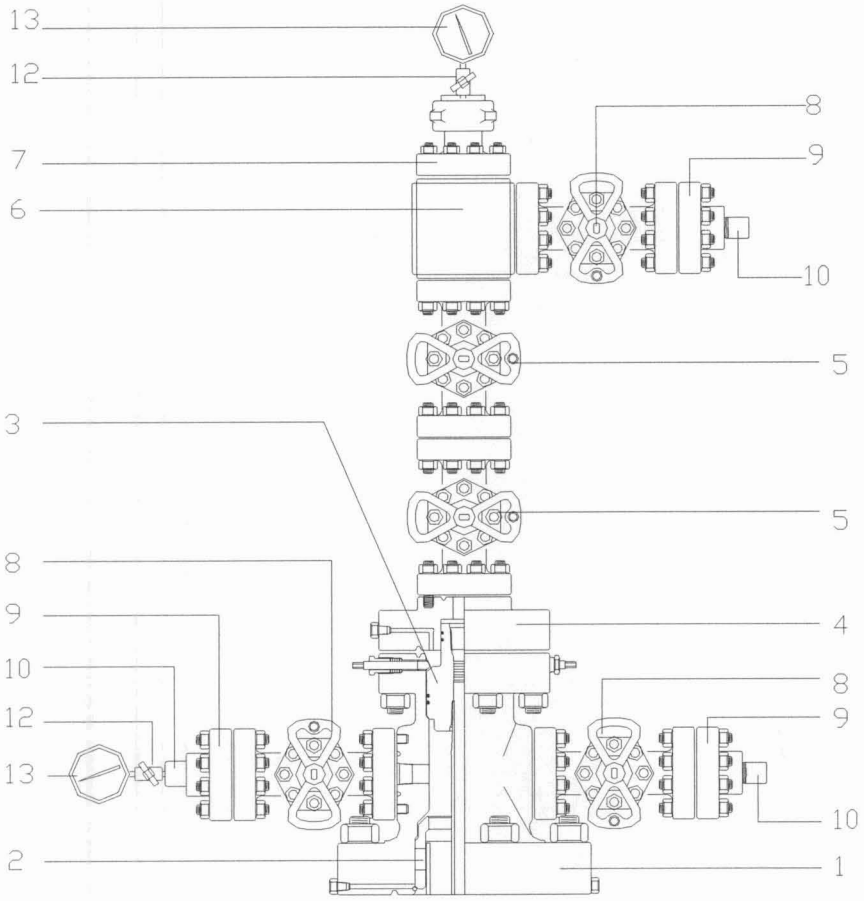
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WELL SUMMARY

OPERATOR	:	*PARAMOUNT RESOURCES LTD.*
WELL NAME	:	*PARA ET AL CAMERON F-77*
UWI	:	*300-F77-6010-117150*
WELL LICENSE	:	*1221*
AFE	:	*09NO10009*
FIELD	:	*Cameron Hills*
SURFACE LOCATION	:	*Unit: F Section: 77* *Grid Area: 60° 10' N 117° 15' W*
SURFACE COORDINATES	:	*Latitude: 60° 06' 29.3"N* *Longitude: 117° 29'4.7" W*
DRILLING RIG	:	*Precision Drilling Rig# 245*
DRILLING CONTRACTOR	:	*Precision Drilling.*
WELL TYPE	:	*Vertical Development Well*
RKB – MSL	:	*725.92m*
MSL - GL	:	*721.17m*
SPUD DATE	:	*February 06, 2010.*
DATE TD REACHED	:	*February 12 ,2010.*
DATE RIG RELEASED	:	*February 17, 2010.*
TD DEPTH	:	*1420.0m MBRT (-694.08m SS)*
TD COORDINATES	:	*Latitude: 60° 06' 29.3"N* *Longitude: 117° 29'4.7" W*
HOLE SIZE	:	*311.0mm 379.0m RKB* *200.0mm 1420.0m RKB.*
SAMPLE INTERVALS	:	*740m to 980m @ 5m Intervals 1 Set.* *1225m – TD @ 5m Intervals 2 Sets.* *1225m – TD Unwashed Spl 1 Set.*
DRILLING FLUID	:	*Surface Hole: Polymer* *Main Hole: Floc Water & Polymer.*
WELL STATUS	:	*Cased for Production Testing.*
STRIKE AREA	:	*South Great Slave Lake*
REGION	:	*NWT Mainland*

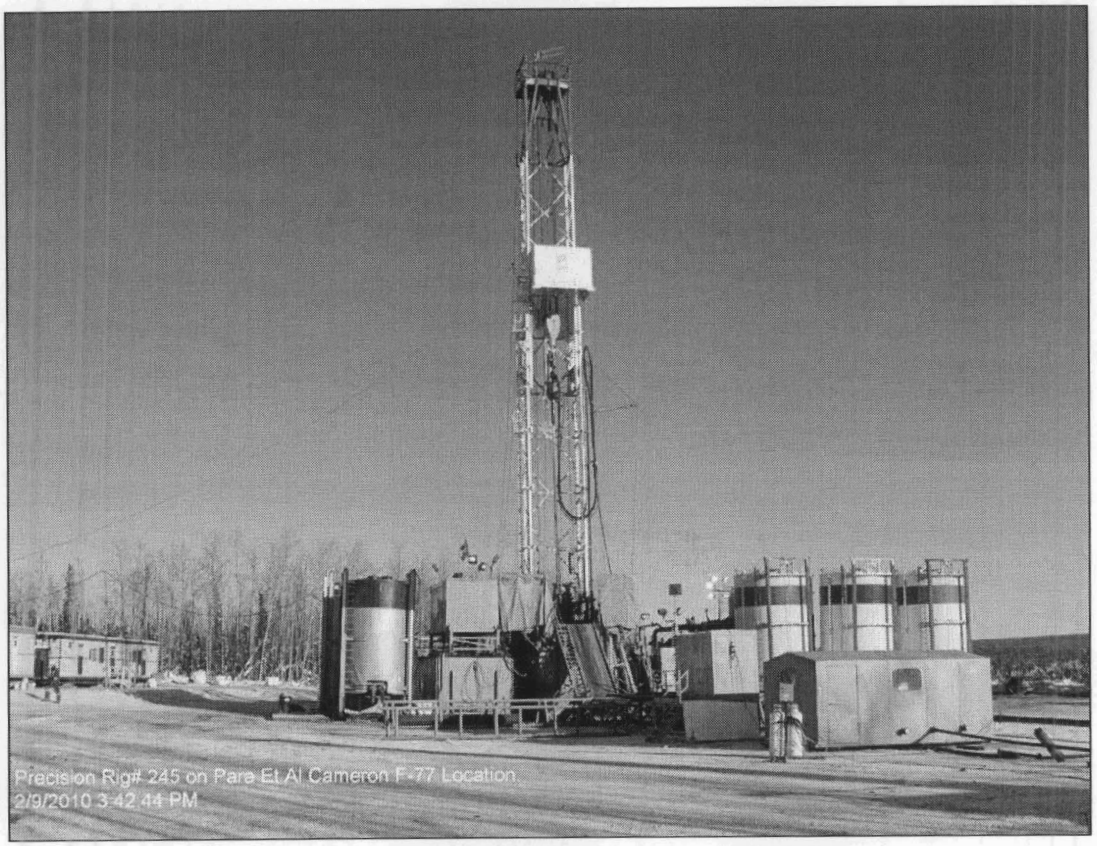


Photo 1: Precision Rig# 245 on Para Et Al Cameron F-77 Location.

WELL ABSTRACT

The **Para Et al Cameron F-77** well is located in Unit F, Section 77 and Grid 60° 10' 00" N and 117° 15' 00" W at the surface co-ordinates of 60° 06' 29.3" N and 117° 29' 04.7" W6 of Cameron Hills in the Northwest Territory.

The proposed **Cameron F-77** development well is a part of an extensive drilling program. The well is proposed to drill vertically as a new delineation well. Paramount Resources Ltd. retained the services of **Precision Drilling** Rig# 245.

The primary objective is to penetrate the prognosticated heavy hydrocarbon bearing zones in the limestone and dolomite sections of the **Sulphur Point** formation. The Secondary target is to investigate the prospective and possibilities of commercial hydrocarbon in the **Slave Point** Formation. In addition to the above objectives, the well are to validate the 3D seismic picking of the reservoirs, to specify the time to depth conversion with the seismic data and to learn more about the complex reservoir characteristic of these formations in the **Cameron Hills.**

The well is spudded at 01:00hrs on the February 06, 2010. Drilling of 311mm hole from surface to 379m is completed using one rock Bit# 1RR1 in 29.0 on bottom bit hours. 219.1mm surface casings are run in setting the shoe at 379m and cemented with Sanjel as per program. Polymer mud is used for drilling the surface hole.

Unabated drilling of 200mm main hole reached TD of the well to 1420m RKB (-694.08m SS) in 64.75 on bottom bit hours using one Reed PDC bit. The TD is reached at 18:25 hrs of February 12, 2010. +/- 47m are drilled into the **Muskeg** formation as to have good rat hole for logging and production facilities. At TD section, the hole is circulated clean before POOH. A wiper trip is performed and a Hi-vis pill being pumped before POOH to run in wireline logs. The open hole logging is completed by Weatherford Logging Services. Run# 1: STI/SPeD/CNS/GR/MRT/HBC/CAL tools are run in. A 10m fill is encountered during logging. The production casings 139.7mm are run in and shoe is set at 1468.0m RKB

The Geological target tops and bases of the well, hydrocarbon bearing zones and formations are encountered very much closed to the prognosis. After comprehensive studies of ditch cuttings, gas shows and co-relation with offset wells the formation tops are identified and left unchanged even after posting the

log curves in the Striplog. The geology section in the Strip Log gives a brief representation of the individual stratigraphic formations.

The **Slave Point** Formation is anticipated at 1296.0m RKB (-570.08m SS) and is 40.50m thick. Maximum 331/121 units and 741/121 units formation gases are noticed with positive natural sample fluorescence during drilling this formation.

From ditch cuttings, gas shows and from the quick look interpretation of electrical logs **Slave Point** formation is little tight but possesses all properties of a good reservoir. The **Slave Point** looks to be very prominent from the porosity, gas shows and sample florescence showing better reservoir potentialities for commercial production.

The **Sulphur Point** limestone section is identified at 1351.0m RKB (-625.08m SS) and followed by the dolomite section at 1360.0m RKB (-634.08m SS). The dolomite section is 11.0m thick. Maximum 578/69 units formation gas is recorded in the dolomite section with oil shows.

The well is for cased for production testing with viable possibilities of commercial production from the **Slave Point** and the **Sulphur Point** dolomite section. They both possess all the properties for commercial hydrocarbon production. Further evaluation and detail studies are proposed.

FORMATION TOPS

FORMATION	PROGNOSIS TOPS		SAMPLE/LOG TOPS		COMMENTS
MSL – RKB: 725.92m	m TVD	m SubSea	m TVD	m SubSea	m Isopach
Wabamun FM	498.92	228.00	495.50	230.42	169.00
Jean Marie Mbr	655.92	70.00	664.50	61.42	6.00
Fort Simpson Fm	662.92	63.00	670.50	55.42	110.00
Twin Falls Fm	780.92	-55.00	780.50	-54.58	159.00
Hay River Fm	941.92	-216.00	939.50	-213.58	333.00
Beaverhill Lake Fm	1275.92	-550.00	1272.50	-546.58	23.00
Slave Point Fm	1297.92	-572.00	1295.50	-569.58	41.00
F4 Marker Fm	1338.92	-613.00	1336.50	-610.58	10.00
Watt Mountain Fm	1346.92	-621.00	1346.00	-620.08	4.50
Sulphur Pt Ls Fm	1351.92	-626.00	1350.50	-624.58	9.50
Sulphur Pt Dol	1361.92	-636.00	1359.50	-633.58	11.50
Muskeg Fm	1373.92	-648.00	1371.00	-645.08	49.00
Total Depth	1393.92	-668.00	1420.00	-694.08	-

FORMATION EVALUATION

Slave Point Formation
Paleozoic, Middle Devonian
Age: 370 million years
Well: Para Et Al Cameron F-77

The **Middle Devonian, Slave Point** Formation consists of cream, dark brown, light yellowish brown and oil stained limestone interbeded occasionally with lenses of finely crystalline dolomites and intercalated with dark brownish grey shale fragments which possibly occur as thin lenses.

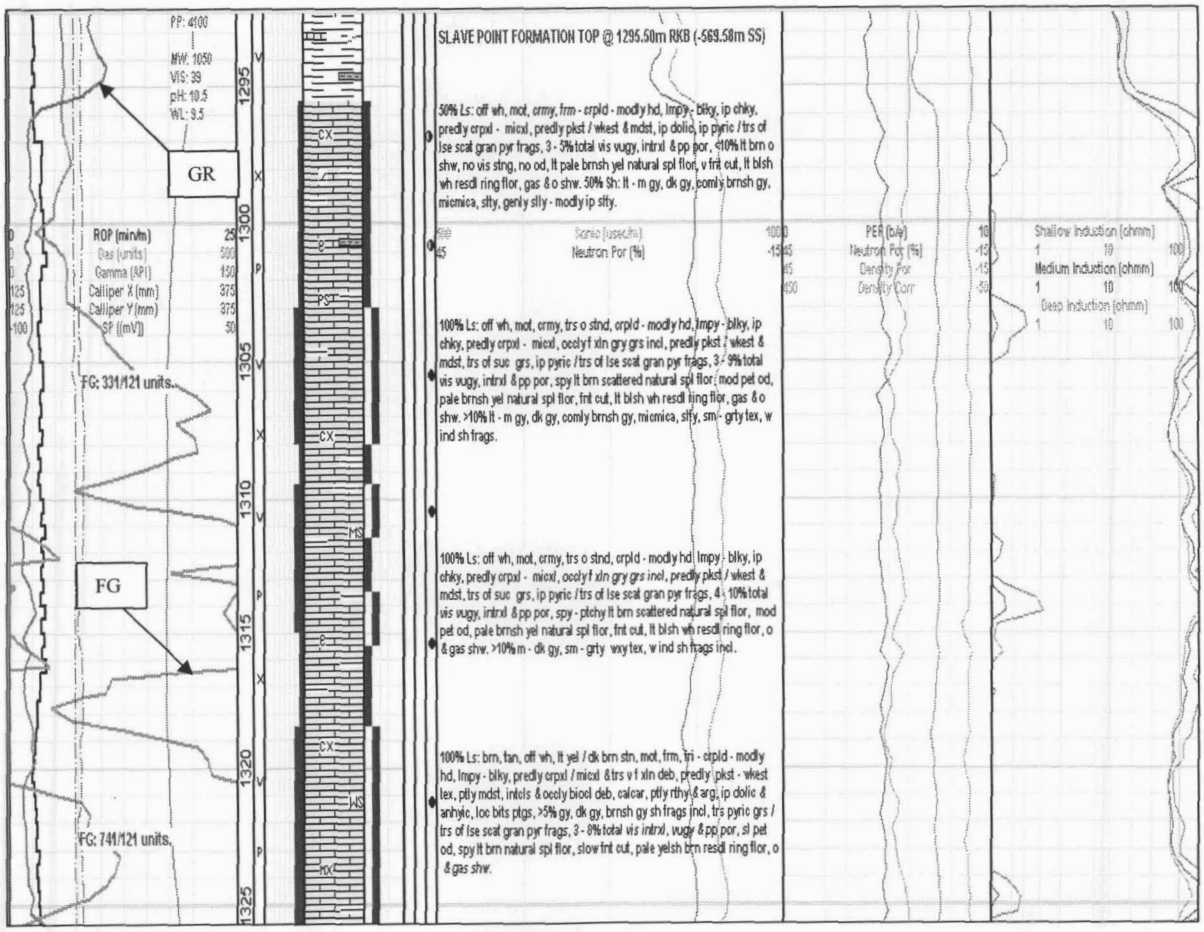


Figure 1: Striplog of the Slave Point Formation.

Photo 2: Ls in the Slave Point Fm_1320m RKB.

The **Slave Point** formation is picked up and identified at 1296.00m RKB (-570.08m SS). Change of ROP from 26m/hr to an average 20m/hr, from ditch cuttings typical light yellowish brown to dark brown limestone and anticipation of formation gas increase are the main criteria for identifying this formation. The Formation is overlain by the **Upper Devonian** cyclical limy shale beds argillaceous limestone and argillaceous micrities of **Beaverhill Lake** formation picked up at 1273.0m RKB (-547.08nm SS), and conformably underlain by **Fort Vermilion** formation encountered at 1336.50m RKB (-610.58m SS).

The **Slave Point** anticipated is 40.5m thick with its typical light yellowish brown to dark brown stains limestone, interbedded with thin shale laminae and often intercalated with thin lenses of fine crystalline dolomites. The top section from 1296.0m to 1303.0m RKB is tighter varying from 3 – 5% porosities and the middle section from 1303m to 1328.5m RKB is more porous varying from 4 - 10% total scattered visible porosities. Vuggy porosities are predominant with partial microfracture, pin point and intercrystalline porosities. In the upper section 331/121 units formation gas are recorded against 1306.50m RKB with positive florescence shows. 741/121 units gas are recorded against 1323.0m RKB with symptoms carrying possibilities of heavy hydrocarbon deposition. The porosity tightens with the increases of the depth and faded to almost 3% due to increase of chalky, earthy, dense argillaceous limestone.

The limestones encountered in the **Slave Point** are off white, mottled, creamy, light yellow with dark brown stain. They are crumpled to moderately hard and predominately blocky with some sub blocky grains. Smooth to gritty very sharp texture resembles to cryptocrystalline group. Partly microcrystalline with a few fine sucrose crystalline grains are noticed. They are predominately wackestone to packstone, intraclasts & occasionally bioclastic debris and partly calcarenite. They are partly earthy & argillaceous, rarely in part dolomitic, Traces of fine crystalline dolomite are commonly noticed all through the section with traces to maximum 10% greenish brown, dark grey shale fragments and siltstone stringers. The lower section is little anhydritic with presence of traces of loose granular anhydrite nodules.

Moderate to strong petroleum odor are noticed all through the section with spotty to patchy light brown natural sample fluorescence, slow faint cut, pale yellowish brown residual ring fluorescence, oil and gas shows. From 1305.0m to 1328.0m RKB possesses good reservoir properties with maximum 10% total scattered visible vuggy, intracrystalline, pin point and micro-fracture porosities.

From the ditch cuttings properties, gas and florescence shows and quick look interpretation of electrical logs the **Slave Point** Formation in the **Cameron F-77** well looks to be very much prospective. Commercial production is possible from this zone. Further studies are recommended.

FORMATION EVALUATION

Sulphur Point Formation
Middle Paleozoic, Devonian
Age: 370 million years
Well: Para Et Al Cameron F-77

The **Paleozoic, Middle Devonian, Sulphur Point** formation conformably separates the overlying from greenish shale of the **Watt Mountain** formation identified at 1345.0m RKB (-619.08m SS) from the underlying anhydritic dolomite and massive , dense anhydrite deposit of the **Muskeg** formations encountered at 1371.0m (-645.08m SS).

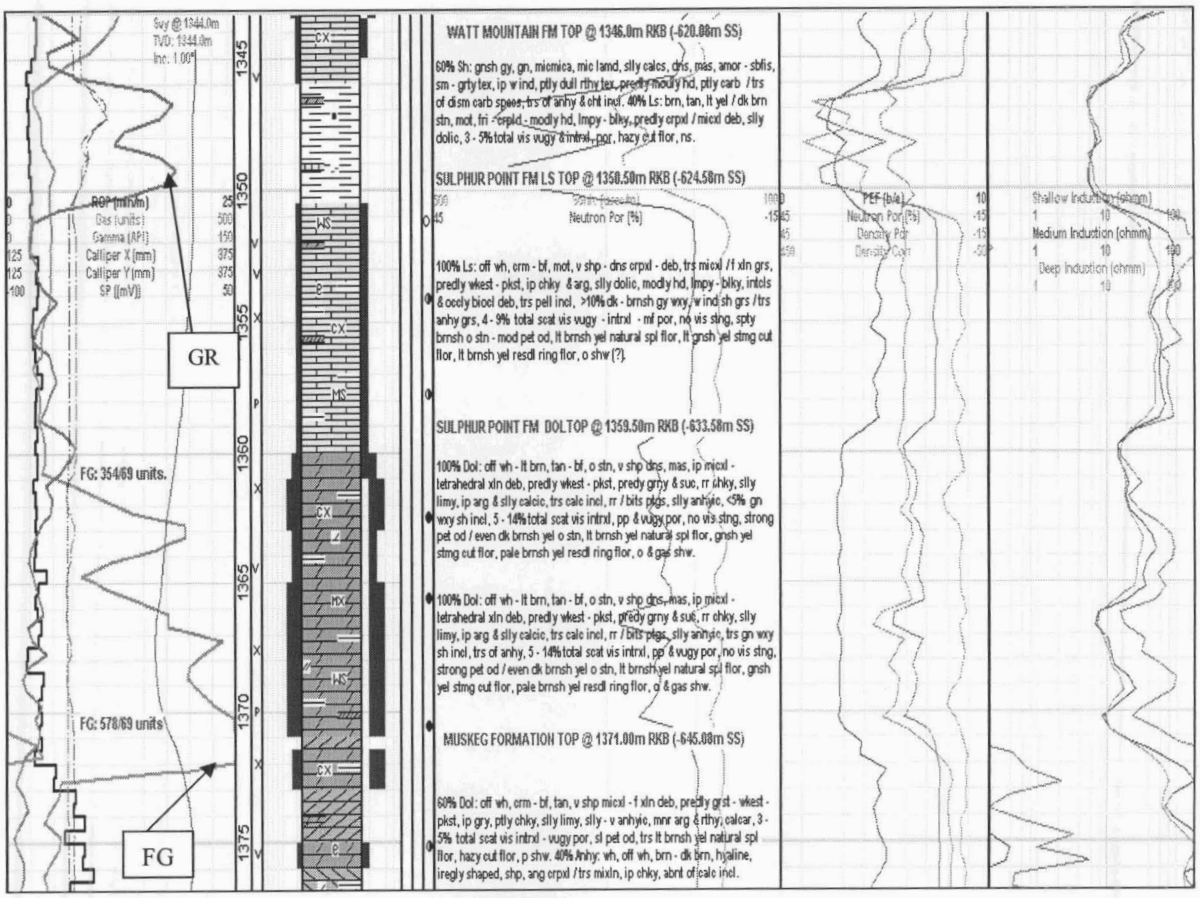


Figure 2: Striplog of the Sulphur Point Formation.

Photo 3: Ls in the Sulphur Point Fm_1355m RKB.

Photo 4: Dol in the Sulphur Point Fm_1367.50m RKB.

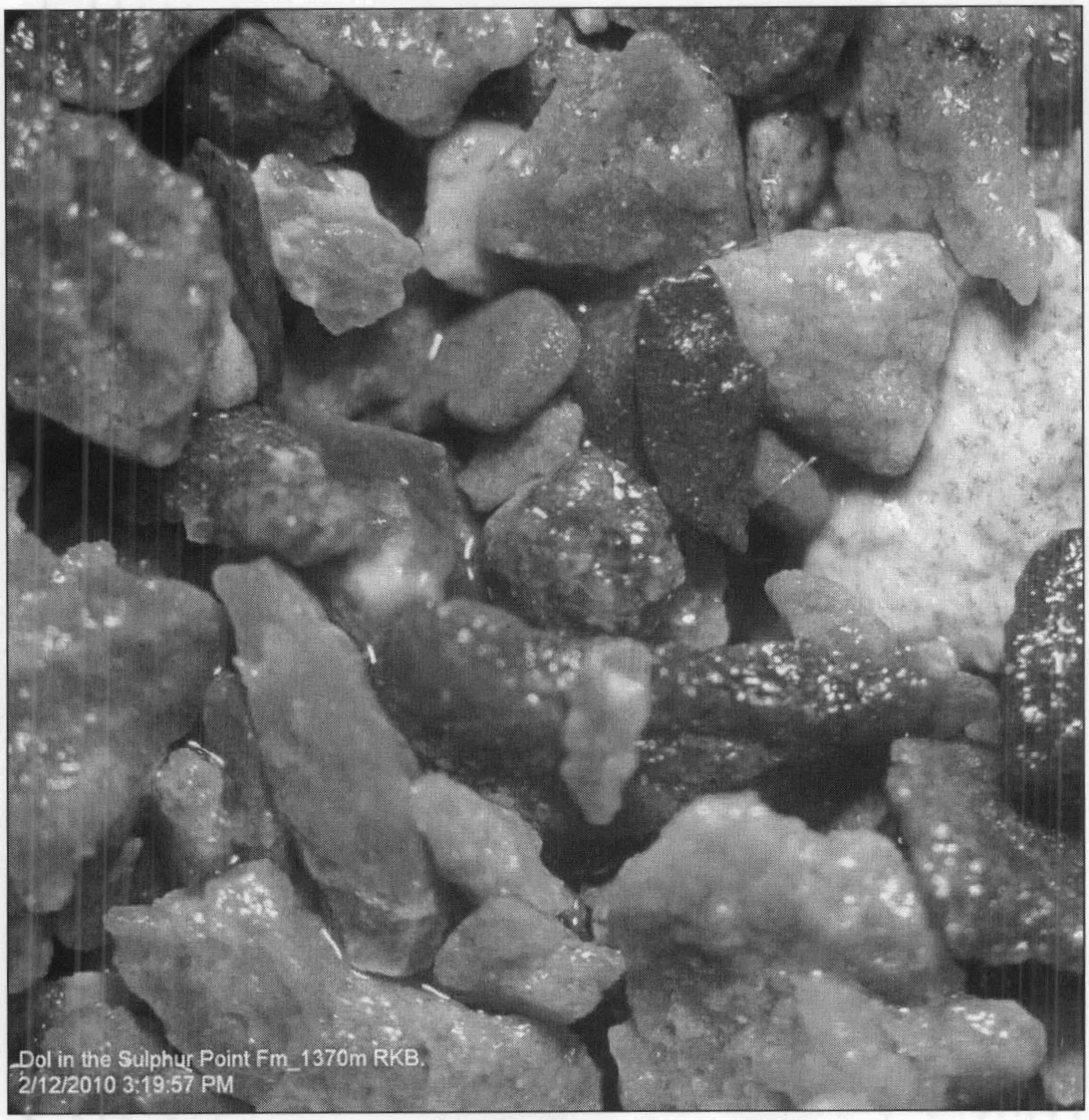


Photo 5: Dol in the Sulphur Point Fm_ 1370m RKB.

The limestone section of the **Sulphur Point** formation is picked up with the end of greenish waxy shaley deposit of the **Watt Mountain** formation. This section is identified from the ROPs, which are comparatively slower and change in drill cuttings. The formation encountered at 1351.0m RKB (-625.08m SS). Co-relation with the offset wells is the other criteria for identifying this formation. The limestone section is 9.0m thick.

The limestones are off white, cream to buff, mottled, color with dark brownish stain. They are generally very sharp to dense cryptocrystalline with some microcrystalline to crystalline debris and crumple to moderately hard, lumpy to blocky. Predominately they are wackestone to packstone texture. They are slightly dolomitic, intraclasts & occasionally bioclastic debris, traces pelletoidal inclusion. They are chalky in parts, slightly earthy and slightly argillaceous. Traces to maximum 10%, greenish to greenish brown waxy shale fragments are anticipated in the limestone section. These shale grains possibly intercalated as thin laminae.

Slight to moderate petroleum odor with scattered to spotty brownish yellow oil staining natural sample fluorescence are noticed. Traces to spotty light brown oil show are noticed in the lower section, light brownish yellow natural sample fluorescence; light greenish yellow streaming cut fluorescence, light brownish yellow residual ring fluorescence, poor shows. Total scattered vuggy, intercrystalline and microfracture porosities varies between 4 – 9%. No high formation gas is encountered in this drilled section.

The dolomitize part of the **Sulphur Point** formation is separated from the overlying of limestone section and underlying **Muskeg** formation. Presence of dolomite is the main criteria of identifying this section. While drilling the ROP are little slower and varied between 3.2min/m to 4.0min/m than in the upper limestone section where ROP varied between 2.6min/m to 3.5min/m. A little faster ROP are noticed in the fine crystalline sucrose porous section. The Dolomite section of the **Sulphur Point** formation is encountered at 1360.0m RKB (-645.0m SS). The section is 11.0m thick overlying on the cyclic deposition of anhydrite and anhydritic dolomites of the **Muskeg** formation.

In the top section the dolomites are coarsely crystalline and in general they are of off white, cream to tan, buff, light brown, oil stained. They are predominately very sharp dense, massive, in part microcrystalline to tetrahedral crystalline debris, with abundant of cryptocrystalline grains, in part sucrosic Usually they are crumpled to moderately hard, lumpy to blocky, smooth to gritty, dense and massive. They are partly earthy & chalky and slightly argillaceous. They predominately wackestone & packstone texture intercalated with some ratty, earthy grains. Traces of fine crystalline limestone with anhydrite grains are also noticed in this interval which possibly intercalated as thin laminae or lenses. Thin

waxy green shale grains are common. Total scattered intracrystalline, pin point, micro fracture and vuggy visible porosities vary between 4 to 14%.

Moderate to strong petroleum odor with even dark brownish oil stain, natural sample fluorescence, greenish yellow streaming cut fluorescence, pale brownish yellow residual ring fluorescence, oil & gas shows lead to all possibilities and properties of a good reservoir and presence of oil & gas deposition.

The upper **Sulphur Point** limestone section is little tight. The dolomite section possesses all the potentiality and characteristics of a good commercial hydrocarbon reservoir and seems to be commercially productive. The well is cased for commercial production testing. Further detail studies and evaluations of the **Sulphur Point** formation are proposed.

DAILY DRILLING SUMMARY

(Morning Report @ 07:00 Hrs)

February 06, 2010	**Midnight Depth: 236m**
Rig move from Cameron H-06 to Cameron F-77. Rig up. Check derrick and other surface equipments. P/U Bit# 1RR1, 311mm, Varel, 18.0x3 jets on a stiff drilling assembly. Pre-spud safety meeting. Spud the well at 01:00hrs. Spud mud is Polymer of 1020 kg/m3 and FV: 33 sec/l. Drilling of surface hole from 27m to 69m. Conduct surveys. Continue drilling.	

February 07, 2010	**Midnight Depth: 378m**
Continue drilling of surface hole from 69m to 312m. Conduct surveys. Continue drilling.	

February 08, 2010	**Midnight Depth: 379m**
At 378m circulation and mud conditioning to 1060 kg/m3, FV: 40 sec/l and pH: 8.0. Conduct bit trip. Drill down to 379.0m. Mud conditioning to 1080 kg/m3, FV: 57 sec/l and pH: 8.0. POOH. RIH 219.1mm, J-55, 35.716 kg/m, 28 joints surface casings. Circulation and mud conditioning through casing string. Cement casings with Sanjel.	

February 09, 2010	**Midnight Depth: 379m**
Cement casings with Sanjel. WOC. Cut, weld & dress casing string to the casing bowel. Nipples up BOP stack. Pressure test of BOPs and surface equipments. Pick up a new PDC Bit# 2, 200mm, Reed, DSX416M-A3PDC, Sr. No. 114178, 12.0x6 jets on stiff drilling assembly. RIH. Cement drilling continued.	

February 10, 2010	**Midnight Depth: 944m**
Drill out cement, float and shoe. Drilling of 200mm main hole from 379m to 710m. Conduct surveys.	

February 11, 2010	**Midnight Depth: 1221m**
Drill out cement, float and shoe. Drilling of 200mm main hole from 710m to 1049m. Conduct surveys.	

February 12, 2010	**Midnight Depth:1420m**
Drill out cement, float and shoe. Drilling of 200mm main hole from 1049m to 1299m. Conduct surveys.	

February 13, 2010	**Midnight Depth:1420m**
Drill out cement, float and shoe. Drilling of 200mm main hole from 1049m to 1420m (-694.08m SS) – TD of the well reached at 18:25hrs. Conduct surveys. Circulation and mud conditioning. Conduct wiper trip of 11 stands. Circulation and mud conditioning to 1040 kg/m3, FV: 52 sec/l, pH: 10.0 and WL: 6.50 cm3. POOH. Logging with Weatherford continued.	

February 14, 2010	**Midnight Depth:1420m**
Logging with Weatherford. STI/SPeD/CNS/GR/MRT/HBC/CAL tools are run in one run. 10m fill up encountered. Rig logging tools and equipments. RIH with hole cleaning assembly. Ream down last three joints of DPs. Trip gas 286/62 units. Condition mud to 1050 kg/m3, FV: 77 sec/l, pH: 8.5 and WL: 7.0. POOH. RIH 139.7mm production casings continued.	

February 15, 2010	**Midnight Depth:1420m**
RIH of 139.7mm production casings, 113 joints, J-55, 20.83 kg/m, 127.30mm ID, ST & C, 1417.63m length. Circulation and mud conditioning through the casing string to 1050 kg/m3, FV: 57 sec/l, pH: 10.0 and WL: 8.0 cm3. Trip gas at TD is 286/62 units. Conduct cement job with Sanjel. WOC. Cut weld and dress casing string. Nipple down BOPs. Make up well head and install Christmas Tree. Slip and cut drill line. Tear down rig continued.	

February 16, 2010	**Midnight Depth:1420m**
Tear down rig continued. Wait on Well License for Rig move.	

February 17, 2010	**Midnight Depth:1420m**
Rig moved to the new location. Wait on Well License for drilling out Rat Hole, Mouse Hole and Pilot Hole.	

SAMPLE DESCRIPTIONS

DRILLED SECTION FROM 27m - 1420.0m RKB

(Sampling Depth from 735m to 980m & 1225m to TD)

735-745

60% **Limestone:** off white, light brown, buff, predominately cryptocrystalline with traces of microcrystalline debris, predominately mudstone with packstone texture, traces argillaceous mudstone, calcarenite, in part slightly dolomitic, partly earthy & argillaceous, lumpy to blocky, firm to crumpled to moderately hard, traces loose grains to predominately peloids, 3 to 4% total visible intracrystalline porosity with vuggy porosity, no shows.
40% **Shale:** dark to blackish grey, greenish grey, micromicaceous in part, non calcareous, subblocky to blocky, subfissile to subplaty, smooth to gritty texture, in part laminated, well indurated, moderately hard to hard, conchoidal to angular break, slightly sideritic, in part carbonaceous & fossiliferous.

745-755

60% **Shale:** dark to blackish grey, greenish grey, micromicaceous in part, non calcareous, subblocky to blocky, subfissile to subplaty, smooth to gritty texture, in part laminated, well indurated, moderately hard to hard, conchoidal to angular break, slightly sideritic, in part carbonaceous & fossiliferous.
40% **Limestone:** off white, light brown, buff, predominately cryptocrystalline with traces of microcrystalline debris, predominately mudstone with packstone texture, abundant argillaceous mudstone, calcarenite, in part slightly dolomitic, partly earthy & argillaceous, in part chalky debris, lumpy to blocky, firm to crumpled to moderately hard, traces loose grains to predominately peloids, 3 to 4% total visible intracrystalline porosity with vuggy to pin point porosity, no shows.

755-765

70% **Shale:** dark to blackish grey, greenish grey, micromicaceous in part, non calcareous, subblocky to blocky, subfissile to subplaty, smooth to gritty texture, in part laminated, well indurated, moderately hard to hard, conchoidal to angular break, slightly sideritic, in part carbonaceous & fossiliferous. 30% Limestone: off white, light brown, buff, predominately cryptocrystalline with traces of microcrystalline debris, predominately mudstone with

packstone texture, abundant argillaceous mudstone, calcarenite, in part slightly dolomitic, partly earthy, ratty & argillaceous, in part chalky debris, lumpy to blocky, firm to crumpled to moderately hard, traces loose grains to predominately peloids, 3 to 4% total visible intracrystalline porosity with vuggy to pin point porosity, no shows.

765-775 50% **Limestone:** off white, light brown, buff, predominately cryptocrystalline with traces of microcrystalline debris, traces fine crystalline grainy grains inclusion, predominately mudstone with packstone texture, >5% argillaceous mudstone, calcarenite, in part slightly dolomitic, partly earthy & argillaceous, firm to crumpled to moderately hard, flaky to blocky, commonly loose grains to predominately peloids, in part pyritic, 3 to 4% total visible intracrystalline porosity with pin point & rare vuggy porosity, no shows.
50% **Shale**: grey, brownish grey, greenish grey, micromicaceous in part, non calcareous, subblocky to blocky, subfissile to subplaty,, smooth to gritty texture, in part laminated, moderately hard to hard, in part well indurated, conchoidal to angular break, partly carbonaceous with traces disseminated carbonaceous specks.

775-780.5 60% **Limestone:** off white, light brown, buff, predominately cryptocrystalline with traces of microcrystalline debris, traces fine crystalline with grainy grains inclusion, predominately mudstone with packstone texture, >5% argillaceous mudstone, calcarenite, in part slightly dolomitic, partly earthy & argillaceous, firm to crumpled to moderately hard, flaky to blocky, commonly loose grains to predominately peloids, in part pyritic, 3 to 4% total visible intracrystalline porosity with pin point & rare vuggy porosity, no shows.
40% **Shale:** grey, brownish grey, greenish grey, micromicaceous in part, non calcareous, subblocky to blocky, subfissile to subplaty,, smooth to gritty texture, in part laminated, moderately hard to hard, in part well indurated, conchoidal to angular break, partly carbonaceous with traces disseminated carbonaceous specks.

TWIN FALLS FM TOP @ 780.50m RKB (-54.58m SS)

780.5-790 80% **Limestone:** off white, light brown, buff, predominately cryptocrystalline with traces of microcrystalline debris,

occasionally fine crystalline grainy grains inclusion, predominately mudstone with packstone texture, traces argillaceous mudstone, calcarenite, in part slightly dolomitic, partly earthy & argillaceous, firm to moderately hard, flaky to blocky, commonly loose grains to predominately peloids, in part pyritic, 3 to 4% total visible intracrystalline porosity with pin point & rare vuggy porosity, no shows.
20% **Shale:** grey to brownish grey, greenish grey, micromicaceous in part, non calcareous, subblocky to blocky, subfissile to subplaty, smooth to gritty texture, in part laminated, moderately hard to hard, conchoidal to angular break, partly carbonaceous with traces disseminated carbonaceous specks, partly dull earthy texture.

790-800 100% **Limestone:** off white, light brown, buff, predominately cryptocrystalline with traces of microcrystalline debris, occasionally fine crystalline grainy grains inclusion, predominately mudstone with packstone texture, traces argillaceous mudstone, slightly calcitic, in part slightly dolomitic, partly earthy & argillaceous, firm to moderately hard, flaky to blocky, commonly loose grains to predominately peloids, in part pyritic with traces loose pyrite grains, 3 to 4% total visible intracrystalline porosity with pin point & rare vuggy porosity, no shows. <10% brownish to greenish grey, dark grey, non to slightly calcareous, smooth to gritty texture, moderately hard to hard, well indurated, conchoidal to angular break, in part carbonaceous.

800-810 100% **Limestone:** off white, light brown, buff, predominately cryptocrystalline with traces of microcrystalline debris, occasionally fine crystalline grainy grains inclusion, predominately mudstone with packstone texture, traces argillaceous mudstone, slightly calcitic, in part slightly dolomitic, partly earthy & argillaceous, firm to moderately hard, flaky to blocky, commonly loose grains to predominately peloids, in part pyritic with traces loose pyrite grains, 3 to 4% total visible intracrystalline porosity with pin point & rare vuggy porosity, no shows. <10% brownish to greenish grey, dark grey, non to slightly calcareous, smooth to gritty texture, moderately hard to hard, well indurated, conchoidal to angular break, in part carbonaceous.

810-820 100% **Limestone:** off white, light brown, buff, predominately cryptocrystalline with traces of microcrystalline debris, occasionally fine crystalline grainy grains inclusion, predominately mudstone with packstone texture, traces argillaceous mudstone, slightly calcitic, in part slightly dolomitic, partly earthy & argillaceous, partly chalky, firm to moderately hard, flaky to blocky, commonly loose grains to predominately peloids, in part

pyritic with traces loose pyrite grains, 3 to 4% total visible intracrystalline porosity with pin point & rare vuggy porosity, no shows. <10% brownish to greenish grey, dark grey, non to slightly calcareous, smooth to gritty texture, moderately hard to hard, well indurated, conchoidal to angular break, in part carbonaceous.

820-830 80% **Limestone:** off white, light brown, tan, predominately cryptocrystalline with traces of microcrystalline debris, in part very fine crystalline & grainy, predominately mudstone with partly packstone texture, traces argillaceous mudstone & chalky debris, in part biostromal, calcarenite, in part argillaceous & dolomitic, partly earthy & ratty, firm to crumpled to moderately hard, lumpy to blocky, commonly loose grains to predominately peloids, 3 to 5% total visible intracrystalline with vuggy & pin point porosity, no shows.
20% **Shale:** greenish grey, grey to brownish grey, in part micromicaceous, slightly calcareous, subblocky to blocky, subfissile to subplaty, smooth to gritty texture, in part laminated, moderately hard, partly carbonaceous, partly dull earthy texture, occur as thin laminae, in part fossiliferous.

830-840 80% **Limestone**: off white, light brown, tan, predominately cryptocrystalline with traces of microcrystalline debris, in part very fine crystalline & grainy, predominately mudstone with partly packstone texture, traces argillaceous mudstone & chalky debris, in part biostromal, slightly calcitic, in part argillaceous & dolomitic, partly earthy & ratty, firm to crumpled to moderately hard, lumpy to blocky, commonly loose grains to predominately peloids, 3 to 5% total visible intracrystalline with vuggy & pin point porosity, no shows.
20% **Shale:** greenish grey, grey to brownish grey, in part micromicaceous, slightly calcareous, subblocky to blocky, subfissile to subplaty, smooth to gritty texture, in part laminated, moderately hard, partly carbonaceous, partly dull earthy texture, occur as thin laminae, in part fossiliferous.

840-850 90% **Limestone:** off white, light brown, tan, predominately cryptocrystalline with traces of microcrystalline debris, predominately mudstone with partly packstone texture, in part sucrosic with traces argillaceous mudstone & chalky debris, in part biostromal, slightly calcitic, in part argillaceous, partly earthy & ratty, firm to crumpled to moderately hard, lumpy to blocky, commonly loose grains to predominately peloids, 4 to 6% total visible intracrystalline with vuggy & pin point porosity, no shows.
10% **Shale:** greenish grey, grey to brownish grey, in part micromicaceous, slightly calcareous, subblocky to blocky,

subfissile to subplaty, smooth to gritty texture, in part laminated, moderately hard, partly carbonaceous, partly dull earthy texture, occur as thin laminae, in part fossiliferous.

850-860 90% **Limestone:** off white, light brown, tan, predominately cryptocrystalline with traces of microcrystalline debris, predominately mudstone with partly packstone texture, in part sucrosic with traces argillaceous mudstone & chalky debris, in part biostromal, slightly calcitic, in part argillaceous, partly earthy & ratty, firm to crumpled to moderately hard, lumpy to blocky, commonly loose grains to predominately peloids, 4 to 6% total visible intracrystalline with vuggy & pin point porosity, no shows.
10% **Shale:** greenish grey, grey to brownish grey, in part micromicaceous, slightly calcareous, subblocky to blocky, subfissile to subplaty, smooth to gritty texture, in part laminated, moderately hard, partly carbonaceous, partly dull earthy texture, occur as thin laminae, in part fossiliferous.

860-865 80% **Limestone:** off white, light brown, predominately cryptocrystalline with traces of microcrystalline debris, predominately mudstone with partly packstone texture, traces argillaceous mudstone & chalky debris, in part biostromal, calcarenite, rare slightly dolomitic, partly earthy & ratty & argillaceous, firm to crumpled to moderately hard, lumpy to blocky to subblocky, commonly loose grains to predominately peloids, 3 to 6% total visible intracrystalline porosity with vuggy & pin point porosity, no shows.
20% **Shale:** greenish grey, grey, brownish grey, in part micromicaceous, non calcareous, subblocky to blocky, subfissile to subplaty, smooth to gritty texture, in part laminated, moderately hard to hard, conchoidal to angular break, partly carbonaceous, partly dull earthy texture, occur as thin laminae.

865-870 80% **Limestone:** off white, light brown, predominately cryptocrystalline with traces of microcrystalline debris, predominately mudstone with partly packstone texture, traces argillaceous mudstone & chalky debris, in part biostromal, calcarenite, rare slightly dolomitic, partly earthy & ratty & argillaceous, firm to crumpled to moderately hard, lumpy to blocky to subblocky, commonly loose grains to predominately peloids, 3 to 6% total visible intracrystalline porosity with vuggy & pin point porosity, no shows.
20% **Shale:** greenish grey, grey, brownish grey, in part micromicaceous, non calcareous, subblocky to blocky, subfissile to subplaty, smooth to gritty texture, in part laminated, moderately

hard to hard, conchoidal to angular break, partly carbonaceous, partly dull earthy texture, occur as thin laminae.

870-880

80% **Limestone:** off white, light brown, predominately cryptocrystalline with traces of microcrystalline debris, predominately mudstone with partly packstone texture, traces argillaceous mudstone & chalky debris, in part biostromal, calcarenite, rare slightly dolomitic, partly earthy & ratty & argillaceous, firm to crumpled to moderately hard, lumpy to blocky to subblocky, commonly loose grains to predominately peloids, 3 to 4% total visible intracrystalline porosity with vuggy & pin point porosity, no shows.
20% **Shale:** greenish grey, grey, brownish grey, in part micromicaceous, non calcareous, subblocky to blocky, subfissile to subplaty, smooth to gritty texture, in part laminated, moderately hard to hard, conchoidal to angular break, partly carbonaceous, partly dull earthy texture.

880-885

70% **Limestone:** off white, light brown, predominately cryptocrystalline with traces of microcrystalline debris, predominately mudstone with partly packstone texture, in part biostromal, slightly calcitic, partly earthy & ratty & argillaceous, in part chalky, firm to moderately hard, flaky to subblocky to blocky, commonly loose grains to predominately peloids, 3 to 4% total visible intracrystalline porosity with vuggy & pin point porosity, no shows.
30% **Shale:** greenish grey, grey, brownish grey, in part micromicaceous, non calcareous, subblocky to blocky, subfissile to subplaty, smooth to gritty texture, in part laminated, moderately hard to hard, conchoidal to angular break, partly carbonaceous, partly dull earthy texture.

885-890

70% **Limestone:** off white, light brown, predominately cryptocrystalline with traces of microcrystalline debris, predominately mudstone with partly packstone texture, in part biostromal, slightly calcitic, partly earthy & ratty & argillaceous, in part chalky, firm to moderately hard, flaky to subblocky to blocky, commonly loose grains to predominately peloids, 3 to 4% total visible intracrystalline porosity with vuggy & pin point porosity, no shows.
30% **Shale:** greenish grey, grey, brownish grey, in part micromicaceous, non calcareous, subblocky to blocky, subfissile to subplaty, smooth to gritty texture, in part laminated, moderately hard to hard, conchoidal to angular break, partly carbonaceous, partly dull earthy texture.

900-910 60% **Limestone:** off white, light brown, predominately cryptocrystalline with traces of microcrystalline debris, predominately mudstone with partly packstone texture, in part biostromal, slightly calcitic, partly earthy & ratty & argillaceous, in part chalky, firm to moderately hard, flaky to subblocky to blocky, commonly loose grains to predominately peloids, 3 to 4% total visible intracrystalline porosity with vuggy porosity, no shows. 40% **Shale:** greenish grey, grey, brownish grey, in part micromicaceous, non calcareous, subblocky to blocky, subfissile to subplaty, smooth to gritty texture, in part laminated, moderately hard to hard, conchoidal to angular break, partly carbonaceous, partly dull earthy texture, traces siltstone stringers inclusion.

910-920 50% **Limestone:** off white, light brown, predominately cryptocrystalline with traces of microcrystalline debris, predominately mudstone with partly packstone texture, in part biostromal, slightly calcitic, partly earthy & ratty & argillaceous, in part chalky, firm to moderately hard, flaky to subblocky to blocky, commonly loose grains to predominately peloids, 3 to 4% total visible intracrystalline porosity with vuggy porosity, no shows. 50% **Shale:** greenish grey, grey, brownish grey, in part micromicaceous, non calcareous, subblocky to blocky, subfissile to subplaty, smooth to gritty texture, in part laminated, moderately hard to hard, conchoidal to angular break, partly carbonaceous, partly dull earthy texture, traces siltstone stringers inclusion.

920-930 70% **Shale:** greenish grey, grey, brownish grey, micromicaceous, generally slightly to moderately salty, micro laminated on darker & harder fraction, calcareous, dense, massive, amorphous to blocky, fissile to platy, smooth to gritty texture, well indurated, partly dull earthy, farm to moderately hard, in part thinly laminated, slightly sideritic, partly carbonaceous, >5% siltstone stringers inclusion, traces chart fragments, in part fossiliferous.
30% **Limestone:** off white, light brown, tan, predominately cryptocrystalline with traces of microcrystalline debris, predominately mudstone with partly packstone texture, in part biostromal, slightly dolomitic, traces argillaceous mudstone & chalky debris, partly earthy & argillaceous, 3% total visible intracrystalline porosity with vuggy porosity, no shows.

930-939.5 70% **Shale:** greenish grey, grey, brownish grey, micromicaceous, generally slightly to moderately silty, micro laminated on darker & harder fraction, calcareous, dense, massive, amorphous to blocky, fissile to platy, smooth to gritty texture, well indurated, partly dull earthy, farm to moderately hard, in part thinly laminated, slightly

sideritic, partly carbonaceous, >5% siltstone stringers inclusion, traces chert fragments, in part fossiliferous.
30% **Limestone:** off white, light brown, tan, predominately cryptocrystalline with traces of microcrystalline debris, predominately mudstone with partly packstone texture, in part biostromal, slightly dolomitic, traces argillaceous mudstone & chalky debris, partly earthy & argillaceous, 3% total visible intracrystalline porosity with vuggy porosity, no shows.

HAY RIVER FM TOP @ 939.50m RKB (-213.58m SS)

939.5-950 90% **Shale:** greenish grey, grey, brownish grey, micromicaceous, generally slightly to moderately silty, micro laminated on darker & harder fraction, calcareous, dense, massive, amorphous to blocky, fissile to platy, smooth to gritty texture, well indurated, partly dull earthy, farm to moderately hard, in part thinly laminated, slightly sideritic, partly carbonaceous, >5% siltstone stringers inclusion, in part fossiliferous.
10% **Limestone:** off white, light brown, tan, predominately cryptocrystalline with traces of microcrystalline debris, predominately mudstone with partly packstone texture, in part biostromal, slightly dolomitic, occur as thin laminae, traces argillaceous mudstone & chalky debris, partly earthy & argillaceous, maximum 3% total visible intracrystalline porosity with vuggy porosity, no shows.

950-960 100% **Shale:** greenish grey, grey, brownish grey, micromicaceous, generally slightly to moderately silty, micro laminated on darker & harder fraction, calcareous, dense, massive, amorphous to blocky, fissile to platy, smooth to gritty texture, well indurated, partly dull earthy, farm to moderately hard, in part thinly laminated, slightly sideritic, partly carbonaceous, >5% siltstone stringers inclusion, in part fossiliferous. <10% off white, light brown, predominately mudstone with partly packstone texture, in part biostromal limestone.

960-970 100% **Shale:** greenish grey, grey, brownish grey, micromicaceous, generally slightly to moderately silty, micro laminated on darker & harder fraction, calcareous, dense, massive, amorphous to blocky, fissile to platy, smooth to gritty texture, well indurated, in part dull earthy, farm to moderately hard, in part thinly laminated, slightly

sideritic, partly carbonaceous, traces of pyrite grains, >5% siltstone stringers inclusion, in part fossiliferous. >5% off white, light brown, predominately mudstone with packstone texture, in part biostromal limestone.

970-980 100% **Shale:** greenish grey, grey, brownish grey, micromicaceous, generally slightly to moderately silty, micro laminated on darker & harder fraction, calcareous, dense, massive, amorphous to blocky, fissile to platy, smooth to gritty texture, well indurated, in part dull earthy, farm to moderately hard, in part thinly laminated, slightly sideritic, partly carbonaceous, rare pyritic with traces loose pyrite grains, >5% siltstone stringers inclusion, in part fossiliferous. >5% off white, light brown, predominately mudstone with packstone texture, in part biostromal limestone.

980-1225 No descriptions done

1225-1235 100% **Shale:** medium to dark grey, greenish grey, micromicaceous, generally slightly to moderately in part silty, micro laminated on darker & harder fraction with fine silty partings, slightly calcareous, dense, massive, grading to mudstone, splintery to blocky, subfissile to platy, smooth to waxy texture, in part dull earthy & partly well indurated, firm to friable to moderately hard, occasionally micro to thinly laminated, bituminous in part, slightly sideritic, in part carbonaceous with traces of disseminated carbonaceous specks, randomly oriented with biotitic mica flakes, traces siltstone stringers, traces of argillaceous limestone, occasionally traces disseminated pyrite, fossiliferous.

1235-1245 100% **Shale:** medium to dark grey, greenish grey, micromicaceous, generally slightly to moderately in part silty, micro laminated on darker & harder fraction with fine silty partings, slightly calcareous, dense, massive, grading to mudstone, splintery to blocky, subfissile to platy, smooth to waxy texture, in part dull earthy & partly well indurated, firm to friable to moderately hard, occasionally micro to thinly laminated, bituminous in part, slightly sideritic, in part carbonaceous with traces of disseminated carbonaceous specks, randomly oriented with biotitic mica flakes, traces siltstone stringers, traces of argillaceous limestone, occasionally traces disseminated pyrite, in part fossiliferous.

1245-1255 100% **Shale:** medium grey, dark grey, greenish grey, micromicaceous, generally slightly to moderately in part silty, micro laminated on darker & harder fraction with fine silty partings, partly very calcareous grading to shaley limestone, dense, massive, grading to mudstone, splintery to blocky, subfissile to

platy, smooth to waxy texture, in part dull earthy & partly well indurated, firm to friable to moderately hard, occasionally micro to thinly laminated, bituminous in part, slightly sideritic, in part carbonaceous with traces of disseminated carbonaceous specks, randomly oriented with biotitic mica flakes, traces siltstone stringers, traces dark argillaceous limestone with chert fragments, generally fossiliferous.

1255-1265 100% **Shale:** medium grey, dark grey, greenish grey, micromicaceous, generally slightly to moderately in part silty, micro laminated on darker & harder fraction with fine silty partings, partly very calcareous grading to shaley limestone, dense, massive, grading to mudstone, splintery to blocky, subfissile to platy, smooth to waxy texture, in part dull earthy & partly well indurated, firm to friable to moderately hard, occasionally micro to thinly laminated, bituminous in part, slightly sideritic, in part carbonaceous with traces of disseminated carbonaceous specks, randomly oriented with biotitic mica flakes, traces siltstone stringers, traces of dark argillaceous limestone, generally fossiliferous.

1265-1272.5 100% **Shale:** medium grey, dark grey, greenish grey, micromicaceous, generally slightly to moderately in part silty, micro laminated on darker & harder fraction with fine silty partings, partly very calcareous grading to shaley limestone, dense, massive, grading to mudstone, splintery to blocky, subfissile to platy, smooth to waxy texture, in part dull earthy & partly well indurated, firm to friable to moderately hard, occasionally micro to thinly laminated, bituminous in part, slightly sideritic, in part carbonaceous with traces of disseminated carbonaceous specks, randomly oriented with biotitic mica flakes, traces siltstone stringers, traces of dark argillaceous limestone, generally fossiliferous.

BEAVERHILL LAKE FM TOP @ 1272.50m (-546.58m SS)

1272.5-1280 100% **Shale:** medium grey, brownish grey, commonly micromicaceous, generally silty, micro laminated on darker & harder fraction with fine silty partings, partly very calcareous grading to shaley limestone, dense, massive, grading to mudstone, splintery to blocky, subfissile to platy, smooth to gritty to waxy texture, rare earthy & well indurated, firm to moderately hard,

occasionally micro to thinly laminated, slightly sideritic, in part carbonaceous with disseminated carbonaceous specks, randomly oriented with biotite mica flakes, traces siltstone stringers, traces dark argillaceous limestone with chert fragments, occasionally pyretic with traces of loose scattered granular pyrite fragments, traces inoceramus prism, occasionally fossiliferous.

1280-1290 100% **Shale:** medium grey, brownish grey, commonly micromicaceous, generally silty, micro laminated on darker & harder fraction with fine silty partings, partly very calcareous grading to shaley limestone, dense, massive, grading to mudstone, splintery to blocky, subfissile to platy, smooth to gritty to waxy texture, rare earthy & well indurated, firm to moderately hard, occasionally micro to thinly laminated, slightly sideritic, in part carbonaceous with disseminated carbonaceous specks, randomly oriented with biotite mica flakes, traces siltstone stringers, traces dark argillaceous limestone with off white limestone grains, occasionally pyretic with traces of loose scattered granular pyrite fragments, traces inoceramus prism, occasionally fossiliferous.

1290-1295.5 100% **Shale**: medium grey, brownish grey, commonly micromicaceous, generally silty, micro laminated on darker & harder fraction with fine silty partings, partly very calcareous grading to shaley limestone, dense, massive, grading to mudstone, splintery to blocky, subfissile to platy, smooth to gritty to waxy texture, rare earthy & well indurated, firm to moderately hard, occasionally micro to thinly laminated, slightly sideritic, in part carbonaceous with disseminated carbonaceous specks, randomly oriented with biotite mica flakes, traces siltstone stringers, <10% dark argillaceous limestone with off white limestone grains, occasionally pyretic with traces of loose scattered granular pyrite fragments, traces inoceramus prism, occasionally fossiliferous.

SLAVE POINT FM TOP @ 1295.50m RKB (-569.58m SS)

1295.5-1305 50% **Limestone:** off white, mottled, creamy, firm to crumpled to moderately hard, lumpy to blocky, in part chalky, predominately cryptocrystalline to microcrystalline, predominately packstone with wackestone & mudstone, in part dolomitic, in part pyritic with traces of loose scattered granular pyrite fragments, 3 to 5% total visible vuggy, intracrystalline & pin point porosity, <10% light

brown oil show, no visible staining, no odor, light pale brownish yellow natural sample fluorescence, very faint cut, light bluish white residual ring fluorescence, gas & oil show.
50% **Shale**: light to medium grey, dark grey, commonly brownish grey, micromicaceous, silty, generally slightly to moderately in part silty.

1305-1315 100% **Limestone:** off white, mottled, creamy, traces oil stained, crumpled to moderately hard, lumpy to blocky, in part chalky, predominately cryptocrystalline to microcrystalline, occasionally fine crystalline grainy grains inclusion, predominately packstone with wackestone & mudstone, traces of sucrosic grains, in part pyritic with traces of loose scattered granular pyrite fragments, 3 to 9% total visible vuggy, intracrystalline & pin point porosity, spotty light brown scattered natural sample fluorescence, moderate petroleum odor, pale brownish yellow natural sample fluorescence, faint cut, light bluish white residual ring fluorescence, gas & oil show. >10% light to medium grey, dark grey, commonly brownish grey, micromicaceous, silty, smooth to gritty texture, well indurated shale fragments.

1315-1320 100% **Limestone:** off white, mottled, creamy, traces oil stained, crumpled to moderately hard, lumpy to blocky, in part chalky, predominately cryptocrystalline to microcrystalline, occasionally fine crystalline grainy grains inclusion, predominately packstone with wackestone & mudstone, traces of sucrosic grains, in part pyritic with traces of loose scattered granular pyrite fragments, 4 to 10% total visible vuggy, intracrystalline & pin point porosity, spotty to patchy light brown scattered natural sample fluorescence, moderate petroleum odor, pale brownish yellow natural sample fluorescence, faint cut, light bluish white residual ring fluorescence, oil & gas show. >10% medium to dark grey, smooth to gritty waxy texture, well indurated shale fragments inclusion.

1320-1330 100% **Limestone:** brown, tan, off white, light yellow with dark brown stain, mottled, firm, friable to crumpled to moderately hard, lumpy to blocky, predominately cryptocrystalline with microcrystalline & traces very fine crystalline debris, predominately packstone to wackestone texture, partly mudstone, intraclasts & occasionally bioclastic debris, calcarenite, partly earthy & argillaceous, in part dolomitic & anhydritic, local bituminous partings, >5% grey, dark grey, brownish grey shale fragments inclusion, traces pyritic grains with traces of loose scattered granular pyrite fragments, 3 to 8% total visible intracrystalline, vuggy & pin point porosity, slight petroleum odor,

spotty light brown natural sample fluorescence, slow faint cut, pale yellowish brown residual ring fluorescence, oil & gas show.

1330-1336.5 100% **Limestone**: brown, tan, off white, light yellow with dark brown stain, mottled, firm, friable to crumpled to moderately hard, lumpy to blocky, predominately cryptocrystalline with microcrystalline & traces very fine crystalline debris, predominately packstone to wackestone texture, partly mudstone, intraclasts & occasionally bioclastic debris, calcarenite, partly earthy & argillaceous, in part dolomitic & anhydritic, local bituminous partings, >5% grey, dark grey, brownish grey shale fragments inclusion, traces pyritic grains with traces of loose scattered granular pyrite fragments, 3 to 8% total visible intracrystalline, vuggy & pin point porosity, slight petroleum odor, spotty light brown natural sample fluorescence, slow faint cut, pale yellowish brown residual ring fluorescence, oil & gas show.

F4 MARKER FMTOP @ 1336.50m RKB (-610.58m SS)

1336.5-1346 60% **Limestone:** brown, tan, light yellow with dark brown stain, mottled, predominately cryptocrystalline with microcrystalline debris, 3 to 5% total visible vuggy & intracrystalline porosity, no odor, no visible staining, >5% light brown natural sample fluorescence, hazy cut fluorescence, no shows. 40% Dolomite: Dolomite: off white, satiny, creamy, predominately cryptocrystalline debris, mudstone to packstone argillaceous debris, fossiliferous, traces of shale fragments, abundant of calcite & anhydrite inclusions, 3 - 4% visible vuggy & intracrystalline porosity, hazy cut fluorescence.

WATT MOUNTAIN FM TOP @ 1346.0m RKB (-620.08m SS)

1346-1350.5 60% **Shale**: greenish grey, green, micromicaceous, micro laminated, slightly calcareous, dense, massive, amorphous to subfissile, smooth to gritty texture, in part well indurated, partly dull earthy texture, predominately moderately hard, partly

carbonaceous with traces of disseminated carbonaceous specks, traces of anhydrite & chert inclusion.
40% **Limestone:** brown, tan, light yellow with dark brown stain, mottled, friable to crumpled to moderately hard, lumpy to blocky, predominately cryptocrystalline with microcrystalline debris, slightly dolomitic, 3 to 5% total visible vuggy & intracrystalline, porosity, hazy cut fluorescence, no shows.

SULPHUR POINT FM LS TOP @ 1350.50m (-624.58m SS)

1350.5-1359.5 100% **Limestone:** off white, cream to buff, mottled, very sharp to dense cryptocrystalline to debris, traces microcrystalline with fine crystalline grains, predominately wackestone to packstone, in part chalky & argillaceous, slightly dolomitic, moderately hard, lumpy to blocky, intraclasts & occasionally bioclastic debris, traces pelletoidal inclusion, >10% dark to brownish grey waxy, well indurated shale grains with traces anhydrite grains, 4 to 9% total scattered visible vuggy to intracrystalline to mf porosity, no visible staining, spotty brownish oil stain to moderate petroleum odor, light brownish yellow natural sample fluorescence, light greenish yellow streaming cut fluorescence, light brownish yellow residual ring fluorescence, oil show (?).

SULPHUR POINT FM DOL TOP @ 1359.50m (-633.58m SS)

1359.5-1365 100% **Dolomite:** off white to light brown, tan to buff, oil stain, very sharp dense, massive, in part microcrystalline to tetrahedral crystalline debris, predominately wackestone to packstone, predominately grainy & sucrosic, rare chalky, slightly limy, in part argillaceous & slightly calcitic, traces calcite inclusion, rare with bituminous partings, slightly anhydritic, <5% green waxy shale inclusion, 5 to 14% total scattered visible intracrystalline, pin point & vuggy porosity, no visible staining, strong petroleum odor with even dark brownish yellow oil stain, light brownish yellow natural sample fluorescence, greenish yellow streaming cut fluorescence, pale brownish yellow residual ring fluorescence, oil & gas show.

1365-1371 100% **Dolomite:** off white to light brown, tan to buff, oil stain, very sharp dense, massive, in part microcrystalline to tetrahedral crystalline debris, predominately wackestone to packstone, predominately grainy & sucrosic, rare chalky, slightly limy, in part argillaceous & slightly calcitic, traces calcite inclusion, rare with bituminous partings, slightly anhydritic, traces green waxy shale inclusion, traces of anhydrite, 5 to 14% total scattered visible intracrystalline, pin point & vuggy porosity, no visible staining, strong petroleum odor with even dark brownish yellow oil stain, light brownish yellow natural sample fluorescence, greenish yellow streaming cut fluorescence, pale brownish yellow residual ring fluorescence, oil & gas show.

MUSKEG FORMATION TOP @ 1371.00m KB (-645.08m SS)

1371-1380 60% **Dolomite:** off white, cream to buff, tan, very sharp microcrystalline to fine crystalline debris, predominately grainstone to wackestone to packstone, in part grainy, partly chalky, slightly limy, slightly to very anhydritic, minor argillaceous & earthy, calcarenite, 3 to 5% total scattered visible intracrystalline to vuggy porosity, slight petroleum odor, traces light brownish yellow natural sample fluorescence, hazy cut fluorescence, poor show.
40% **Anhydrite:** white, off white, brown to dark brown, hyaline, irregularly shaped, sharp, angular cryptocrystalline with traces microcrystalline, in part chalky, abundant of calcite inclusion.

1380-1390 70% **Anhydrite**: white, off white, brown to dark brown, hyaline, irregularly shaped, sharp, angular cryptocrystalline with traces microcrystalline, dense, abundant of calcite inclusion, traces of fine crystalline limestone with abundant of brownish grey to tan dolomite inclusion.
30% **Dolomite:** off white, cream to buff, tan, very sharp microcrystalline to fine crystalline debris, predominately grainstone to wackestone to packstone, in part grainy, partly chalky, slightly limy, slightly to very anhydritic, minor argillaceous & earthy, calcarenite, 3 to 5% total scattered visible intracrystalline to vuggy porosity, slight poor odor, traces light brownish yellow natural sample fluorescence, hazy cut fluorescence, poor show.

1390-1395 60% **Anhydrite:** white, off white, brown to dark brown, hyaline, irregularly shaped, sharp, angular cryptocrystalline with traces microcrystalline, dense, abundant of calcite inclusion, traces of fine crystalline limestone with abundant of brownish grey to tan dolomite inclusion.
40% **Dolomite**: off white, cream to buff, tan, very sharp microcrystalline to fine crystalline debris, predominately grainstone to wackestone to packstone, in part grainy, partly chalky, slightly limy, slightly to very anhydritic, minor argillaceous & earthy, calcarenite, 3 to 5% total scattered visible intracrystalline to vuggy porosity, slight poor odor, traces light brownish yellow natural sample fluorescence, hazy cut fluorescence, poor show.

1395-1405 60% **Anhydrite:** white, off white, brown to dark brown, hyaline, irregularly shaped, sharp, angular cryptocrystalline with traces microcrystalline, dense, abundant of calcite inclusion, traces of fine crystalline limestone with abundant of brownish grey to tan dolomite inclusion.
40% **Dolomite:** off white, cream to buff, tan, very sharp microcrystalline to fine crystalline debris, predominately grainstone to wackestone to packstone, in part grainy, partly chalky, slightly limy, very anhydritic, minor argillaceous & earthy, calcarenite, 3 to 5% total scattered visible intracrystalline to vuggy porosity, slight poor odor, traces light brownish yellow natural sample fluorescence, hazy cut fluorescence, poor show.

1405-1410 60% **Anhydrite:** white, off white, brown to dark brown, hyaline, irregularly shaped, sharp, angular cryptocrystalline with traces microcrystalline, dense, abundant of calcite inclusion, traces of fine crystalline limestone with abundant of brownish grey to tan dolomite inclusion.
40% **Dolomite:** off white, cream to buff, tan, very sharp microcrystalline to fine crystalline debris, predominately grainstone to wackestone to packstone, in part grainy, partly chalky, slightly limy, slightly to very anhydritic, minor argillaceous & earthy, calcarenite, 3 to 5% total scattered visible intracrystalline to vuggy porosity, slight poor odor, traces light brownish yellow natural sample fluorescence, hazy cut fluorescence, poor show.

1410-1415 60% **Anhydrite:** white, off white, brown to dark brown, hyaline, irregularly shaped, sharp, angular cryptocrystalline with traces microcrystalline, dense, abundant of calcite inclusion, traces of fine

crystalline limestone with abundant of brownish grey to tan dolomite inclusion.
40% **Dolomite:** off white, cream to buff, tan, very sharp microcrystalline to fine crystalline debris, predominately grainstone to wackestone to packstone, in part grainy, partly chalky, slightly limy, slightly to very anhydritic, minor argillaceous & earthy, calcarenite, 3 to 5% total scattered visible intracrystalline to vuggy porosity, slight poor odor, traces light brownish yellow natural sample fluorescence, hazy cut fluorescence, poor show.

1415-1420 100% **Anhydrite**: white, off white, brown to dark brown, hyaline, irregularly shaped, sharp, angular cryptocrystalline with traces microcrystalline, dense, abundant of calcite inclusion, traces of fine crystalline limestone with abundant of brownish grey to tan dolomite inclusion.

TD OF PARA ET AL CAMERON F-77.

DISTRIBUTION

The original and five (5) copies of the Geological Report on Para Et Al Cameron F-77 have been completed. The original and four (4) Copies will be forwarded to PARAMOUNT RESOURCES LTD. and "Moh & Associate Oilfield Consultants Ltd." will retain the remaining copy.

Respectfully

Moh Sahota, B. Sc. (Hons), M. Sc. Geology
President,
Moh & Association Oilfield Consultants Ltd.

Paramount resources ltd.

Scale 1:240 (5"=100') Metric
Measured Depth Log

Well Name:	PARA ET AL CAMERON F-77		
Location:	300/F77-6010-117150		
License Number:	1221	Region:	NWT
Spud Date:	Feb 06, 2010 @ 01:00 Hrs.	Drilling Completed:	Feb 12, 2010 @ 18:25 H
Surface Coordinates:	Latitude: 60° 06' 29.3" North		
	Longitude: 117° 29' 04.7" West		
Bottom Hole	Latitude: 60° 06' 29.3" North		
Coordinates:	Longitude: 117° 29' 04.7" West		
Ground Elevation (m):	721.17m	K.B. Elevation (m):	725.92m
Logged Interval (m):	27.0m To: 1410.6m	Total Depth (m):	1420.0m
Formation:	Primary: Sulphur Point	Secondary: Slave Point	
Type of Drilling Fluid:	Polymer - Floc Water - Polymer.		

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.co

OPERATOR

Company: PARAMOUNT RESOURCES LTD.
Address: 4700 Bankers Hall West
888 3rd Street S.W.
Calgary, AB T2P 5C5.

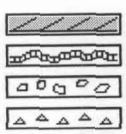
GEOLOGIST

Name: Azim Ahmed
Company: Moh and Associates Oilfield Consultants Ltd.
Address: 509, 206 - 7th Ave SW
Calgary, AB T2P 0W7.

Comments

The well is drilled as a vertical one and all depths are measured from RKB.
The well is drilled by Precision Drilling Rig# 245.
AFE# 09NO10009
A Total Gas Detector is used for gas detection.
Logging conducted by Weatherford.
Run# 1: STI/SPeD/CNS/GR/MRT/HBC/CAL tools are run in.
Neutron & Density porostity logs presented on a limestone and dolomite scales.
139.7mm production casings are run in.

ROCK TYPES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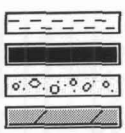
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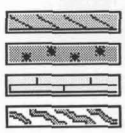
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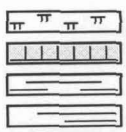
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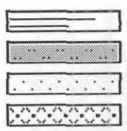
Shgy
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Till

ACCESSORIES

MINERAL
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff

FOSSIL
- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

STRINGER
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg

TEXTURE
- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

OTHER SYMBOLS

POROSITY
- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

SORTING
- Well
- Moderate
- Poor

ROUNDING
- Rounded
- Subrnd
- Subang
- Angular

OIL SHOW
- Even
- Spotted
- Ques
- Dead

INTERVAL
- Core
- Dst

EVENT
- Rft
- Sidewall

Drilling Track
- ROP (min/m)
- Gas (units)
- Gamma (API)
- Calliper X (mm)
- Calliper Y (mm)
- SP ((mV))

Depth | Porosity Type | Porosity (24% 18% 12% 6%) | Lithology | Grain Size (1/16 mm, 1/8 mm, 1/4 mm, 1/2 mm, 1 mm) | Sorting | Rounding | Oil Shows

Geological Descriptions
- Sonic (usec/m)
- Neutron Por (%)
- PEF (b/e)
- Neutron Po
- Density Por
- Density Cor

ROP (min/m) 25 | Gas (units) 1000 | Gamma (API) 150 | Calliper X (mm) 375 | Calliper Y (mm) 375 | SP ((mV)) 50

Sonic (usec/m) 500 | Neutron Por (%) 45 | 1000 | -15 | 45 | 450

Spud Well @ 01:00Hrs Feb 06, 2010.
Spud Mud: Polymer.

False Conductor Set @ 27.0m RKB.

311mm Surface Hole Drilling F/27m RKB.

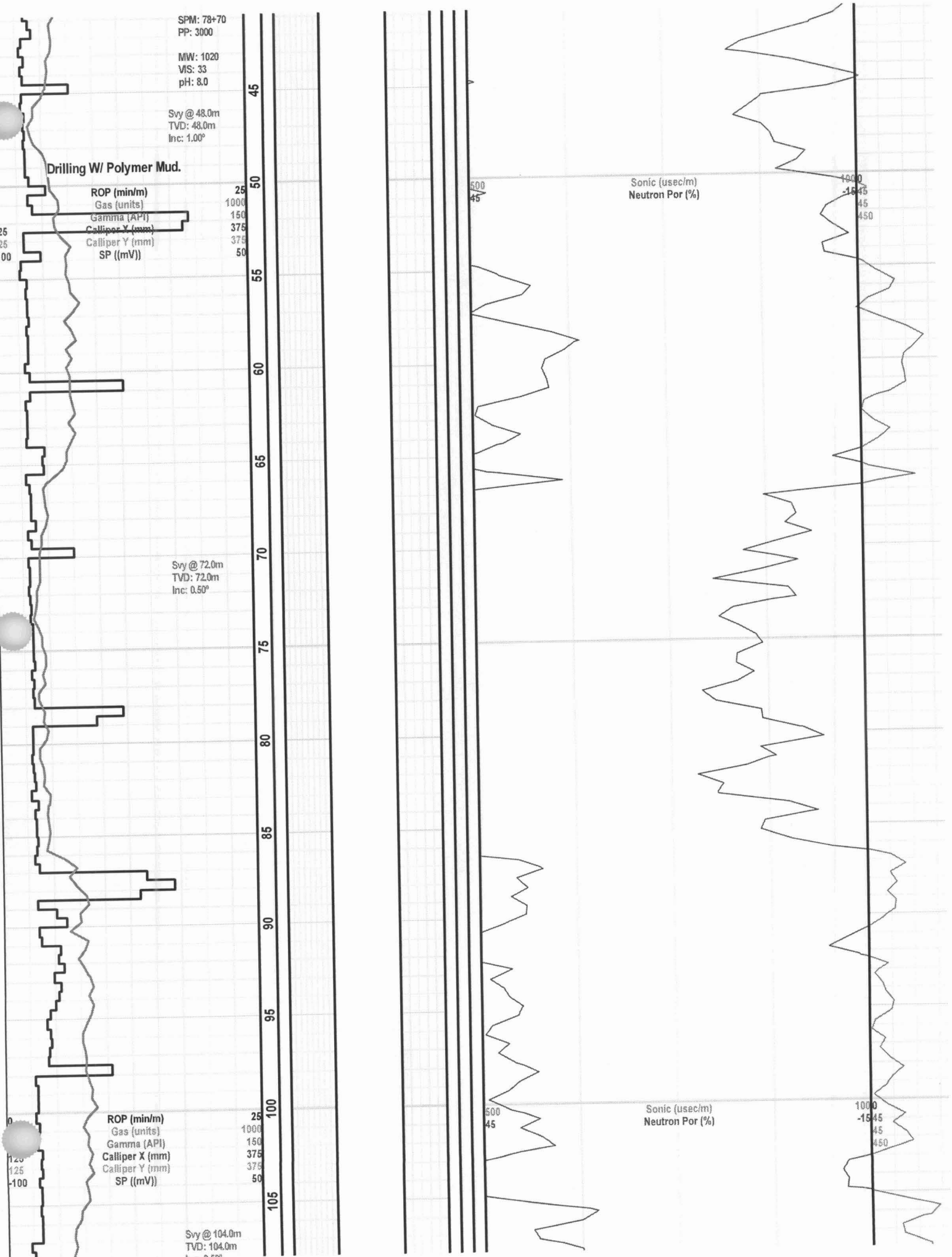
FORMATION TOPS ARE LOG TOPS.

KB: 725.92m
GL: 721.17m
FILL: 1.00m
MSL: 720.17m

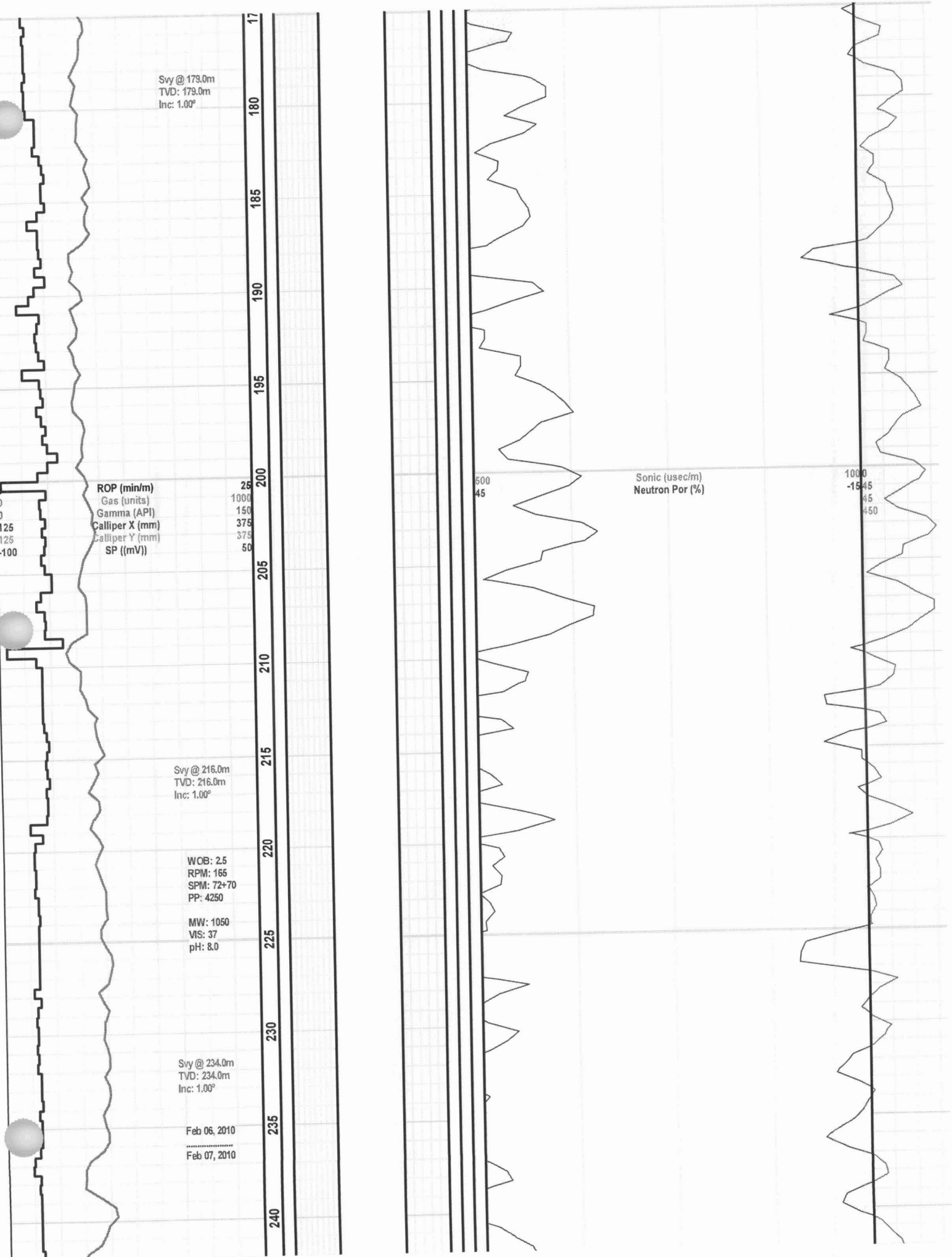
Feb 05, 2010
Feb 06, 2010

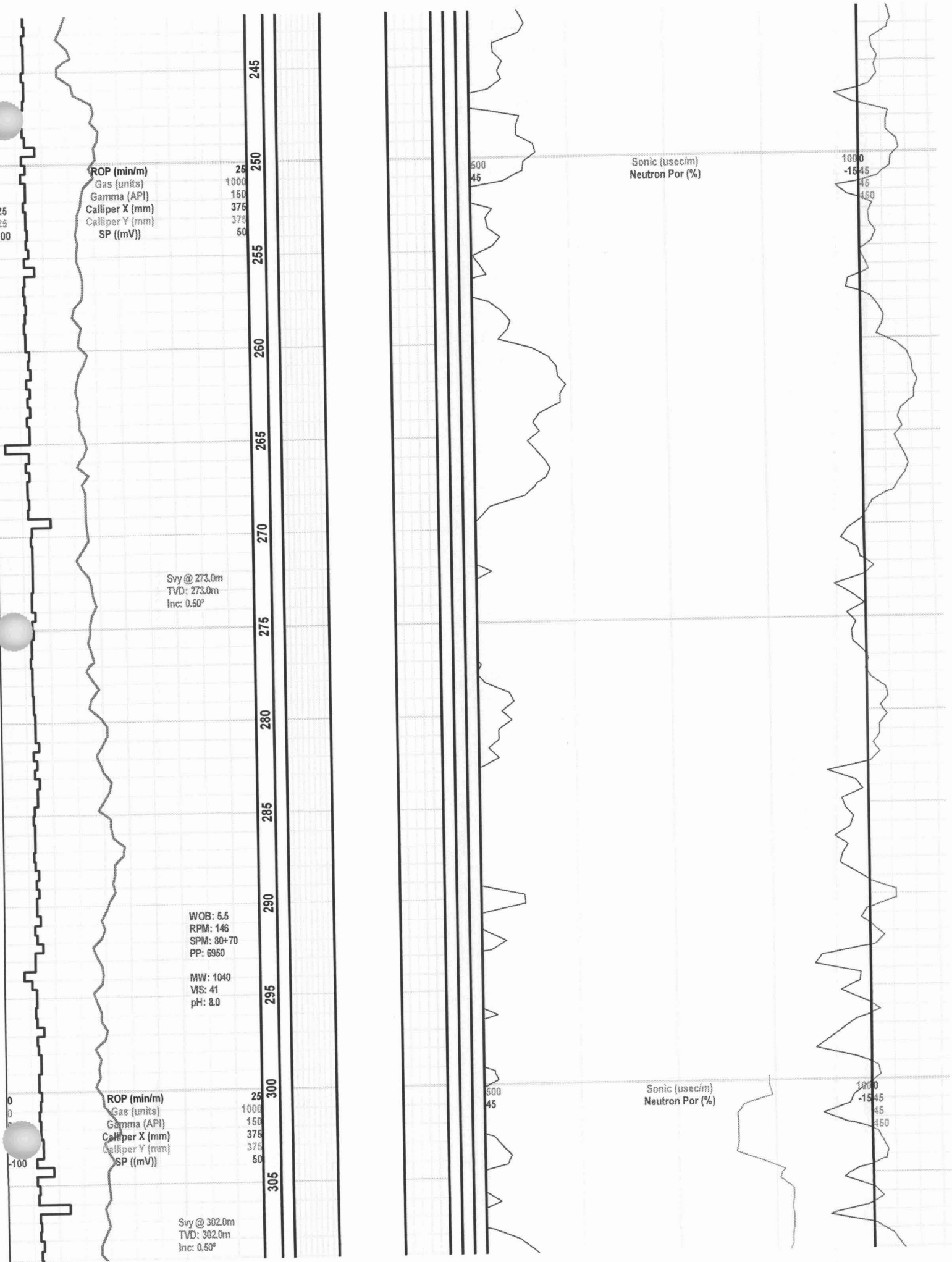
Bit# 1RR1,
311mm, Varel
HE04JMRSV
Sr.No.253625
18.0x3 Jets
In: 27m
Out: 379m
Bit Hrs: 29.0

WOB: 3.0
RPM: 134

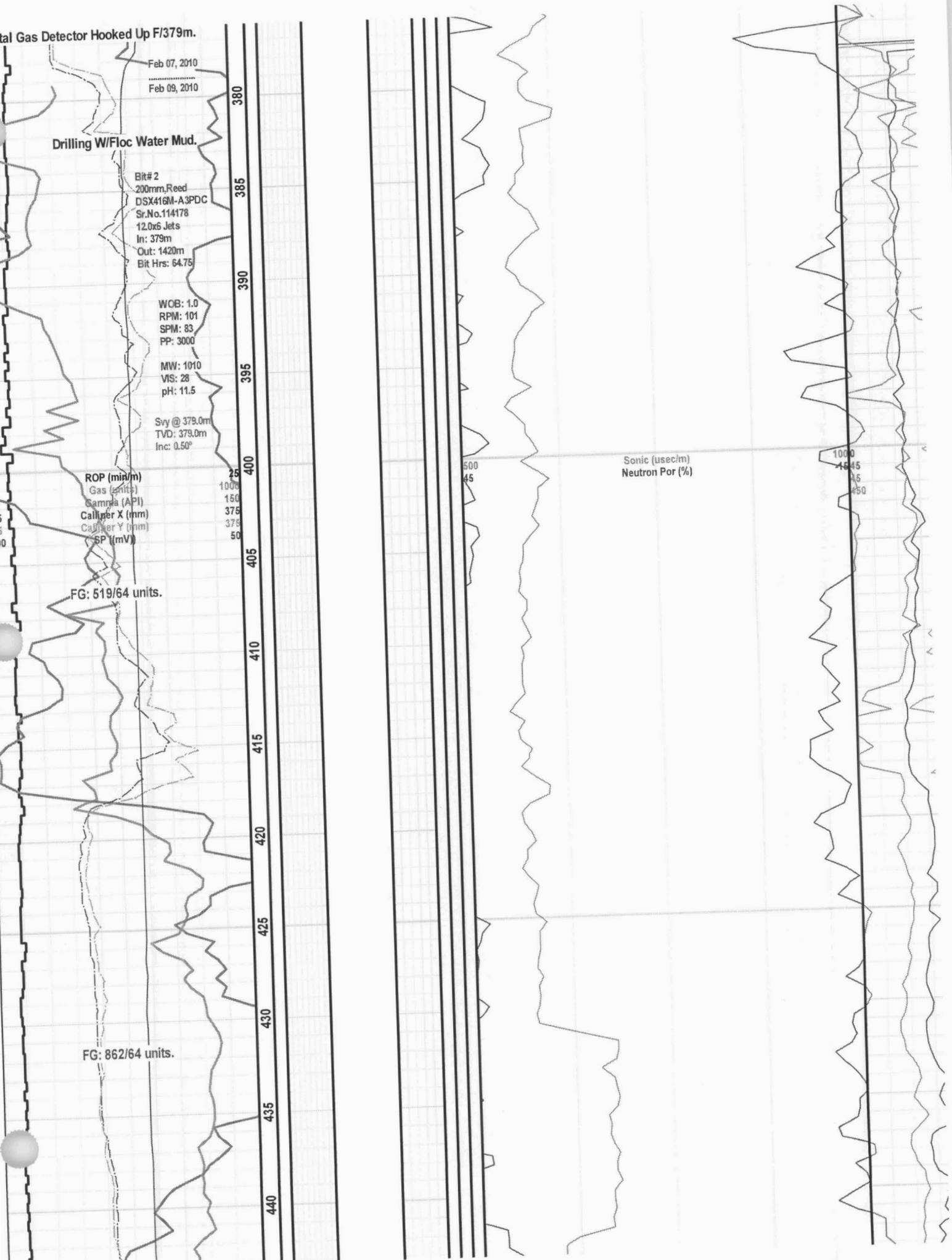

SPM: 78+70
PP: 3000
MW: 1020
VIS: 33
pH: 8.0
Svy @ 48.0m
TVD: 48.0m
Inc: 1.00°
Drilling W/ Polymer Mud.
ROP (min/m)
Gas (units)
Gamma (API)
Calliper X (mm)
Calliper Y (mm)
SP ((mV))
Sonic (usec/m)
Neutron Por (%)
Svy @ 72.0m
TVD: 72.0m
Inc: 0.50°
Svy @ 104.0m
TVD: 104.0m

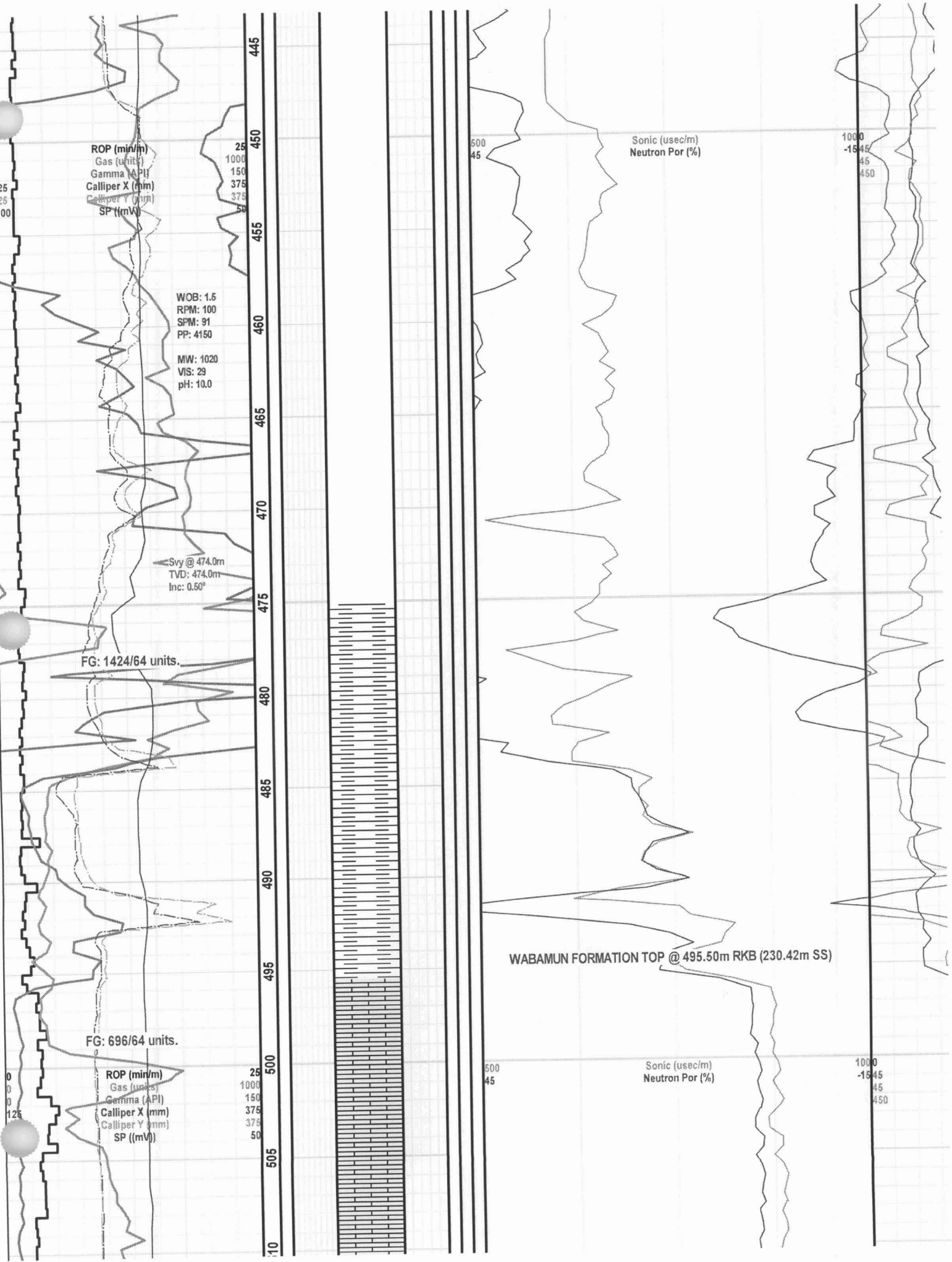
Inc: 0.50°
WOB: 2.5
RPM: 160
SPM: 80+69
PP: 4150
MW: 1050
VIS: 37
pH: 8.0
ROP (min/m)
Gas (units)
Gamma (API)
Calliper X (mm)
Calliper Y (mm)
SP ((mV))
25
1000
150
375
375
50
Sonic (usec/m)
Neutron Por (%)
110
115
120
125
130
135
140
145
150
155
160
165
170


Svy @ 179.0m
TVD: 179.0m
Inc: 1.00°
ROP (min/m)
Gas (units)
Gamma (API)
Calliper X (mm)
Calliper Y (mm)
SP ((mV))
Sonic (usec/m)
Neutron Por (%)
Svy @ 216.0m
TVD: 216.0m
Inc: 1.00°
WOB: 2.5
RPM: 165
SPM: 72+70
PP: 4250
MW: 1050
VIS: 37
pH: 8.0
Svy @ 234.0m
TVD: 234.0m
Inc: 1.00°
Feb 06, 2010
Feb 07, 2010

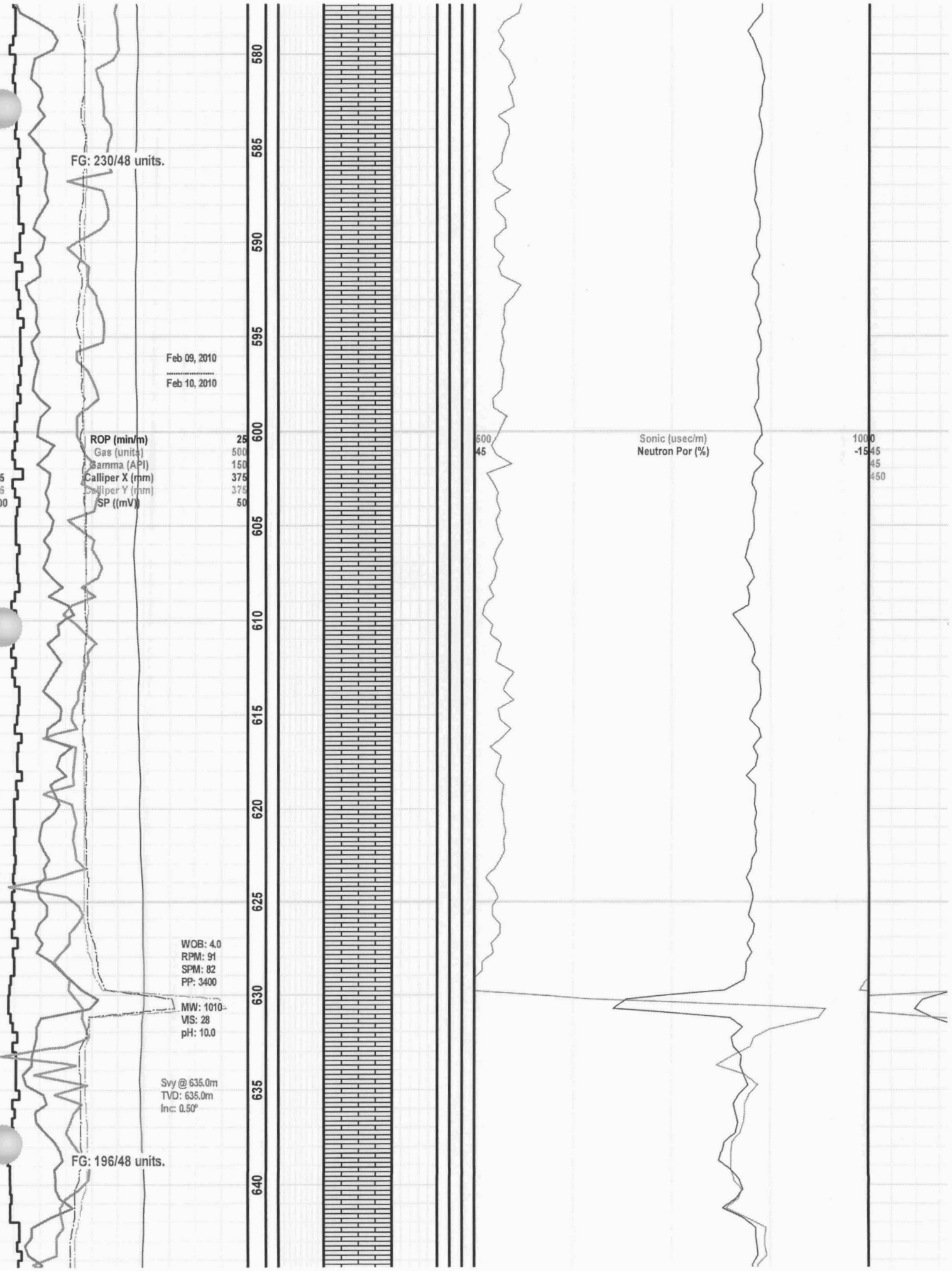

ROP (min/m)
Gas (units)
Gamma (API)
Calliper X (mm)
Calliper Y (mm)
SP ((mV))
25
1000
150
375
375
50
Sonic (usec/m)
Neutron Por (%)
245
250
255
260
265
270
275
280
285
290
295
300
305
Svy @ 273.0m
TVD: 273.0m
Inc: 0.50°
WOB: 5.5
RPM: 146
SPM: 80+70
PP: 6950
MW: 1040
VIS: 41
pH: 8.0
Svy @ 302.0m
TVD: 302.0m
Inc: 0.50°

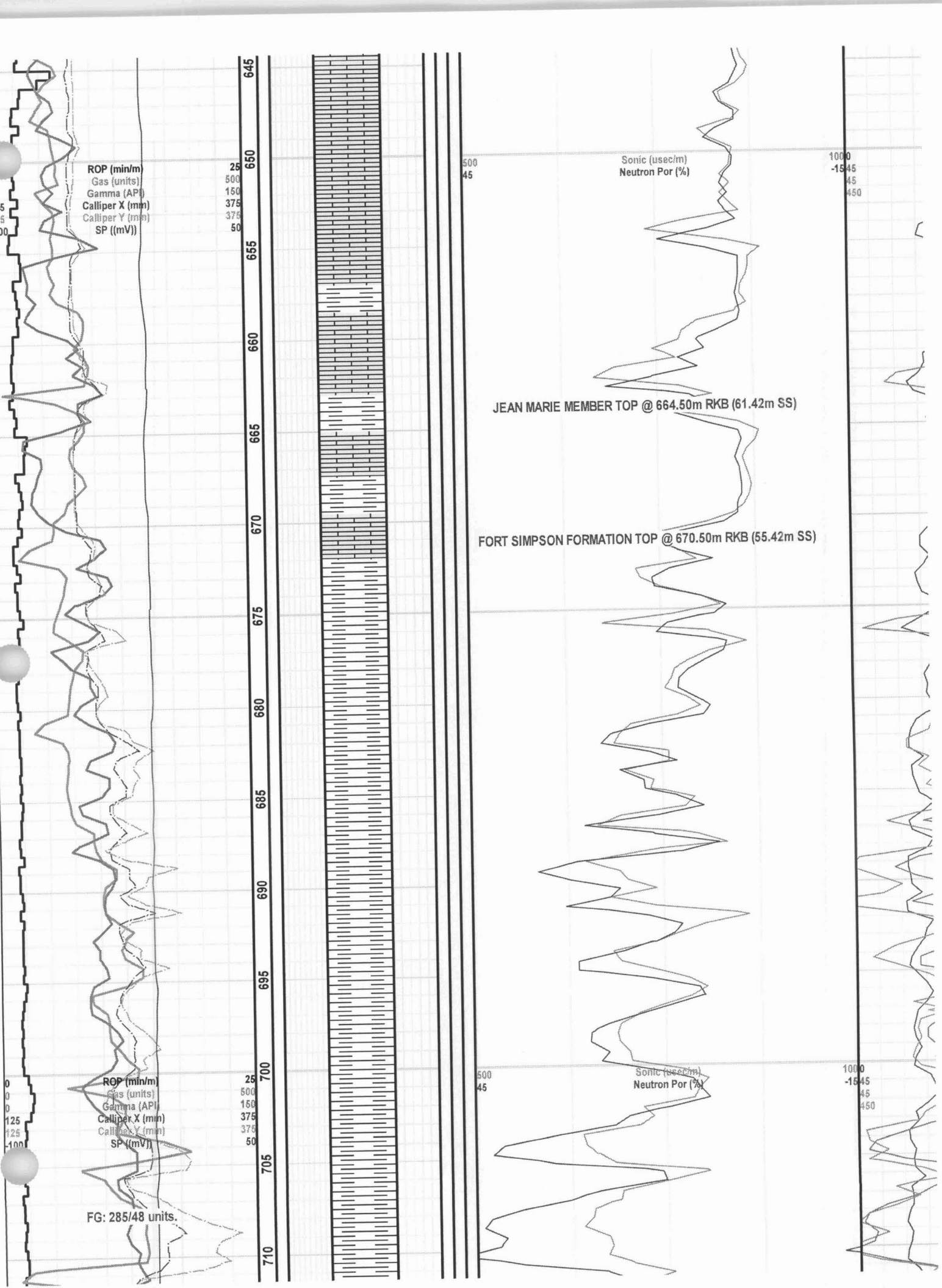
310
315
320
325
330
335
340
345
350
355
360
365
370
375
Svy @ 348.0m
TVD: 348.0m
Inc: 1.00°
ROP (min/m)
Gas (units)
Gamma (API)
Calliper X (mm)
Calliper Y (mm)
SP ((mV))
25
1000
150
375
375
50
WOB: 4.0
RPM: 146
SPM: 79+79
PP: 5850
MW: 1060
VIS: 40
pH: 8.0
Set 219.1mm Surface Casings @
379.0m RKB.
Sonic (usec/m)
Neutron Por (%)

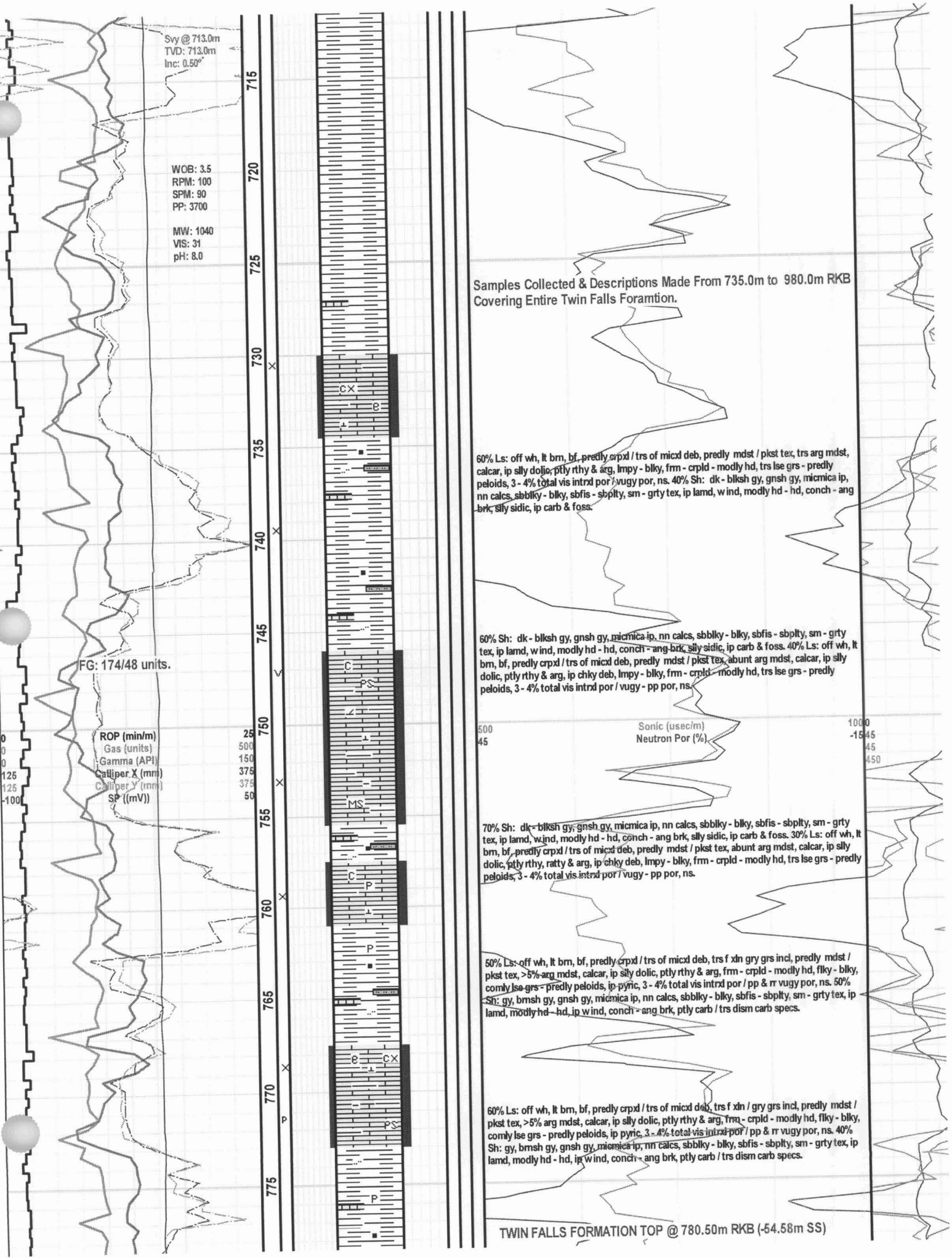

tal Gas Detector Hooked Up F/379m.
Feb 07, 2010
Feb 09, 2010
Drilling W/Floc Water Mud.
Bit# 2
200mm,Reed
DSX416M-A3PDC
Sr.No.114178
12.0x6 Jets
In: 379m
Out: 1420m
Bit Hrs: 64.75
WOB: 1.0
RPM: 101
SPM: 83
PP: 3000
MW: 1010
VIS: 28
pH: 11.5
Svy @ 379.0m
TVD: 379.0m
Inc: 0.50°
ROP (min/m)
Gas (units)
Gamma (API)
Caliper X (mm)
Caliper Y (mm)
SP (mV)
25
1000
150
375
375
50
FG: 519/64 units.
FG: 862/64 units.
380
385
390
395
400
405
410
415
420
425
430
435
440
Sonic (usec/m)
Neutron Por (%)
500
45
1000
45
150

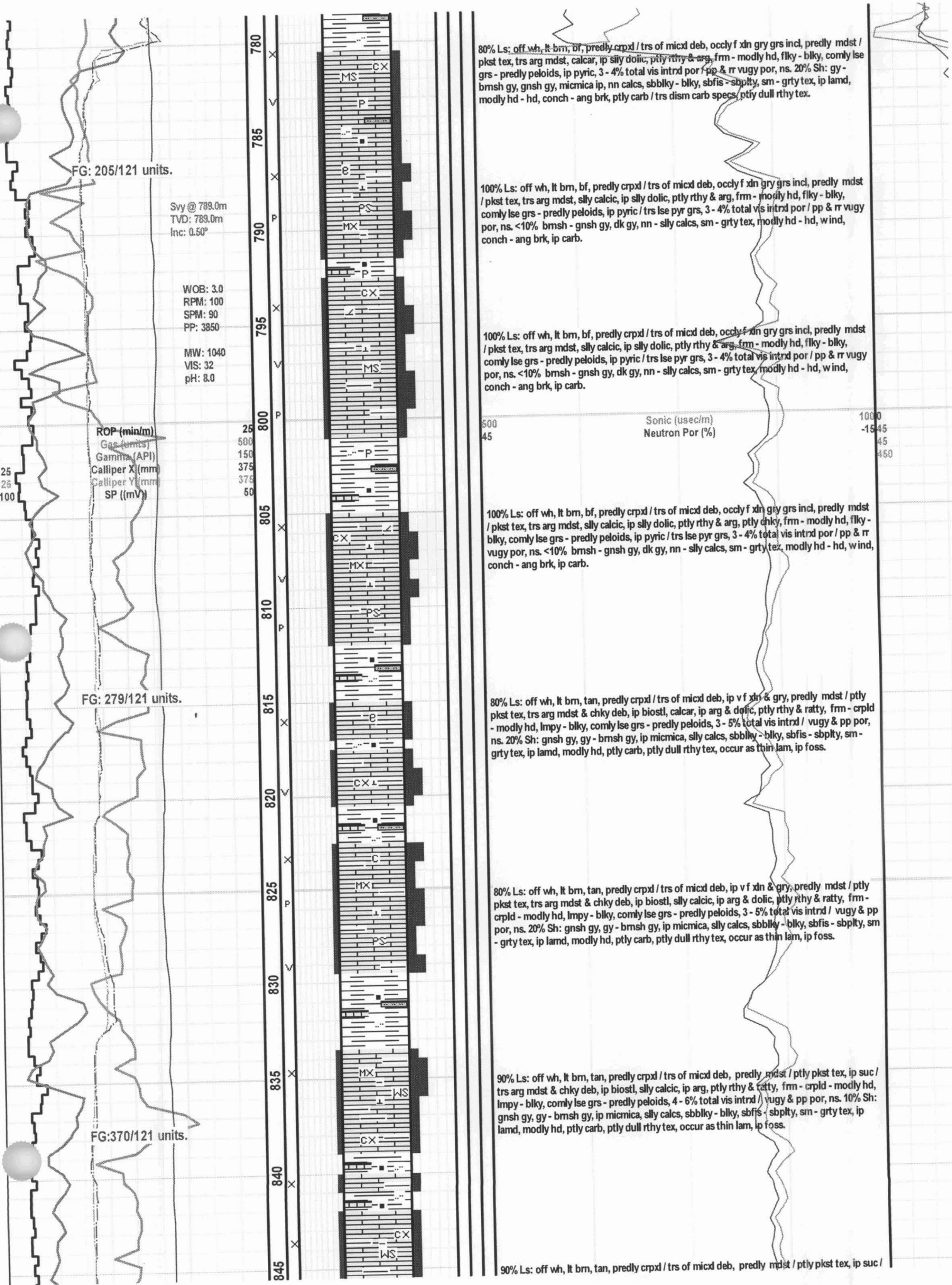

ROP (min/m)
Gas (units)
Gamma (API)
Calliper X (mm)
Calliper Y (mm)
SP ((mV))
25
1000
150
375
375
50
WOB: 1.5
RPM: 100
SPM: 91
PP: 4150
MW: 1020
VIS: 29
pH: 10.0
Svy @ 474.0m
TVD: 474.0m
Inc: 0.50°
FG: 1424/64 units.
FG: 696/64 units.
Sonic (usec/m)
Neutron Por (%)
500
45
1000
-15
45
450
WABAMUN FORMATION TOP @ 495.50m RKB (230.42m SS)
445
450
455
460
465
470
475
480
485
490
495
500
505
510

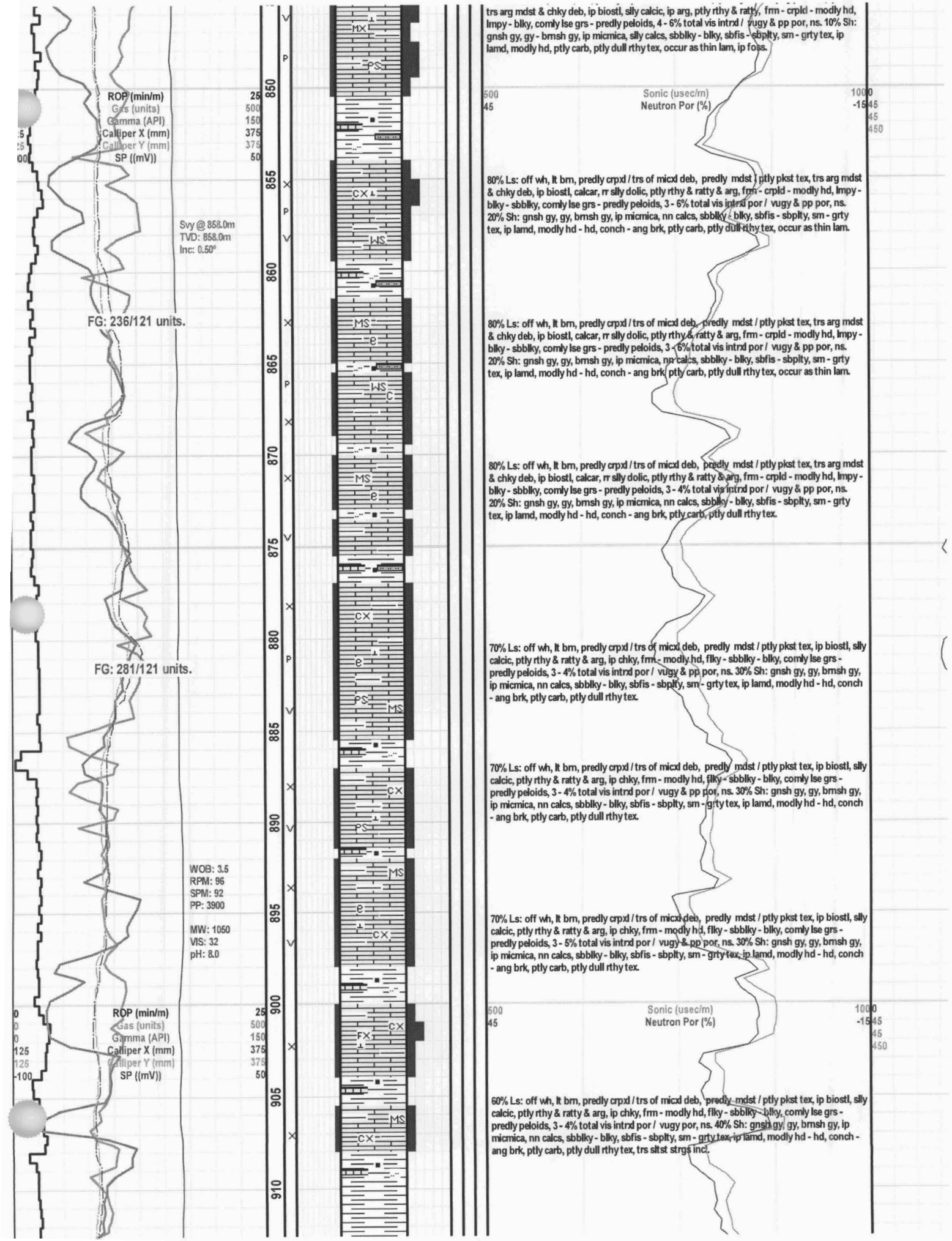

FG:463/64 units.
WOB: 4.0
RPM: 91
SPM: 81
PP: 3350
MW: 1010
VIS: 28
pH: 10.0
FG: 404/64 units.
Svy @ 549.0m
TVD: 549.0m
Inc: 0.50°
Scale Change
ROP (min/m) 25
Gas (units) 500
Gamma (API) 150
Calliper X (mm) 375
Calliper Y (mm) 375
50
FG: 338/48 units.
Sonic (usec/m)
Neutron Por (%)
515
520
525
530
535
540
545
550
555
560
565
570
575

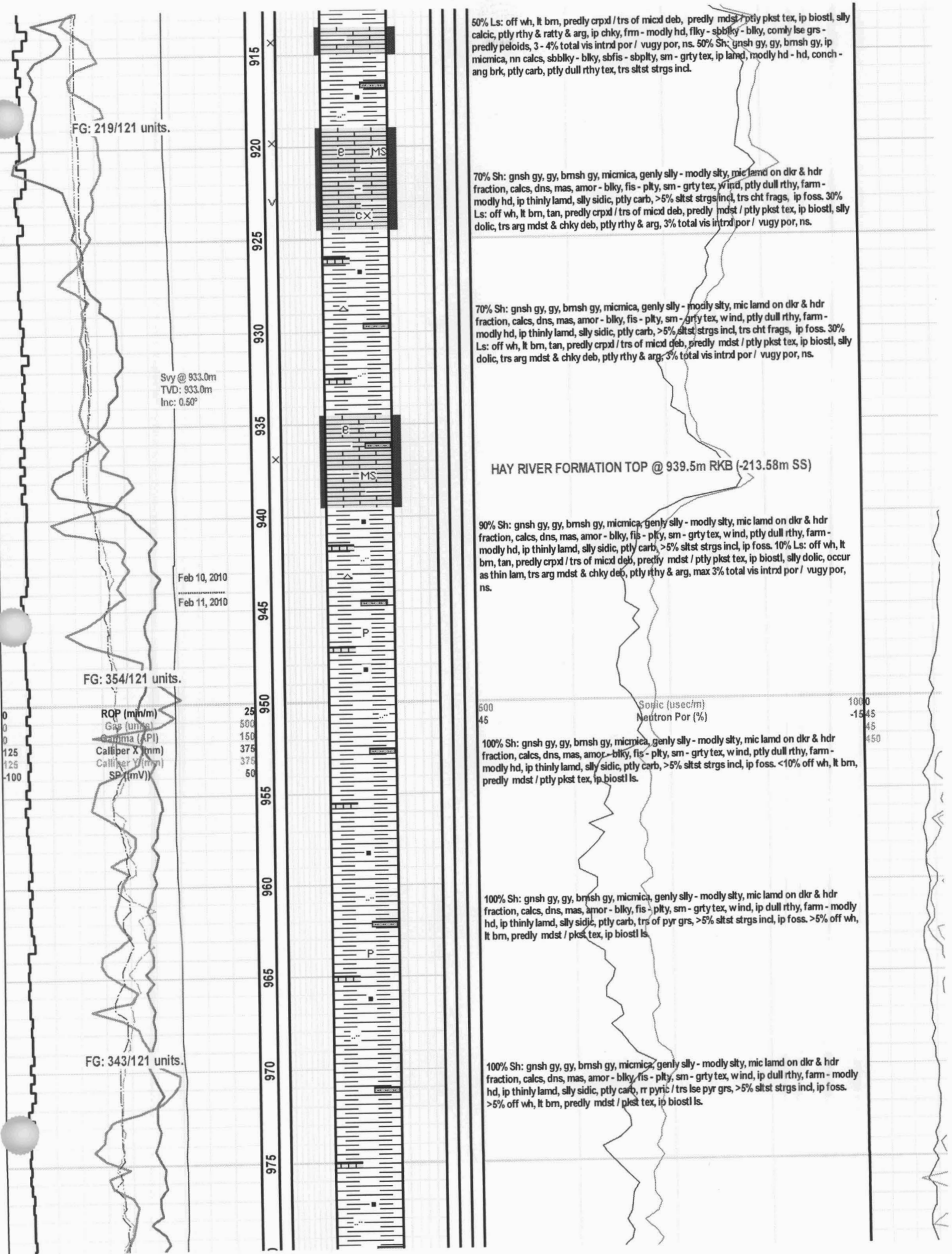

FG: 230/48 units.
Feb 09, 2010
Feb 10, 2010
ROP (min/m) 25
Gas (units) 500
Gamma (API) 150
Calliper X (mm) 375
Calliper Y (mm) 375
SP ((mV)) 50
580
585
590
595
600
605
610
615
620
625
630
635
640
500
45
Sonic (usec/m)
Neutron Por (%)
1000
-15
45
450
WOB: 4.0
RPM: 91
SPM: 82
PP: 3400
MW: 1010
VIS: 28
pH: 10.0
Svy @ 635.0m
TVD: 635.0m
Inc: 0.50°
FG: 196/48 units.

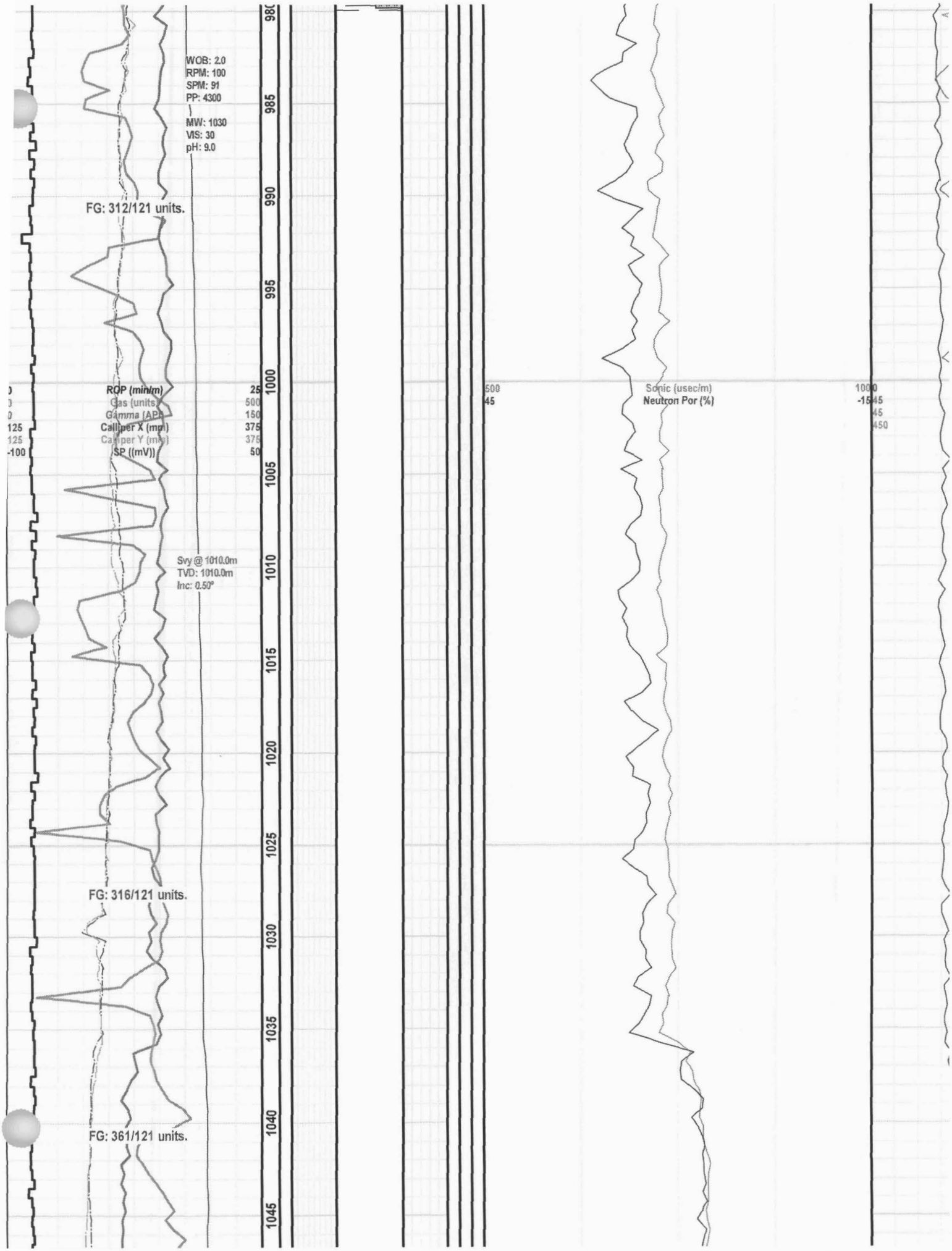

ROP (min/m)
Gas (units)
Gamma (API)
Calliper X (mm)
Calliper Y (mm)
SP ((mV))
25
500
150
375
375
50
645
650
655
660
665
670
675
680
685
690
695
700
705
710
Sonic (usec/m)
Neutron Por (%)
500
45
1000
-15
45
450
JEAN MARIE MEMBER TOP @ 664.50m RKB (61.42m SS)
FORT SIMPSON FORMATION TOP @ 670.50m RKB (55.42m SS)
FG: 285/48 units.

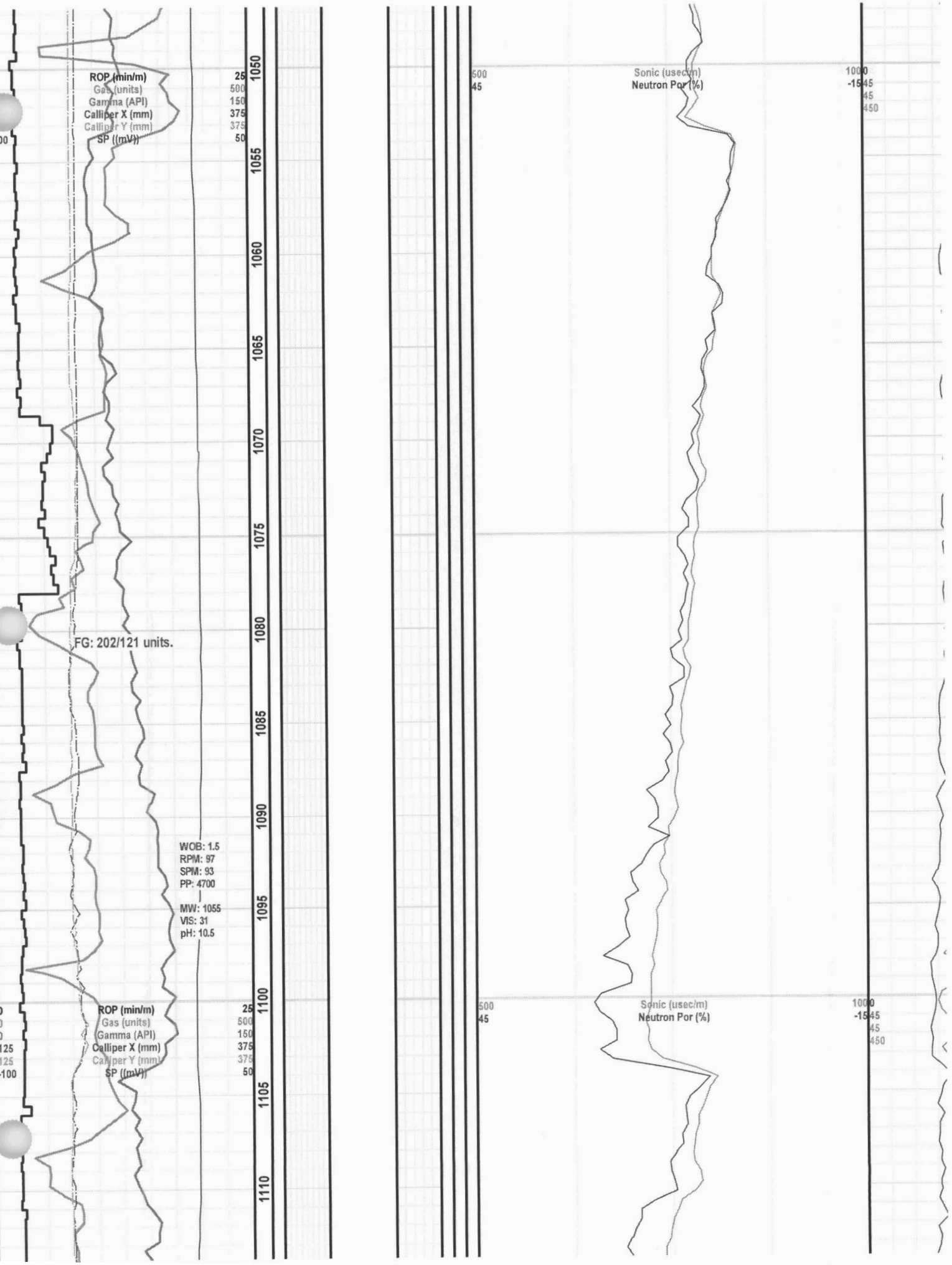

Svy @ 713.0m
TVD: 713.0m
Inc: 0.50°
WOB: 3.5
RPM: 100
SPM: 90
PP: 3700
MW: 1040
VIS: 31
pH: 8.0
FG: 174/48 units.
ROP (min/m)
Gas (units)
Gamma (API)
Caliper X (mm)
Caliper Y (mm)
SP ((mV))
715
720
725
730
735
740
745
750
755
760
765
770
775
Samples Collected & Descriptions Made From 735.0m to 980.0m RKB
Covering Entire Twin Falls Foramtion.
60% Ls: off wh, lt brn, bf, predly crpxl / trs of micxl deb, predly mdst / pkst tex, trs arg mdst, calcar, ip slly dolic, ptly rthy & arg, lmpy - blky, frm - crpld - modly hd, trs lse grs - predly peloids, 3 - 4% total vis intrxl por / vugy por, ns. 40% Sh: dk - blksh gy, gnsh gy, micmica ip, nn calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, w ind, modly hd - hd, conch - ang brk, slly sidic, ip carb & foss.
60% Sh: dk - blksh gy, gnsh gy, micmica ip, nn calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, w ind, modly hd - hd, conch - ang brk, slly sidic, ip carb & foss. 40% Ls: off wh, lt brn, bf, predly crpxl / trs of micxl deb, predly mdst / pkst tex, abunt arg mdst, calcar, ip slly dolic, ptly rthy & arg, ip chky deb, lmpy - blky, frm - crpld - modly hd, trs lse grs - predly peloids, 3 - 4% total vis intrxl por / vugy - pp por, ns.
500
45
Sonic (usec/m)
Neutron Por (%)
1000
-15
45
450
70% Sh: dk - blksh gy, gnsh gy, micmica ip, nn calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, w ind, modly hd - hd, conch - ang brk, slly sidic, ip carb & foss. 30% Ls: off wh, lt brn, bf, predly crpxl / trs of micxl deb, predly mdst / pkst tex, abunt arg mdst, calcar, ip slly dolic, ptly rthy, ratty & arg, ip chky deb, lmpy - blky, frm - crpld - modly hd, trs lse grs - predly peloids, 3 - 4% total vis intrxl por / vugy - pp por, ns.
50% Ls: off wh, lt brn, bf, predly crpxl / trs of micxl deb, trs f xln gry grs incl, predly mdst / pkst tex, >5% arg mdst, calcar, ip slly dolic, ptly rthy & arg, frm - crpld - modly hd, flky - blky, comly lse grs - predly peloids, ip pyric, 3 - 4% total vis intrxl por / pp & rr vugy por, ns. 50% Sh: gy, brnsh gy, gnsh gy, micmica ip, nn calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, modly hd - hd, ip w ind, conch - ang brk, ptly carb / trs dism carb specs.
60% Ls: off wh, lt brn, bf, predly crpxl / trs of micxl deb, trs f xln / gry grs incl, predly mdst / pkst tex, >5% arg mdst, calcar, ip slly dolic, ptly rthy & arg, frm - crpld - modly hd, flky - blky, comly lse grs - predly peloids, ip pyric, 3 - 4% total vis intrxl por / pp & rr vugy por, ns. 40% Sh: gy, brnsh gy, gnsh gy, micmica ip, nn calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, modly hd - hd, ip w ind, conch - ang brk, ptly carb / trs dism carb specs.
TWIN FALLS FORMATION TOP @ 780.50m RKB (-54.58m SS)


FG: 205/121 units.
Svy @ 789.0m
TVD: 789.0m
Inc: 0.50°
WOB: 3.0
RPM: 100
SPM: 90
PP: 3850
MW: 1040
VIS: 32
pH: 8.0
ROP (min/m)
Gas (units)
Gamma (API)
Calliper X (mm)
Calliper Y (mm)
SP ((mV))
FG: 279/121 units.
FG:370/121 units.
80% Ls: off wh, lt brn, bf, predly crpxl / trs of micxl deb, occly f xln gry grs incl, predly mdst / pkst tex, trs arg mdst, calcar, ip slly dolic, ptly rthy & arg, frm - modly hd, flky - blky, comly lse grs - predly peloids, ip pyric, 3 - 4% total vis intrxd por / pp & rr vugy por, ns. 20% Sh: gy - brnsh gy, gnsh gy, micmica ip, nn calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, modly hd - hd, conch - ang brk, ptly carb / trs dism carb specs, ptly dull rthy tex.
100% Ls: off wh, lt brn, bf, predly crpxl / trs of micxl deb, occly f xln gry grs incl, predly mdst / pkst tex, trs arg mdst, slly calcic, ip slly dolic, ptly rthy & arg, frm - modly hd, flky - blky, comly lse grs - predly peloids, ip pyric / trs lse pyr grs, 3 - 4% total vis intrxd por / pp & rr vugy por, ns. <10% brnsh - gnsh gy, dk gy, nn - slly calcs, sm - grty tex, modly hd - hd, wind, conch - ang brk, ip carb.
100% Ls: off wh, lt brn, bf, predly crpxl / trs of micxl deb, occly f xln gry grs incl, predly mdst / pkst tex, trs arg mdst, slly calcic, ip slly dolic, ptly rthy & arg, frm - modly hd, flky - blky, comly lse grs - predly peloids, ip pyric / trs lse pyr grs, 3 - 4% total vis intrxd por / pp & rr vugy por, ns. <10% brnsh - gnsh gy, dk gy, nn - slly calcs, sm - grty tex, modly hd - hd, wind, conch - ang brk, ip carb.
Sonic (usec/m)
Neutron Por (%)
100% Ls: off wh, lt brn, bf, predly crpxl / trs of micxl deb, occly f xln gry grs incl, predly mdst / pkst tex, trs arg mdst, slly calcic, ip slly dolic, ptly rthy & arg, ptly chky, frm - modly hd, flky - blky, comly lse grs - predly peloids, ip pyric / trs lse pyr grs, 3 - 4% total vis intrxd por / pp & rr vugy por, ns. <10% brnsh - gnsh gy, dk gy, nn - slly calcs, sm - grty tex, modly hd - hd, wind, conch - ang brk, ip carb.
80% Ls: off wh, lt brn, tan, predly crpxl / trs of micxl deb, ip v f xln & gry, predly mdst / ptly pkst tex, trs arg mdst & chky deb, ip biostl, calcar, ip arg & dolic, ptly rthy & ratty, frm - crpld - modly hd, lmpy - blky, comly lse grs - predly peloids, 3 - 5% total vis intrxd / vugy & pp por, ns. 20% Sh: gnsh gy, gy - brnsh gy, ip micmica, slly calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, modly hd, ptly carb, ptly dull rthy tex, occur as thin lam, ip foss.
80% Ls: off wh, lt brn, tan, predly crpxl / trs of micxl deb, ip v f xln & gry, predly mdst / ptly pkst tex, trs arg mdst & chky deb, ip biostl, slly calcic, ip arg & dolic, ptly rthy & ratty, frm - crpld - modly hd, lmpy - blky, comly lse grs - predly peloids, 3 - 5% total vis intrxd / vugy & pp por, ns. 20% Sh: gnsh gy, gy - brnsh gy, ip micmica, slly calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, modly hd, ptly carb, ptly dull rthy tex, occur as thin lam, ip foss.
90% Ls: off wh, lt brn, tan, predly crpxl / trs of micxl deb, predly mdst / ptly pkst tex, ip suc / trs arg mdst & chky deb, ip biostl, slly calcic, ip arg, ptly rthy & ratty, frm - crpld - modly hd, lmpy - blky, comly lse grs - predly peloids, 4 - 6% total vis intrxd / vugy & pp por, ns. 10% Sh: gnsh gy, gy - brnsh gy, ip micmica, slly calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, modly hd, ptly carb, ptly dull rthy tex, occur as thin lam, ip foss.
90% Ls: off wh, lt brn, tan, predly crpxl / trs of micxl deb, predly mdst / ptly pkst tex, ip suc /

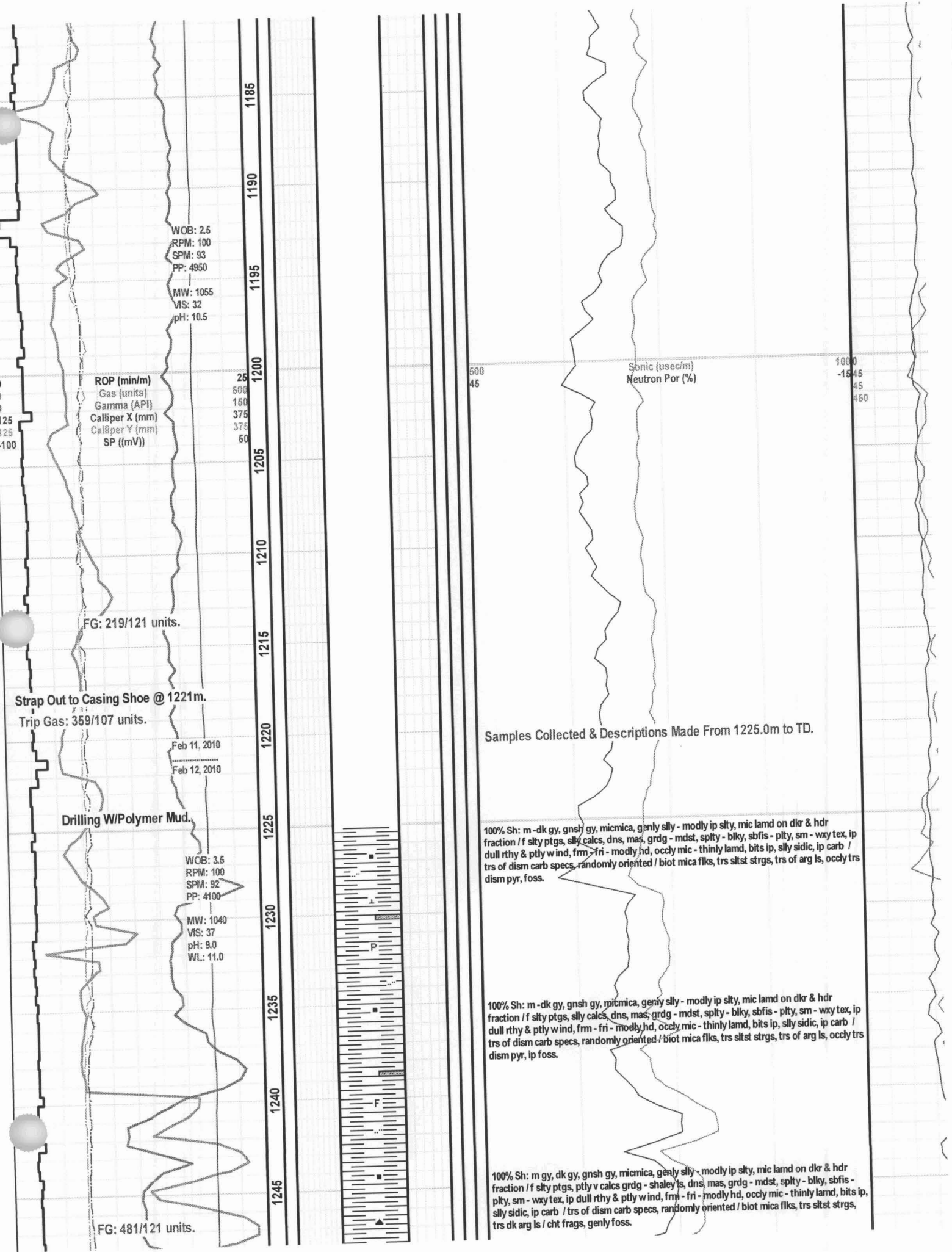

ROP (min/m)
Gas (units)
Gamma (API)
Caliper X (mm)
Caliper Y (mm)
SP ((mV))
Svy @ 858.0m
TVD: 858.0m
Inc: 0.50°
FG: 236/121 units.
FG: 281/121 units.
WOB: 3.5
RPM: 96
SPM: 92
PP: 3900
MW: 1050
VIS: 32
pH: 8.0
trs arg mdst & chky deb, ip biostl, slly calcic, ip arg, ptly rthy & ratty, frm - crpld - modly hd, lmpy - blky, comly lse grs - predly peloids, 4 - 6% total vis intrxl / vugy & pp por, ns. 10% Sh: gnsh gy, gy - brnsh gy, ip micmica, slly calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, modly hd, ptly carb, ptly dull rthy tex, occur as thin lam, ip foss.
Sonic (usec/m)
Neutron Por (%)
80% Ls: off wh, lt brn, predly crpxl / trs of micxl deb, predly mdst / ptly pkst tex, trs arg mdst & chky deb, ip biostl, calcar, rr slly dolic, ptly rthy & ratty & arg, frm - crpld - modly hd, lmpy - blky - sbblky, comly lse grs - predly peloids, 3 - 6% total vis intrxl por / vugy & pp por, ns. 20% Sh: gnsh gy, gy, brnsh gy, ip micmica, nn calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, modly hd - hd, conch - ang brk, ptly carb, ptly dull rthy tex, occur as thin lam.
80% Ls: off wh, lt brn, predly crpxl / trs of micxl deb, predly mdst / ptly pkst tex, trs arg mdst & chky deb, ip biostl, calcar, rr slly dolic, ptly rthy & ratty & arg, frm - crpld - modly hd, lmpy - blky - sbblky, comly lse grs - predly peloids, 3 - 6% total vis intrxl por / vugy & pp por, ns. 20% Sh: gnsh gy, gy, brnsh gy, ip micmica, nn calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, modly hd - hd, conch - ang brk, ptly carb, ptly dull rthy tex, occur as thin lam.
80% Ls: off wh, lt brn, predly crpxl / trs of micxl deb, predly mdst / ptly pkst tex, trs arg mdst & chky deb, ip biostl, calcar, rr slly dolic, ptly rthy & ratty & arg, frm - crpld - modly hd, lmpy - blky - sbblky, comly lse grs - predly peloids, 3 - 4% total vis intrxl por / vugy & pp por, ns. 20% Sh: gnsh gy, gy, brnsh gy, ip micmica, nn calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, modly hd - hd, conch - ang brk, ptly carb, ptly dull rthy tex.
70% Ls: off wh, lt brn, predly crpxl / trs of micxl deb, predly mdst / ptly pkst tex, ip biostl, slly calcic, ptly rthy & ratty & arg, ip chky, frm - modly hd, flky - sbblky - blky, comly lse grs - predly peloids, 3 - 4% total vis intrxl por / vugy & pp por, ns. 30% Sh: gnsh gy, gy, brnsh gy, ip micmica, nn calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, modly hd - hd, conch - ang brk, ptly carb, ptly dull rthy tex.
70% Ls: off wh, lt brn, predly crpxl / trs of micxl deb, predly mdst / ptly pkst tex, ip biostl, slly calcic, ptly rthy & ratty & arg, ip chky, frm - modly hd, flky - sbblky - blky, comly lse grs - predly peloids, 3 - 4% total vis intrxl por / vugy & pp por, ns. 30% Sh: gnsh gy, gy, brnsh gy, ip micmica, nn calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, modly hd - hd, conch - ang brk, ptly carb, ptly dull rthy tex.
70% Ls: off wh, lt brn, predly crpxl / trs of micxl deb, predly mdst / ptly pkst tex, ip biostl, slly calcic, ptly rthy & ratty & arg, ip chky, frm - modly hd, flky - sbblky - blky, comly lse grs - predly peloids, 3 - 5% total vis intrxl por / vugy & pp por, ns. 30% Sh: gnsh gy, gy, brnsh gy, ip micmica, nn calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, modly hd - hd, conch - ang brk, ptly carb, ptly dull rthy tex.
60% Ls: off wh, lt brn, predly crpxl / trs of micxl deb, predly mdst / ptly pkst tex, ip biostl, slly calcic, ptly rthy & ratty & arg, ip chky, frm - modly hd, flky - sbblky - blky, comly lse grs - predly peloids, 3 - 4% total vis intrxl por / vugy por, ns. 40% Sh: gnsh gy, gy, brnsh gy, ip micmica, nn calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, modly hd - hd, conch - ang brk, ptly carb, ptly dull rthy tex, trs sltst strgs incl.

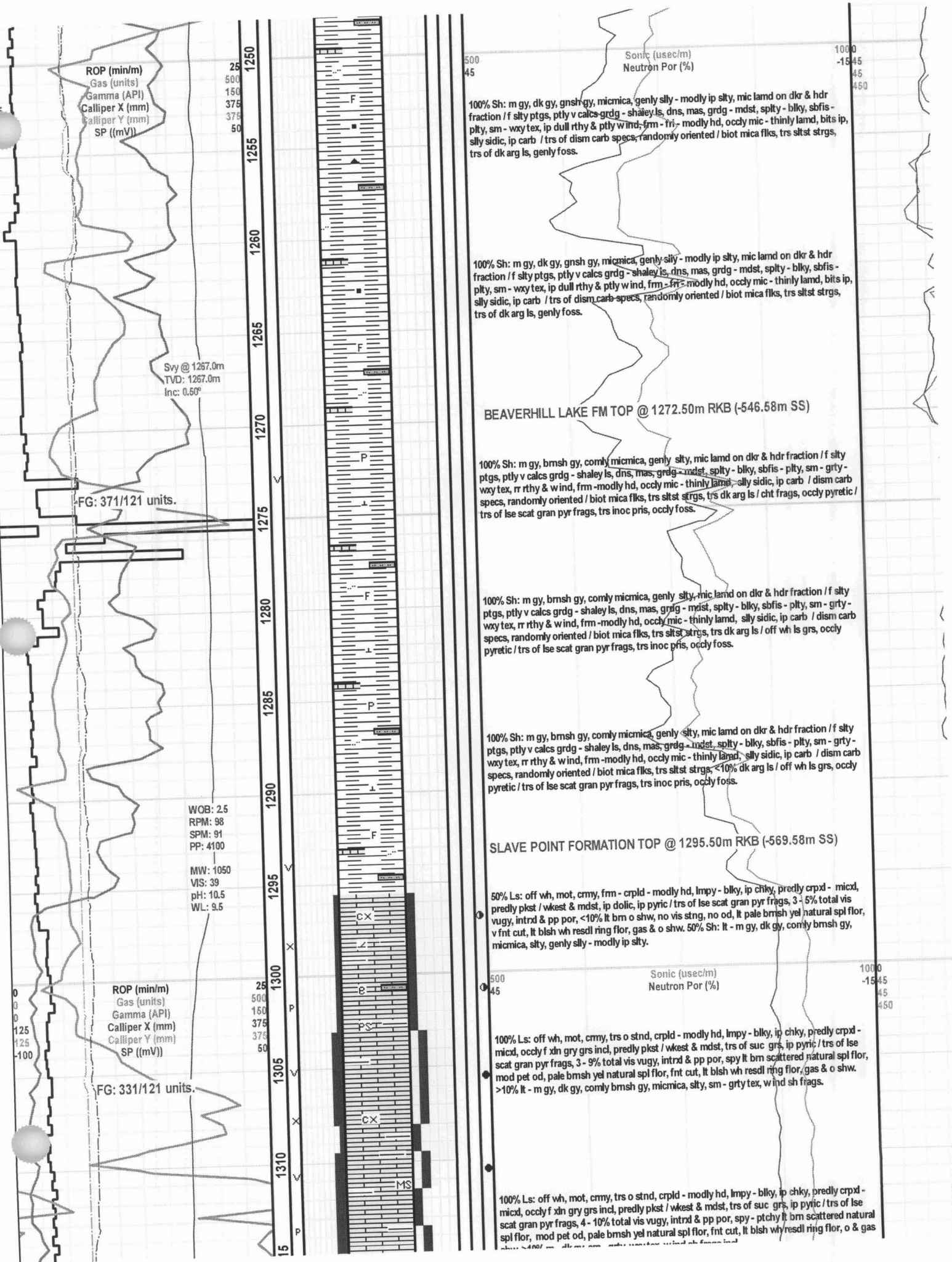

FG: 219/121 units.
Svy @ 933.0m
TVD: 933.0m
Inc: 0.50°
Feb 10, 2010
Feb 11, 2010
FG: 354/121 units.
ROP (min/m)
Gas (units)
Gamma (API)
Caliper X (mm)
Caliper Y (mm)
SP (mV)
FG: 343/121 units.
915
920
925
930
935
940
945
950
955
960
965
970
975
MS
MS
P
P
50% Ls: off wh, lt brn, predly crpxl / trs of micxl deb, predly mdst / ptly pkst tex, ip biostl, slly calcic, ptly rthy & ratty & arg, ip chky, frm - modly hd, flky - sbblky - blky, comly lse grs - predly peloids, 3 - 4% total vis intrxl por / vugy por, ns. 50% Sh: gnsh gy, gy, brnsh gy, ip micmica, nn calcs, sbblky - blky, sbfis - sbplty, sm - grty tex, ip lamd, modly hd - hd, conch - ang brk, ptly carb, ptly dull rthy tex, trs sltst strgs incl.
70% Sh: gnsh gy, gy, brnsh gy, micmica, genly slly - modly slty, mic lamd on dkr & hdr fraction, calcs, dns, mas, amor - blky, fis - plty, sm - grty tex, w ind, ptly dull rthy, farm - modly hd, ip thinly lamd, slly sidic, ptly carb, >5% sltst strgs incl, trs cht frags, ip foss. 30% Ls: off wh, lt brn, tan, predly crpxl / trs of micxl deb, predly mdst / ptly pkst tex, ip biostl, slly dolic, trs arg mdst & chky deb, ptly rthy & arg, 3% total vis intrxl por / vugy por, ns.
70% Sh: gnsh gy, gy, brnsh gy, micmica, genly slly - modly slty, mic lamd on dkr & hdr fraction, calcs, dns, mas, amor - blky, fis - plty, sm - grty tex, w ind, ptly dull rthy, farm - modly hd, ip thinly lamd, slly sidic, ptly carb, >5% sltst strgs incl, trs cht frags, ip foss. 30% Ls: off wh, lt brn, tan, predly crpxl / trs of micxl deb, predly mdst / ptly pkst tex, ip biostl, slly dolic, trs arg mdst & chky deb, ptly rthy & arg, 3% total vis intrxl por / vugy por, ns.
HAY RIVER FORMATION TOP @ 939.5m RKB (-213.58m SS)
90% Sh: gnsh gy, gy, brnsh gy, micmica, genly slly - modly slty, mic lamd on dkr & hdr fraction, calcs, dns, mas, amor - blky, fis - plty, sm - grty tex, w ind, ptly dull rthy, farm - modly hd, ip thinly lamd, slly sidic, ptly carb, >5% sltst strgs incl, ip foss. 10% Ls: off wh, lt brn, tan, predly crpxl / trs of micxl deb, predly mdst / ptly pkst tex, ip biostl, slly dolic, occur as thin lam, trs arg mdst & chky deb, ptly rthy & arg, max 3% total vis intrxl por / vugy por, ns.
Sonic (usec/m)
Neutron Por (%)
100% Sh: gnsh gy, gy, brnsh gy, micmica, genly slly - modly slty, mic lamd on dkr & hdr fraction, calcs, dns, mas, amor - blky, fis - plty, sm - grty tex, w ind, ptly dull rthy, farm - modly hd, ip thinly lamd, slly sidic, ptly carb, >5% sltst strgs incl, ip foss. <10% off wh, lt brn, predly mdst / ptly pkst tex, ip biostl ls.
100% Sh: gnsh gy, gy, brnsh gy, micmica, genly slly - modly slty, mic lamd on dkr & hdr fraction, calcs, dns, mas, amor - blky, fis - plty, sm - grty tex, w ind, ptly dull rthy, farm - modly hd, ip thinly lamd, slly sidic, ptly carb, trs of pyr grs, >5% sltst strgs incl, ip foss. >5% off wh, lt brn, predly mdst / pkst tex, ip biostl ls.
100% Sh: gnsh gy, gy, brnsh gy, micmica, genly slly - modly slty, mic lamd on dkr & hdr fraction, calcs, dns, mas, amor - blky, fis - plty, sm - grty tex, w ind, ip dull rthy, farm - modly hd, ip thinly lamd, slly sidic, ptly carb, rr pyric / trs lse pyr grs, >5% sltst strgs incl, ip foss. >5% off wh, lt brn, predly mdst / pkst tex, ip biostl ls.

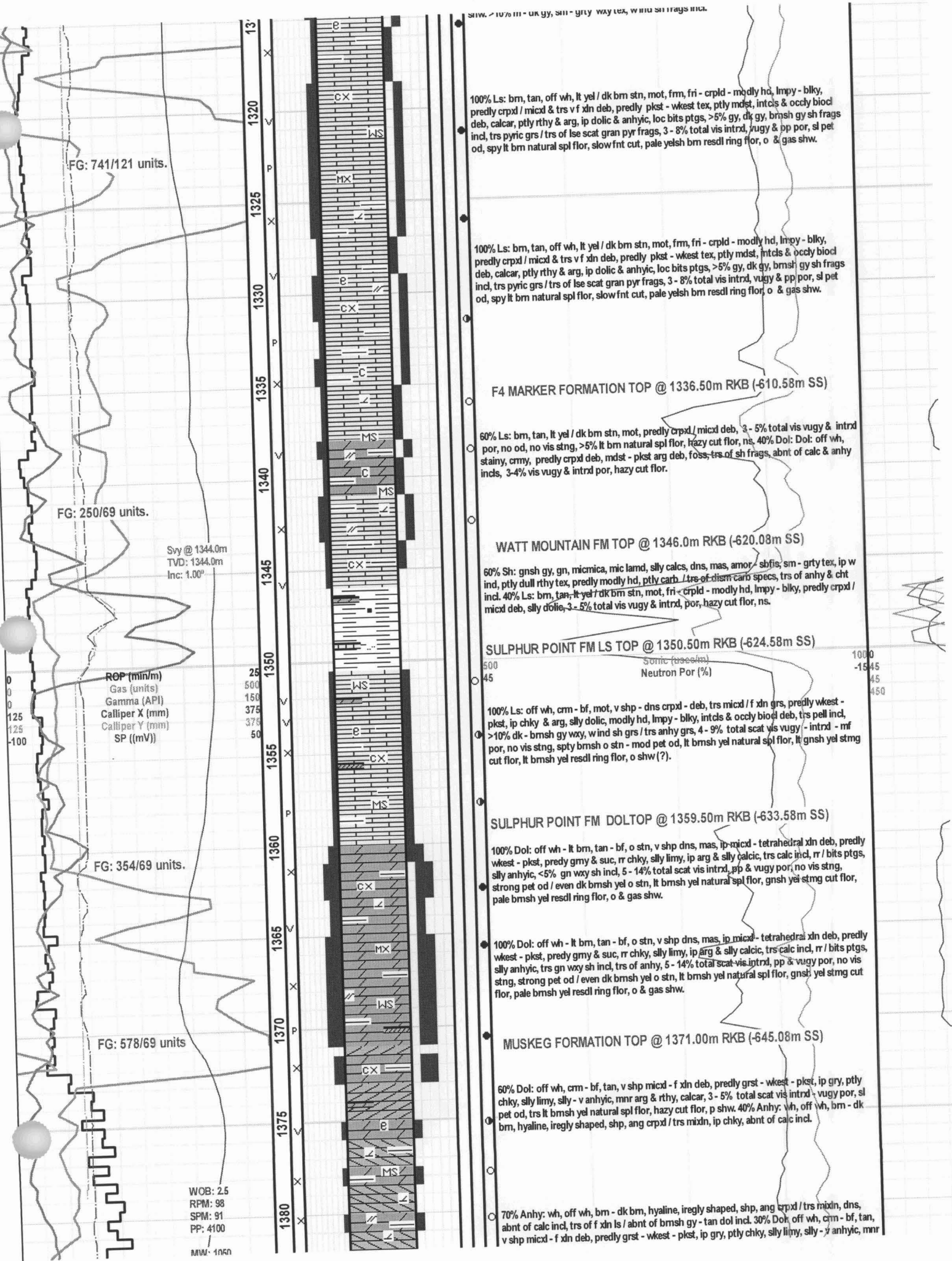

WOB: 2.0
RPM: 100
SPM: 91
PP: 4300
MW: 1030
VIS: 30
pH: 9.0
FG: 312/121 units.
ROP (min/m)
Gas (units)
Gamma (API)
Caliper X (mm)
Caliper Y (mm)
SP ((mV))
Svy @ 1010.0m
TVD: 1010.0m
Inc: 0.50°
FG: 316/121 units.
FG: 361/121 units.
Sonic (usec/m)
Neutron Por (%)
980
985
990
995
1000
1005
1010
1015
1020
1025
1030
1035
1040
1045

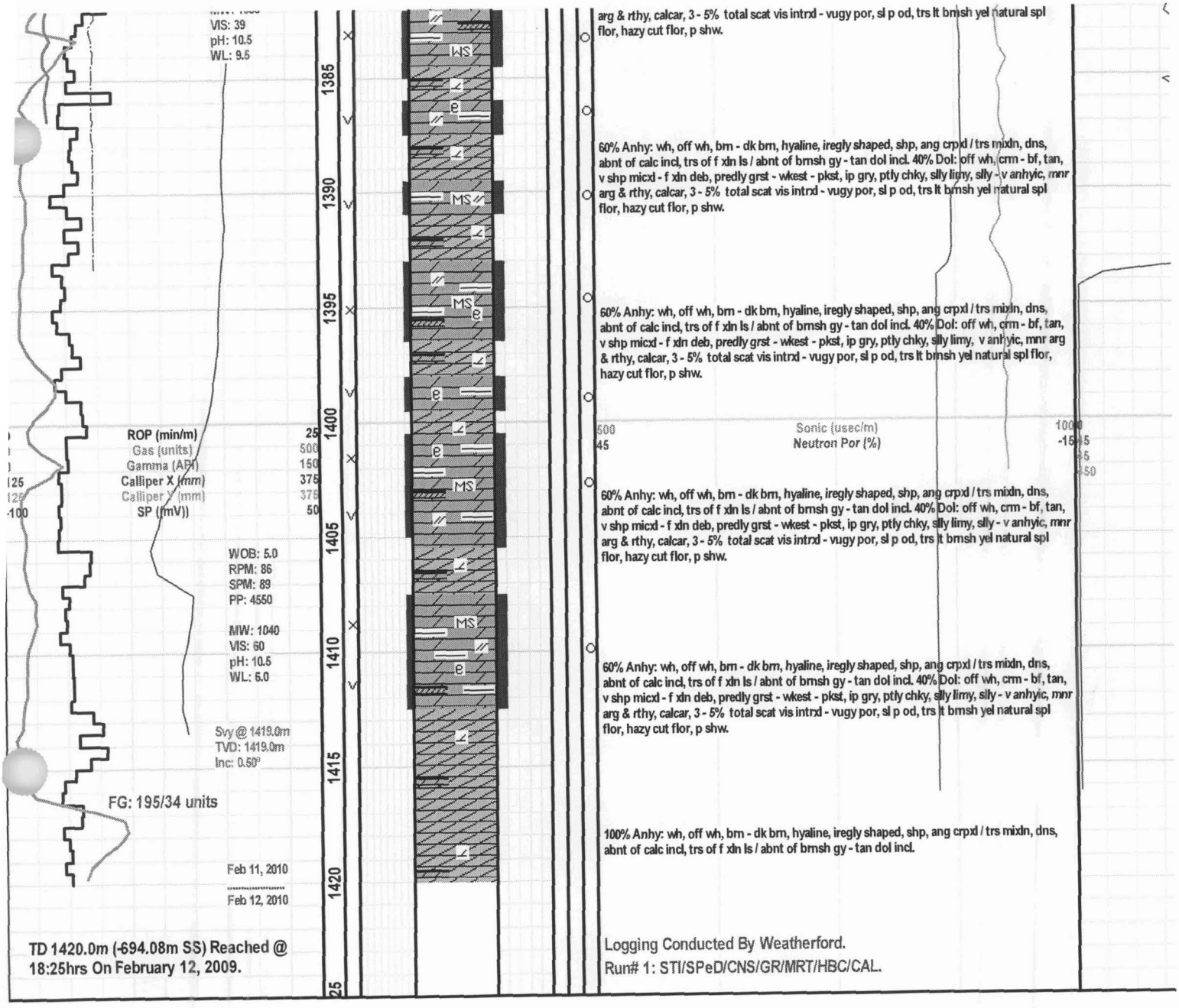

ROP (min/m)
Gas (units)
Gamma (API)
Calliper X (mm)
Calliper Y (mm)
SP ((mV))
25
500
150
375
375
50
1050
1055
1060
1065
1070
1075
1080
1085
1090
1095
1100
1105
1110
FG: 202/121 units.
WOB: 1.5
RPM: 97
SPM: 93
PP: 4700
MW: 1055
VIS: 31
pH: 10.5
500
45
Sonic (usec/m)
Neutron Por (%)
1000
-15
45
450
ROP (min/m)
Gas (units)
Gamma (API)
Calliper X (mm)
Calliper Y (mm)
SP ((mV))
25
500
150
375
375
50
500
45
Sonic (usec/m)
Neutron Por (%)
1000
-15
45
450

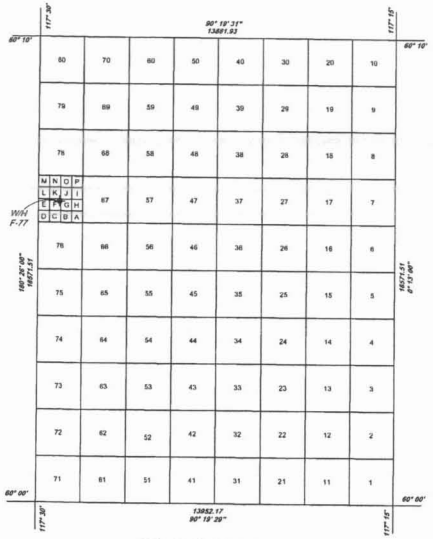
FG: 224/121 units.
Svy @ 1133.0m
TVD: 1133.0m
Inc: 0.50°
ROP (min/m)
Gas (units)
Gamma (API)
Calliper X (mm)
Calliper Y (mm)
SP ((mV))
FG: 399/121 units.
Svy @ 1179.0m
TVD: 1179.0m
Inc: 0.25°
Sonic (usec/m)
Neutron Por (%)
1115
1120
1125
1130
1135
1140
1145
1150
1155
1160
1165
1170
1175
1180


WOB: 2.5
RPM: 100
SPM: 93
PP: 4950
MW: 1055
VIS: 32
pH: 10.5
ROP (min/m)
Gas (units)
Gamma (API)
Calliper X (mm)
Calliper Y (mm)
SP ((mV))
25
500
150
375
375
50
1185
1190
1195
1200
1205
1210
1215
1220
1225
1230
1235
1240
1245
Sonic (usec/m)
Neutron Por (%)
500
45
1000
-15
45
45
450
FG: 219/121 units.
Strap Out to Casing Shoe @ 1221m.
Trip Gas: 359/107 units.
Feb 11, 2010
Feb 12, 2010
Drilling W/Polymer Mud.
WOB: 3.5
RPM: 100
SPM: 92
PP: 4100
MW: 1040
VIS: 37
pH: 9.0
WL: 11.0
P
F
FG: 481/121 units.
Samples Collected & Descriptions Made From 1225.0m to TD.
100% Sh: m -dk gy, gnsh gy, micmica, genly slly - modly ip slty, mic lamd on dkr & hdr fraction / f slty ptgs, slly calcs, dns, mas, grdg - mdst, splty - blky, sbfis - plty, sm - wxy tex, ip dull rthy & ptly w ind, frm - fri - modly hd, occly mic - thinly lamd, bits ip, slly sidic, ip carb / trs of dism carb specs, randomly oriented / biot mica flks, trs sltst strgs, trs of arg ls, occly trs dism pyr, foss.
100% Sh: m -dk gy, gnsh gy, micmica, genly slly - modly ip slty, mic lamd on dkr & hdr fraction / f slty ptgs, slly calcs, dns, mas, grdg - mdst, splty - blky, sbfis - plty, sm - wxy tex, ip dull rthy & ptly w ind, frm - fri - modly hd, occly mic - thinly lamd, bits ip, slly sidic, ip carb / trs of dism carb specs, randomly oriented / biot mica flks, trs sltst strgs, trs of arg ls, occly trs dism pyr, ip foss.
100% Sh: m gy, dk gy, gnsh gy, micmica, genly slly - modly ip slty, mic lamd on dkr & hdr fraction / f slty ptgs, ptly v calcs grdg - shaley ls, dns, mas, grdg - mdst, splty - blky, sbfis - plty, sm - wxy tex, ip dull rthy & ptly w ind, frm - fri - modly hd, occly mic - thinly lamd, bits ip, slly sidic, ip carb / trs of dism carb specs, randomly oriented / biot mica flks, trs sltst strgs, trs dk arg ls / cht frags, genly foss.


ROP (min/m)
Gas (units)
Gamma (API)
Calliper X (mm)
Calliper Y (mm)
SP ((mV))
25
500
150
375
375
50
1250
1255
1260
1265
1270
1275
1280
1285
1290
1295
1300
1305
1310
1315
Svy @ 1267.0m
TVD: 1267.0m
Inc: 0.50°
FG: 371/121 units.
WOB: 2.5
RPM: 98
SPM: 91
PP: 4100
MW: 1050
VIS: 39
pH: 10.5
WL: 9.5
FG: 331/121 units.
F
P
CX
PS
MS
Sonic (usec/m)
Neutron Por (%)
500
45
1000
-15
45
450
100% Sh: m gy, dk gy, gnsh gy, micmica, genly slly - modly ip slty, mic lamd on dkr & hdr fraction / f slty ptgs, ptly v calcs grdg - shaley ls, dns, mas, grdg - mdst, splty - blky, sbfis - plty, sm - wxy tex, ip dull rthy & ptly wind, frm - fri - modly hd, occly mic - thinly lamd, bits ip, slly sidic, ip carb / trs of dism carb specs, randomly oriented / biot mica flks, trs sltst strgs, trs of dk arg ls, genly foss.
100% Sh: m gy, dk gy, gnsh gy, micmica, genly slly - modly ip slty, mic lamd on dkr & hdr fraction / f slty ptgs, ptly v calcs grdg - shaley ls, dns, mas, grdg - mdst, splty - blky, sbfis - plty, sm - wxy tex, ip dull rthy & ptly wind, frm - fri - modly hd, occly mic - thinly lamd, bits ip, slly sidic, ip carb / trs of dism carb specs, randomly oriented / biot mica flks, trs sltst strgs, trs of dk arg ls, genly foss.
BEAVERHILL LAKE FM TOP @ 1272.50m RKB (-546.58m SS)
100% Sh: m gy, brnsh gy, comly micmica, genly slty, mic lamd on dkr & hdr fraction / f slty ptgs, ptly v calcs grdg - shaley ls, dns, mas, grdg - mdst, splty - blky, sbfis - plty, sm - grty - wxy tex, rr rthy & wind, frm -modly hd, occly mic - thinly lamd, slly sidic, ip carb / dism carb specs, randomly oriented / biot mica flks, trs sltst strgs, trs dk arg ls / cht frags, occly pyretic / trs of lse scat gran pyr frags, trs inoc pris, occly foss.
100% Sh: m gy, brnsh gy, comly micmica, genly slty, mic lamd on dkr & hdr fraction / f slty ptgs, ptly v calcs grdg - shaley ls, dns, mas, grdg - mdst, splty - blky, sbfis - plty, sm - grty - wxy tex, rr rthy & wind, frm -modly hd, occly mic - thinly lamd, slly sidic, ip carb / dism carb specs, randomly oriented / biot mica flks, trs sltst strgs, trs dk arg ls / off wh ls grs, occly pyretic / trs of lse scat gran pyr frags, trs inoc pris, occly foss.
100% Sh: m gy, brnsh gy, comly micmica, genly slty, mic lamd on dkr & hdr fraction / f slty ptgs, ptly v calcs grdg - shaley ls, dns, mas, grdg - mdst, splty - blky, sbfis - plty, sm - grty - wxy tex, rr rthy & wind, frm -modly hd, occly mic - thinly lamd, slly sidic, ip carb / dism carb specs, randomly oriented / biot mica flks, trs sltst strgs, <10% dk arg ls / off wh ls grs, occly pyretic / trs of lse scat gran pyr frags, trs inoc pris, occly foss.
SLAVE POINT FORMATION TOP @ 1295.50m RKB (-569.58m SS)
50% Ls: off wh, mot, crmy, frm - crpld - modly hd, lmpy - blky, ip chky, predly crpxl - micxl, predly pkst / wkest & mdst, ip dolic, ip pyric / trs of lse scat gran pyr frags, 3 - 5% total vis vugy, intrxl & pp por, <10% lt brn o shw, no vis stng, no od, lt pale brnsh yel natural spl flor, v fnt cut, lt blsh wh resdl ring flor, gas & o shw. 50% Sh: lt - m gy, dk gy, comly brnsh gy, micmica, slty, genly slly - modly ip slty.
100% Ls: off wh, mot, crmy, trs o stnd, crpld - modly hd, lmpy - blky, ip chky, predly crpxl - micxl, occly f xln gry grs incl, predly pkst / wkest & mdst, trs of suc grs, ip pyric / trs of lse scat gran pyr frags, 3 - 9% total vis vugy, intrxl & pp por, spy lt brn scattered natural spl flor, mod pet od, pale brnsh yel natural spl flor, fnt cut, lt blsh wh resdl ring flor, gas & o shw. >10% lt - m gy, dk gy, comly brnsh gy, micmica, slty, sm - grty tex, wind sh frags.
100% Ls: off wh, mot, crmy, trs o stnd, crpld - modly hd, lmpy - blky, ip chky, predly crpxl - micxl, occly f xln gry grs incl, predly pkst / wkest & mdst, trs of suc grs, ip pyric / trs of lse scat gran pyr frags, 4 - 10% total vis vugy, intrxl & pp por, spy - ptchy lt brn scattered natural spl flor, mod pet od, pale brnsh yel natural spl flor, fnt cut, lt blsh wh resdl ring flor, o & gas

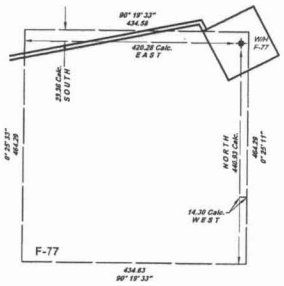

FG: 741/121 units.
FG: 250/69 units.
Svy @ 1344.0m
TVD: 1344.0m
Inc: 1.00°
ROP (min/m)
Gas (units)
Gamma (API)
Calliper X (mm)
Calliper Y (mm)
SP ((mV))
FG: 354/69 units.
FG: 578/69 units
WOB: 2.5
RPM: 98
SPM: 91
PP: 4100
MW: 1050
1320
1325
1330
1335
1340
1345
1350
1355
1360
1365
1370
1375
1380
shw. >10% lm - dk gy, sltl - grty wxy tex, w ind sh frags incl.
100% Ls: brn, tan, off wh, lt yel / dk brn stn, mot, frm, fri - crpld - modly hd, lmpy - blky, predly crpxl / micxl & trs v f xln deb, predly pkst - wkest tex, ptly mdst, intcls & occly biocl deb, calcar, ptly rthy & arg, ip dolic & anhyic, loc bits ptgs, >5% gy, dk gy, brnsh gy sh frags incl, trs pyric grs / trs of lse scat gran pyr frags, 3 - 8% total vis intrxl, vugy & pp por, sl pet od, spy lt brn natural spl flor, slow fnt cut, pale yelsh brn resdl ring flor, o & gas shw.
100% Ls: brn, tan, off wh, lt yel / dk brn stn, mot, frm, fri - crpld - modly hd, lmpy - blky, predly crpxl / micxl & trs v f xln deb, predly pkst - wkest tex, ptly mdst, intcls & occly biocl deb, calcar, ptly rthy & arg, ip dolic & anhyic, loc bits ptgs, >5% gy, dk gy, brnsh gy sh frags incl, trs pyric grs / trs of lse scat gran pyr frags, 3 - 8% total vis intrxl, vugy & pp por, sl pet od, spy lt brn natural spl flor, slow fnt cut, pale yelsh brn resdl ring flor, o & gas shw.
F4 MARKER FORMATION TOP @ 1336.50m RKB (-610.58m SS)
60% Ls: brn, tan, lt yel / dk brn stn, mot, predly crpxl / micxl deb, 3 - 5% total vis vugy & intrxl por, no od, no vis stng, >5% lt brn natural spl flor, hazy cut flor, ns. 40% Dol: Dol: off wh, stainy, crmy, predly crpxl deb, mdst - pkst arg deb, foss, trs of sh frags, abnt of calc & anhy incls, 3-4% vis vugy & intrxl por, hazy cut flor.
WATT MOUNTAIN FM TOP @ 1346.0m RKB (-620.08m SS)
60% Sh: gnsh gy, gn, micmica, mic lamd, slly calcs, dns, mas, amor - sbfis; sm - grty tex, ip w ind, ptly dull rthy tex, predly modly hd, ptly carb / trs of dism carb specs, trs of anhy & cht incl. 40% Ls: brn, tan, lt yel / dk brn stn, mot, fri - crpld - modly hd, lmpy - blky, predly crpxl / micxl deb, slly dolic, 3 - 5% total vis vugy & intrxl, por, hazy cut flor, ns.
SULPHUR POINT FM LS TOP @ 1350.50m RKB (-624.58m SS)
Sonic (usec/m)
Neutron Por (%)
100% Ls: off wh, crm - bf, mot, v shp - dns crpxl - deb, trs micxl / f xln grs, predly wkest - pkst, ip chky & arg, slly dolic, modly hd, lmpy - blky, intcls & occly biocl deb, trs pell incl, >10% dk - brnsh gy wxy, w ind sh grs / trs anhy grs, 4 - 9% total scat vis vugy - intrxl - mf por, no vis stng, spty brnsh o stn - mod pet od, lt brnsh yel natural spl flor, lt gnsh yel stmg cut flor, lt brnsh yel resdl ring flor, o shw (?).
SULPHUR POINT FM DOLTOP @ 1359.50m RKB (-633.58m SS)
100% Dol: off wh - lt brn, tan - bf, o stn, v shp dns, mas, ip micxl - tetrahedral xln deb, predly wkest - pkst, predy grny & suc, rr chky, slly limy, ip arg & slly calcic, trs calc incl, rr / bits ptgs, slly anhyic, <5% gn wxy sh incl, 5 - 14% total scat vis intrxl, pp & vugy por, no vis stng, strong pet od / even dk brnsh yel o stn, lt brnsh yel natural spl flor, gnsh yel stmg cut flor, pale brnsh yel resdl ring flor, o & gas shw.
100% Dol: off wh - lt brn, tan - bf, o stn, v shp dns, mas, ip micxl - tetrahedral xln deb, predly wkest - pkst, predy grny & suc, rr chky, slly limy, ip arg & slly calcic, trs calc incl, rr / bits ptgs, slly anhyic, trs gn wxy sh incl, trs of anhy, 5 - 14% total scat vis intrxl, pp & vugy por, no vis stng, strong pet od / even dk brnsh yel o stn, lt brnsh yel natural spl flor, gnsh yel stmg cut flor, pale brnsh yel resdl ring flor, o & gas shw.
MUSKEG FORMATION TOP @ 1371.00m RKB (-645.08m SS)
60% Dol: off wh, crm - bf, tan, v shp micxl - f xln deb, predly grst - wkest - pkst, ip gry, ptly chky, slly limy, slly - v anhyic, mnr arg & rthy, calcar, 3 - 5% total scat vis intrxl - vugy por, sl pet od, trs lt brnsh yel natural spl flor, hazy cut flor, p shw. 40% Anhy: wh, off wh, brn - dk brn, hyaline, iregly shaped, shp, ang crpxl / trs mixln, ip chky, abnt of calc incl.
70% Anhy: wh, off wh, brn - dk brn, hyaline, iregly shaped, shp, ang crpxl / trs mixln, dns, abnt of calc incl, trs of f xln ls / abnt of brnsh gy - tan dol incl. 30% Dol: off wh, crm - bf, tan, v shp micxl - f xln deb, predly grst - wkest - pkst, ip gry, ptly chky, slly limy, slly - v anhyic, mnr


VIS: 39
pH: 10.5
WL: 9.5
ROP (min/m) 25
Gas (units) 500
Gamma (API) 150
Calliper X (mm) 375
Calliper Y (mm) 375
SP (mV)) 50
WOB: 5.0
RPM: 86
SPM: 89
PP: 4550
MW: 1040
VIS: 60
pH: 10.5
WL: 6.0
Svy @ 1419.0m
TVD: 1419.0m
Inc: 0.50°
FG: 195/34 units
Feb 11, 2010
Feb 12, 2010
TD 1420.0m (-694.08m SS) Reached @ 18:25hrs On February 12, 2009.
1385
1390
1395
1400
1405
1410
1415
1420
WS
MS
arg & rthy, calcar, 3 - 5% total scat vis intrxd - vugy por, sl p od, trs lt brnsh yel natural spl flor, hazy cut flor, p shw.
60% Anhy: wh, off wh, brn - dk brn, hyaline, iregly shaped, shp, ang crpxl / trs mixdn, dns, abnt of calc incl, trs of f xln ls / abnt of brnsh gy - tan dol incl. 40% Dol: off wh, crm - bf, tan, v shp micxl - f xln deb, predly grst - wkest - pkst, ip gry, ptly chky, slly limy, slly - v anhyic, mnr arg & rthy, calcar, 3 - 5% total scat vis intrxd - vugy por, sl p od, trs lt brnsh yel natural spl flor, hazy cut flor, p shw.
500 Sonic (usec/m) 1000
45 Neutron Por (%) -15
Logging Conducted By Weatherford.
Run# 1: STI/SPeD/CNS/GR/MRT/HBC/CAL.



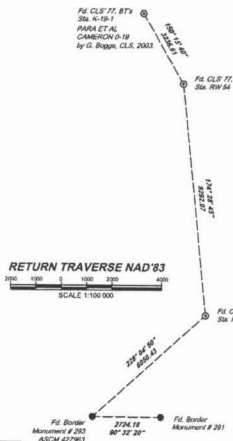
GRID AREA 60° 10', 117° 15'

SCALE 1:100 000



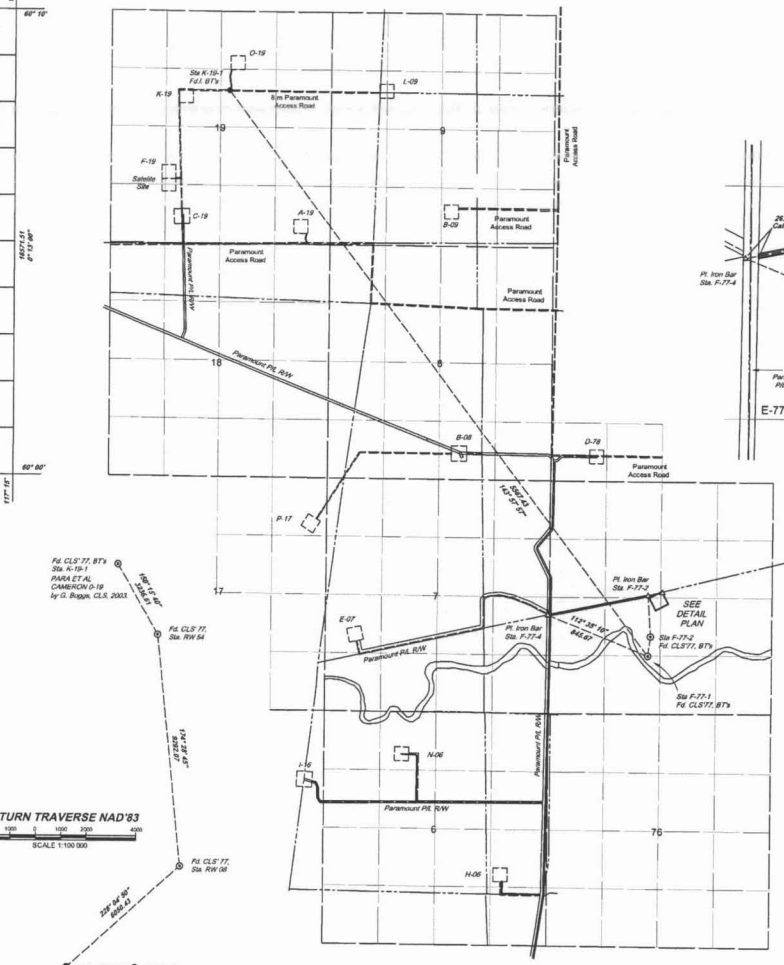
UNIT F-77 NAD'27

SCALE 1:5000



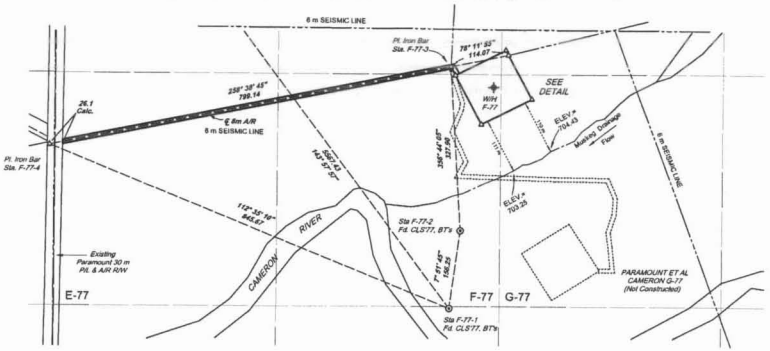
RETURN TRAVERSE NAD'83

SCALE 1:100 000



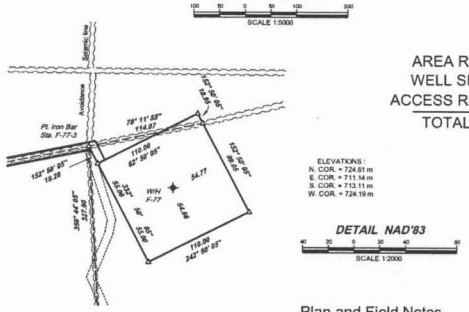
ACCESS SKETCH AND
LOCATION TRAVERSE NAD'83

SCALE 1:20 000



W/S DETAIL NAD'83

SCALE 1:5000



DETAIL NAD'83

SCALE 1:2000

ELEVATIONS :
N. COR. = 724.81 m
E. COR. = 711.14 m
S. COR. = 713.11 m
W. COR. = 724.19 m

AREA REQ'D WITHIN
WELL SITE = 1.21 ha
ACCESS ROAD = 0.636 ha
TOTAL = 1.846 ha

GEOGRAPHIC AND UTM COORDINATES - NAD '27				
STATION	LATITUDE (N)	LONGITUDE (W)	NORTHING	EASTING
GRID AREA 60° 10', 117° 15'				
N.E.	60° 10' 00.000"	117° 15' 00.000"	6689792.794	486125.259
N.W.	60° 10' 00.000"	117° 30' 00.000"	6669871.560	472250.652
S.W.	60° 00' 00.000"	117° 30' 00.000"	6651310.016	472110.252
S.E.	60° 00' 00.000"	117° 15' 00.000"	6651230.974	486055.060
UNIT F-77				
N.E.	60° 06' 30.052"	117° 29' 03.748"	6663370.09	473070.21
N.W.	60° 06' 30.028"	117° 29' 31.873"	6663372.56	472635.86
S.W.	60° 06' 15.028"	117° 29' 31.873"	6662908.52	472632.41
S.E.	60° 06' 15.052"	117° 29' 03.749"	6662906.05	473066.81
STA K-19-1	60° 06' 39.654"	117° 32' 44.358"	6667408.02	469858.39
W/H F-77	60° 06' 29.296"	117° 29' 04.674"	6663348.82	473055.75

GEOGRAPHIC AND UTM COORDINATES - NAD '83					
STATION	LATITUDE (N)	LONGITUDE (W)	NORTHING	EASTING	ELEVATION
K-19-1	60° 06' 40.026"	117° 32' 49.456"	6667624.42	469618.96	789.28
F-77-1	60° 06' 15.402"	117° 29' 15.111"	6663124.51	472892.45	702.34
F-77-2	60° 06' 20.408"	117° 29' 13.802"	6663279.21	472913.81	703.35
F-77-3	60° 06' 30.979"	117° 29' 15.167"	6663606.41	472895.14	725.31
F-77-4	60° 06' 25.707"	117° 30' 05.797"	6663449.16	472112.04	701.87
W/H F-77	60° 06' 29.669"	117° 29' 09.761"	6663565.24	472978.32	721.95 C/F
					721.25 GRND

WELL SITE COORDINATES SHOWN ARE BASED ON FD. CLS'77 POST
STA. K-19-1, W/S PLAN _____ CLS/R, BY GREG BOGGS, CLS
HELD FOR VERTICAL AND HORIZONTAL CONTROL
(SEE RETURN TRAVERSE FOR CONFIRMATION.)
FINAL COORDINATES WERE CALCULATED IN NAD'83 AND CONVERTED TO
NAD'27 USING NATIONAL TRANSFORMATION VERSION 2 PROGRAM

LEGEND

Monument found (Border Monuments) shown thus. ●
CLS '77 Posts shown thus. ⊙
Alberta Statutory Iron Post found shown thus. ●
Alberta Statutory Iron Posts planted shown thus. ○
Iron Spikes planted shown thus △
Calculated Position shown thus ■
Production W/H Position shown thus ✦
Distances are in metres and decimals thereof.
Portions referred to (Well Site and Access Road) bounded thus _____

UTM coordinates are computed for Zone 11, Central Meridian 117° W.
Bearings are UTM and were derived from differentially corrected GPS Observations, and are referred to Meridian 117° W.
Measured distances shown are ground distances, reduced by Combined Scale Factor of 0.999494
Distances on grid area subdivisions are UTM plane. (NAD'27)
Elevations shown are orthometric elevations, based on elevation of Sta. K-19-1 and thus derived from published elevation of Border Monument # 293
All dimensions shown on body of plan are based on NAD 83 (Original) datum.
Refer to Field Book _____ for the survey report pertaining to this project.

Plan and Field Notes
of (As Built) Survey of

PRODUCTION WELL

PARA ET AL CAMERON F-77

within UNIT H, SECTION 06
GRID AREA 60° 10', 117° 15'
NORTHWEST TERRITORIES
CANADA OIL AND GAS REGULATIONS
PRODUCTION LICENCE NO. PL#014

THIS SURVEY WAS EXECUTED BETWEEN THE
DATES OF OCTOBER 16TH, 2009 TO MARCH 20TH, 2010
BY GREG BOGGS, CLS

CERTIFIED CORRECT AND COMPLETED JUNE 02, 2010.

GREG BOGGS
CANADA LANDS SURVEYOR

DATE

G.A. Boggs
Comm. No. 1009

Surveyed for

PARAMOUNT RESOURCES LTD.

SCALE= 1:5000	UNIVERSAL SURVEYS INC.	UNIVERSAL JOB No.	09-1806
DATE: JUNE 02,2010	10111 - 123 Ave. - Edmonton, Alberta - Ph: 780-454-3002	UNIVERSAL PLAN No.	091806L01
		REVISION No. :	A

SHADOW RATHOLE DRILLING LTD.

MAILING ADDRESS:
11301 - 91 AVENUE
GRANDE PRAIRIE, AB T8V 5Z3
TELEPHONE (780) 538-3911
FAX (780) 532-1155

FIELD TICKET 12349

DATE: Jan 29, 2010
ORDERED BY: Bernie
SIGNED BY: [signature]

BILL TO: Paramont
Cameron Hills

LOCATION	DRILLING RIG	OIL COMPANY	P.O. NO.
F 77-60-10-117-15	Precision 245		

DRILLING AND DRIVING

	SIZE	REMARKS	UNIT PRICE	AMOUNT
CONDUCTOR		24" X 80'		Bid
RAT & MOUSE		20" X 18' mouse 20" X 22' RAT		Bid
CELLAR		3' x 6'		Bid
AIR HAMMER				
		0' to 4' Snow Fill Perma Frost of 35'		
		4' to 80 Clay & Rock		
		No water		

TRAVEL

DRILL UNIT	592 468 Km		Bid
SERVICE UNIT	311 468 Km		Bid
AIR HAMMER			

PARAMOUNT RESOURCES LTD.
WELL: F-77/60-10-117-15
CODE:
AFE: 0910010009
FOREMAN: Bernie Geleth
ATTENTION: Rudy Kapitaniuk

MATERIALS

CONDUCTOR PIPE	16" x 40'		Bid
LINER	⊗		
CEMENT	100 BAGS Portland		Bid
CRIB	3' x 6'		Bid
DRAINLINE			
TEETH			
POINTS			
WELDER	Hot Rod Billed Direct to Paramont		
	Bid Price		11000.00

DRILLER Doug
SWAMPER Wendy & Matt
UNIT 592 & 311 & Welder

G.S.T. #R138086384

SUB-TOTAL	11000.00
G.S.T.	550.00
TOTAL	11550.00

Menzies Printers 322359

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/4/2010
Report #: 1.0
Depth Progress:

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 23,036
Cum Cost to Date: 23,036

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: -1.04 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

Daily Operations

Depth Start (mKB)	Depth End (mKB)	Target Formation	Target Depth (mKB)
		Sulphur Pt	1,400.00

Weather	Temperature (°C)	Lease Condition
CLEAR	-38	

Operation at 6am

Operations Summary

Operations Next Report Period

Remarks

Avg Connection Gas (Units)	Avg Background Gas (Units)	Avg Trip Gas (Units)	Max H2S (Units)

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

DAILY CONTACTS

Title	Job Contact	Phone Mobile

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
00:00	07:45	7.75	7.75	Tear down	TEAR DOWN FOR MORNING MOVE
07:45	08:00	0.25	8.00	Safety meeting	HAND OVER MEETING
08:00	08:15	0.25	8.25	Safety meeting	SAFETY MEETING W/MULLEN AND CREW MOVE FROM H-06 TO F-77
08:15	16:00	7.75	16.00	Move rig	MOVE RIG W/MULLEN
16:00	18:30	2.50	18.50	Move rig	MOVE RIG W/MULLEN
18:30	18:45	0.25	18.75	Safety meeting	HAND OVER MEETING
18:45	21:30	2.75	21.50	Rig up	RIG UP POWER,STEAM AND ALL RELATED EQUIPMENT
21:30	21:45	0.25	21.75	Safety meeting	SAFETY MEETING W/CREW PRIOR TO RAISE DERRICK
21:45	22:45	1.00	22.75	Rig up	VISUALLY INS DERRICK PRIOR TO RAISE DERRICK BY ROMEO DASTOUS AND ERICK BIGRAS. DERRCK RAISED @ 22:30HRS
22:45	23:00	0.25	23.00	Safety meeting	SAFETY MEETING W/WELDER
23:00	00:00	1.00	24.00	Other	WELD DIVERTER FLANGE AND FLOW SHOW

MUD CHECKS

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (kg/m³)	Sand (%)	Solids (%)	Temp Bottom Hole (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30min)

Active Mud Volume (Surf) (m³)	Mud Lost to Hole (m³)	Cum Mud Lost to Hole (m³)	Daily Mud Cost	Mud Cum To Date

Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)

MUD ADDITIVES

Description	Cost (/unit)	Consumed

MUD PUMPS

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
1	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
2	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Paramount resources ltd.

Report For: 2/4/2010
Report #: 1.0
Depth Progress:

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 23,036
Cum Cost to Date: 23,036

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: -1.04 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	
Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	

BIT SUMMARY

Bit Run	Bit Type	Size (mm)	Make	Model	Serial Number	IADC Codes
Nozzles (mm)	**Depth In (mKB)**	**Depth Out (mKB)**	**Depth Drilled (m)**	**Drilling Time (hrs)**	**BHA ROP (m/hr)**	**IADC Bit Dull**

DRILL STRING COMPONENTS

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

DRILLING SUMMARY

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)
RPM (rpm)	**Motor RPM (rpm)**	**Bit RPM (rpm)**	**Slack-Off Hook Load (daN)**	**Drilling Time (hrs)**		

SAFETY CHECKS

Date	Type	Description
2/4/2010	Safety Meeting	RIG MOVE
2/4/2010	Safety Meeting	RUG UP
2/5/2010	Safety Meeting	NIPPLE UP DIVERTER

SAFETY INCIDENTS

Date	Comment	Type

WELL CONTROL SUMMARY

Run Date	Casing Description	OD (mm)	Set Depth (mKB)	Vol (m³)	P (LO) (kPa)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

FORMATIONS

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)
F4		
Watt Mtn Fm		
Sulphur Point Fm		
Muskeg Fm		
TD		

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/5/2010
Report #: 2.0
Depth Progress:

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 287,582
Cum Cost to Date: 310,618

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: -0.04 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

Daily Operations

Depth Start (mKB)	Depth End (mKB)	Target Formation	Target Depth (mKB)
		Sulphur Pt	1,400.00

Weather	Temperature (°C)	Lease Condition
ICE FOG	-13	

Operation at 6am
DRILLING 311MM HOLE @ 62.00

Operations Summary
WELDED CONDUCTOR FLANGE, INSTALLED DIVERTER AND RIGGED UP FLARE TANK.
INSTALLED SNOW RAMPS AND FROZE IN WITH CONSTRUCTION WATER TRUCKS
ORGANIZED MUD PRODUCT

Operations Next Report Period
SPUD F-77 AND DRILL AHEAD

Remarks
COMPLETED CAODC CHECKIST AND HAZARD HUNT
CONTINUED WITH FLOODING OF BACK END OF THE RIG, WATERED THE BERM TO ENSURE INTEGRITY IN CUTTINGS STORAGE AREA

Avg Connection Gas (Units)	Avg Background Gas (Units)	Avg Trip Gas (Units)	Max H2S (Units)

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

DAILY CONTACTS

Title	Job Contact	Phone Mobile
Drilling Foreman	HALE YARDLEY	866 935 3725
Rig Manager	ERIC BIGRAS	866 672 1751
Drilling Foreman	JOSH BLINSTON	866 935 3725

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
00:00	02:00	2.00	2.00	Other	WELD DIVERTER FLANGE AND FLOW SHOW
02:00	06:00	4.00	6.00	Nipple up/down diverter system	NIPPLE UP/DIVERTER SYSTEM + DIVERTER LINE IN FLARE TANK, CHANGE HAMMER UNION ON DIVERTER LINE
06:00	06:15	0.25	6.25	Safety meeting	HAND OVER MEETING
06:15	07:15	1.00	7.25	Nipple up/down diverter system	CONT TO NIPPLE UP DIVERTER +DIVERTER LINE AND FLOW LINE +HCR COVER ON FLOW SHOW.
07:15	08:00	0.75	8.00	Rig up	RIG UP 3RD PARTY EQUIPMENT + RIG
08:00	16:00	8.00	16.00	Rig up	STEAMED OFF AND CHANGED SHAKER SCREENS, INSTALLED ONE 84 AND 0NE 110 MESH SCREEN, ORGANIZED THE SHALE BINS, MUD PRODUCT, RIG UP LIGHTING AROUND THE RIG, SPOTTED LIGHT TOWER, FINALIZED TIE ON OF FLARE TANK. BUILT UP SNOW RAMPS IN AND AROUND SHALE BINS.
16:00	18:00	2.00	18.00	Rig up	CONSTRUCTION CREWS ASSISTING WITH LEASE PREPERATION
18:00	18:15	0.25	18.25	Safety meeting	HAND OVER MEETING
18:15	00:00	5.75	24.00	Rig up	CONT TO RIG UP AND MIX MUD PRIOR TO SPUD AND PICK UP BHA @22:15 PM CHANGE HARD DRIVE IN TOOL PUSH SHACK AND PASON SATELLITE DISH.

MUD CHECKS

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (kg/m³)	Sand (%)	Solids (%)	Temp Bottom Hole (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30min)

Active Mud Volume (Surf) (m³)	Mud Lost to Hole (m³)	Cum Mud Lost to Hole (m³)	Daily Mud Cost	Mud Cum To Date

Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)

MUD ADDITIVES

Description	Cost (/unit)	Consumed

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/5/2010
Report #: 2.0
Depth Progress:

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 287,582
Cum Cost to Date: 310,618

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: -0.04 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

MUD PUMPS

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
1	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	
	No	0	
	No	0	

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
2	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	
	No	0	
	No	0	

BIT SUMMARY

Bit Run	Bit Type	Size (mm)	Make	Model	Serial Number	IADC Codes

Nozzles (mm)	Depth In (mKB)	Depth Out (mKB)	Depth Drilled (m)	Drilling Time (hrs)	BHA ROP (m/hr)	IADC Bit Dull

DRILL STRING COMPONENTS

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

DRILLING SUMMARY

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)

SAFETY CHECKS

Date	Type	Description
2/5/2010	Safety Meeting	RIG UP 3rd PARTY EQUIPMENT
2/5/2010	Safety Meeting	COMUNICATION
2/6/2010	Safety Meeting	HAZARD HUNT

SAFETY INCIDENTS

Date	Comment	Type

WELL CONTROL SUMMARY

Run Date	Casing Description	OD (mm)	Set Depth (mKB)	Vol (m³)	P (LO) (kPa)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
2/6/2010	21.00	0.50	0.00	21.00	0.09	0.00	0.09	0.71
2/6/2010	48.00	1.00	0.00	48.00	0.45	0.00	0.45	0.56

FORMATIONS

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)
F4		
Watt Mtn Fm		
Sulphur Point Fm		
Muskeg Fm		
TD		

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU
Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/6/2010
Report #: 3.0
Depth Progress: 236.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 109,366
Cum Cost to Date: 419,984

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 0.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

Daily Operations

Depth Start (mKB)	Depth End (mKB)	Target Formation	Target Depth (mKB)
0.0	236.0	Sulphur Pt	1,400.00

Weather	Temperature (°C)	Lease Condition
OVERCAST, CALM	-12	FROZEN AND FIRM

Operation at 6am
DRILLING SURFACE HOLE TO 303 M @ 15+ M/HR

Operations Summary
RIGGED TO SPUD. SPUDDED WELL @ 01:00. DRILLED AHEAD AND SURVEYED. MINOR LOSS CIRCULATION 152 - 172 M IN COURSE SANDS.

Operations Next Report Period
RUN AND CEMENT SURFACE CASING

Remarks
PRE-SPUD MEETING AND DISCUSSION OF DEALING WITH FROZEN / ICE LOCATIONS: CELLAR HEATERS POINTED UP, SAWDUST, GEL AND PLASTIC PLACED IN CELLAR WITH STRICT ORDERS TO NOT RUN A STEAM HOSE IN PIPE IN THE MOUSE HOLE. 1 LESS THAN 100 L MUD SPILL FROM SHALE BIN AND CLEANED-UP

Avg Connection Gas (Units)	Avg Background Gas (Units)	Avg Trip Gas (Units)	Max H2S (Units)

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

DAILY CONTACTS

Title	Job Contact	Phone Mobile
Rig Manager	ERICK BIGRAS	
Drilling Foreman	HALE YARDLEY	866 935 3725
Rig Manager	ERIC BIGRAS	866 672 1751
Drilling Foreman	JOSH BLINSTON	866 935 3725

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
00:00	00:15	0.25	0.25	SAFETY MEETING	PRE SPUD SAFETY MEETING CREW,RIG MANAGER AND WELL SUPREVISER
00:15	00:45	0.50	0.75		HAZARD HUNT WITH CREW
00:45	01:00	0.25	1.00	RIG SERVICE	RIG SERVICE FUNCTION HYDRILL 18sec to close
01:00	02:00	1.00	2.00	DRILL	DRILL 311mm HOLE F/ 27M TO 31M
02:00	02:15	0.25	2.25	RIG SERVICE	RIG SERVICE & SET CROWN SAVER
02:15	04:45	2.50	4.75	DRILL	DRILL FROM 31M TO 51M
04:45	05:00	0.25	5.00	DEV. SURVEY	DEVIATION SURVEY
05:00	06:00	1.00	6.00	DRILL	DRILL FROM 51M TO 60 M
06:00	06:15	0.25	6.25	SAFETY MEETING	HAND OVER SAFETY MEETING
06:15	07:15	1.00	7.25	DRILL	DRILL FROM 60 M TO 78M
07:15	07:30	0.25	7.50	DEV. SURVEY	DEVIATION SURVEY 1DEG @ 48M
07:30	08:00	0.50	8.00	DRILL	DRILL 311mm HOLE F/ 78m TO 84m
08:00	08:15	0.25	8.25	RIG SERVICE	RIG SERVICE(FUNC. HYDRIL 19 SEC. TO CLOSE)
08:15	08:45	0.50	8.75	DRILL	DRILL 311mm HOLE F/ 84m TO 88m
08:45	09:00	0.25	9.00		FIX FLOW TEE
09:00	11:00	2.00	11.00	DRILL	DRILL 311mm HOLE F/ 88m TO 107m
11:00	11:15	0.25	11.25	DEV. SURVEY	SURVEY 77m @ 0.5DEG
11:15	13:30	2.25	13.50	DRILL	DRILL 311mm HOLE F/ 107m TO 134m
13:30	13:45	0.25	13.75	DEV. SURVEY	SURVEY 104m @ 0.5DEG
13:45	16:00	2.25	16.00	DRILL	DRILL 311mm HOLE F/ 134m TO 159m ENCOUNTER COARSE SAND FROM 152M TO 172M.
16:00	16:30	0.50	16.50	COND MUD & CIRC	BUILD VOL. & VIS FOR LOSSES
16:30	17:30	1.00	17.50	DRILL	DRILL 311mm HOLE F/ 159m TO 171m
17:30	18:00	0.50	18.00	RIG SERVICE	RIG SERVICE(FUNC. DIVERTER 20 SEC. TO CLOSE

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/6/2010
Report #: 3.0
Depth Progress: 236.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 109,366
Cum Cost to Date: 419,984

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 0.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
18:00	18:15	0.25	18.25	SAFETY MEETING	HAND OVER SAFETY MEETING
18:15	23:45	5.50	23.75	DRILL	DRILL 311mm HOLE F/ 171m TO 236 M
23:45	00:00	0.25	24.00	DEV. SURVEY	DEVIATION SURVEY ACCU TIME.

MUD CHECKS

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
Electric Stab (V)	**ECD - Manual Entry (kg/m³)**	**Sand (%)**	**Solids (%)**	**Temp Bottom Hole (°C)**	**HTHP Pressure (kPa)**	**HTHP Filtrate (mL/30min)**

Active Mud Volume (Surf) (m³)	Mud Lost to Hole (m³)	Cum Mud Lost to Hole (m³)	Daily Mud Cost	Mud Cum To Date
			4,561	4,561

Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
	1050.0	36	8.0		

MUD ADDITIVES

Description	Cost (/unit)	Consumed
KELZAN	522.35	2.0
HYPERDRILLAF247RD	221.55	2.0
SAWDUST	6.53	30.0
HYPERDRILLAF247RD	221.55	1.0
MILLZAN	522.35	2.0
SAWDUST	6.53	20.0
CELLOPHANE	72.40	1.0
KELZAN	522.35	2.0
KWIKSEAL	34.01	3.0
SAWDUST	6.53	40.0

MUD PUMPS

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
1	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	80	
	No	80	
	No	75	

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
2	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	80	
	No	80	
	No	75	

BIT SUMMARY

Bit Run	Bit Type	Size (mm)	Make	Model	Serial Number	IADC Codes
1RR	Bit	311.0	VAREL	HEO4JMRSV	253625	---

Nozzles (mm)	Depth In (mKB)	Depth Out (mKB)	Depth Drilled (m)	Drilling Time (hrs)	BHA ROP (m/hr)	IADC Bit Dull
14.3/14.3/14.3/14.3	0.00	324.00	324.00	25.25	12.8	1-1-WT-A-E-1-CT-...

DRILL STRING COMPONENTS

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Drill pipe - Singles			1	9.57	320.24
Drill pipe - Stands			5	95.48	310.67
HWDP(4.0 IN)		135.0	6	55.44	215.19
X/O		158.0	1	0.27	159.75
DC (6.25 IN)		158.0	8	72.93	159.48
JARS-HYD		158.0	1	5.26	86.55
PONY DC		158.0	1	4.60	81.29

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/6/2010
Report #: 3.0
Depth Progress: 236.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 109,366
Cum Cost to Date: 419,984

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 0.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

DRILL STRING COMPONENTS

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
DC (6.25 IN)		158.0	5	45.80	76.69
TELADRIFT		158.0	1	2.62	30.89
DC (6.25 IN)		158.0	1	8.78	28.27
BELL SUB		158.0	1	0.76	19.49
DC (8.00 IN)		203.0	2	18.02	18.73
BIT SUB		203.0	1	0.71	0.71

DRILLING SUMMARY

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)
0.00	84.00		3	0.0		

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)
180		180		5.00

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)
84.00	159.00		4			

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)
160		160		7.00

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)
159.00	236.00		3	0.0		

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)
150		150		6.50

SAFETY CHECKS

Date	Type	Description
2/6/2010	Safety Meeting	CONTAINING SPILLS
2/6/2010	Safety Meeting	WORKING ON PUMP
2/7/2010	Safety Meeting	MOUSE HOLE CONN

SAFETY INCIDENTS

Date	Comment	Type

WELL CONTROL SUMMARY

Run Date	Casing Description	OD (mm)	Set Depth (mKB)	Vol (m³)	P (LO) (kPa)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
2/6/2010	179.00	1.00	0.00	178.99	2.04	0.00	2.04	0.20
2/6/2010	207.00	1.00	0.00	206.98	2.53	0.00	2.53	0.00
2/7/2010	216.00	1.00	0.00	215.98	2.69	0.00	2.69	0.00
2/7/2010	234.00	1.00	0.00	233.98	3.00	0.00	3.00	0.00
2/7/2010	273.00	0.50	0.00	272.98	3.51	0.00	3.51	0.38

FORMATIONS

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/7/2010
Report #: 4.0
Depth Progress: 88.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 49,733
Cum Cost to Date: 469,717

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 1.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

Daily Operations

Depth Start (mKB)	Depth End (mKB)	Target Formation	Target Depth (mKB)
236.0	324.0	Sulphur Pt	1,400.00

Weather	Temperature (°C)	Lease Condition
CLEAR	-10	

Operation at 6am
WOC, STRIPPING MUD, RIGGING OUT DIVERTER

Operations Summary
DRILLED SURFACE HOLE TO 378 M, WIPER TRIPPED TO SURFACE, CIRCULATED SMALL BRIDGE @ 190 M AND WASHED TO BOTTOM WITH 9 M FILL. DRILLED TO 379 M TRIPPED OUT FOR CASING. LAID DOWN 203 MM DC'S

Operations Next Report Period
RUN AND CEMENT SURFACE CASING, HEAD-UP AND PRESSURE TEST BOPS

Remarks
HOLE IN GOOD CONDITION, BEGAN TO STRIP OUT SOLIDS. REPORTABLE INCIDENT ABOUT 200 L OF HIGH VIS DRILLING MUD LOST OUT END OF SHALE TANK. IT WAS IMMEDIATELY SCOOPED UP AND RETURNED TO THE SHALE BIN. SHALE SHAKER IS THE WEAK LINK OF THIS OPERATION.

Avg Connection Gas (Units)	Avg Background Gas (Units)	Avg Trip Gas (Units)	Max H2S (Units)

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

DAILY CONTACTS

Title	Job Contact	Phone Mobile
Drilling Foreman	HALE YARDLEY	866 935 3725
Drilling Foreman	JOSH BLINSTON	866 935 3725
Rig Manager	ERIC BIGRAS	866 672 1751

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
00:00	00:45	0.75	0.75	DRILL	DRILL 311 MM HOLE FROM 236 M TO 246M
00:45	01:00	0.25	1.00	RIG SERVICE	RIG SERVICE& FUNCTION DIVERTER 20 SEC CLOSED
01:00	01:15	0.25	1.25	DEV. SURVEY	DEVIATION SURVEY
01:15	03:00	1.75	3.00	DRILL	DRILL 311MM HOLE FROM 246 M TO 274M
03:00	03:15	0.25	3.25	DEV. SURVEY	DEVIATION SURVEY
03:15	05:45	2.50	5.75	DRILL	DRILL 311MM HOLE FROM 274M TO 303 M
05:45	06:00	0.25	6.00	DEV. SURVEY	DEVIATION SURVEY
06:00	06:15	0.25	6.25	SAFETY MEETING	HAND OVER SAFETY MEETING
06:15	08:00	1.75	8.00	DRILL	DRILL 311 MM HOLE FROM 303 M TO 324M
08:00	08:15	0.25	8.25	RIG SERVICE	RIG SERVICE(FUNC. DIVERTER 19 SEC. TO CLOSE)
08:15	08:30	0.25	8.50	DRILL	DRILL 311mm HOLE F/ 324m TO 332m
08:30	08:45	0.25	8.75	DEV. SURVEY	SURVEY 302m @ 0.5 DEG.
08:45	11:00	2.25	11.00	DRILL	DRILL 311mm HOLE F/ 332m TO 360m
11:00	11:15	0.25	11.25	DEV. SURVEY	SURVEY @ 330m 1.0 DEG
11:15	12:30	1.25	12.50	DRILL	DRILL 311mm HOLE F/ 360m TO 378m
12:30	12:45	0.25	12.75	COND MUD & CIRC	CIRC. HOLE CLEAN
12:45	13:00	0.25	13.00	DEV. SURVEY	SURVEY @ 348m 1.0 DEG
13:00	16:00	3.00	16.00	TRIPS	CLEAN OUT TRIP TO BIT(BLOW KELLY BEFORE TRIP)
16:00	16:45	0.75	16.75	TRIPS	TRIP IN(PIPE STRAP=RIG 208.15-STRAP 208.62=DIFF 0.47)
16:45	17:00	0.25	17.00	COND MUD & CIRC	WASH THROUGH BRIDGE @ 190m
17:00	17:45	0.75	17.75	TRIPS	RUN INTO 374M CIRC BOTTOMS UP
17:45	18:00	0.25	18.00	SAFETY MEETING	HANDOVER MEETING W/ CREWS
18:00	18:30	0.50	18.50	COND MUD & CIRC	CONDITION MUD & CIRCULATE

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Paramount resources ltd.

Report For: 2/7/2010
Report #: 4.0
Depth Progress: 88.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 49,733
Cum Cost to Date: 469,717

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 1.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
18:30	18:45	0.25	18.75	DRILL	DRILL FROM 378M TO 379.0
18:45	20:00	1.25	20.00	COND MUD & CIRC	CONDITION MUD & CIRCULATE
20:00	23:00	3.00	23.00	TRIPS	BLOW KELLY & TRIP OUT OF HOLE TO RUN CASING LAY DOWN 8 DC , TRIP VOL CAL, 4.49 ACT / 5.02 DIFF .53M3
23:00	23:15	0.25	23.25	RIG SERVICE	RIG SERVICE
23:15	23:30	0.25	23.50	SAFETY MEETING	PRE-JOB SAFETY ON RUNNING CASING.
23:30	00:00	0.50	24.00	RUN CASING AND CEMENT	RIG UP/ TO RUN CASING SERIAL #32607/SLX-65 TONNE 6 5/8DATE CHECK 7/7/2005.

MUD CHECKS

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
Electric Stab (V)	**ECD - Manual Entry (kg/m³)**	**Sand (%)**	**Solids (%)**	**Temp Bottom Hole (°C)**	**HTHP Pressure (kPa)**	**HTHP Filtrate (mL/30min)**

Active Mud Volume (Surf) (m³)	Mud Lost to Hole (m³)	Cum Mud Lost to Hole (m³)	Daily Mud Cost	Mud Cum To Date
			2,754	7,314

Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
	1080.0	57	8.0		

MUD ADDITIVES

Description	Cost (/unit)	Consumed
TKPP	150.51	1.0
KELZAN	522.35	1.0
DETERGENT	62.35	1.0
HYPERDRILLAF247RD	221.55	1.0
SAWDUST	6.53	15.0
HYPERDRILLAF247RD	221.55	1.0
MILLZAN	522.35	2.0
SAWDUST	6.53	10.0
GEL	14.69	25.0

MUD PUMPS

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
1	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	80	
	No	80	
	No	80	

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
2	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	80	
	No	80	
	No	0	

BIT SUMMARY

Bit Run	Bit Type	Size (mm)	Make	Model	Serial Number	IADC Codes
1RR	Bit	311.0	VAREL	HEO4JMRSV	253625	---

Nozzles (mm)	Depth In (mKB)	Depth Out (mKB)	Depth Drilled (m)	Drilling Time (hrs)	BHA ROP (m/hr)	IADC Bit Dull
14.3/14.3/14.3/14.3	0.00	324.00	324.00	25.25	12.8	1-1-WT-A-E-1-CT-...

DRILL STRING COMPONENTS

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
Drill pipe - Singles			1	9.57	320.24
Drill pipe - Stands			5	95.48	310.67

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/7/2010
Report #: 4.0
Depth Progress: 88.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 49,733
Cum Cost to Date: 469,717

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 1.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

DRILL STRING COMPONENTS

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)
HWDP(4.0 IN)		135.0	6	55.44	215.19
X/O		158.0	1	0.27	159.75
DC (6.25 IN)		158.0	8	72.93	159.48
JARS-HYD		158.0	1	5.26	86.55
PONY DC		158.0	1	4.60	81.29
DC (6.25 IN)		158.0	5	45.80	76.69
TELADRIFT		158.0	1	2.62	30.89
DC (6.25 IN)		158.0	1	8.78	28.27
BELL SUB		158.0	1	0.76	19.49
DC (8.00 IN)		203.0	2	18.02	18.73
BIT SUB		203.0	1	0.71	0.71

DRILLING SUMMARY

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)
236.00	324.00		4	0.0		

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)
150		150		6.75

SAFETY CHECKS

Date	Type	Description
2/7/2010	Safety Meeting	TRIPPING
2/7/2010	Safety Meeting	TRIPPING
2/8/2010	Safety Meeting	CEMENTING

SAFETY INCIDENTS

Date	Comment	Type

WELL CONTROL SUMMARY

Run Date	Casing Description	OD (mm)	Set Depth (mKB)	Vol (m³)	P (LO) (kPa)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
2/7/2010	302.00	0.50	0.00	301.97	3.77	0.00	3.77	0.00
2/7/2010	330.00	1.00	0.00	329.97	4.13	0.00	4.13	0.54
2/7/2010	348.00	1.00	0.00	347.97	4.45	0.00	4.45	0.00

FORMATIONS

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/8/2010
Report #: 5.0
Depth Progress: 0.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 85,375
Cum Cost to Date: 555,092

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 2.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

Daily Operations

Depth Start (mKB)	Depth End (mKB)	Target Formation	Target Depth (mKB)
324.0	324.0	Sulphur Pt	1,400.00

Weather	Temperature (°C)	Lease Condition
MOSTLY CLEAR	-15	FROZEN

Operation at 6am
TRIPPING IN HOLE TO DRILL OUT

Operations Summary
RAN AND CEMENTED 380 M SURFACE CASING, WOC, CUT CASING, WELDED CASING BOWL, INSTALLED BOPS AND PRESSURE TESTED MANIFOLD AND BOPS

Operations Next Report Period
DRILL OUT AND AHEAD WITH 200 MAIN HOLE

Remarks
5 M3 OF GOOD CEMENT RETURNS, STRIPPED 80 M3 OF SURFACE MUD, CONTINUED TO FREEZE VEHICLE ACCESS BEHIND FLARE TANK TO ALLOW TRUCKS AND LOADER TO DRIVE AROUND

Avg Connection Gas (Units)	Avg Background Gas (Units)	Avg Trip Gas (Units)	Max H2S (Units)

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

DAILY CONTACTS

Title	Job Contact	Phone Mobile
Drilling Foreman	HALE YARDLEY	866 935 3725
Rig Manager	ERIC BIGRAS	866 672 1751
Drilling Foreman	JOSH BLINSTON	866 935 3725

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
00:00	02:30	2.50	2.50	RUN CASING AND CEMENT	CONT RUN CASING
02:30	04:15	1.75	4.25	COND MUD & CIRC	CONDITION MUD & CIRCULATE WORKED PIPE @ 379 M
04:15	04:30	0.25	4.50	SAFETY MEETING	PRE-JOB SAFETY ON CEMENTING
04:30	05:45	1.25	5.75	RUN CASING AND CEMENT	RIG UP TO & CEMENTING CASING
05:45	06:00	0.25	6.00	SAFETY MEETING	HAND OVER MEETING SAFETY MEETING
06:00	08:00	2.00	8.00	WAIT ON CEMENT	WAIT ON CEMENT
08:00	10:00	2.00	10.00	WAIT ON CEMENT	WAIT ON CEMENT STRIP MUD TO WATER
10:00	11:00	1.00	11.00	NIPPLE UP B.O.P.	NIPPLE DOWN DIVERTER SYSTEM + DIVERTER LINE,HCR
11:00	11:15	0.25	11.25	SAFETY MEETING	SAFETY MEETING W/WELDER
11:15	14:15	3.00	14.25		CUT CASING,DIVERTER FLANGE AND LAY OUT DIVERTER +WELD ON BOWL.
14:15	15:00	0.75	15.00	CUT OFF DRILLING LINE	SLIP/CUT DRILLING LINE
15:00	15:30	0.50	15.50		CONT TO WELD BOWL,COOL DOWN AND PRESSURE TEST BOWL.
15:30	15:45	0.25	15.75	SAFETY MEETING	SAFETY MEETING W/CREW PRIOR TO NIPPLE UP BOP AND ALL RELATED EQUIPMENT.
15:45	16:00	0.25	16.00	NIPPLE UP B.O.P.	NIPPLE UP BOP , HCR,KILL LINE,FLARE LINE,FLARE TANK,PRESSURE RELASE LINE,MANIFOLD.
16:00	18:00	2.00	18.00	NIPPLE UP B.O.P.	CONT TO NIPPLE UP BOP AND ALL RELATED EQUIPMENT.

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/8/2010
Report #: 5.0
Depth Progress: 0.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 85,375
Cum Cost to Date: 555,092

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 2.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
18:00	18:15	0.25	18.25	SAFETY MEETING	CREW HANDOVER MEETING
18:15	19:30	1.25	19.50	NIPPLE UP B.O.P.	NIPPLE UP BOP
19:30	19:45	0.25	19.75	SAFETY MEETING	SAFETY MEETING W/PRESSURE TESTER
19:45	00:00	4.25	24.00	TEST B.O.P.	TEST BOP PRESS TEST ALL MANIFOLD VALVE SWEEP LINE OUTSIDE HCR VALVE TO 1500 KPA LOW AND 14000 KPA HIGH 10 MIN EACH ,

MUD CHECKS

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
Electric Stab (V)	**ECD - Manual Entry (kg/m³)**	**Sand (%)**	**Solids (%)**	**Temp Bottom Hole (°C)**	**HTHP Pressure (kPa)**	**HTHP Filtrate (mL/30min)**

Active Mud Volume (Surf) (m³)	Mud Lost to Hole (m³)	Cum Mud Lost to Hole (m³)	Daily Mud Cost	Mud Cum To Date
			1,509	8,824

Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
	1050.0	80			

MUD ADDITIVES

Description	Cost (/unit)	Consumed
SODA ASH	21.19	1.0
KELZAN	522.35	1.0
DESCO	80.46	2.0
CELLOPHANE	72.40	6.0
GEL	14.69	15.0
SAWDUST	6.53	23.0

MUD PUMPS

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
1	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	
	No		
	No	0	

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
2	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	80	
	No		
	No	0	

BIT SUMMARY

Bit Run	Bit Type	Size (mm)	Make	Model	Serial Number	IADC Codes
Nozzles (mm)	**Depth In (mKB)**	**Depth Out (mKB)**	**Depth Drilled (m)**	**Drilling Time (hrs)**	**BHA ROP (m/hr)**	**IADC Bit Dull**

DRILL STRING COMPONENTS

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

DRILLING SUMMARY

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/8/2010
Report #: 5.0
Depth Progress: 0.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 85,375
Cum Cost to Date: 555,092

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 2.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

SAFETY CHECKS

Date	Type	Description
2/8/2010	Safety Meeting	HAMMER WRENCHES
2/8/2010	Safety Meeting	PRESSURE TESTING
2/9/2010	Safety Meeting	PRESS TESTING

SAFETY INCIDENTS

Date	Comment	Type

WELL CONTROL SUMMARY

Run Date	Casing Description	OD (mm)	Set Depth (mKB)	Vol (m³)	P (LO) (kPa)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

FORMATIONS

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/9/2010
Report #: 6.0
Depth Progress: 218.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 68,667
Cum Cost to Date: 623,760

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 3.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

Daily Operations

Depth Start (mKB)	Depth End (mKB)	Target Formation	Target Depth (mKB)
379.4	597.4	Sulphur Pt	1,400.00

Weather	Temperature (°C)	Lease Condition
MOSTLY CLEAR	-10	FROZEN

Operation at 6am
CONTROL DRILLING FT. SIMPSON @ 15+ M/HR

Operations Summary
PRESSURE TESTED MANIFOLD AND BOPS TO 1.4 & 14 MPA (ANNULAR 10.5 MPA) FOR 10 MINUTES EACH, ALL HELD OK. FUNCTION TESTED ACCUMULATOR. PRESSURE BEFORE21.5 MPA AFTER 3 FUNCTIONS 12.5 MPA. RECHARGE TIME 64 SECS, HELD BOP DRILL WITH BOTH CREWS, HELD H2S DRILL AND AIR PACK DONNING DRILL. MINOR LOSS OF RETURNS AT WABAMUN TOP 480 M, REDUCED PUMP RATE AND DRILLED AHEAD WITH FLOC WATER

Operations Next Report Period
DRILL AHEAD WITH FLOC WATER

Remarks
DRILLED OUT WITH WATER AND AHEAD WITH PROCESSED SURFACE WATER. MUD DENSITY CLIMBED TO 1040 AND BEGAN TO FLOC SOLIDS. MINOR FLUID LOSS @ TOP OF WABAMUN, 480 M. INAC INSPECTION, NO PROBLEMS. DRILLED AHEAD INCIDENT FREE

Avg Connection Gas (Units)	Avg Background Gas (Units)	Avg Trip Gas (Units)	Max H2S (Units)

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

DAILY CONTACTS

Title	Job Contact	Phone Mobile
Drilling Foreman	HALE YARDLEY	866 935 3725
Drilling Foreman	JOSH BLINSTON	866 935 3725
Rig Manager	ERIC BIGRAS	866 672 1751

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
00:00	02:15	2.25	2.25	Pressure test BOPs	FINISH PRESSURE TEST BOPS TEST HYDRILL TO 1,500 KPA LOW .10,500 HIGH 10 MIN EACH, TEST HCR, BACK UP KILL LINE STA BBING VAQLVE, INSIDE B.O.P TO 1500 KPA LOW 14,000 KPA HIGH 10 MIN EACH, TEST UPPER KELLY COCK TO 1,500 KPA LOW 15,000 KPA HIGH 10 MIN EACH,
02:15	02:30	0.25	2.50	Rig Service	RIG SERVICE , FUNCTION MOTOR KILL OK
02:30	03:30	1.00	3.50	Test BOP	ACCUMULATOR CHECK PRESS AT START,21,000 PRESS REMAINING AFTER 3 FUNCTION 12,500,TIME TO RECHARGE /1 MIN .4 SEC/PRECHARGE6,600 KPA/ N 2 BOTTLE#12,100 PSI/#2 2,100 PSI #3 1,500 PSI. TEST BLID RAM 1,500 KPA LOW 14,000 KPA HIGH 10 MIN EACH.
03:30	03:45	0.25	3.75	Safety meeting	SAFETY MEETING & B.O.P DRILL WITH CREW PRIOR TO R.I.H CREW POSITION IN 1 MIN 20 SEC.
03:45	05:45	2.00	5.75	Trip in hole	MAKE UP B.H.A &TRIP IN HOLE WITH BIT #2
05:45	06:00	0.25	6.00	Safety meeting	HAND OVER SAFETY MEETING
06:00	06:15	0.25	6.25	Condition mud & circulate	CIRCULATE DOWN STRING TO TAG CEMENT
06:15	06:30	0.25	6.50	Drills/BOP, etc.	BOP DRILL W/ CREW(WELL SECURE IN 98SEC. HYDRIL 13SEC. TO CLOSE)
06:30	07:15	0.75	7.25	Condition mud & circulate	CIRCULATE DOWN STRING TO TAG CEMENT TOP
07:15	08:00	0.75	8.00	Drill cement/drill out cement/drill float&shoe	DRILL OUT FLOAT(TAG CEMENT @ 363M)
08:00	08:15	0.25	8.25	Rig Service	RIG SERVICE(FUNC. HCR 2SEC. TO OPEN)
08:15	09:45	1.50	9.75	Drill cement/drill out cement/drill float&shoe	DRILL OUT FLOAT & SHOE
09:45	11:00	1.25	11.00	Drill	DRILL 200mm HOLE F/ 379m TO 398m

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Paramount resources ltd.

Report For: 2/9/2010
Report #: 6.0
Depth Progress: 218.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 68,667
Cum Cost to Date: 623,760

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 3.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
11:00	11:15	0.25	11.25	Deviation survey	SURVEY @ 397M 0.5DEG
11:15	14:30	3.25	14.50	Drill	DRILL 200mm HOLE F/ 398m TO 446m
14:30	14:45	0.25	14.75	On job training	SAFETY MEETING & SCBA TRAINING W/ RAIMS SAFETY SERVICES
14:45	16:00	1.25	16.00	Drill	DRILL 200mm HOLE F/ 446m TO 475m
16:00	16:15	0.25	16.25	Deviation survey	SURVEY @ 475M 0.5 DEG
16:15	18:00	1.75	18.00	Drill	DRILL 200mm HOLE F/ 475M TO 503 M
18:00	18:15	0.25	18.25	Safety meeting	HAND OVER SAFETY MEETING
18:15	18:45	0.50	18.75	Drill	DRILL FROM 503M TO 513 M
18:45	19:00	0.25	19.00	Rig Service	RIG SERVICE FUNCTION PIPE RAMS,4 SEC TO CLOSE
19:00	21:00	2.00	21.00	Drill	DRILL FROM 513M TO 551 M
21:00	21:15	0.25	21.25	Deviation survey	DEVIATION SURVEY
21:15	00:00	2.75	24.00	Drill	DRILL FROM 551 M TO 597 M

MUD CHECKS

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (kg/m³)	Sand (%)	Solids (%)	Temp Bottom Hole (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30min)

Active Mud Volume (Surf) (m³)	Mud Lost to Hole (m³)	Cum Mud Lost to Hole (m³)	Daily Mud Cost	Mud Cum To Date
			1,835	10,659

Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
519.40	1010.0	28	10.0		

MUD ADDITIVES

Description	Cost (/unit)	Consumed
CITRIC ACID	190.53	7.0
CALCIUM NITRATE	43.63	10.0
SAWDUST	6.53	10.0

MUD PUMPS

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
1	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	
2,780	Yes	69	
2,088	Yes	69	

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
2	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	65	
	No	91	
	No	0	

BIT SUMMARY

Bit Run	Bit Type	Size (mm)	Make	Model	Serial Number	IADC Codes
2	Bit	200.0	REED	DSX416M-A3PDC	114176	M-2-2-2

Nozzles (mm)	Depth In (mKB)	Depth Out (mKB)	Depth Drilled (m)	Drilling Time (hrs)	BHA ROP (m/hr)	IADC Bit Dull
	379.40	1,421.55	1,059.00	67.25	15.7	1-1-CT-N-X-200-N...

DRILL STRING COMPONENTS

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/9/2010
Report #: 6.0
Depth Progress: 218.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 68,667
Cum Cost to Date: 623,760

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 3.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

DRILLING SUMMARY

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)
379.40	475.40		2,000			

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)
100		100		7.25

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)
475.40	597.40		3,000			

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)
90		90		7.00

SAFETY CHECKS

Date	Type	Description
2/9/2010	Safety Meeting	BOP DRILL
2/9/2010	Safety Meeting	CONNECTIONS
2/10/2010	Safety Meeting	DRIVE TO AIRPORT FOR DAY OFF.

SAFETY INCIDENTS

Date	Comment	Type

WELL CONTROL SUMMARY

Run Date	Casing Description	OD (mm)	Set Depth (mKB)	Vol (m³)	P (LO) (kPa)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
2/9/2010	397.40	0.50	0.00	397.36	5.09	0.00	5.09	0.30
2/9/2010	474.40	0.50	0.00	474.36	5.76	0.00	5.76	0.00
2/9/2010	549.40	0.50	0.00	549.36	6.42	0.00	6.42	0.00

FORMATIONS

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/10/2010
Report #: 7.0
Depth Progress: 365.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 58,519
Cum Cost to Date: 682,279

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 4.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

Daily Operations

Depth Start (mKB)	Depth End (mKB)	Target Formation	Target Depth (mKB)
580.6	945.6	Sulphur Pt	1,400.00

Weather	Temperature (°C)	Lease Condition
CLEAR	-15	FROZEN

Operation at 6am
CONTROL DRILLING FT SIMPSON @ 15+ M/HR TO 1030 M

Operations Summary
CONTINUED TO CONTROL DRILL AHEAD INTO FT SIMPSON WITHOUT LOSS OF RETURNS WITH FLOCCED WATER

Operations Next Report Period
DRILL AHEAD, MUD-UP AND LIKELY WIPER TRIP

Remarks
INSTALLED FLOW SHOW SENSOR ON FLOW LINE. CONDUCTED H2S MEETING WITH NEW CREW, SAFETY STAND DOWN MEETING WITH PD SAFETY. DRILLED AHEAD INCIDENT FREE

Avg Connection Gas (Units)	Avg Background Gas (Units)	Avg Trip Gas (Units)	Max H2S (Units)

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

DAILY CONTACTS

Title	Job Contact	Phone Mobile
Drilling Foreman	HALE YARDLEY	866 935 3725
Rig Manager	ERIC BIGRAS	866 672 1751
Drilling Foreman	JOSH BLINSTON	866 935 3725

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
00:00	01:30	1.50	1.50	Drill	DRILL FROM 597 M TO 618 M
01:30	01:45	0.25	1.75	Rig Service	RIG SERVICE FUNCTION HYDRIL ,12 SEC TO CLOSE
01:45	02:45	1.00	2.75	Drill	DRILL FROM 618 M TO 638M
02:45	03:00	0.25	3.00	Deviation survey	DEVIATION SURVEY
03:00	06:00	3.00	6.00	Drill	DRILL FROM 638 M TO 695 M
06:00	06:15	0.25	6.25	Safety meeting	HAND OVER SAFETY MEETING
06:15	07:15	1.00	7.25	Drill	DRILL FROM 695m TO 714m
07:15	07:30	0.25	7.50	Deviation survey	SURVEY @ 713m 0.5 DEG
07:30	08:00	0.50	8.00	Drill	DRILL 200mm HOLE F/ 714m TO 724m
08:00	08:15	0.25	8.25	Rig Service	RIG SERVICE(FUNC. PIPE RAMS 2 SEC. TO CLOSE)
08:15	12:45	4.50	12.75	Drill	DRILL 200mm HOLE F/ 724m TO 800m
12:45	13:15	0.50	13.25	Other	INSTALL PASSON FLOW SENSOR
13:15	14:00	0.75	14.00	Drill	DRILL 200mm HOLE F/ 800m TO 809M
14:00	14:15	0.25	14.25	Safety meeting	HANDOVER SAFETY MEETING
14:15	15:45	1.50	15.75	Drill	DRILL FROM 809M TO 831M
15:45	16:00	0.25	16.00	Deviation survey	DEVIATION SURVEY
16:00	16:15	0.25	16.25	Drills/BOP, etc.	DRILLS/BOP, ETC. FUNCTION HYDRIL CLOSED IN 13SECONDS
16:15	18:00	1.75	18.00	Drill	DRILL FROM 831M TO 858M
18:00	18:15	0.25	18.25	Deviation survey	DEVIATION SURVEY
18:15	22:30	4.25	22.50	Drill	DRILL 200mm HOLE F/ 858m TO 934m
22:30	22:45	0.25	22.75	Rig Service	RIG SERVICE(FUNC. PIPE RAMS 3 SEC. TO CLOSE)
22:45	23:15	0.50	23.25	On job training	SAFETY STAND DOWN MEETING W/ PD SAFETY PERSONEL
23:15	23:30	0.25	23.50	Deviation survey	SURVEY @ 933m 0.5 DEG
23:30	00:00	0.50	24.00	Drill	DRILL 200mm HOLE F/ 934m TO 944m

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Paramount resources ltd.

Report For: 2/10/2010
Report #: 7.0
Depth Progress: 365.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 58,519
Cum Cost to Date: 682,279

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 4.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

MUD CHECKS

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (kg/m³)	Sand (%)	Solids (%)	Temp Bottom Hole (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30min)

Active Mud Volume (Surf) (m³)	Mud Lost to Hole (m³)	Cum Mud Lost to Hole (m³)	Daily Mud Cost	Mud Cum To Date
			3,012	13,672

Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
921.55	1030.0	30	9.0		

MUD ADDITIVES

Description	Cost (/unit)	Consumed
KELZAN	522.35	1.0
CAUSTIC	44.63	1.0
GEL	14.69	12.0
SAWDUST	6.53	25.0
KELZAN	522.35	1.0
LIME	15.38	1.0
SAWDUST	6.53	5.0
CALCIUM NITRATE	43.63	10.0
ALKAPAM A-1103D	211.93	1.0
CAUSTIC	44.63	2.0
CALCIUM NITRATE	43.63	15.0
SAWDUST	6.53	22.0

MUD PUMPS

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
1	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
2,100	Yes	69	
2,456	Yes	70	
2,247	Yes	70	

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
2	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	
	No	0	
	No	0	

BIT SUMMARY

Bit Run	Bit Type	Size (mm)	Make	Model	Serial Number	IADC Codes
2	Bit	200.0	REED	DSX416M-A3PDC	114176	M-2-2-2

Nozzles (mm)	Depth In (mKB)	Depth Out (mKB)	Depth Drilled (m)	Drilling Time (hrs)	BHA ROP (m/hr)	IADC Bit Dull
	379.40	1,421.55	1,059.00	67.25	15.7	1-1-CT-N-X-200-N...

DRILL STRING COMPONENTS

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

DRILLING SUMMARY

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)
580.55	725.55		4,000			

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)
90		90		7.00

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)
725.55	832.55		3,000			

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)
100		100		6.75

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/10/2010
Report #: 7.0
Depth Progress: 365.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 58,519
Cum Cost to Date: 682,279

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 4.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

DRILLING SUMMARY

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)
832.55	945.55		3,200			

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)
100		100		6.50

SAFETY CHECKS

Date	Type	Description
2/10/2010	Safety Meeting	STEAM
2/10/2010	Safety Meeting	OVERHEAD EQUIPMENT
2/11/2010	Safety Meeting	SAFETY STAND DOWN

SAFETY INCIDENTS

Date	Comment	Type

WELL CONTROL SUMMARY

Run Date	Casing Description	OD (mm)	Set Depth (mKB)	Vol (m³)	P (LO) (kPa)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
2/10/2010	636.55	0.50	0.00	636.51	7.18	0.00	7.18	0.00
2/10/2010	714.55	0.50	0.00	714.50	7.86	0.00	7.86	0.00
2/10/2010	790.55	0.50	0.00	790.50	8.52	0.00	8.52	0.00
2/10/2010	859.55	0.50	0.00	859.50	9.13	0.00	9.13	0.00
2/10/2010	934.55	0.50	0.00	934.49	9.78	0.00	9.78	0.00

FORMATIONS

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU
Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/11/2010
Report #: 8.0
Depth Progress: 277.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 53,824
Cum Cost to Date: 736,104

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 5.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

Daily Operations

Depth Start (mKB)	Depth End (mKB)	Target Formation	Target Depth (mKB)
944.4	1,221.4	Sulphur Pt	1,400.00

Weather	Temperature (°C)	Lease Condition
CLEAR	-20	FROZEN

Operation at 6am
DRILLING SLAVE PT @ 15+ M/HR TP 1283 M

Operations Summary
CONTINUED TO CONTROL DRILL FT SIMPSON SHALE; BEGAN TO MUD-UP SYSTEM @ 1100 M. RAN CONFIRMATION WIRELINE SURVEY @ 1179M - .26 DEGREES. DRILLED TO 1221 M, CIRCULATED HOLE CLEAN AND WIPER TRIPPED (SLM) TO SURFACE CASING NO DEPTH CORRECTION, NO FILL ON BOTTOM

Operations Next Report Period
DRILL AHEAD TO TD, BUILD AND MAINTAIN MUD PROPERTIES

Remarks
DRILLED AHEAD INCIDENT FREE

Avg Connection Gas (Units)	Avg Background Gas (Units)	Avg Trip Gas (Units)	Max H2S (Units)

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

DAILY CONTACTS

Title	Job Contact	Phone Mobile
Drilling Foreman	HALE YARDLEY	866 935 3725
Rig Manager	ERIC BIGRAS	866 672 1751
Drilling Foreman	JOSH BLINSTON	866 935 3725

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
00:00	00:15	0.25	0.25	Rig Service	RIG SERVICE(FUNC. HYDRIL 14 SEC. TO CLOSE)
00:15	04:30	4.25	4.50	Drill	DRILL 200mm HOLE F/ 944m TO 1011m
04:30	04:45	0.25	4.75	Deviation survey	SURVEY @ 1010m 1.0DEG
04:45	06:00	1.25	6.00	Drill	DRILL 200mm HOLE F/ 1011m TO 1030m
06:00	06:15	0.25	6.25	Safety meeting	HANDOVER SAFETY MEETING
06:15	08:00	1.75	8.00	Drill	DRILL FROM 1030M TO 1066M
08:00	09:00	1.00	9.00	Drill	DRILL FROM 1066M TO 1077M
09:00	09:15	0.25	9.25	Rig Service	RIG SERVICE FUNCTION HCR OPENED IN 1 SECOND
09:15	10:00	0.75	10.00	Drill	DRILL FROM 1077M TO 1087M
10:00	10:15	0.25	10.25	Deviation survey	DEVIATION SURVEY
10:15	13:00	2.75	13.00	Drill	DRILL FROM 1087M TO 1134M
13:00	13:15	0.25	13.25	Deviation survey	DEVIATION SURVEY
13:15	16:00	2.75	16.00	Drill	DRILL FROM 1134M TO 1182M
16:00	16:45	0.75	16.75	Drill	DRILL FROM 1182M TO 1192M
16:45	17:15	0.50	17.25	Deviation survey	DEVIATION SURVEY (WIRELINE SURVEY)
17:15	18:00	0.75	18.00	Drill	DRILL FROM 1192M TO 1201M
18:00	18:15	0.25	18.25	Safety meeting	HANDOVER SAFETY MEETING
18:15	19:00	0.75	19.00	Drill	DRILL 200mm HOKLE F/ 1201m TO 1221m
19:00	19:30	0.50	19.50	Condition mud & circulate	CONDITION MUD & CIRCULATE
19:30	19:45	0.25	19.75	Other	PUMP PILL THEN BLOW KELLY
19:45	22:30	2.75	22.50	Trip out of hole	CLEAN OUT TRIP TO HWDP(STRAP OUT FLOW CHECKS @ 1209, 1114, 624, 228M)(STRAP=DERRICK 1013.24-TALLY 1012.53=DIFF.0.71 HOLE FILL VOL=ACTUAL 3.82-CALC.2.76=DIFF.1.06)
22:30	00:00	1.50	24.00	Trip in hole	TRIP IN HOLE(FLOW CHECK @ 624m)

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU
Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/11/2010
Report #: 8.0
Depth Progress: 277.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 53,824
Cum Cost to Date: 736,104

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 5.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

MUD CHECKS

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (kg/m³)	Sand (%)	Solids (%)	Temp Bottom Hole (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30min)

Active Mud Volume (Surf) (m³)	Mud Lost to Hole (m³)	Cum Mud Lost to Hole (m³)	Daily Mud Cost	Mud Cum To Date
			9,009	22,680

Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
1,205.40	1040.0	37	9.0		

MUD ADDITIVES

Description	Cost (/unit)	Consumed
ALKAPAM A-1103D	211.93	1.0
KELZAN	522.35	1.0
ALKAPAM A-1103D	211.93	1.0
MF-VIS	500.41	1.0
CAUSTIC	44.63	2.0
SAWDUST	6.53	5.0
CALCIUM NITRATE	43.63	10.0
MTL SHURE SHALE	195.51	8.0
CAUSTIC	44.63	1.0
DRISPAC PLUS REGULAR	261.75	3.0
SODIUM BICARBONATE	29.46	3.0
STARDRILL	146.16	4.0
LIGNITE	16.58	6.0
MF-VIS	500.41	7.0
BARITE	22.29	15.0

MUD PUMPS

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
1	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
2,650	Yes	69	
2,666	Yes	70	
2,615	Yes	70	

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
2	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	
	No	0	
	No	0	

BIT SUMMARY

Bit Run	Bit Type	Size (mm)	Make	Model	Serial Number	IADC Codes
2	Bit	200.0	REED	DSX416M-A3PDC	114176	M-2-2-2

Nozzles (mm)	Depth In (mKB)	Depth Out (mKB)	Depth Drilled (m)	Drilling Time (hrs)	BHA ROP (m/hr)	IADC Bit Dull
	379.40	1,421.55	1,059.00	67.25	15.7	1-1-CT-N-X-200-N...

DRILL STRING COMPONENTS

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

DRILLING SUMMARY

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)
944.40	1,066.40		4,000			

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)
100		100		7.25

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)
1,066.40	1,182.40		4,000			

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)
100		100		7.25

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/11/2010
Report #: 8.0
Depth Progress: 277.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 53,824
Cum Cost to Date: 736,104

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 5.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

DRILLING SUMMARY

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)
1,182.40	1,221.40		4,000			

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)
100		100		2.25

SAFETY CHECKS

Date	Type	Description
2/11/2010	Safety Meeting	WORKING AROUND ROTARY
2/11/2010	Safety Meeting	BOP EQUIPMENT
2/12/2010	Safety Meeting	CONNECTIONS

SAFETY INCIDENTS

Date	Comment	Type

WELL CONTROL SUMMARY

Run Date	Casing Description	OD (mm)	Set Depth (mKB)	Vol (m³)	P (LO) (kPa)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
2/11/2010	1,010.40	1.00	0.00	1,010.34	10.77	0.00	10.77	0.20
2/11/2010	1,087.40	1.00	0.00	1,087.33	12.12	0.00	12.12	0.00
2/11/2010	1,133.40	0.50	0.00	1,133.32	12.72	0.00	12.72	0.33
2/11/2010	1,179.40	0.26	0.00	1,179.32	13.02	0.00	13.02	0.16

FORMATIONS

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/12/2010
Report #: 9.0
Depth Progress: 199.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 52,185
Cum Cost to Date: 788,288

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 6.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

Daily Operations

Depth Start (mKB)	Depth End (mKB)	Target Formation	Target Depth (mKB)
1,222.6	1,421.6	Sulphur Pt	1,400.00

Weather	Temperature (°C)	Lease Condition
CLEAR	-20	FROZEN

Operation at 6am
RIGGING-UP WEATHERFORD LOGGING TOOL

Operations Summary
DRILLED AHEAD TO 1420 M. CIRCULATED HOLE FOR 4+ BOTTOMS UP, STILL NOT CLEAN, WIPER TRIPPED TO 1200 M, 1.5 M FILL. CIRC ANOTHER HR & INCREASE YP FROM 19.2 TO 21.5

Operations Next Report Period
OPEN HOLE LOG LOG AND LIKELY GET APPROVAL TO RUN CASING

Remarks
50 LITER MUD SPILL FROM SHALE BIN, INAC INSPECTION - CONCERNS ABOUT FLUID IN SUMP, ADVISED WE ARE ATTEMPTING TO MINIMIZE FLUID, AND POLYMER MUDS ARE MORE DIFFICULT TO WORK WITH

Avg Connection Gas (Units)	Avg Background Gas (Units)	Avg Trip Gas (Units)	Max H2S (Units)
190	200		

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

DAILY CONTACTS

Title	Job Contact	Phone Mobile
Drilling Foreman	JOSH BLINSTON	866 935 3725
Rig Manager	ERIC BIGRAS	866 672 1751
Drilling Foreman	HALE YARDLEY	866 935 3725

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
00:00	00:30	0.50	0.50	Trip in hole	TRIP IN TO BOTTOM
00:30	00:45	0.25	0.75	Condition mud & circulate	FILL PIPE
00:45	01:00	0.25	1.00	Rig Service	RIG SERVICE (FUNC. ANNULAR 13 SEC. TO CLOSE)
01:00	04:15	3.25	4.25	Drill	DRILL 200mm HOLE F/ 1221m TO 1268m
04:15	04:30	0.25	4.50	Deviation survey	SURVEY @ 1267m 0.5DEG
04:30	06:00	1.50	6.00	Drill	DRILL 200mm HOLE F/ 1268m TO 1278m
06:00	06:15	0.25	6.25	Safety meeting	CREW HANDOVER MEETING
06:15	08:00	1.75	8.00	Drill	DRILL 200mm HOLE F/ 1278m TO 1311M
08:00	08:15	0.25	8.25	Rig Service	RIG SERVICE FUNCTION PIPE RAMS CLOSED IN 4 SECONDS
08:15	10:30	2.25	10.50	Drill	DRILL FROM 1311M TO 1345M
10:30	10:45	0.25	10.75	Deviation survey	DEVIATION SURVEY
10:45	16:00	5.25	16.00	Drill	DRILL FROM 1345M TO 1399M
16:00	16:15	0.25	16.25	Rig Service	RIG SERVICE FUNCTION HCR 1SEC OPENED
16:15	18:00	1.75	18.00	Drill	DRILL FROM 1399M TO TD 1415M
18:00	18:15	0.25	18.25	Safety meeting	HANDOVER SAFETY MEETING
18:15	18:30	0.25	18.50	Drill	DRILL 200mm HOLE F/ 1415m TO 1420m
18:30	18:45	0.25	18.75	Deviation survey	SURVEY @ 1419m 0.5 DEG
18:45	20:45	2.00	20.75	Condition mud & circulate	CIRC. HOLE CLEAN & CONDITION MUD
20:45	21:45	1.00	21.75	Trips	CLEAN OUT TRIP(11STANDS, FLOW CHECKS @ 1409, 1314m HOLE FILL VOL. = ACTUAL 1.58- CALC. 0.57= DIFF. 1.01)
21:45	22:45	1.00	22.75	Trip in hole	RUN IN 11 STDS TO BOTTOM
22:45	00:00	1.25	24.00	Condition mud & circulate	CIRCULATE HOLE CLEAN & CONDITION MUD FOR LOGGING

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/12/2010
Report #: 9.0
Depth Progress: 199.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 52,185
Cum Cost to Date: 788,288

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 6.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

MUD CHECKS

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
Electric Stab (V)	**ECD - Manual Entry (kg/m³)**	**Sand (%)**	**Solids (%)**	**Temp Bottom Hole (°C)**	**HTHP Pressure (kPa)**	**HTHP Filtrate (mL/30min)**

Active Mud Volume (Surf) (m³)	Mud Lost to Hole (m³)	Cum Mud Lost to Hole (m³)	Daily Mud Cost	Mud Cum To Date
			9,600	32,280

Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
1,421.55	1040.0	72	10.0		

MUD ADDITIVES

Description	Cost (/unit)	Consumed
DRISPAC PLUS REGULAR	261.75	1.0
STARDRILL	146.16	2.0
LIGNITE	16.58	3.0
DRISPAC PLUS REGULAR	261.75	3.0
CAUSTIC	44.63	4.0
STARDRILL	146.16	6.0
MF-VIS	500.41	6.0
LIGNITE	16.58	9.0
MF-VIS	500.41	8.0

MUD PUMPS

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
1	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
2,730	Yes	69	
2,665	Yes	70	
2,665	Yes	70	

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
2	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	
	No	0	
	No	0	

BIT SUMMARY

Bit Run	Bit Type	Size (mm)	Make	Model	Serial Number	IADC Codes
2	Bit	200.0	REED	DSX416M-A3PDC	114176	M-2-2-2

Nozzles (mm)	Depth In (mKB)	Depth Out (mKB)	Depth Drilled (m)	Drilling Time (hrs)	BHA ROP (m/hr)	IADC Bit Dull
	379.40	1,421.55	1,059.00	67.25	15.7	1-1-CT-N-X-200-N...

DRILL STRING COMPONENTS

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

DRILLING SUMMARY

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)
1,222.55	1,312.55		4,000			

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)
100		100		6.50

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)
1,312.55	1,400.55		4,000			

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)
95		95		7.50

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)
1,400.55	1,421.55		4,000			

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)
95		95		2.00

SAFETY CHECKS

Date	Type	Description
2/12/2010	Safety Meeting	WILDLIFE

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/12/2010
Report #: 9.0
Depth Progress: 199.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 52,185
Cum Cost to Date: 788,288

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 6.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

SAFETY CHECKS

Date	Type	Description
2/12/2010	Safety Meeting	DOWN HOLE TORQUE
2/13/2010	Safety Meeting	TRIPPING

SAFETY INCIDENTS

Date	Comment	Type

WELL CONTROL SUMMARY

Run Date	Casing Description	OD (mm)	Set Depth (mKB)	Vol (m³)	P (LO) (kPa)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	NS (m)	EW (m)	VS (m)	DLS (°/30m)
2/12/2010	1,268.55	0.50	0.00	1,268.47	13.62	0.00	13.62	0.08
2/12/2010	1,345.55	1.00	0.00	1,345.46	14.62	0.00	14.62	0.19
2/12/2010	1,421.55	0.50	0.00	1,421.46	15.62	0.00	15.62	0.20

FORMATIONS

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/13/2010
Report #: 10.0
Depth Progress: 0.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 64,039
Cum Cost to Date: 852,327

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 7.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

Daily Operations

Depth Start (mKB)	Depth End (mKB)	Target Formation	Target Depth (mKB)
1,421.6	1,421.6	Sulphur Pt	1,400.00

Weather	Temperature (°C)	Lease Condition
CLEAR	-10	FROZEN

Operation at 6am
RUNNING 140 MM PROD. CASING TO 360 M

Operations Summary
TRIPPED OUT AND LOGGED WELL, COMBO LOG TO BOTTOM - 1413 M @ 08:00. LOGGED 60 M REPEAT SECTION AND TAGGED BOTTOM @ 1410.6 M CONFIRMATION OF WELL @ 11:20, TRIPPED IN HOLE, CIRCULATED WELL CLEAN, LAID DOWN DRILL STRING

Operations Next Report Period
RUN PRODUCTION CASING, CIRCULATE AND CEMENT

Remarks
COORDINATED EFFORTS TO OBTAIN A SHALE DRYER TO AVERT UNDESIRED WATER TRANSFERED TO SUMP

Avg Connection Gas (Units)	Avg Background Gas (Units)	Avg Trip Gas (Units)	Max H2S (Units)

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

DAILY CONTACTS

Title	Job Contact	Phone Mobile

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
00:00	00:15	0.25	0.25	Other	PUMP PILL & BLOW KELLY
00:15	04:45	4.50	4.75	Trip out of hole	POOH FOR LOGGING(HOLE FILL VOL. = ACTUAL 8.88- CALC. 6.20=DIFF. 2.68 FLOW CHECKS @ 1409, 1315, 673, 221, 0M FUNC. BLIND RAMS 4 SEC. TO CLOSE)
04:45	05:00	0.25	5.00	Rig Service	RIG SERVICE FUNCTION BLIND RAMS 4 SEC TO CLOSE
05:00	05:15	0.25	5.25	Pre-job safety	SAFETY MEETING W/ WEATHERFORD
05:15	06:00	0.75	6.00	Wireline logs	RIG UP LOGGERS
06:00	06:15	0.25	6.25	Safety meeting	SAFETY MEETING
06:15	08:00	1.75	8.00	Logging - Open hole logs	LOGGING - OPEN HOLE LOGS, LOG TOOLS ARE STI/MDA/SPD/CNT/UGR/MRT/DAC TIME IN BOTTOM 8:00AM LOGERS DEPTH 1413m
08:00	08:15	0.25	8.25	Rig Service	RIG SERVICE FUNCTION PIPE RAMS CLOSED IN 4SECONDS
08:15	15:00	6.75	15.00	Logging - Open hole logs	LOGGING - OPEN HOLE LOGS RIG OUT LOG TOOLS
15:00	16:00	1.00	16.00	Trip in hole	TRIP IN HOLE FLOW CHECK @ 385M 10 min
16:00	18:00	2.00	18.00	Trip in hole	TRIP IN HOLE FLOW CHECKS @ 724M 10 min
18:00	18:15	0.25	18.25	Safety meeting	HANDOVER SAFETY MEETING
18:15	20:15	2.00	20.25	Condition mud & circulate	WASH TO BOTTOM
20:15	20:30	0.25	20.50	Rig Service	RIG SERVICE FUNCTION HYDRILL 13 SEC TO CLOSE
20:30	20:45	0.25	20.75	Lay down drill pipe	LAY DOWN 3 SINGLES
20:45	21:45	1.00	21.75	Condition mud & circulate	WASH TO BOTTOM & CIRC. HOLE CLEAN
21:45	22:00	0.25	22.00	Other	PUMP PILL & BLOW KELLY
22:00	00:00	2.00	24.00	Lay down drill pipe	LAY DOWN DP(FLOW CHECKS @ 1416, 1322M)

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/13/2010
Report #: 10.0
Depth Progress: 0.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 64,039
Cum Cost to Date: 852,327

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 7.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

MUD CHECKS

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (kg/m³)	Sand (%)	Solids (%)	Temp Bottom Hole (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30min)

Active Mud Volume (Surf) (m³)	Mud Lost to Hole (m³)	Cum Mud Lost to Hole (m³)	Daily Mud Cost	Mud Cum To Date
			1,325	33,605

Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
1,421.55	1050.0	76	10.5		

MUD ADDITIVES

Description	Cost (/unit)	Consumed
BARITE	22.29	15.0
CAUSTIC	44.63	1.0
MF-VIS	500.41	1.0
BARITE	22.29	20.0

MUD PUMPS

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
1	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
2,700	Yes	69	
	No	0	
3,750	Yes	70	

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
2	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	
	No	0	
	No	0	

BIT SUMMARY

Bit Run	Bit Type	Size (mm)	Make	Model	Serial Number	IADC Codes

Nozzles (mm)	Depth In (mKB)	Depth Out (mKB)	Depth Drilled (m)	Drilling Time (hrs)	BHA ROP (m/hr)	IADC Bit Dull

DRILL STRING COMPONENTS

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

DRILLING SUMMARY

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)

SAFETY CHECKS

Date	Type	Description
2/13/2010	Safety Meeting	DRIVING
2/13/2010	Safety Meeting	SLIPS AND FALLS
2/14/2010	Safety Meeting	LAYING DOWN PIPE

SAFETY INCIDENTS

Date	Comment	Type

WELL CONTROL SUMMARY

Run Date	Casing Description	OD (mm)	Set Depth (mKB)	Vol (m³)	P (LO) (kPa)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/13/2010
Report #: 10.0
Depth Progress: 0.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 64,039
Cum Cost to Date: 852,327

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 7.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

FORMATIONS

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/14/2010
Report #: 11.0
Depth Progress: 0.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 126,475
Cum Cost to Date: 978,802

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 8.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

Daily Operations

Depth Start (mKB)	Depth End (mKB)	Target Formation	Target Depth (mKB)
1,421.6	1,421.6	Sulphur Pt	1,400.00

Weather	Temperature (°C)	Lease Condition
HIGH CLOUD	-8	FROZEN

Operation at 6am
RIGGING OUT

Operations Summary
LAID DOWN DRILL STRING, RAN AND CEMENTED AND PRESSURE TESTED PRODUCTION CASING. RIGGED OUT, SET SLIPS, CUT CASING AND INSTALLED TUBING HEAD

Operations Next Report Period
RIG OUT, RIG RELEASE AND BEGIN TO MOVE TO N-06

Remarks
AT ABOUT 22:30 ADVISED OF 250 LITER MUD SPILL FROM PUMP SUCTION, GATE ACCIDENTALLY OPENED ON NEARLY EMPY TANK. MUD VACUUMED UP. NO ACCIDENTS

Avg Connection Gas (Units)	Avg Background Gas (Units)	Avg Trip Gas (Units)	Max H2S (Units)

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

DAILY CONTACTS

Title	Job Contact	Phone Mobile
Drilling Foreman	HALE YARDLEY	866 935 3725
Drilling Foreman	JOSH BLINSTON	866 935 3725
Rig Manager	ERIC BIGRAS	866 672 1751

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
00:00	04:30	4.50	4.50	Lay down drill pipe	LAY DOWN STRING(FLOW CHECKS @ 709, 198,0m HOLE FILL VOL. = ACTUAL 8.43 - CALC. 6.20=DIFF. 2.23)
04:30	04:45	0.25	4.75	Rig Service	RIG SERVICE(FUNC. BLIND RAMS 3 SWEC. TO CLOSE)
04:45	05:15	0.50	5.25	Rig up/down to run casing	RIG UP TO RUN CASING ELEVATOR CERT. #EDM 0303 5566 10243LT TESTED TO 225 TON
05:15	05:30	0.25	5.50	Pre-job safety	SAFETY MEETING W/ TONG HAND
05:30	06:00	0.50	6.00	Run casing & cementing	RUN 139.7mm CASING
06:00	06:15	0.25	6.25	Safety meeting	CREW CHANGE HANDOVER
06:15	08:00	1.75	8.00	Run casing & cementing	RUN 139.7mm CASING
08:00	12:00	4.00	12.00	Run casing	RUN CASING.
12:00	12:15	0.25	12.25	Rig up/down to run casing	RIG OUT POWER TONGS AND BRAKE CIRCULATION.
12:15	13:45	1.50	13.75	Condition mud & circulate	CONDITION MUD & CIRCULATE.
13:45	14:00	0.25	14.00	Safety meeting	SAFETY MEETING W/SANJEL PRIOR TO CEMENT LONG STRING.
14:00	15:45	1.75	15.75	Cementing	CEMENTING W SANJEL,CEMENT PLUG IN PLACE @ 3:30PM .5M3 OF GOOD CEMENT RETURN, PRESSURE TESTED PLUG TO 21MPA FOR 10 MIN.
15:45	16:00	0.25	16.00	Cementing	RAN 113 JTS OF 139.7 MMK,20.83KG/M J-55 ST & C LENTH 1417.68m TO 1417mkb CIRCULATED AND CEMENT W/3m3 WATER,3m3SCAV, 28.68m3 (23.9 T OF FILL AND 7.06m3 (8T) OF TAIL CEMENT).
16:00	16:15	0.25	16.25	Cementing	CEMENTING(TEAR OUT CEMENTERS)
16:15	18:00	1.75	18.00	Wait on cement	WAIT ON CEMENT
18:00	18:15	0.25	18.25	Safety meeting	HANDOVER SAFETY MEETING
18:15	22:00	3.75	22.00	Nipple down BOPs	FLUSH B.O.P. STACK W/CEMENTER,NIPPLE DOWN BOPS,HCR,KILL LINE,FLOW T,FLOW LINE AND SET SLIPS AT STRING W/T,CUT CASING AND LAY OUT.
22:00	22:15	0.25	22.25	Safety meeting	SAFETY MEETING W/STREAM FLOW PRIOR TO NIPPLE UP WELL HEAD.

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Paramount resources ltd.

Report For: 2/14/2010
Report #: 11.0
Depth Progress: 0.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 126,475
Cum Cost to Date: 978,802

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 8.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
22:15	00:00	1.75	24.00	Other	NIPPLE UP WELD HEAD W/ STREAM FLOW

MUD CHECKS

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)
Electric Stab (V)	ECD - Manual Entry (kg/m³)	Sand (%)	Solids (%)	Temp Bottom Hole (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30min)

Active Mud Volume (Surf) (m³)	Mud Lost to Hole (m³)	Cum Mud Lost to Hole (m³)	Daily Mud Cost	Mud Cum To Date
			925	34,530

Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)
1,421.55	1050.0	48	10.0		

MUD ADDITIVES

Description	Cost (/unit)	Consumed
DESCO	80.46	6.0
CELLOPHANE	72.40	5.0
DESCO	80.46	1.0

MUD PUMPS

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
1	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	
1,628	Yes	70	
	No	0	

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
2	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	
	No	0	
	No	0	

BIT SUMMARY

Bit Run	Bit Type	Size (mm)	Make	Model	Serial Number	IADC Codes
Nozzles (mm)	Depth In (mKB)	Depth Out (mKB)	Depth Drilled (m)	Drilling Time (hrs)	BHA ROP (m/hr)	IADC Bit Dull

DRILL STRING COMPONENTS

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

DRILLING SUMMARY

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	*Drilling Torque*	*Flow Rate (m³/min)*	dP (SPP) (kPa)
RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)		

SAFETY CHECKS

Date	Type	Description
2/14/2010	Safety Meeting	SAFETY CABLES
2/14/2010	Safety Meeting	SHUTIN PROCEDURES
2/15/2010	Safety Meeting	TEAR OUT

SAFETY INCIDENTS

Date	Comment	Type

WELL CONTROL SUMMARY

Run Date	Casing Description	OD (mm)	Set Depth (mKB)	*Vol (m³)*	*P (LO) (kPa)*

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU
Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/14/2010
Report #: 11.0
Depth Progress: 0.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 126,475
Cum Cost to Date: 978,802

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 8.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

FORMATIONS

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/15/2010
Report #: 12.0
Depth Progress: 0.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 40,922
Cum Cost to Date: 1,019,724

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 9.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

Daily Operations

Depth Start (mKB)	Depth End (mKB)	Target Formation	Target Depth (mKB)
1,421.6	1,421.6	Sulphur Pt	1,400.00

Weather	Temperature (°C)	Lease Condition
	-20	FROZEN

Operation at 6am
TRANSFERRING DRILLING FLUID TO N-06 LOCATION

Operations Summary
COMPLETED INSTALLATION OF TUBING HEAD, CLEANED MUD TANKS AND RIGGED OUT. RIG RELEASED 08:00 15 FEB '10. LOWERED DERRICK @ 08:00

Operations Next Report Period
COMPLETE RIG MOVE TO N-06 LOCATION, RELEASE ALL TRUCKS BUT A BED TRUCK AND SUPERVISOR

Remarks
MOVED RENTALS, WELLSITE TRAILERS TO NEW LOCATION; N-06 UNABLE TO SPUD AS APPROVAL NOT RECEIVED

Avg Connection Gas (Units)	Avg Background Gas (Units)	Avg Trip Gas (Units)	Max H2S (Units)

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

DAILY CONTACTS

Title	Job Contact	Phone Mobile
Drilling Foreman	JOSH BLINSTON	866 935 3725

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
00:00	02:00	2.00	2.00	Tear down	TEAR OUT FLARE TANK, AND ASSOCIATED LINES, CLOSE UP MANIFOLD SHACK, PUT LINES AWAY, CLOSE UP SHACKS
02:00	02:15	0.25	2.25	Pre-job safety	SAFETY MEETING W/ CREW
02:15	03:15	1.00	3.25	Slip/Cut drilling line	SLIP & CUT 12.8m
03:15	04:00	0.75	4.00	Rig up	RIG UP FLOOR TO LOWER TOP SECTION & DERRICK
04:00	06:00	2.00	6.00	Tear down	CONTINUE TO TEAR OUT REST OF RIG FOR MOVE
06:00	06:15	0.25	6.25	Safety meeting	CREW CHANGE HAND OVER MEETING
06:15	07:30	1.25	7.50	Tear down	INSPECT DERRICK PRIOR TO LAY DOWN E.B AND P.I. + LAY OUT DERRICK
07:30	08:00	0.50	8.00	Tear down	TEAR DOWN
08:00	16:00	8.00	16.00	Tear down	TEAR DOWN + MOVE ALL 3rd PARTY EQUIPMENT INTO NEW LOCATION AND W/ON WELL LICENSE
16:00	00:00	8.00	24.00	Other	W/ON MORNING TO MOVE BUILDINGS INTO NEW LOCATION (W/ON WELL LICENSE)

MUD CHECKS

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (kg/m³)	Sand (%)	Solids (%)	Temp Bottom Hole (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30min)

Active Mud Volume (Surf) (m³)	Mud Lost to Hole (m³)	Cum Mud Lost to Hole (m³)	Daily Mud Cost	Mud Cum To Date
			5,336	39,866

Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)

MUD ADDITIVES

Description	Cost (/unit)	Consumed
ALKAPAM A-1103D	211.93	9.0
BARITE	22.29	-38.0
CALCIUM NITRATE	43.63	-45.0
CAUSTIC	44.63	1.0
DETERGENT	62.35	-1.0
ENVIROFLOC	43.63	107.0
KELZAN	522.35	4.0
LIGNITE	16.58	9.0
LIME	15.38	-1.0
MF-VIS	500.41	-1.0

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig: 245 PRECISION DRILLING, DIV OF PDC

Report For: 2/15/2010
Report #: 12.0
Depth Progress: 0.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 40,922
Cum Cost to Date: 1,019,724

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 9.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

MUD ADDITIVES

Description	Cost (/unit)	Consumed
MILLZAN	522.35	-4.0
MTL SHURE SHALE	195.51	10.0

MUD PUMPS

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
1	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	
	No	0	
	No	0	

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
2	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	
	No	0	
	No	0	

BIT SUMMARY

Bit Run	Bit Type	Size (mm)	Make	Model	Serial Number	IADC Codes

Nozzles (mm)	Depth In (mKB)	Depth Out (mKB)	Depth Drilled (m)	Drilling Time (hrs)	BHA ROP (m/hr)	IADC Bit Dull

DRILL STRING COMPONENTS

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

DRILLING SUMMARY

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)

SAFETY CHECKS

Date	Type	Description
2/15/2010	Safety Meeting	CONFINED SPACE
2/15/2010	Safety Meeting	MAINTENANCE
2/16/2010	Safety Meeting	MOVING W/TRUCK

SAFETY INCIDENTS

Date	Comment	Type

WELL CONTROL SUMMARY

Run Date	Casing Description	OD (mm)	Set Depth (mKB)	Vol (m³)	P (LO) (kPa)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

FORMATIONS

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig:

Report For: 2/16/2010
Report #: 13.0
Depth Progress: 0.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 21,491
Cum Cost to Date: 1,041,215

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 10.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

Daily Operations

Depth Start (mKB)	Depth End (mKB)	Target Formation	Target Depth (mKB)
1,421.6	1,421.6	Sulphur Pt	1,400.00

Weather	Temperature (°C)	Lease Condition
CLEAR	-13	OK

Operation at 6am
READY TO RATHOLE

Operations Summary
MOVED THE RIG PACKAGE AND ALL RENTAL LOADS FROM F-77 TO N-06 LOCATION. RIG CREWS MAKING MINOR REPAIRS AND PERFORMING RIG MAINTENANCE. HAULED THE REMAINING VOLUME FROM THE F-77 TANK FARM AND PUT INTO STORAGE ON N-06 LOCATION

Operations Next Report Period
IF APPROVED, DRILL RATHOLE AND CONDUCTOR, HAUL DIRTY SNOW FROM F-77 TO BINS ON N-06

Remarks
ABOUT 145M3 OF DRILLING MUD AND MIX WATER IN STORAGE ON N-06
RELEASED ALL MULLEN TRUCKS EXCEPT TWO BED TRUCKS AND ONE SUPERVISOR
RATHOLE RIG CREW IN CAMP ON THE READY
ROAD NEEDS WORK
RIG CREW AND RIG MANAGER CREW CHANGING TODAY
EXPECT SITE INSPECTION FROM NEB TODAY

Avg Connection Gas (Units)	Avg Background Gas (Units)	Avg Trip Gas (Units)	Max H2S (Units)

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

DAILY CONTACTS

Title	Job Contact	Phone Mobile
Drilling Foreman	JOSH BLINSTON	866 935 3725

TIME LOG SUMMARY

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Code 2	Comment
00:00	08:00	8.00	8.00	Other	W/ON WELL LICENSE
08:00	08:15	0.25	8.25	Safety meeting	SAFETY MEETING W/MULLEN
08:15	16:00	7.75	16.00	Move rig	MOVE ALL RIG LOADS ON TO N-06
16:00	00:00	8.00	24.00	Other	OTHER W/ON WELL LICENSE

MUD CHECKS

Low Gravity Solids (%)	MBT (kg/m³)	Oil Water Ratio	Chlorides (mg/L)	Calcium (mg/L)	Lime (kg/m³)	Potassium (mg/L)

Electric Stab (V)	ECD - Manual Entry (kg/m³)	Sand (%)	Solids (%)	Temp Bottom Hole (°C)	HTHP Pressure (kPa)	HTHP Filtrate (mL/30min)

Active Mud Volume (Surf) (m³)	Mud Lost to Hole (m³)	Cum Mud Lost to Hole (m³)	Daily Mud Cost	Mud Cum To Date
				39,866

Depth (mKB)	Density (kg/m³)	Funnel Viscosity (s/L)	pH	PV Override (cp)	YP Override (Pa)

MUD ADDITIVES

Description	Cost (/unit)	Consumed

MUD PUMPS

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
1	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	
	No	0	
	No	0	

Pump Number	Rod Diameter (mm)	Pump Rating (kW)
2	63.5	

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	
	No	0	

Daily Drilling

Well Name: PARA ET AL CAMERON F-77

Business Unit: NE BC & NWT COU

Rig:

Report For: 2/16/2010
Report #: 13.0
Depth Progress: 0.00

Total AFE Amount: 1,437,304.00
AFE Number: 09N010009
Daily Cost: 21,491
Cum Cost to Date: 1,041,215

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065

Spud Date	Rig Release Date	DFS: 10.96 days
2/6/2010 01:00	2/15/2010 8:00:00 AM	

Ground Elevation (m)	Original KB Elevation (m)	KB-Casing Flange Distance (m)
720.17	725.92	4.20

Pressure (kPa)	Slow Speed Check?	Strokes (spm)	Volumetric Efficiency (%)
	No	0	

BIT SUMMARY

Bit Run	Bit Type	Size (mm)	Make	Model	Serial Number	IADC Codes

Nozzles (mm)	Depth In (mKB)	Depth Out (mKB)	Depth Drilled (m)	Drilling Time (hrs)	BHA ROP (m/hr)	IADC Bit Dull

DRILL STRING COMPONENTS

Item Description	ID (mm)	OD (mm)	Jts	Len (m)	Cum Len (m)

DRILLING SUMMARY

Depth Start (mKB)	Depth End (mKB)	ROP Instantaneous (min/m)	Weight on Bit (daN)	Drilling Torque	Flow Rate (m³/min)	dP (SPP) (kPa)

RPM (rpm)	Motor RPM (rpm)	Bit RPM (rpm)	Slack-Off Hook Load (daN)	Drilling Time (hrs)

SAFETY CHECKS

Date	Type	Description

SAFETY INCIDENTS

Date	Comment	Type

WELL CONTROL SUMMARY

Run Date	Casing Description	OD (mm)	Set Depth (mKB)	Vol (m³)	P (LO) (kPa)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)	NS (m)	EW (m)	VS (m)	DLS (°/30m)

FORMATIONS

Formation Name	Drill Top MD (mKB)	Drill Top TVD (mKB)

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
0Y52245_20100204_1A	Pason	2010	02	04

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	60.06.25.30N/117.29.04.70W	NT	AT-CAG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	VERT	☐
	Operator's AFE	Contractor's Job No	Spud Date	Time
	09N010009	354		
	Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
	JOSH BLINSTON	ERICK BIGRAS		

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection		
2) Detailed Inspection - Weekly (Using Check List)		
3) H2S Signs Posted if Required		
4) Well Licence & Stick Diagram Posted		
5) Flare Lines Staked		
6) BOP Drills Performed		
7) Visually Inspected BOPs - Flare Lines & Degasser Lines		

1) Rig Site Health & Safety Meeting (one/crew/month)
2) GADDC Rig Safety Inspection Checklist (one/rig/month)
3) Mast Inspection before Raising or Lowering
4) Crown Saver Checked
5) Motor Kills Checked

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	06:00
Temp	-38
Current Conditions	CLEAR
Wind Direction	NE
Wind Strength	UP TO 19 KM/H
Road Condition	FAIR

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)
DP	4"FH	S95	102	65	23.8300	185	
DC	4.5" XH	DC	158	58	134.0000	18	
HW	4" FH	HWDP	102	65	41.6400	6	

MUD PUMPS

No.	Make	Stroke Length (mm)
1	BPMMP	229
2	BPMMP	229

GENERAL EQUIPMENT & SERVICES

Description	Hours
MUD PUMP	24.00
MANIFOLD SHACK	24.00
LOADER	24.00

CAODC Pason V.7.1

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)
SURFACE	LKSIDE	J-55	219	206	35.72	26	378	4	378
PRODUCTION	PARAGON	J-55	140	127	20.83	119	1469	4	1468

SHALE SHAKERS

No.	Top Screen			Middle Screen			Middle Screen			Bottom Screen		
	Size	Changed	New	Size	Changed	New	Size	Changed	New	Size	Changed	New
1	110	☒	☐	84	☒	☒		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐

TOUR 1

SIGNATURE OF DRILLER: ROMEO DASTOUS

START TIME: 00:00 END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

Drill Pipe — Stands (m)
Drill Pipe — Singles (m)
Weight of DC (kdaN) — Kelly Down (m)
Weight of string (kdaN) — Total (m)

BITS

Bit Number
Size (mm)
IADC Code
Manufacturer
Type
Serial No
Jets (mm)
Depth Out (m)
Depth In (m)
Total Drilled (m)
Hrs Run Today
Cumulative Hrs Run
Entry Date

DULL GRADE

T_i		Gage (mm)	
T_o		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type: Water ☐ Oil ☐ Other ☐

Time	
Density (kg/m³)	
Funnel Viscosity (s/l)	
Fluid Loss (cm³)	
pH	
Location	
Depth (m)	
PVT (m³)	

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
COMUNICATION		

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
00:00	07:45	7.75	22	TEAR DOWN FOR MORNING MOVE
07:45	08:00	0.25	21	HAND OVER MEETING

Remarks:

TOUR 2

SIGNATURE OF DRILLER: JOE LEADLEY

START TIME: 08:00 END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

Drill Pipe — Stands (m)
Drill Pipe — Singles (m)
Weight of DC (kdaN) — Kelly Down (m)
Weight of string (kdaN) — Total (m)

BITS

Bit Number
Size (mm)
IADC Code
Manufacturer
Type
Serial No
Jets (mm)
Depth Out (m)
Depth In (m)
Total Drilled (m)
Hrs Run Today
Cumulative Hrs Run
Entry Date

DULL GRADE

T_i		Gage (mm)	
T_o		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type: Water ☐ Oil ☐ Other ☐

Time	
Density (kg/m³)	
Funnel Viscosity (s/l)	
Fluid Loss (cm³)	
pH	
Location	
Depth (m)	
PVT (m³)	

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
RIG MOVE		

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
08:00	08:15	0.25	21	SAFETY MEETING W/MULLEN AND CREW MOVE FROM H-06 TO F-77
08:15	16:00	7.75	1A	MOVE RIG W/MULLEN

Remarks:

TOUR 3

SIGNATURE OF DRILLER: ROMEO DASTOUS

START TIME: 16:00 END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

Drill Pipe — Stands (m)
Drill Pipe — Singles (m)
Weight of DC (kdaN) — Kelly Down (m)
Weight of string (kdaN) — Total (m)

BITS

Bit Number
Size (mm)
IADC Code
Manufacturer
Type
Serial No
Jets (mm)
Depth Out (m)
Depth In (m)
Total Drilled (m)
Hrs Run Today
Cumulative Hrs Run
Entry Date

DULL GRADE

T_i		Gage (mm)	
T_o		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type: Water ☐ Oil ☐ Other ☐

Time	
Density (kg/m³)	
Funnel Viscosity (s/l)	
Fluid Loss (cm³)	
pH	
Location	
Depth (m)	
PVT (m³)	

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
RUG UP		

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
16:00	18:30	2.50	1A	MOVE RIG W/MULLEN
18:30	18:45	0.25	21	HAND OVER MEETING
18:45	21:30	2.75	1	RIG UP POWER,STEAM AND ALL RELATED EQUIPMENT
21:30	21:45	0.25	21	SAFETY MEETING W/CREW PRIOR TO RAISE DERRICK
21:45	22:45	1.00	1	VISUALLY INS DERRICK PRIOR TO RAISE DERRICK BY ROMEO DASTOUS AND ERICK BIGRAS. DERRICK RAISED @ 22:30HRS
22:45	23:00	0.25	21	SAFETY MEETING W/WELDER
23:00	24:00	1.00	25	WELD DIVERTER FLANGE AND FLOW SHOW

Remarks:

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
DY52245_20100205_1B	Pason	2010	02	05

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	60:06:28.30N:117:29:-04.70W	NT	AT-GNG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	VERT	☐
	Operator's AFE	Contractor's Job No	Spud Date	Time
	09N010009	354	2010/02/06	01:00
	Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
	HALE YARDLEY	ERICK BIGRAS		

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection		
2) Detailed Inspection - Weekly (Using Check List)		
3) H2S Signs Posted if Required		
4) Well Licence & Stick Diagram Posted		
5) Flare Lines Staked		
6) BOP Drills Performed		
7) Visually Inspected BOPs - Flare Lines & Degasser Lines		
1) Rig Site Health & Safety Meeting (one/crew/month)		
2) CAODC Rig Safety Inspection Checklist (one/rig/month)		
3) Mast Inspection before Raising or Lowering		
4) Crown Saver Checked		
5) Motor Kills Checked		

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	06:00
Temp	-25
Current Conditions	CLEAR
Wind Direction	NE
Wind Strength	UP TO 19 KM/H
Road Condition	FAIR

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)
DP	4"FH	S95	102	65	23.8300	185	
DC	4.5" XH	DC	158	58	134.0000	18	
HW	4" FH	HWDP	102	65	41.6400	6	

MUD PUMPS

No.	Make	Stroke Length (mm)
1	BPMMP	229
2	BPMMP	229

GENERAL EQUIPMENT & SERVICES

Description	Hours
MUD PUMP	24.00
MANIFOLD SHACK	24.00
LOADER	24.00

CAODC

Pason

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)
SURFACE	UKSIDE	J-55	219	206	35.72	28	376	4	378
PRODUCTION	PARAGON	J-55	140	127	20.83	119	1469	4	1468

SHALE SHAKERS

No.	Top Screen			Middle Screen			Middle Screen			Bottom Screen		
	Size	Changed	New	Size	Changed	New	Size	Changed	New	Size	Changed	New
1	110	☑	☑	84	☑	☑		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐

TOUR 1

SIGNATURE OF DRILLER: ROMEO DASTOUS — START TIME: 00:00 — END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

	Drill Pipe	Stands (m)	
	Drill Pipe	Singles (m)	
Weight of DC (kdaN)		Kelly Down (m)	
Weight of string (kdaN)		Total (m)	

BITS

Bit Number	
Size (mm)	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets (mm)	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DULL GRADE

T_1		Gage (mm)	
T_2		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐
Time			
Density (kg/m³)			
Funnel Viscosity (s/l)			
Fluid Loss (cm³)			
pH			
Location			
Depth (m)			
PVT (m³)			

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
NIPPLE UP DIVERTER		

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations In Sequence & Remarks
00:00	02:00	2.00	25	WELD DIVERTER FLANGE AND FLOW SHOW
02:00	06:00	4.00	14C	NIPPLE UP/DIVERTER SYSTEM + DIVERTER LINE IN FLARE TANK. CHANGE HAMMER UNION ON DIVERTER LINE
06:00	06:15	0.25	21	HAND OVER MEETING
06:15	07:15	1.00	14C	CONT TO NIPPLE UP DIVERTER +DIVERTER LINE AND FLOW LINE +HCR COVER ON FLOW SHOW.
07:15	08:00	0.75	1	RIG UP 3RD PARTY EQUIPMENT + RIG

Remarks:

TOUR 2

SIGNATURE OF DRILLER: JOE LEADLEY — START TIME: 08:00 — END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

	Drill Pipe	Stands (m)	
	Drill Pipe	Singles (m)	
Weight of DC (kdaN)		Kelly Down (m)	
Weight of string (kdaN)		Total (m)	

BITS

Bit Number	
Size (mm)	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets (mm)	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DULL GRADE

T_1		Gage (mm)	
T_2		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐
Time			
Density (kg/m³)			
Funnel Viscosity (s/l)			
Fluid Loss (cm³)			
pH			
Location			
Depth (m)			
PVT (m³)			

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
RIG UP 3rd PARTY EQUIPMENT		

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations In Sequence & Remarks
08:00	16:00	8.00	1	STEAMED OFF AND CHANGED SHAKER SCREENS, INSTALLED ONE 84 AND ONE 110 MESH SCREEN. ORGANIZED THE SHALE BINS. MUD PRODUCT. RIG UP LIGHTING AROUND THE RIG. SPOTTED LIGHT TOWER. FINALIZED TIE ON OF FLARE TANK. BUILT UP SNOW RAMPS IN AND AROUND SHALE BINS.

Remarks:

TOUR 3

SIGNATURE OF DRILLER: ROMEO DASTOUS — START TIME: 16:00 — END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

	Drill Pipe	Stands (m)	
	Drill Pipe	Singles (m)	
Weight of DC (kdaN)		Kelly Down (m)	
Weight of string (kdaN)		Total (m)	0.00

BITS

Bit Number	
Size (mm)	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets (mm)	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DULL GRADE

T_1		Gage (mm)	
T_2		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐
Time			
Density (kg/m³)			
Funnel Viscosity (s/l)			
Fluid Loss (cm³)			
pH			
Location			
Depth (m)			
PVT (m³)			

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
COMUNICATION		

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	305.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations In Sequence & Remarks
16:00	18:00	2.00	1	CONSTRUCTION CREWS ASSISTING WITH LEASE PREPERATION
18:00	18:15	0.25	21	HAND OVER MEETING
18:15	24:00	5.75	1	CONT TO RIG UP AND MIX MUD PRIOR TO SPUD AND PICK UP BHA @22:15 PM CHANGE HARD DRIVE IN TOOL PUSH SHACK AND PASON SATELLITE DISH.

Remarks:

FRONT PAGE SUMMARY

CAODC Pason V.1.0

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
0Y52245_20100206_1A	Pason	2010	02	06

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	60:06:29.30N/117:29:04.70W	NT	LAT-LONG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	VERT	☐
	Operator's AFE	Contractor's Job No	Spud Date	Time
	09N010009	354	2010/02/06	01:00
	Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
	HALE YARDLEY	ERICK BIGRAS		

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection	HY	EB
2) Detailed Inspection - Weekly (Using Check List)	HY	EB
3) H2S Signs Posted if Required	HY	EB
4) Well Licence & Stick Diagram Posted	HY	EB
5) Flare Lines Staked	HY	EB
6) BOP Drills Performed	HY	EB
7) Visually Inspected BOPs - Flare Lines & Degasser Lines	HY	EB
1) Rig Site Health & Safety Meeting (one/crew/month)		EB
2) CAODC Rig Safety Inspection Checklist (one/rig/month)		EB
3) Mast Inspection before Raising or Lowering		
4) Crown Saver Checked		EB
5) Motor Kills Checked		

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	06:00
Temp	-25
Current Conditions	CLEAR
Wind Direction	NE
Wind Strength	UP TO 19 KM/H
Road Condition	FAIR

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)
DP	4"FH	SS95	102	65	23.8300	185	
DC	4.5" XH	DC	158	58	134.0000	18	
HW	4" FH	HWDP	102	65	41.6400	6	

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)
SURFACE	LKSIDE	J-55	219	206	35.72	28	378	4	378
PRODUCTION	PARAGON	J-55	140	127	20.83	119	1469	4	1468

MUD PUMPS

No.	Make	Stroke Length (mm)
1	BPMMP	229
2	BPMMP	229

GENERAL EQUIPMENT & SERVICES

Description	Hours
MUD PUMP	24.00
DIVERTER	24.00
LOADER	24.00

SHALE SHAKERS

No.	Top Screen Size	Changed	New	Middle Screen Size	Changed	New	Middle Screen Size	Changed	New	Bottom Screen Size	Changed	New
1	110	☒	☒	84	☒	☒		☐	☐		☐	☐

TOUR 1

SIGNATURE OF DRILLER: ROMEO DASTOUS — START TIME 00:00 — END TIME 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	311		0.30
1	BIT SUB	203	1	0.71
2	DC (8.00 IN)	203	1	18.02
1	BELL SUB	158	1	0.76
1	DC (6.25 IN)	158	1	8.78
1	TELADRIFT	158	1	2.62
5	DC (6.25 IN)	158	1	45.80
0	Drill Pipe	Stands (m)		0.00
0	Drill Pipe	Singles (m)		0.00
Weight of DC (kdaN)	12	Kelly Down (m)		7.01
Weight of string (kdaN)	19	Total (m)		84.00

BITS

Bit Number	1RR
Size (mm)	311
IADC Code	
Manufacturer	VAREL
Type	HE04JMRSV
Serial No	253625
Jets (mm)	14.3 14.3 14.3 14.3
Depth Out (m)	
Depth In (m)	0
Total Drilled (m)	84
Hrs Run Today	5.00
Cumulative Hrs Run	5.00
Entry Date	2010/02/06

DULL GRADE

T_i		Gage (mm)	
T_o		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type: Water ☒ Oil ☐ Other

Time	01:00	04:00	07:00
Density (kg/m³)	1000	1020	1020
Funnel Viscosity (s/l)	33	33	33
Fluid Loss (cm³)			
pH			
Location	SHAKER	SHAKER	SHAKER
Depth (m)	0	45	72
PVT (m³)	55	55	50

MUD MATERIALS ADDED

Product	Amount	Type
SAWDUST	30	SACK
MTL SURE SHALE	10	PAIL
KELZAN	2	SACK
HYPERDRILLAF247RD	2	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
HAZARD HUNT	15	

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)
0	84	DRILL	180	2

HOLE CONDITION

Hole Drag Up (kdaN)	0
Hole Drag Down (kdaN)	0
Torque at Bottom (Nm)	0
Fill on Bottom (m)	0

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	COMBINED	152	80	3640	7.00
2	COMBINED	152	80	3640	7.00

Remarks:

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type
05:00	21.00	0.5	0	TELEDRIFT
07:30	48.00	1.0	0	TELEDRIFT

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
00:00	00:15	0.25	21	PRE SPUD SAFETY MEETING CREW,RIG MANAGER AND WELL SUPREVISER
00:15	00:45	0.50	25	HAZARD HUNT WITH CREW
00:45	01:00	0.25	7	RIG SERVICE FUNCTION HYDRILL 18sec to close
01:00	02:00	1.00	2	DRILL 311mm HOLE F/ 27M TO 31M
02:00	02:15	0.25	7	RIG SERVICE & SET CROWN SAVER
02:15	04:45	2.50	2	DRILL FROM 31M TO 51M
04:45	05:00	0.25	10	DEVIATION SURVEY
05:00	06:00	1.00	2	DRILL FROM 51M TO 60 M
06:00	06:15	0.25	21	HAND OVER SAFETY MEETING
06:15	07:15	1.00	2	DRILL FROM 60 M TO 78M
07:15	07:30	0.25	10	DEVIATION SURVEY 1DEG @ 48M
07:30	08:00	0.50	2	DRILL 311mm HOLE F/ 78m TO 84m

Remarks: VISUALLY INS DIVERTER LINE,FLARE TANK,TONGS,BACK UP LINE,SLIPS,DOG COLARD CHECK DEAD MAN NUT,FUNCTION CROWN SAVER,VISUALLY INS ESCAPE LINE AND BUGGY E.B. BLOW DOWN BOILER 4X 150L FUEL LOADER CHECK BRAKE PINS, LINKAGE OK.CHECK ALL LOADER EQUIPEMENT OK. HOOK UP AND CHECK FLARE TANK IGNITER WORK FINE.

TOUR 2

SIGNATURE OF DRILLER: JOE LEADLEY — START TIME 08:00 — END TIME 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	311		0.30
1	BIT SUB	203	1	0.71
2	DC (8.00 IN)	203	1	18.02
1	BELL SUB	158	1	0.76
1	DC (6.25 IN)	158	1	8.78
1	TELADRIFT	158	1	2.62
5	DC (6.25 IN)	158	1	45.80
1	PONY DC	158	1	4.60
1	JARS-HYD	158	1	5.26
7	DC (6.25 IN)	158	1	64.07
0	Drill Pipe	Stands (m)		0.00
0	Drill Pipe	Singles (m)		0.00
Weight of DC (kdaN)	12	Kelly Down (m)		8.08
Weight of string (kdaN)	23	Total (m)		159.00

BITS

Bit Number	1RR
Size (mm)	311
IADC Code	
Manufacturer	VAREL
Type	HE04JMRSV
Serial No	253625
Jets (mm)	14.3 14.3 14.3 14.3
Depth Out (m)	
Depth In (m)	0
Total Drilled (m)	159
Hrs Run Today	7.00
Cumulative Hrs Run	12.00
Entry Date	2010/02/06

DULL GRADE

T_i		Gage (mm)	
T_o		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type: Water ☒ Oil ☐ Other

Time	09:00	12:00	15:00
Density (kg/m³)	1030	1040	1050
Funnel Viscosity (s/l)	32	35	37
Fluid Loss (cm³)			
pH	8	8	8
Location	SHAKER	SHAKER	SHAKER
Depth (m)	83	118	150
PVT (m³)	46	48	51

MUD MATERIALS ADDED

Product	Amount	Type
HYPERDRILLAF247RD	1	SACK
MILLZAN	2	SACK
SAWDUST	20	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)
UNITED	8.00	1060	1040	1200

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
CONTAINING SPILLS	35	

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)
84	159	DRILL	160	4

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	COMBINED	152	80	5060	8.00
2	COMBINED	152	80	5060	8.00

Remarks:

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type
11:00	77.00	0.5	0	TELEDRIFT
13:30	104.00	0.5	0	TELEDRIFT

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
08:00	08:15	0.25	7	RIG SERVICE(FUNC. HYDRIL 19 SEC. TO CLOSE)
08:15	08:45	0.50	2	DRILL 311mm HOLE F/ 84m TO 88m
08:45	09:00	0.25	25	FIX FLOW TEE
09:00	11:00	2.00	2	DRILL 311mm HOLE F/ 88m TO 107m
11:00	11:15	0.25	10	SURVEY 77m @ 0.5DEG
11:15	13:30	2.25	2	DRILL 311mm HOLE F/ 107m TO 134m
13:30	13:45	0.25	10	SURVEY 104m @ 0.5DEG
13:45	16:00	2.25	2	DRILL 311mm HOLE F/ 134m TO 159m ENCOUNTER COARSE SAND FROM 152M TO 172M.

Remarks: DWA FUNC. CROWN SAVER. INSPECTED BRAKES, PINS, ROLLERS & LINKAGES, TONG & BACKUP LINES, SLIP DIES & SAFETY PINS, DIVERTER LINE, FLARE TANK, & DEAD MAN BLOW DOWN BOILER 4 x 150L

TOUR 3

SIGNATURE OF DRILLER: ROMEO DASTOUS — START TIME 16:00 — END TIME 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	311		0.30
1	BIT SUB	203	1	0.71
2	DC (8.00 IN)	203	1	18.02
1	BELL SUB	158	1	0.76
1	DC (6.25 IN)	158	1	8.78
1	TELADRIFT	158	1	2.62
5	DC (6.25 IN)	158	1	45.80
1	PONY DC	158	1	4.60
1	JARS-HYD	158	1	5.26
8	DC (6.25 IN)	158	1	72.93
1	X/O	158	1	0.27
6	HWDP(4.0 IN)	135	1	55.44
0	Drill Pipe	Stands (m)		0.00
1	Drill Pipe	Singles (m)		9.53
Weight of DC (kdaN)	12	Kelly Down (m)		10.98
Weight of string (kdaN)	23	Total (m)		236.00

BITS

Bit Number	1RR
Size (mm)	311
IADC Code	
Manufacturer	VAREL
Type	HEO4JMRSV
Serial No	253625
Jets (mm)	14.3 14.3 14.3 14.3
Depth Out (m)	
Depth In (m)	0
Total Drilled (m)	236
Hrs Run Today	6.50
Cumulative Hrs Run	18.50
Entry Date	2010/02/06

DULL GRADE

T_i		Gage (mm)	
T_o		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type: Water ☒ Oil ☐ Other

Time	20:00		
Density (kg/m³)	1050		
Funnel Viscosity (s/l)	36		
Fluid Loss (cm³)			
pH	8		
Location	SHAKER		
Depth (m)	193		
PVT (m³)	53		

MUD MATERIALS ADDED

Product	Amount	Type
KELZAN	2	SACK
CELLOPHANE	1	SACK
KWIKSEAL	3	SACK
SAWDUST	40	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
WORKING ON PUMP	27	

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)
159	236	DRILL	150	3

HOLE CONDITION

Hole Drag Up (kdaN)	3
Hole Drag Down (kdaN)	2
Torque at Bottom (Nm)	0
Fill on Bottom (m)	0

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	SINGLE	152	75	4800	8.00
2	SINGLE	152	75	4800	7.00

Remarks:

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type
18:45	179.00	1.0	0	TELEDRIFT
21:45	207.00	1.0	0	TELEDRIFT

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
16:00	16:30	0.50	5	BUILD VOL. & VIS FOR LOSSES
16:30	17:30	1.00	2	DRILL 311mm HOLE F/ 159m TO 171m
17:30	18:00	0.50	7	RIG SERVICE(FUNC. DIVERTER 20 SEC. TO CLOSE
18:00	18:15	0.25	21	HAND OVER SAFETY MEETING
18:15	23:45	5.50	2	DRILL 311mm HOLE F/ 171m TO 236 M
23:45	24:00	0.25	10	DEVIATION SURVEY ACCU TIME.

Remarks: FUNCTION CROWN SAVER OK,CHECK TONGS, PINS, BACK UP & MAKE UP LINE. CHECK TUGGER AND SAFETY HOOK , BOOM LINE, SLIPSBOTH SET , CHECK DOG COLLAR. VISUALLY CHECK ALL DIVERTER EQUIPEMENT OK.BLOW BOILER 4X 150 LITER. FUEL LOADER 250L

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
0Y52245_20100207_1D	Pason	2010	02	07

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	60:06:29.30N/117:29:-04.70W	NT	AT-CNG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	VERT	☐
	Operator's AFE	Contractor's Job No	Spud Date	Time
	09N010009	354	2010/02/06	01:00
	Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
	HALE YARDLEY	ERICK BIGRAS		

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection	HY	EB
2) Detailed Inspection - Weekly (Using Check List)	HY	EB
3) H2S Signs Posted if Required	HY	EB
4) Well Licence & Stick Diagram Posted	HY	EB
5) Flare Lines Staked	HY	EB
6) BOP Drills Performed	HY	EB
7) Visually Inspected BOPs - Flare Lines & Degasser Lines	HY	EB
1) Rig Site Health & Safety Meeting (crew/crew/month)		EB
2) CAODC Rig Safety Inspection Checklist (one/rig/month)		
3) Mast Inspection before Raising or Lowering		
4) Crown Saver Checked		
5) Motor Kills Checked		EB

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	06:00
Temp	-28
Current Conditions	CLEAR
Wind Direction	NE
Wind Strength	UP TO 19 KM/H
Road Condition	FAIR

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)
DP	4"FH	SS95	102	65	23.8300	185	
DC	4.5" XH	DC	158	58	134.0000	18	
HW	4" FH	HWDP	102	65	41.6400	6	

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)
SURFACE	LKSIDE	J-55	219	206	35.72	28	378	4	376
PRODUCTION	PARAGON	J-55	140	127	20.83	119	1469	4	1468

MUD PUMPS

No.	Make	Stroke Length (mm)
1	BPMMP	229
2	BPMMP	229

GENERAL EQUIPMENT & SERVICES

Description	Hours
MUD PUMP	24.00
DIVERTER	24.00
LOADER	24.00

CAODC Pason V1.0

SHALE SHAKERS

No.	Top Screen			Middle Screen			Middle Screen			Bottom Screen		
	Size	Changed	New	Size	Changed	New	Size	Changed	New	Size	Changed	New
1	110	☐	☐	84	☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐		☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐		☐	☐	☐	☐	☐	☐	☐	☐

TOUR 1

SIGNATURE OF DRILLER: ROMEO DASTOUS — START TIME: 00:00 — END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	311		0.30
1	BIT SUB	203	1	0.71
2	DC (8.00 IN)	203	1	18.02
1	BELL SUB	158	1	0.76
1	DC (6.25 IN)	158	1	8.78
1	TELADRIFT	158	1	2.62
5	DC (6.25 IN)	158	1	45.80
1	PONY DC	158	1	4.60
1	JARS-HYD	158	1	5.26
8	DC (6.25 IN)	158	1	72.93
1	X/O	158	1	0.27
6	HWDP(4.0 IN)	135	1	55.44
5	Drill Pipe		Stands (m)	95.48
1	Drill Pipe		Singles (m)	9.57
Weight of DC (kdaN)	12	Kelly Down (m)		3.46
Weight of string (kdaN)	26	Total (m)		324.00

BITS

Bit Number	1RR
Size (mm)	311
IADC Code	
Manufacturer	VAREL
Type	HE04JMRSV
Serial No	253625
Jets (mm)	14.3 14.3 14.3 14.3
Depth Out (m)	
Depth In (m)	0
Total Drilled (m)	324
Hrs Run Today	6.50
Cumulative Hrs Run	25.00
Entry Date	2010/02/07

DULL GRADE

T_i		Gage (mm)	
T_o		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☒	Oil ☐	Other ☐
Time	02:00	04:00	
Density (kg/m³)	1050	1040	
Funnel Viscosity (s/l)	40	41	
Fluid Loss (cm³)			
pH	8	8	
Location	SHAKER	SHAKER	
Depth (m)	255	275	
PVT (m³)	55	51	

MUD MATERIALS ADDED

Product	Amount	Type
SAWDUST	15	SACK
KELZAN	1	SACK
HYPERDRILLAF247RD	1	SACK
DETERGENT	1	PAIL
TKPP	1	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)
CENTRIFUGE	8.00	1040	1700	1020

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
MOUSE HOLE CONN		26

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)
236	324	DRILL	150	4

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	CONVENTIONAL	152	80	4400	8.00
2	CONVENTIONAL	152	80	4400	8.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	3
Hole Drag Down (kdaN)	2
Torque at Bottom (Nm)	0
Fill on Bottom (m)	0

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type
00:45	216.00	1.0	0	TELEDRIFT
03:30	234.00	1.0	0	TELEDRIFT
06:00	273.00	0.5	0	TELEDRIFT

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
00:00	00:45	0.75	2	DRILL 311 MM HOLE FROM 236 M TO 246M
00:45	01:00	0.25	7	RIG SERVICE& FUNCTION DIVERTER 20 SEC CLOSED
01:00	01:15	0.25	10	DEVIATION SURVEY
01:15	03:00	1.75	2	DRILL 311MM HOLE FROM 246 M TO 274M
03:00	03:15	0.25	10	DEVIATION SURVEY
03:15	05:45	2.50	2	DRILL 311MM HOLE FROM 274M TO 303 M
05:45	06:00	0.25	10	DEVIATION SURVEY
06:00	06:15	0.25	21	HAND OVER SAFETY MEETING
06:15	08:00	1.75	2	DRILL 311 MM HOLE FROM 303 M TO 324M

Remarks: FUNCTION CROWN SAVER / BRAKE PINS,LINKAGE ,ROLLERS,CHECK DC SLIPS, DP SLIPS.
BREAK OUT LINE AND MAKE UP , BACK UP LINE ,TUGGER BOOM LINE , EASY RIDER . FALL ARREST, BLOW BOILER 4X 16s LITER, CHECK DEAD MAN BOLTS AND NUTS, VISUALLY
CH3ECK ALL DIVERTER EQUIPEMENT & DEEGASSER LINE OK.

TOUR 2

SIGNATURE OF DRILLER: JOE LEADLEY — START TIME: 08:00 — END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	311		0.30
1	BIT SUB	203	1	0.71
2	DC (8.00 IN)	203	1	18.02
1	BELL SUB	158	1	0.76
1	DC (6.25 IN)	158	1	8.78
1	TELADRIFT	158	1	2.62
5	DC (6.25 IN)	158	1	45.80
1	PONY DC	158	1	4.60
1	JARS-HYD	158	1	5.26
8	DC (6.25 IN)	158	1	72.93
1	X/O	158	1	0.27
6	HWDP(4.0 IN)	135	1	55.44
8	Drill Pipe		Stands (m)	152.71
0	Drill Pipe		Singles (m)	0.00
Weight of DC (kdaN)	12	Kelly Down (m)		9.80
Weight of string (kdaN)	26	Total (m)		378.00

BITS

Bit Number	1RR
Size (mm)	311
IADC Code	
Manufacturer	VAREL
Type	HE04JMRSV
Serial No	235625
Jets (mm)	14.3 14.3 14.3 14.3
Depth Out (m)	
Depth In (m)	0
Total Drilled (m)	378
Hrs Run Today	3.75
Cumulative Hrs Run	28.75
Entry Date	2010/02/07

DULL GRADE

T_i		Gage (mm)	
T_o		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☒	Oil ☐	Other ☐
Time	08:00	10:00	13:00
Density (kg/m³)	1060	1070	1080
Funnel Viscosity (s/l)	40	43	57
Fluid Loss (cm³)			
pH	8	8	8
Location	SHAKER	SHAKER	SHAKER
Depth (m)	320	350	378
PVT (m³)	51	51	52

MUD MATERIALS ADDED

Product	Amount	Type
GEL	25	SACK
MILLZAN	2	SACK
HYPERDRILLAF247RD	1	SACK
SAWDUST	10	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)
UNITED	8.00	1080	1060	1220

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
TRIPPING		29

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)
324	378	DRILL	150	5

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	CONVENTIONAL	152	80	6050	3.75
2	CONVENTIONAL	152	80	6050	3.75

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type
08:30	302.00	0.5	0	TELEDRIFT
11:15	330.00	1.0	0	TELEDRIFT
12:45	348.00	1.0	0	TELEDRIFT

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
08:00	08:15	0.25	7	RIG SERVICE(FUNC. DIVERTER 19 SEC. TO CLOSE)
08:15	08:30	0.25	2	DRILL 311mm HOLE F/ 324m TO 332m
08:30	08:45	0.25	10	SURVEY 302m @ 0.5 DEG.
08:45	11:00	2.25	2	DRILL 311mm HOLE F/ 332m TO 360m
11:00	11:15	0.25	10	SURVEY @ 330m 1.0 DEG
11:15	12:30	1.25	2	DRILL 311mm HOLE F/ 360m TO 378m
12:30	12:45	0.25	5	CIRC. HOLE CLEAN
12:45	13:00	0.25	10	SURVEY @ 348m 1.0 DEG
13:00	16:00	3.00	6	CLEAN OUT TRIP TO BIT(BLOW KELLY BEFORE TRIP)

Remarks: DWA FUNC. CROWN SAVER
VISUALLY INSPECTED BRAKES & LINKAGES, TONGS & HOLD BACK LINES, ALL SLIPS & SAFETY PINS, DEAD MAN NUTS
DIVERTER LINE & FLARE TANK
BLEW BOILER 4 x 150L

TOUR 3

SIGNATURE OF DRILLER: ROMEO DASTOUS — START TIME: 16:00 — END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	311		0.30
1	BIT SUB	203	1	0.71
2	DC (8.00 IN)	203	1	18.02
1	BELL SUB	158	1	0.76
1	DC (6.25 IN)	158	1	8.78
1	TELADRIFT	158	1	2.62
5	DC (6.25 IN)	158	1	45.80
1	PONY DC	158	1	4.60
1	JARS-HYD	158	1	5.26
8	DC (6.25 IN)	158	1	72.93
1	X/O	158	1	0.27
6	HWDP(4.0 IN)	135	1	55.44
8	Drill Pipe		Stands (m)	152.71
0	Drill Pipe		Singles (m)	0.00
Weight of DC (kdaN)	12	Kelly Down (m)		10.80
Weight of string (kdaN)	26	Total (m)		379.00

BITS

Bit Number	1RR
Size (mm)	311
IADC Code	
Manufacturer	VAREL
Type	HE04JMRSV
Serial No	235625
Jets (mm)	14.3 14.3 14.3 14.3
Depth Out (m)	379
Depth In (m)	0
Total Drilled (m)	379
Hrs Run Today	0.25
Cumulative Hrs Run	29.00
Entry Date	2010/02/07

DULL GRADE

T_i	1	Gage (mm)	1
T_o	1	ODC	CT
MDC	WT	Reason Pulled	TD
LOC	A	Total Run (m/hr)	13.07
BRG	E		

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐
Time			
Density (kg/m³)			
Funnel Viscosity (s/l)			
Fluid Loss (cm³)			
pH			
Location			
Depth (m)			
PVT (m³)			

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
TRIPPING		25

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)
378	379	DRILL	160	4

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	SINGLE	152	80	4500	2.00
2	SINGLE	152	0	4500	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	2
Hole Drag Down (kdaN)	1
Torque at Bottom (Nm)	0
Fill on Bottom (m)	0

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	280.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
16:00	16:45	0.75	6	TRIP IN(PIPE STRAP=RIG 208.15-STRAP 208.62=DIFF 0.47)
16:45	17:00	0.25	5	WASH THROUGH BRIDGE @ 190m
17:00	17:45	0.75	6	RUN INTO 374M CIRC BOTTOMS UP
17:45	18:00	0.25	21	HANDOVER MEETING W/ CREWS
18:00	18:30	0.50	5	CONDITION MUD & CIRCULATE
18:30	18:45	0.25	2	DRILL FROM 378M TO 379.0
18:45	20:00	1.25	5	CONDITION MUD & CIRCULATE
20:00	23:00	3.00	6B	BLOW KELLY & TRIP OUT OF HOLE TO RUN CASING LAY DOWN 8" DC , TRIP VOL CAL. 4.49 ACT / 5.02 DIFF .53M3
23:00	23:15	0.25	7	RIG SERVICE
23:15	23:30	0.25	21D	PRE-JOB SAFETY ON RUNNING CASING.
23:30	24:00	0.50	12A	RIG UP/ TO RUN CASING SERIAL #32607/SLX-65 TONNE 6 5/8DATE CHECK 7/7/2005.

Remarks: FUNCTION CROWN SAVER,VISUALLY INS DIVERTER LINE AND FLARE TANK
CHECK DEAD MAN NUTS,INS TUGGER LINE,HOOK,BRAKE PINS,ROLLERS,LINKAGE
FUEL LOADER250 L BLOW DOWN BOILER 4 X 150L

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
OYS2245_20100208_1A	Pason	2010	02	08

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	60:06:39.30N/117:39:04.70W	NT	AT-CNG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	VERT	☐
	Operator's AFE	Contractor's Job No	Spud Date	Time
	09N010009	354	2010/02/06	01:00
	Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
	HALE YARDLEY	ERICK BIGRAS		

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection		
2) Detailed Inspection - Weekly (Using Check List)		
3) H2S Signs Posted if Required		
4) Well Licence & Stick Diagram Posted		
5) Flare Lines Staked		
6) BOP Drills Performed		
7) Visually Inspected BOPs - Flare Lines & Degasser Lines		
1) Rig Site Health & Safety Meeting (one/crew/month)		
2) CAODC Rig Safety Inspection Checklist (one/rig/month)		
3) Mast Inspection before Raising or Lowering		
4) Crown Saver Checked		
5) Motor Kills Checked	EB	

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	06:00
Temp	-16
Current Conditions	CLEAR
Wind Direction	NE
Wind Strength	UP TO 19 KM/H
Road Condition	FAIR

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)
DP	4"FH	SS95	102	65	23.8300	185	
DC	4.5" XH	DC	158	58	134.0000	18	
HW	4" FH	HWDP	102	65	41.6400	6	

MUD PUMPS

No.	Make	Stroke Length (mm)
1	BPMMP	229
2	BPMMP	229

GENERAL EQUIPMENT & SERVICES

Description	Hours
MUD PUMP	24.00
MANIFOLD	24.00
LOADER	24.00

CAODC

Pason

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)
SURFACE	LKSIDE	J-55	219	206	35.72	28	378	4	378
PRODUCTION	PARAGON	J-55	140	127	20.83	119	1469	4	1468

SHALE SHAKERS

No.	Top Screen Size	Top Screen Changed	Top Screen New	Middle Screen Size	Middle Screen Changed	Middle Screen New	Middle Screen Size	Middle Screen Changed	Middle Screen New	Bottom Screen Size	Bottom Screen Changed	Bottom Screen New
1	110	☒	☒	84	☒	☒		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐

TOUR 1

SIGNATURE OF DRILLER: ROMEO DASTOUS

START TIME: 00:00 — END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	311		0.20
1	TELEDRIFT	158	1	2.62
5	DC (6.25 IN)	158	1	45.80
1	PONY DC	158	1	4.60
1	JARS-HYD	158	1	5.26
9	DC (6.25 IN)	158	1	82.42
1	X/O	158	1	0.27
6	HWDP(4.0 IN)	135	1	55.44
8	Drill Pipe	Stands (m)		152.71
0	Drill Pipe	Singles (m)		0.00
Weight of DC (kdaN)	12	Kelly Down (m)		11.70
Weight of string (kdaN)	26	Total (m)		361.02

BITS

Bit Number	1RR
Size (mm)	311
IADC Code	
Manufacturer	VAREL
Type	HE04JMRSV
Serial No	253625
Jets (mm)	14.3 14.3 14.3 14.3
Depth Out (m)	
Depth In (m)	0
Total Drilled (m)	
Hrs Run Today	6.50
Cumulative Hrs Run	25.00
Entry Date	2010/02/07

DULL GRADE

T_1		Gage (mm)	
T_2		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☒ Oil ☐ Other ☐
Time	03:00
Density (kg/m³)	1050
Funnel Viscosity (s/l)	80
Fluid Loss (cm³)	
pH	
Location	
Depth (m)	
PVT (m³)	

MUD MATERIALS ADDED

Product	Amount	Type
DESCO	2	SACK
KELZAN	1	SACK
GEL	15	SACK
SODA ASH	1	SACK
CELLOPHANE	6	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)
CENTRIFUGE	8.00	1050	1700	1040

SAFETY

Time	Safety Topic	MEHL (kdaN)	MACP (kpa)
	CEMENTING	15	

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	SINGLE	152	0	700	0.00
2	SINGLE	152	80	700	2.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	0
Hole Drag Down (kdaN)	0
Torque at Bottom (Nm)	0
Fill on Bottom (m)	0

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
00:00	02:30	2.50	12B	CONT RUN CASING
02:30	04:15	1.75	5	CONDITION MUD & CIRCULATE WORKED PIPE @ 378 M
04:15	04:30	0.25	21D	PRE-JOB SAFETY ON CEMENTING
04:30	05:45	1.25	12C	RIG UP TO & CEMENTING CASING
05:45	06:00	0.25	21	HAND OVER MEETING SAFETY MEETING
06:00	08:00	2.00	13	WAIT ON CEMENT

Remarks: CHECK AND FUNCTION CROWN SAVER OK, CHECK BRAKE PINS, LINKAGE OK,CHECK LOADER EQUIPEMENT
RAN 29 JTS OF 219 MM, 35.7 KG/M, J-55, - 206 MM ID SURFACE CSG LENGTH 380.79 TO 379M. CEMENTED WITH 33T OF G
PLUG IN PLACE @ 05:50 8 FEB WITH 5 M3 GOOD RETURNS. ANNULUS HELD OK, HELD 16 MPA ON CASING FOR 10 MINUTES
VISUALLY INS ESCAPE BUGGY AND ESCAPE LINE E.B.

TOUR 2

SIGNATURE OF DRILLER: JOE LEADLEY

START TIME: 08:00 — END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
8	Drill Pipe	Stands (m)		152.71
0	Drill Pipe	Singles (m)		0.00
Weight of DC (kdaN)	12	Kelly Down (m)		10.80
Weight of string (kdaN)	26	Total (m)		163.51

BITS

Bit Number	1RR
Size (mm)	311
IADC Code	
Manufacturer	VAREL
Type	HE04JMRSV
Serial No	235625
Jets (mm)	14.3 14.3 14.3 14.3
Depth Out (m)	
Depth In (m)	0
Total Drilled (m)	
Hrs Run Today	3.75
Cumulative Hrs Run	28.75
Entry Date	2010/02/07

DULL GRADE

T_1		Gage (mm)	
T_2		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☒ Oil ☐ Other ☐
Time	
Density (kg/m³)	
Funnel Viscosity (s/l)	
Fluid Loss (cm³)	
pH	
Location	
Depth (m)	
PVT (m³)	

MUD MATERIALS ADDED

Product	Amount	Type
SAWDUST	23	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
HAMMER WRENCHES		

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
08:00	10:00	2.00	13	WAIT ON CEMENT STRIP MUD TO WATER
10:00	11:00	1.00	14C	NIPPLE DOWN DIVERTER SYSTEM + DIVERTER LINE,HCR
11:00	11:15	0.25	21	SAFETY MEETING W/WELDER
11:15	14:15	3.00	25	CUT CASING,DIVERTER FLANGE AND LAY OUT DIVERTER +WELD ON BOWL.
14:15	15:00	0.75	9A	SLIP/CUT DRILLING LINE
15:00	15:30	0.50	25	CONT TO WELD BOWL,COOL DOWN AND PRESSURE TEST BOWL.
15:30	15:45	0.25	21	SAFETY MEETING W/CREW PRIOR TO NIPPLE UP BOP AND ALL RELATED EQUIPMENT.
15:45	16:00	0.25	14A	NIPPLE UP BOP , HCR,KILL LINE,FLARE LINE,FLARE TANK,PRESSURE RELASE LINE,MANIFOLD.

Remarks: VISUALLY INS BRAKE PINS,ROLLERS,LINKADE TONGS,BACK UP LINES,FUNCTION CROWN SAVER
CHECK DEAD MAN NUTS.

TOUR 3

SIGNATURE OF DRILLER: ROMEO DASTOUS

START TIME: 16:00 — END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	311		0.30
1	BIT SUB	203	1	0.71
1	DC (6.25 IN)	158	1	8.78
1	TELEDRIFT	158	1	2.62
5	DC (6.25 IN)	158	1	45.80
1	PONY DC	158	1	4.60
1	JARS-HYD	158	1	5.26
8	DC (6.25 IN)	158	1	72.93
1	X/O	158	1	0.27
6	HWDP(4.0 IN)	135	1	55.44
8	Drill Pipe	Stands (m)		152.71
0	Drill Pipe	Singles (m)		0.00
Weight of DC (kdaN)	12	Kelly Down (m)		10.80
Weight of string (kdaN)	26	Total (m)		360.22

BITS

Bit Number	1RR
Size (mm)	311
IADC Code	
Manufacturer	VAREL
Type	HE04JMRSV
Serial No	235625
Jets (mm)	14.3 14.3 14.3 14.3
Depth Out (m)	
Depth In (m)	0
Total Drilled (m)	
Hrs Run Today	0.25
Cumulative Hrs Run	29.00
Entry Date	2010/02/07

DULL GRADE

T_1	1	Gage (mm)	1
T_2	1	ODC	CT
MDC	WT	Reason Pulled	TD
LOC	A	Total Run (m/hr)	
BRG	E		

MUD RECORD

Mud Type	Water ☒ Oil ☐ Other ☐
Time	
Density (kg/m³)	
Funnel Viscosity (s/l)	
Fluid Loss (cm³)	
pH	
Location	
Depth (m)	
PVT (m³)	

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
PRESSURE TESTING		

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
16:00	18:00	2.00	14	CONT TO NIPPLE UP BOP AND ALL RELATED EQUIPMENT.
18:00	18:15	0.25	21	CREW HANDOVER MEETING
18:15	19:30	1.25	14	NIPPLE UP BOP
19:30	19:45	0.25	21	SAFETY MEETING W/PRESSURE TESTER
19:45	24:00	4.25	15	TEST BOP PRESS TEST ALL MANIFOLD VALVE SWEEP LINE OUTSIDE HCR VALVE TO 1500 KPA LOW AND 14000 KPA HIGH 10 MIN EACH .

Remarks:

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
0Y52245_20100208_1A	Pason	2010	02	08

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	60:06:29.30N/117:29:-04.70W	NT	LAT-LONG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	VERT	☐
	Operator's AFE	Contractor's Job No	Spud Date	Time
	09N010009	354	2010/02/06	01:00
	Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
	HALE YARDLEY	ERICK BIGRAS		

DAILY CHECKS (OP / RM)

1) Daily Walk Around Inspection
2) Detailed Inspection - Weekly (Using Check List)
3) H2S Signs Posted if Required
4) Well Licence & Stick Diagram Posted
5) Flare Lines Staked
6) BOP Drills Performed
7) Visually Inspected BOPs - Flare Lines & Degasser Lines

1) Rig Site Health & Safety Meeting (one/crew/month)
2) CAODC Rig Safety Inspection Checklist (one/rig/month)
3) Mast Inspection before Raising or Lowering
4) Crown Saver Checked
5) Motor Kills Checked

FUEL @ 08:00 HOURS

Rig / Boiler / Op Fuel

WEATHER

Time / Temp / Current Conditions / Wind Direction / Wind Strength / Road Condition

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)

MUD PUMPS

No.	Make	Stroke Length (mm)

GENERAL EQUIPMENT & SERVICES

Description	Hours

SHALE SHAKERS

No. / Top Screen / Middle Screen / Middle Screen / Bottom Screen (Size, Changed, New)

CAODC
Pason

TOUR 1

SIGNATURE OF DRILLER: ROMEO DASTOUS

START TIME: 00:00 — END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	158	1	0.71
1	TELEDRIFT	158	1	2.62
16	DC (6.25 IN)	158	1	137.37
1	X/O	158	1	0.27
6	HWDP(4.0 IN)	135	1	55.44
0	Drill Pipe	Stands (m)		0.00
0	Drill Pipe	Singles (m)		0.00
Weight of DC (kdaN)		Kelly Down (m)		0.00
Weight of string (kdaN)		Total (m)		196.61

BITS: Bit Number / Size (mm) / IADC Code / Manufacturer / Type / Serial No / Jets (mm) / Depth Out (m) / Depth In (m) / Total Drilled (m) / Hrs Run Today / Cumulative Hrs Run / Entry Date

DULL GRADE: T_i / T_o / MDC / LOC / BRG / Gage (mm) / ODC / Reason Pulled / Total Run (m/hr)

MUD RECORD: Mud Type (Water ☐ Oil ☐ Other) / Time / Density (kg/m³) / Funnel Viscosity (s/l) / Fluid Loss (cm³) / pH / Location / Depth (m) / PVT (m³)

MUD MATERIALS ADDED: Product / Amount / Type

SOLIDS CONTROL: Equipment Name / Hours Run / Intake Density (kg/m³) / Over Flow Density (kg/m³) / Under Flow Density (kg/m³)

SAFETY: Safety Topic / MEHL (kdaN) / MACP (kpa)

METRES DRILLED: From (m) / To (m) / D-R-C / RPM / WOB (kdaN)

REDUCED PUMP SPEED: No. / Pressure (kpa) / Strokes/min / Depth (m)

CIRCULATION: Pump / Type / Liner Size (mm) / SPM / Pressure (kpa) / Hours Run — Remarks:

HOLE CONDITION: Hole Drag Up (kdaN) / Hole Drag Down (kdaN) / Torque at Bottom (Nm) / Fill on Bottom (m)

BOILER: No. / Hours Run / pH / Stack Temp (°C)

DEVIATION SURVEYS: Time / Depth (m) / Deviation / Direction / Type

TIME LOG: From / To / Elapsed / Code / Details of Operations in Sequence & Remarks — Remarks:

TOUR 2

SIGNATURE OF DRILLER: JOE LEADLEY

START TIME: 08:00 — END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	158	1	0.71
1	TELEDRIFT	158	1	2.62
5	DC (6.25 IN)	158	1	45.01
1	SHORT DC 6.25"	158	1	4.60
1	JARS-MECH	158	1	5.26
9	DC (6.25 IN)	158	1	82.50
1	X/O	158	1	0.27
6	HWDP(4.0 IN)	135	1	55.44
8	Drill Pipe	Stands (m)		152.71
0	Drill Pipe	Singles (m)		0.00
Weight of DC (kdaN)		Kelly Down (m)		11.70
Weight of string (kdaN)		Total (m)		361.02

BITS / DULL GRADE / MUD RECORD / MUD MATERIALS ADDED / SOLIDS CONTROL / SAFETY / METRES DRILLED / REDUCED PUMP SPEED / CIRCULATION / HOLE CONDITION / BOILER / DEVIATION SURVEYS / TIME LOG — Remarks:

TOUR 3

SIGNATURE OF DRILLER: ROMEO DASTOUS

START TIME: 16:00 — END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
	Drill Pipe	Stands (m)		
	Drill Pipe	Singles (m)		
Weight of DC (kdaN)		Kelly Down (m)		
Weight of string (kdaN)		Total (m)		

BITS / DULL GRADE / MUD RECORD / MUD MATERIALS ADDED / SOLIDS CONTROL / SAFETY / METRES DRILLED / REDUCED PUMP SPEED / CIRCULATION / HOLE CONDITION / BOILER / DEVIATION SURVEYS / TIME LOG — Remarks:

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
0Y52245_20100209_1B	Pason	2010	02	09

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	60:06:29.30N/117:29:-04.70W	NT	AT-LONG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	VERT	☐

Operator's AFE	Contractor's Job No	Spud Date	Time
09N010009	354	2010/02/06	01:00

Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
HALE YARDLEY	ERICK BIGRAS		

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection	HY	EB
2) Detailed Inspection - Weekly (Using Check List)	HY	EB
3) H2S Signs Posted if Required	HY	EB
4) Well Licence & Stick Diagram Posted	HY	EB
5) Flare Lines Staked	HY	EB
6) BOP Drills Performed	HY	EB
7) Visually Inspected BOPs - Flare Lines & Degasser Lines	HY	EB
1) Rig Site Health & Safety Meeting (one/crew/month)		EB
2) CAODC Rig Safety Inspection Checklist (one/rig/month)		EB
3) Mast Inspection before Raising or Lowering		EB
4) Crown Saver Checked		EB
5) Motor Kills Checked		EB

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	06:00
Temp	-16
Current Conditions	CLEAR
Wind Direction	NE
Wind Strength	UP TO 19 KM/H
Road Condition	FAIR

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)
DP	4"FH	S95	102	65	23.8300	185	
DC	4.5" XH	DC	158	58	134.0000	18	
HW	4" FH	HWDP	102	65	41.6400	6	

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)
SURFACE	LKSIDE	J-55	219	206	35.72	28	378	4	378
PRODUCTION	PARAGON	J-55	140	127	20.83	119	1469	4	1468

MUD PUMPS

No.	Make	Stroke Length (mm)
1	BPMMP	229
2	BPMMP	229

GENERAL EQUIPMENT & SERVICES

Description	Hours
MUD PUMP	24.00
DIVERTER	24.00
LOADER	24.00

CAODC Pason v3.1.0

SHALE SHAKERS

No.	Top Screen Size	Top Screen Changed	Top Screen New	Middle Screen Size	Middle Screen Changed	Middle Screen New	Middle Screen Size	Middle Screen Changed	Middle Screen New	Bottom Screen Size	Bottom Screen Changed	Bottom Screen New
1	200	☐	☐	200	☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐

TOUR 1

SIGNATURE OF DRILLER: ROMEO DASTOUS

START TIME: 00:00 END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	158	1	0.71
1	TELEDRIFT	158	1	2.62
5	DC (6.25 IN)	158	1	45.01
1	SHORT DC 6.25"	158	1	4.60
1	JARS-MECH	158	1	5.26
9	DC (6.25 IN)	158	1	82.50
1	X/O	158	1	0.27
6	HWDP(4.0 IN)	135	1	55.44
8	Drill Pipe	Stands (m)		152.71
0	Drill Pipe	Singles (m)		0.00
Weight of DC (kdaN)		Kelly Down (m)		11.40
Weight of string (kdaN)		Total (m)		360.72

BITS

Bit Number	2
Size (mm)	200
IADC Code	M 2 2 2
Manufacturer	REED
Type	DSX416M-A3PDC
Serial No	114176
Jets (mm)	12.0 12.0 12.0 12.0 12.0 12.0
Depth Out (m)	
Depth In (m)	379
Total Drilled (m)	0
Hrs Run Today	
Cumulative Hrs Run	0.00
Entry Date	2010/02/09

DULL GRADE

T_I		Gage (mm)	
T_a		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐
Time			
Density (kg/m³)			
Funnel Viscosity (s/l)			
Fluid Loss (cm³)			
pH			
Location			
Depth (m)			
PVT (m³)			

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
PRESS TESTING	25	4596

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	SINGLE	152	0	1755	0.00
2	SINGLE	152	65	1755	3.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	280.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
00:00	02:15	2.25	15A	FINISH PRESSURE TEST BOPS TEST HYDRILL TO 1,500 KPA LOW ,10,500 HIGH 10 MIN EACH, TEST HCR, BACK UP KILL LINE STA BBING VAQLVE, INSIDE B.O.P TO 1500 KPA LOW 14,000 KPA HIGH 10 MIN EACH, TEST UPPER KELLY COCK TO 1,500 KPA LOW 15,000 KPA HIGH 10 MIN EACH.
02:15	02:30	0.25	7	RIG SERVICE , FUNCTION MOTOR KILL OK
02:30	03:30	1.00	15	ACCUMULATOR CHECK PRESS AT START,21,000 PRESS REMAINING AFTER 3 FUNCTION 12,500,TIME TO RECHARGE /1 MIN ,4 SEC/PRECHARGE6,600 KPA/ N 2 BOTTLE#12,100 PSI#2 2,100 PSI #3 1,500 PSI. TEST BLID RAM 1,500 KPA LOW 14,000 KPA HIGH 10 MIN EACH.
03:30	03:45	0.25	21	SAFETY MEETING & B.O.P DRILL WITH CREW PRIOR TO R.I.H CREW POSITION IN 1 MIN 20 SEC.
03:45	05:45	2.00	6A	MAKE UP B.H.A &TRIP IN HOLE WITH BIT #2
05:45	06:00	0.25	21	HAND OVER SAFETY MEETING

Remarks: FUNCTION CROWN SAVER ,CHECK TONGS,PINS, BRAKE LINKAGE ROLLER ,DCAND DP SLIPS
BACK UP AND MAKE UP LINE,TUGGER 1 AND TWO ,EASY RIDER, FALL ARREST ,
BLOW BOILER 4X150 LITER,

TOUR 2

SIGNATURE OF DRILLER: JOE LEADLEY

START TIME: 08:00 END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.30
1	BIT SUB	158	1	0.71
1	TELEDRIFT	158	1	2.62
5	DC (6.25 IN)	158	1	45.01
1	SHORT DC 6.25"	158	1	4.60
1	JARS-HYD	158	1	5.26
9	DC (6.25 IN)	158	1	82.50
1	X/O	158	1	0.27
6	HWDP(4.0 IN)	135	1	55.44
8	Drill Pipe	Stands (m)		152.71
1	Drill Pipe	Singles (m)		9.50
Weight of DC (kdaN)	12	Kelly Down (m)		6.08
Weight of string (kdaN)	25	Total (m)		365.00

BITS

Bit Number	2
Size (mm)	200
IADC Code	M 2 2 2
Manufacturer	REED
Type	DSX416M-A3PDC
Serial No	114176
Jets (mm)	12.0 12.0 12.0 12.0 12.0 12.0
Depth Out (m)	
Depth In (m)	379
Total Drilled (m)	96
Hrs Run Today	5.75
Cumulative Hrs Run	5.75
Entry Date	2010/02/09

DULL GRADE

T_I		Gage (mm)	
T_a		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☒	Oil ☐	Other ☐	
Time	10:00	12:00	15:00	
Density (kg/m³)	1010	1020	1040	
Funnel Viscosity (s/l)	28	29	30	
Fluid Loss (cm³)				
pH	12	10	10	
Location	SHAKER	SHAKER	SHAKER	
Depth (m)	380	408	470	
PVT (m³)	20	46	45	

MUD MATERIALS ADDED

Product	Amount	Type
CITRIC ACID	7	SACK
CALCIUM NITRATE	10	SACK
SAWDUST	10	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)
UNITED	4.00	1040	1020	1180

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
BOP DRILL	20	4448

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)
379	475	DRILL	100	2

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
1	2780 @	69 @	455
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	SINGLE	152	91	3730	3.00
2	SINGLE	152	91	3730	5.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	1
Hole Drag Down (kdaN)	2
Torque at Bottom (Nm)	1100
Fill on Bottom (m)	0

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	280.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type
11:15	397.00	0.5	0	TELEDRIFT

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
08:00	08:15	0.25	7	RIG SERVICE(FUNC. HCR 2SEC. TO OPEN)
08:15	09:45	1.50	2C	DRILL OUT FLOAT & SHOE
09:45	11:00	1.25	2	DRILL 200mm HOLE F/ 379m TO 398m
11:00	11:15	0.25	10	SURVEY @ 397M 0.5DEG
11:15	14:30	3.25	2	DRILL 200mm HOLE F/ 398m TO 446m
14:30	14:45	0.25	21C	SAFETY MEETING & SCBA TRAINING W/ RAIMS SAFETY SERVICES
14:45	16:00	1.25	2	DRILL 200mm HOLE F/ 446m TO 475m

Remarks: DWA FUNC.CROWN SAVER
INSPECTED BRAKES & LINKAGES, TONGS, DIES & LINES, SLIPS & DIES
FLARE LINE & DEGASSER LINES, FLARE TANK & IGNITOR, BOP BOLTS & CROSS CHAINS
BLEW BOILER 4x150L

TOUR 3

SIGNATURE OF DRILLER: ROMEO DASTOUS

START TIME: 16:00 END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	158	1	0.71
1	TELEDRIFT	158	1	2.62
5	DC (6.25 IN)	158	1	45.01
1	PONY DC	158	1	4.60
1	JARS-HYD	158	1	5.26
9	DC (6.25 IN)	158	1	82.50
1	X/O	158	1	0.27
6	HWDP(4.0 IN)	135	1	55.44
20	Drill Pipe	Stands (m)		382.01
1	Drill Pipe	Singles (m)		9.60
Weight of DC (kdaN)	12	Kelly Down (m)		8.78
Weight of string (kdaN)	29	Total (m)		597.00

BITS

Bit Number	2
Size (mm)	200
IADC Code	M 2 2 2
Manufacturer	REED
Type	DSX416M-A3PDC
Serial No	114176
Jets (mm)	12.0 12.0 12.0 12.0 12.0 12.0
Depth Out (m)	
Depth In (m)	379
Total Drilled (m)	218
Hrs Run Today	7.00
Cumulative Hrs Run	12.75
Entry Date	2010/02/09

DULL GRADE

T_I		Gage (mm)	
T_a		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☒	Oil ☐	Other ☐
Time	19:00		
Density (kg/m³)	1010		
Funnel Viscosity (s/l)	28		
Fluid Loss (cm³)			
pH	10		
Location	SHAKER		
Depth (m)	519		
PVT (m³)	47		

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
CONNECTIONS	30	4559

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)
475	597	DRILL	90	3

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
1	2088 @	69 @	513
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	SINGLE	152	82	3100	8.00
2	SINGLE	152	0	3100	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	1
Hole Drag Down (kdaN)	2
Torque at Bottom (Nm)	0
Fill on Bottom (m)	0

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type
16:00	474.00	0.5	0	TELEDRIFT
21:15	549.00	0.5	0	TELEDRIFT

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
16:00	16:15	0.25	10	SURVEY @ 475M 0.5 DEG
16:15	18:00	1.75	2	DRILL 200mm HOLE F/ 475M TO 503 M
18:00	18:15	0.25	21	HAND OVER SAFETY MEETING
18:15	18:45	0.50	2	DRILL FROM 503M TO 513 M
18:45	19:00	0.25	7	RIG SERVICE FUNCTION PIPE RAMS,4 SEC TO CLOSE
19:00	21:00	2.00	2	DRILL FROM 513M TO 551 M
21:00	21:15	0.25	10	DEVIATION SURVEY
21:15	24:00	2.75	2	DRILL FROM 551 M TO 597 M

Remarks: FUNCTION CROWN SAVER , BRAKE PINS LINKAGE, ROLLER TONGS , PINS, BACK UP LINE
MAKE UP AND BREAK OUT LINE, TUGGER BOOM LINE SAFETY HOOK, ESCAPE LINE GERONIMO
VISUALLY CHECK DEGASSER AND FLARE LINE, B.O.P EQUIPEMENT,STABBING VALVE.
CHECK REMOTE DP PRESS TO MANIFOLD, BLOW BOILER 4X 150 LITER.
RESET AUTO DIGGER QUICK RELEASE WITHIN 3".

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
DYS2245_20100209_1B	Pason	2010	02	09

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	60:04:29.30N/117:29:04.70W	NT	AT-CNG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	VERT	☐
	Operator's AFE	Contractor's Job No	Spud Date	Time
	09N010009	354	2010/02/06	01:00
	Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
	HALE YARDLEY	ERICK BIGRAS		

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection		
2) Detailed Inspection - Weekly (Using Check List)		
3) H2S Signs Posted if Required		
4) Well Licence & Stick Diagram Posted		
5) Flare Lines Staked		
6) BOP Drills Performed		
7) Visually Inspected BOPs – Flare Lines & Degasser Lines		

1) Rig Site Health & Safety Meeting (one/crew/month)	
2) CAODC Rig Safety Inspection Checklist (one/rig/month)	
3) Mast Inspection before Raising or Lowering	
4) Crown Saver Checked	
5) Motor Kills Checked	

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	
Temp	
Current Conditions	
Wind Direction	
Wind Strength	
Road Condition	

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)

MUD PUMPS

No.	Make	Stroke Length (mm)

GENERAL EQUIPMENT & SERVICES

Description	Hours

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)

SHALE SHAKERS

No.	Top Screen			Middle Screen			Middle Screen			Bottom Screen		
	Size	Changed	New	Size	Changed	New	Size	Changed	New	Size	Changed	New
		☐	☐		☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐

Pason v.1.0

TOUR 1

SIGNATURE OF DRILLER: ROMEO DASTOUS — START TIME: 00:00 — END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.30
1	BIT SUB	158	1	0.71
1	TELEDRIFT	158	1	2.62
5	DC (6.25 IN)	158	1	45.01
1	SHORT DC 6.25"	158	1	4.60
1	JARS-HYD	158	1	5.26
9	DC (6.25 IN)	158	1	82.50
1	X/O	158	1	0.27
6	HWDP(4.0 IN)	135	1	55.44
8	Drill Pipe		Stands (m)	152.71
1	Drill Pipe		Singles (m)	9.50
Weight of DC (kdaN)	12	Kelly Down (m)		6.08
Weight of string (kdaN)	25	Total (m)		365.00

BITS

Bit Number	
Size (mm)	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets (mm)	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DULL GRADE

T_I		Gage (mm)	
T_O		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐	
Time				
Density (kg/m³)				
Funnel Viscosity (s/l)				
Fluid Loss (cm³)				
pH				
Location				
Depth (m)				
PVT (m³)				

MUD MATERIALS ADDED

Product	Amount	Type

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min		Depth (m)
		@	@	
		@	@	
		@	@	

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run

Remarks:

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
06:00	06:15	0.25	5	CIRCULATE DOWN STRING TO TAG CEMENT
06:15	06:30	0.25	21A	BOP DRILL W/ CREW(WELL SECURE IN 98SEC, HYDRIL 13SEC. TO CLOSE)
06:30	07:15	0.75	5	CIRCULATE DOWN STRING TO TAG CEMENT TOP
07:15	08:00	0.75	2C	DRILL OUT FLOAT(TAG CEMENT @ 363M)

Remarks:

TOUR 2

SIGNATURE OF DRILLER: JOE LEADLEY — START TIME: 08:00 — END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	158	1	0.71
1	TELEDRIFT	158	1	2.62
6	DC (6.25 IN)	158	1	45.01
1	SHORT DC 6.25"	158	1	4.60
1	JARS-HYD	158	1	5.26
9	DC (6.25 IN)	158	1	82.50
1	X/O	158	1	0.27
6	HWDP(4.0 IN)	135	1	55.44
14	Drill Pipe		Stands (m)	267.17
0	Drill Pipe		Singles (m)	0.00
Weight of DC (kdaN)	12	Kelly Down (m)		11.22
Weight of string (kdaN)	26	Total (m)		475.00

BITS

Bit Number	
Size (mm)	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets (mm)	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DULL GRADE

T_I		Gage (mm)	
T_O		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐	
Time				
Density (kg/m³)				
Funnel Viscosity (s/l)				
Fluid Loss (cm³)				
pH				
Location				
Depth (m)				
PVT (m³)				

MUD MATERIALS ADDED

Product	Amount	Type

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min		Depth (m)
		@	@	
		@	@	
		@	@	

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run

Remarks:

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks

Remarks:

TOUR 3

SIGNATURE OF DRILLER: ROMEO DASTOUS — START TIME: 16:00 — END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
	Drill Pipe		Stands (m)	
	Drill Pipe		Singles (m)	
Weight of DC (kdaN)		Kelly Down (m)		
Weight of string (kdaN)		Total (m)		

BITS

Bit Number	
Size (mm)	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets (mm)	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DULL GRADE

T_I		Gage (mm)	
T_O		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐	
Time				
Density (kg/m³)				
Funnel Viscosity (s/l)				
Fluid Loss (cm³)				
pH				
Location				
Depth (m)				
PVT (m³)				

MUD MATERIALS ADDED

Product	Amount	Type

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min		Depth (m)
		@	@	
		@	@	
		@	@	

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run

Remarks:

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks

Remarks:

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
0Y52245_20100210_1A	Pason	2010	02	10

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	60:56:39.30N/117:39:-94.70W	NT	AT-CONO	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	VERT	☐
	Operator's AFE	Contractor's Job No	Spud Date	Time
	09N010009	354	2010/02/06	01:00
	Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
	HALE YARDLEY	ERICK BIGRAS		

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection	HY	EB
2) Detailed Inspection - Weekly (Using Check List)	HY	EB
3) H2S Signs Posted if Required	HY	EB
4) Well Licence & Stick Diagram Posted	HY	EB
5) Flare Lines Staked	HY	EB
6) BOP Drills Performed		
7) Visually Inspected BOPs - Flare Lines & Degasser Lines	HY	EB
1) Rig Site Health & Safety Meeting (one/crew/month)		EB
2) CAODC Rig Safety Inspection Checklist (one/rig/month)		
3) Mast Inspection before Raising or Lowering		
4) Crown Saver Checked		EB
5) Motor Kills Checked		

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	06:00
Temp	-21
Current Conditions	CLEAR
Wind Direction	NE
Wind Strength	UP TO 19 KM/H
Road Condition	FAIR

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)
DP	4"FH	SS95	102	65	23.8300	185	
DC	4.5" XH	DC	158	58	134.0000	18	
HW	4" FH	HWDP	102	65	41.6400	6	

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)
SURFACE	LKSIDE	J-55	219	206	35.72	28	378	4	378
PRODUCTION	PARAGON	J-55	140	127	20.83	119	1469	4	1468

MUD PUMPS

No.	Make	Stroke Length (mm)
1	BPMMP	229
2	BPMMP	229

GENERAL EQUIPMENT & SERVICES

Description	Hours
MUD PUMP	24.00
DIVERTER	24.00
LOADER	24.00

CAODC

Pason

SHALE SHAKERS

No.	Top Screen			Middle Screen			Middle Screen			Bottom Screen		
	Size	Changed	New	Size	Changed	New	Size	Changed	New	Size	Changed	New
1	200	☒	☒	200	☒	☒		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐

TOUR 1

SIGNATURE OF DRILLER: ROMEO DASTOUS

START TIME: 00:00 — END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

0	Drill Pipe	Stands (m)	0.00
0	Drill Pipe	Singles (m)	0.00
Weight of DC (kdaN)	0	Kelly Down (m)	0.00
Weight of string (kdaN)	0	Total (m)	0.00

BITS

Bit Number	2
Size (mm)	200
IADC Code	M 2 2 2
Manufacturer	REED
Type	DSX416M-A3PDC
Serial No	114176
Jets (mm)	12.0 12.0 12.0 12.0 12.0 12.0
Depth Out (m)	
Depth In (m)	379
Total Drilled (m)	724
Hrs Run Today	7.00
Cumulative Hrs Run	19.75
Entry Date	2010/02/10

DULL GRADE

T_i		Gage (mm)	
T_o		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water [x]	Oil [ ]	Other [ ]
Time	01:00	04:00	06:00
Density (kg/m³)	1020	1020	1040
Funnel Viscosity (s/l)	30	30	31
Fluid Loss (cm³)			
pH			
Location	SHAKER	SHAKER	SHAKER
Depth (m)	612	660	704
PVT (m³)	44	45	45

MUD MATERIALS ADDED

Product	Amount	Type
GEL	12	SACK
CAUSTIC	1	SACK
SAWDUST	25	SACK
KELZAN	1	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)
CENTRIFUGE	8.00	1020	1680	1000

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
DRIVE TO AIRPORT FOR DAY OFF.	33	4448

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)
579	724	DRILL	90	4

REDUCED PUMP SPEED

No.	Pressure (kpa)		Strokes/min		Depth (m)
1	2100	@	69	@	609
		@		@	
		@		@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	SINGLE	152	80	2700	8.00
2	SINGLE	152	0	2700	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	4
Hole Drag Down (kdaN)	2
Torque at Bottom (Nm)	0
Fill on Bottom (m)	0

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type
02:30	635.00	0.5	0	TELEDRIFT
07:15	713.00	0.5	0	TELEDRIFT

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
00:00	01:30	1.50	2	DRILL FROM 597 M TO 618 M
01:30	01:45	0.25	7	RIG SERVICE FUNCTION HYDRIL .12 SEC TO CLOSE
01:45	02:45	1.00	2	DRILL FROM 618 M TO 638M
02:45	03:00	0.25	10	DEVIATION SURVEY
03:00	06:00	3.00	2	DRILL FROM 638 M TO 695 M
06:00	06:15	0.25	21	HAND OVER SAFETY MEETING
06:15	07:15	1.00	2	DRILL FROM 695m TO 714m
07:15	07:30	0.25	10	SURVEY @ 713m 0.5 DEG
07:30	08:00	0.50	2	DRILL 200mm HOLE F/ 714m TO 724m

Remarks: FUNCTION CROWN SAVER , CHECK BRAKE PIN LINKAGE ROLLER, TONGS PINS, BACK UP LINE , BREAK OUT CABLE, DP AND DC SLIPS, BOOM LINE TUGGER SAFETY HOOK , CHECK STABBING VALVE,VISUALLY CHECK B.O.P EQUIPEMENT,REMOTE OP PRESS GAUGE IN MANIFOLD SHACK, BLOW BOILER 4X150 LITER,CHECK DEAD MAN BOLTS AND NUTS OK.

TOUR 2

SIGNATURE OF DRILLER: JOE LEADLEY

START TIME: 08:00 — END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

0	Drill Pipe	Stands (m)	0.00
0	Drill Pipe	Singles (m)	0.00
Weight of DC (kdaN)	0	Kelly Down (m)	0.00
Weight of string (kdaN)	0	Total (m)	0.00

BITS

Bit Number	2
Size (mm)	200
IADC Code	M 2 2 2
Manufacturer	REED
Type	DSX416M-A3PDC
Serial No	114176
Jets (mm)	12.0 12.0 12.0 12.0 12.0 12.0
Depth Out (m)	
Depth In (m)	379
Total Drilled (m)	838
Hrs Run Today	6.75
Cumulative Hrs Run	25.50
Entry Date	2010/02/10

DULL GRADE

T_i		Gage (mm)	
T_o		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water [x]	Oil [ ]	Other [ ]
Time	08:00	10:00	12:00
Density (kg/m³)	1040	1040	1040
Funnel Viscosity (s/l)	31	32	31
Fluid Loss (cm³)			
pH	8	8	8
Location	SHAKER	SHAKER	SHAKER
Depth (m)	725	761	798
PVT (m³)	46	45	42

MUD MATERIALS ADDED

Product	Amount	Type
CALCIUM NITRATE	10	SACK
LIME	1	SACK
KELZAN	1	SACK
SAWDUST	5	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)
CENT	8.00	1040	1020	1220

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
STEAM	2993	4448

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)
724	831	DRILL	100	3

REDUCED PUMP SPEED

No.	Pressure (kpa)		Strokes/min		Depth (m)
1	2456	@	70	@	800
		@		@	
		@		@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	SINGLE	152	91	4020	8.00
2	SINGLE	152	0	4020	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	2
Hole Drag Down (kdaN)	3
Torque at Bottom (Nm)	45
Fill on Bottom (m)	0

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type
12:00	789.00	0.5	0	TELEDRIFT

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
08:00	08:15	0.25	7	RIG SERVICE(FUNC. PIPE RAMS 2 SEC. TO CLOSE)
08:15	12:45	4.50	2	DRILL 200mm HOLE F/ 724m TO 809m
12:45	13:15	0.50	25	INSTALL PASSON FLOW SENSOR
13:15	14:00	0.75	2	DRILL 200mm HOLE F/ 800m TO 809M
14:00	14:15	0.25	21	HANDOVER SAFETY MEETING
14:15	15:45	1.50	2	DRILL FROM 809M TO 831M
15:45	16:00	0.25	10	DEVIATION SURVEY

Remarks: DWA FUNC. CROWN SAVER, FLARE TANK INGNITOR INSPECTED SNAKES, LINKAGES, ROLLERS & PINS, ACCUM. PRESS., VISUALLY INSPECT DERRICK, FLARE & DEGASSER LINES, SLIPS & DIES, TONGS, DIES & HOLDBACK LINES FUNCTION HYDRIL 13SECONDS TO CLOSE.

TOUR 3

SIGNATURE OF DRILLER: PETER IWANCZYK

START TIME: 16:00 — END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

0	Drill Pipe	Stands (m)	0.00
0	Drill Pipe	Singles (m)	0.00
Weight of DC (kdaN)		Kelly Down (m)	0.00
Weight of string (kdaN)		Total (m)	0.00

BITS

Bit Number	2
Size (mm)	200
IADC Code	M 2 2 2
Manufacturer	REED
Type	DSX416M-A3PDC
Serial No	114176
Jets (mm)	12.0 12.0 12.0 12.0 12.0 12.0
Depth Out (m)	
Depth In (m)	379
Total Drilled (m)	944
Hrs Run Today	6.50
Cumulative Hrs Run	32.00
Entry Date	2010/02/10

DULL GRADE

T_i		Gage (mm)	
T_o		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water [x]	Oil [ ]	Other [ ]
Time	18:00	21:00	23:00
Density (kg/m³)	1050	1040	1030
Funnel Viscosity (s/l)	32	31	30
Fluid Loss (cm³)			
pH	8	10	9
Location	SHAKER	SHAKER	SHAKER
Depth (m)	860	915	920
PVT (m³)	50	47	46

MUD MATERIALS ADDED

Product	Amount	Type
CAUSTIC	2	SACK
CALCIUM NITRATE	15	SACK
SAWDUST	22	SACK
ALKAPAM A-1103D	1	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)
CENTRIFUGE	8.00	1050	1015	1895

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
OVERHEAD EQUIPMENT	44	2956

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)
831	944	DRILL	100	3

REDUCED PUMP SPEED

No.	Pressure (kpa)		Strokes/min		Depth (m)
1	2247	@	70	@	848
		@		@	
		@		@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	SINGLE	152	90	3560	8.00
2	SINGLE	152	0	3560	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	2
Hole Drag Down (kdaN)	3
Torque at Bottom (Nm)	0
Fill on Bottom (m)	0

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type
18:00	858.00	0.5	0	TELEDRIFT
23:15	933.00	0.5	0	TELEDRIFT

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
16:00	16:15	0.25	21A	DRILLS/BOP, ETC. FUNCTION HYDRIL CLOSED IN 13SECONDS
16:15	18:00	1.75	2	DRILL FROM 831M TO 858M
18:00	18:15	0.25	10	DEVIATION SURVEY
18:15	22:30	4.25	2	DRILL 200mm HOLE F/ 858m TO 934m
22:30	22:45	0.25	7	RIG SERVICE(FUNC. PIPE RAMS 3 SEC. TO CLOSE)
22:45	23:15	0.50	21C	SAFETY STAND DOWN MEETING W/ PD SAFETY PERSONEL
23:15	23:30	0.25	10	SURVEY @ 933m 0.5 DEG
23:30	24:00	0.50	2	DRILL 200mm HOLE F/ 934m TO 944m

Remarks: SET AND FUNCTION CROWN SAVER, VISUALLY INSPECT BRAKE, ROLLERS, LINKAGE, AND PINS. CHECK TONGS, BACKUP LINES, DC/DP SLIPS, STABBING VALVE, TUGGER HOOKS, BOOM HOOK, CHECK DEADMAN NUTS AND BOLTS, FLARE/DEGASSER LINES AND FLARE TANK. BLOWDOWN BOILER 4X150L fuel loader 250l

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
DY52245_20100210_1A	Pason	2010	02	10

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	60:56:29.30N/117:39:34.70W	NT	AT-ONG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	VERT	☐
	Operator's AFE	Contractor's Job No	Spud Date	Time
	09N010009	354	2010/02/06	01:00
	Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
	HALE YARDLEY	ERICK BIGRAS		

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection		
2) Detailed Inspection - Weekly (Using Check List)		
3) H2S Signs Posted if Required		
4) Well Licence & Stick Diagram Posted		
5) Flare Lines Staked		
6) BOP Drills Performed		
7) Visually Inspected BOPs - Flare Lines & Degasser Lines		
1) Rig Site Health & Safety Meeting (one/crew/month)		
2) CAODC Rig Safety Inspection Checklist (one/rig/month)		
3) Mast Inspection before Raising or Lowering		
4) Crown Saver Checked		
5) Motor Kills Checked		

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	
Temp	
Current Conditions	
Wind Direction	
Wind Strength	
Road Condition	

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)

MUD PUMPS

No.	Make	Stroke Length (mm)

GENERAL EQUIPMENT & SERVICES

Description	Hours

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)

SHALE SHAKERS

No.	Top Screen			Middle Screen			Middle Screen			Bottom Screen		
	Size	Changed	New	Size	Changed	New	Size	Changed	New	Size	Changed	New
		☐	☐		☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐

Pason v.1.1

TOUR 1

SIGNATURE OF DRILLER: ROMEO DASTOUS

START TIME: 00:00 END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	158	1	0.71
1	TELEDRIFT	158	1	2.62
5	DC (6.25 IN)	158	1	45.01
1	PONY DC	158	1	4.60
1	JARS-HYD	158	1	5.26
9	DC (6.25 IN)	158	1	82.50
1	X/O	158	1	0.27
6	HWDP(4.0 IN)	135	1	55.44
27	Drill Pipe		Stands (m)	516.12
0	Drill Pipe		Singles (m)	0.00
Weight of DC (kdaN)	12		Kelly Down (m)	11.27
Weight of string (kdaN)	30		Total (m)	724.00

BITS

Bit Number	
Size (mm)	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets (mm)	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DULL GRADE

T_I		Gage (mm)	
T_O		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type: Water ☐ Oil ☐ Other ☐

Time	
Density (kg/m³)	
Funnel Viscosity (s/l)	
Fluid Loss (cm³)	
pH	
Location	
Depth (m)	
PVT (m³)	

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min		Depth (m)
		①	④	
		②	⑤	
		③	⑥	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks

Remarks:

TOUR 2

SIGNATURE OF DRILLER: JOE LEADLEY

START TIME: 08:00 END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	158	1	0.71
1	TELEDRIFT	158	1	2.62
6	DC (6.25 IN)	158	1	49.61
1	JARS-HYD	158	1	5.26
9	DC (6.25 IN)	158	1	82.50
1	X/O	158	1	0.27
6	HWDP(4.0 IN)	135	1	55.44
33	Drill Pipe		Stands (m)	630.72
0	Drill Pipe		Singles (m)	0.00
Weight of DC (kdaN)	14		Kelly Down (m)	3.67
Weight of string (kdaN)	30		Total (m)	831.00

BITS

Bit Number	
Size (mm)	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets (mm)	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DULL GRADE

T_I		Gage (mm)	
T_O		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type: Water ☐ Oil ☐ Other ☐

Time	15:00
Density (kg/m³)	1050
Funnel Viscosity (s/l)	32
Fluid Loss (cm³)	
pH	8
Location	
Depth (m)	810
PVT (m³)	40

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min		Depth (m)
		①	④	
		②	⑤	
		③	⑥	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks

Remarks:

TOUR 3

SIGNATURE OF DRILLER: PETER IWANCZYK

START TIME: 16:00 END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	158	64	0.71
1	TELEDRIFT	158	65	2.62
6	DC (6.25 IN)	158	65	49.61
1	JARS-HYD	158	65	5.26
9	DC (6.25 IN)	158	65	82.50
1	X/O	158	65	0.27
6	HWDP(4.0 IN)	135	65	55.44
38	Drill Pipe		Stands (m)	726.38
1	Drill Pipe		Singles (m)	9.61
Weight of DC (kdaN)	14		Kelly Down (m)	11.40
Weight of string (kdaN)	32		Total (m)	944.00

BITS

Bit Number	
Size (mm)	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets (mm)	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DULL GRADE

T_I		Gage (mm)	
T_O		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type: Water ☐ Oil ☐ Other ☐

Time	
Density (kg/m³)	
Funnel Viscosity (s/l)	
Fluid Loss (cm³)	
pH	
Location	
Depth (m)	
PVT (m³)	

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min		Depth (m)
		①	④	
		②	⑤	
		③	⑥	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks

Remarks:

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
0Y52245_20100211_1B	Pason	2010	02	11

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	60:56:29.30N/117:29:-04.70W	NT	AT-LONG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	VERT	☐

Operator's AFE	Contractor's Job No	Spud Date	Time
09N010009	354	2010/02/06	01:00
Signature of Operator Representative	**Signature of Contractor's Rig manager**	**Rig Release Date**	**Time**
HALE YARDLEY	ERICK BIGRAS		

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection	HY	EB
2) Detailed Inspection - Weekly (Using Check List)	HY	EB
3) H2S Signs Posted if Required	HY	EB
4) Well Licence & Stick Diagram Posted	HY	EB
5) Flare Lines Staked	HY	EB
6) BOP Drills Performed		
7) Visually Inspected BOPs - Flare Lines & Degasser Lines	HY	EB
1) Rig Site Health & Safety Meeting (one/crew/month)		EB
2) CAODC Rig Safety Inspection Checklist (one/rig/month)		
3) Mast Inspection before Raising or Lowering		
4) Crown Saver Checked		EB
5) Motor Kills Checked		

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	06:00
Temp	-25
Current Conditions	CLEAR
Wind Direction	NE
Wind Strength	UP TO 19 KM/H
Road Condition	FAIR

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)
DP	4"FH	S95	102	65	23.8300	185	
DC	4.5" XH	DC	158	58	134.0000	18	
HW	4" FH	HWDP	102	65	41.6400	6	

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)
SURFACE	LKSIDE	J-55	219	206	35.72	28	378	4	378
PRODUCTION	PARAGON	J-55	140	127	20.83	119	1469	4	1468

MUD PUMPS

No.	Make	Stroke Length (mm)
1	BPMMP	229
2	BPMMP	229

GENERAL EQUIPMENT & SERVICES

Description	Hours
MUD PUMP	24.00
MANIFOLD	24.00
LOADER	24.00

CAODC Pason V3.1

SHALE SHAKERS

No.	Top Screen			Middle Screen			Middle Screen			Bottom Screen		
	Size	Changed	New	Size	Changed	New	Size	Changed	New	Size	Changed	New
1	200	☐	☐	84	☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐

TOUR 1

SIGNATURE OF DRILLER: JOE LEADLEY — START TIME: 00:00 — END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

0	Drill Pipe	Stands (m)	0.00
0	Drill Pipe	Singles (m)	0.00
Weight of DC (kdaN)	0	Kelly Down (m)	0.00
Weight of string (kdaN)	0	Total (m)	0.00

BITS

Bit Number	2
Size (mm)	200
IADC Code	M 2 2 2
Manufacturer	REED
Type	DSX416M-A3PDC
Serial No	114176
Jets (mm)	12.0 12.0 12.0 12.0 12.0 12.0
Depth Out (m)	
Depth In (m)	379
Total Drilled (m)	687
Hrs Run Today	7.25
Cumulative Hrs Run	39.25
Entry Date	2010/02/11

DULL GRADE

T_I		Gage (mm)	
T_O		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other: FLOC
Time	02:00	04:00	
Density (kg/m³)	1040	1040	
Funnel Viscosity (s/l)	30	30	
Fluid Loss (cm³)			
pH	9	9	
Location	SHAKER	SHAKER	
Depth (m)	970	1000	
PVT (m³)	49	48	

MUD MATERIALS ADDED

Product	Amount	Type
ALKAPAM A-1103D	1	SACK
KELZAN	1	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)
CENT	8.00	1040	1020	1800

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
SAFETY STAND DOWN	50	4448

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)
944	1066	DRILL	100	4

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
1	2650 @	69 @	1011
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	SINGLE	152	92	4370	8.00
2	SINGLE	152	0	4370	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	5
Hole Drag Down (kdaN)	2
Torque at Bottom (Nm)	3500
Fill on Bottom (m)	0

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type
04:30	1010.00	1.0	0	TELEDRIFT

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
00:00	00:15	0.25	7	RIG SERVICE(FUNC. HYDRIL 14 SEC. TO CLOSE)
00:15	04:30	4.25	2	DRILL 200mm HOLE F/ 944m TO 1011m
04:30	04:45	0.25	10	SURVEY @ 1010m 1.0DEG
04:45	06:00	1.25	2	DRILL 200mm HOLE F/ 1011m TO 1030m
06:00	06:15	0.25	21	HANDOVER SAFETY MEETING
06:15	08:00	1.75	2	DRILL FROM 1030M TO 1066M

Remarks: DWA FUNC, CROWN SAVER, FLARE TANK IGNITOR
INSPECTED BRAKES, LINKAGES, ROLLERS & PINS, TONGS, DIES & HOLD BACK LINES.
BOP BOLTS, HYDRAULIC HOSES.
BLEW BOILER 4x 150L

TOUR 2

SIGNATURE OF DRILLER: PETER IWANCZYK — START TIME: 08:00 — END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

0	Drill Pipe	Stands (m)	0.00
0	Drill Pipe	Singles (m)	0.00
Weight of DC (kdaN)		Kelly Down (m)	0.00
Weight of string (kdaN)		Total (m)	0.00

BITS

Bit Number	2
Size (mm)	200
IADC Code	M 2 2 2
Manufacturer	REED
Type	DSX416M-A3PDC
Serial No	114176
Jets (mm)	12.0 12.0 12.0 12.0 12.0 12.0
Depth Out (m)	
Depth In (m)	379
Total Drilled (m)	803
Hrs Run Today	7.25
Cumulative Hrs Run	46.50
Entry Date	2010/02/11

DULL GRADE

T_I		Gage (mm)	
T_O		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☒	Oil ☐	Other ☐
Time	08:00	10:00	12:00
Density (kg/m³)	1040	1055	1055
Funnel Viscosity (s/l)	30	31	31
Fluid Loss (cm³)			
pH	9	8	10
Location	SHAKER	SHAKER	SHAKER
Depth (m)	1065	1087	1112
PVT (m³)	47	46	48

MUD MATERIALS ADDED

Product	Amount	Type
ALKAPAM A-1103D	1	SACK
CALCIUM NITRATE	10	SACK
CAUSTIC	2	SACK
MF-VIS	1	SACK
SAWDUST	5	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)
CENTRIFUGE	8.00	1050	1025	1890

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
WORKING AROUND ROTARY	44	2956

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)
1066	1182	DRILL	100	4

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
1	2666 @	70 @	1095
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	SINGLE	152	90	4782	8.00
2	SINGLE	152	0	4782	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	1
Hole Drag Down (kdaN)	3
Torque at Bottom (Nm)	45
Fill on Bottom (m)	0

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.0	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type
10:00	1087.00	1.0	0	TELEDRIFT
13:00	1133.00	0.5	0	TELEDRIFT

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
08:00	09:00	1.00	2	DRILL FROM 1066M TO 1077M
09:00	09:15	0.25	7	RIG SERVICE FUNCTION HCR OPENED IN 1 SECOND
09:15	10:00	0.75	2	DRILL FROM 1077M TO 1087M
10:00	10:15	0.25	10	DEVIATION SURVEY
10:15	13:00	2.75	2	DRILL FROM 1087M TO 1134M
13:00	13:15	0.25	10	DEVIATION SURVEY
13:15	16:00	2.75	2	DRILL FROM 1134M TO 1182M

Remarks: FUNCTION CROWNSAVER, CHECK BRAKE, ROLLERS, PINS, LINKAGE, DEADMAN NUTS AND
BOLTS, VISUALLY INSPECT TONGS, BACKUP LINES, DC/DP SLIPS AND ELEVATORS,
TUGGER HOOKS, BOOM HOOK, CHECK FLARE DEGASSER LINES AND FLARE TANK.
BLOW DOWN BOILER 4X150L

TOUR 3

SIGNATURE OF DRILLER: JOE LEADLEY — START TIME: 16:00 — END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

0	Drill Pipe	Stands (m)	0.00
0	Drill Pipe	Singles (m)	0.00
Weight of DC (kdaN)		Kelly Down (m)	0.00
Weight of string (kdaN)		Total (m)	0.00

BITS

Bit Number	2
Size (mm)	200
IADC Code	M 2 2 2
Manufacturer	REED
Type	DSX416M-A3PDC
Serial No	114176
Jets (mm)	12.0 12.0 12.0 12.0 12.0 12.0
Depth Out (m)	1221
Depth In (m)	379
Total Drilled (m)	842
Hrs Run Today	2.25
Cumulative Hrs Run	48.75
Entry Date	2010/02/11

DULL GRADE

T_I		Gage (mm)	
T_O		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	17.27
BRG			

MUD RECORD

Mud Type	Water ☒	Oil ☐	Other ☐
Time	17:00	18:00	
Density (kg/m³)	1040	1040	
Funnel Viscosity (s/l)	33	37	
Fluid Loss (cm³)	12.0	11.0	
pH	9	9	
Location	SHAKER	SHAKER	
Depth (m)	1191	1205	
PVT (m³)	44	43	

MUD MATERIALS ADDED

Product	Amount	Type
LIGNITE	6	SACK
DRISPAC PLUS REGULAR	3	SACK
STARDRILL	4	SACK
SODIUM BICARBONATE	3	SACK
MTL SHURE SHALE	8	SACK
MF-VIS	7	SACK
CAUSTIC	1	SACK
BARITE	15	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)
CENTRIFUGE	8.00	1050	1025	1890

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
BOP EQUIPMENT	40	2956

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)
1182	1221	DRILL	100	4

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
1	2615 @	70 @	1221
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	SINGLE	152	90	4185	3.00
2	SINGLE	152	0	4185	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	1
Hole Drag Down (kdaN)	3
Torque at Bottom (Nm)	90
Fill on Bottom (m)	0

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type
17:00	1179.00	0.3	0	WIRELINE

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
16:00	16:45	0.75	2	DRILL FROM 1182M TO 1192M
16:45	17:15	0.50	10	DEVIATION SURVEY (WIRELINE SURVEY)
17:15	18:00	0.75	2	DRILL FROM 1192M TO 1201M
18:00	18:15	0.25	21	HANDOVER SAFETY MEETING
18:15	19:00	0.75	2	DRILL 200mm HOKLE F/ 1201m TO 1221m
19:00	19:30	0.50	5	CONDITION MUD & CIRCULATE
19:30	19:45	0.25	25	PUMP PILL THEN BLOW KELLY
19:45	22:15	2.50	6B	CLEAN OUT TRIP TO HWDP(STRAP OUT FLOW CHECKS @ 1209, 1114, 624, 228M)(STRAP=DERRICK 1013.24-TALLY 1012.53=DIFF.0.71 HOLE FILL VOL=ACTUAL 3.82-CALC.2.76=DIFF.1.06)
22:15	22:30	0.25	7	RIG SERVICE FUNCTION PIPE RAMS 3 SEC TO CLOSE
22:30	24:00	1.50	6A	TRIP IN HOLE(FLOW CHECK @ 624m)

Remarks: FUNCTION CROWN SAVER, VISUALLY INSPECT BRAKE, ROLLERS, PINS, LINKAGE,
CHECK DEADMAN NUTS AND BOLTS, TONGS, BACKUP LINES,DC/DP SLIPS AND ELEVATORS.
STABBING VALVE, TUGGER HOOKS, BOOM HOOK, CHECK FLARE DEGASSER LINES AND FLARE
TANK.
BLOW DOWN BOILER 4X150L

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
DY52245_20100211_1B	Pason	2010	02	11

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	55:06:28.30N/117:29:-04.70W	NT	AT-ONG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	VERT	☐

Operator's AFE	Contractor's Job No	Spud Date	Time
09N010009	354	2010/02/06	01:00

Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
HALE YARDLEY	ERICK BIGRAS		

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection		
2) Detailed Inspection - Weekly (Using Check List)		
3) H2S Signs Posted if Required		
4) Well Licence & Stick Diagram Posted		
5) Flare Lines Staked		
6) BOP Drills Performed		
7) Visually Inspected BOPs - Flare Lines & Degasser Lines		
1) Rig Site Health & Safety Meeting (one/crew/month)		
2) CAODC Rig Safety Inspection Checklist (one/rig/month)		
3) Mast Inspection before Raising or Lowering		
4) Crown Saver Checked		
5) Motor Kills Checked		

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	
Temp	
Current Conditions	
Wind Direction	
Wind Strength	
Road Condition	

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)

MUD PUMPS

No.	Make	Stroke Length (mm)

GENERAL EQUIPMENT & SERVICES

Description	Hours

CAODC Pason V3.0

SHALE SHAKERS

No.	Top Screen			Middle Screen			Middle Screen			Bottom Screen		
	Size	Changed	New	Size	Changed	New	Size	Changed	New	Size	Changed	New
		☐	☐		☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐

TOUR 1

SIGNATURE OF DRILLER: JOE LEADLEY — START TIME: 00:00 — END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	159	64	0.71
1	TELEDRIFT	158	65	2.62
6	DC (6.25 IN)	158	65	45.01
1	PONY DC	158	65	4.60
1	JARS-HYD	158	65	5.26
9	DC (6.25 IN)	158	65	82.50
1	X/O	158	65	0.27
6	HWDP(4.0 IN)	135	65	55.44
38	Drill Pipe		Stands (m)	726.38
1	Drill Pipe		Singles (m)	9.61
Weight of DC (kdaN)			Kelly Down (m)	11.40
Weight of string (kdaN)			Total (m)	944.00

BITS

Bit Number	
Size (mm)	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets (mm)	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DULL GRADE

T_I		Gage (mm)	
T_B		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐
Time			
Density (kg/m³)			
Funnel Viscosity (s/l)			
Fluid Loss (cm³)			
pH			
Location			
Depth (m)			
PVT (m³)			

MUD MATERIALS ADDED

Product	Amount	Type

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run

Remarks:

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks

Remarks:

TOUR 2

SIGNATURE OF DRILLER: PETER IWANCZYK — START TIME: 08:00 — END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	158	64	0.71
1	TELEDRIFT	158	65	2.62
6	DC (6.25 IN)	158	65	49.61
1	JARS-HYD	158	65	5.26
9	DC (6.25 IN)	158	65	82.50
1	X/O	158	65	0.27
6	HWDP(4.0 IN)	135	65	55.44
51	Drill Pipe		Stands (m)	974.41
0	Drill Pipe		Singles (m)	0.00
Weight of DC (kdaN)			Kelly Down (m)	10.98
Weight of string (kdaN)			Total (m)	1182.00

BITS

Bit Number	
Size (mm)	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets (mm)	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DULL GRADE

T_I		Gage (mm)	
T_B		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐
Time	15:00		
Density (kg/m³)	1055		
Funnel Viscosity (s/l)	35		
Fluid Loss (cm³)			
pH	10		
Location	SHAKER		
Depth (m)	1168		
PVT (m³)	41		

MUD MATERIALS ADDED

Product	Amount	Type

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run

Remarks:

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks

Remarks:

TOUR 3

SIGNATURE OF DRILLER: JOE LEADLEY — START TIME: 16:00 — END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	158	64	0.71
1	TELEDRIFT	158	65	2.62
6	DC (6.25 IN)	158	65	45.01
1	PONY DC	158	65	4.60
1	JARS-HYD	158	65	5.26
9	DC (6.25 IN)	158	65	82.50
1	X/O	158	65	0.27
6	HWDP(4.0 IN)	135	65	55.44
53	Drill Pipe		Stands (m)	1012.53
0	Drill Pipe		Singles (m)	0.00
Weight of DC (kdaN)	12		Kelly Down (m)	11.86
Weight of string (kdaN)	39		Total (m)	1221.00

BITS

Bit Number	
Size (mm)	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets (mm)	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DULL GRADE

T_I		Gage (mm)	
T_B		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐
Time			
Density (kg/m³)			
Funnel Viscosity (s/l)			
Fluid Loss (cm³)			
pH			
Location			
Depth (m)			
PVT (m³)			

MUD MATERIALS ADDED

Product	Amount	Type

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run

Remarks:

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks

Remarks:

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
0Y52245_20100212_1A	Pason	2010	02	12

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	60:06:29.30N/117:29:3 04.70W	NT	AT-CNG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD	PRECISION DRILLING, DIV OF PDC	VERT	☐

Operator's AFE	Contractor's Job No	Spud Date	Time
09N010009	354	2010/02/06	01:00

Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
HALE YARDLEY	ERICK BIGRAS		

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection	HY	EB
2) Detailed Inspection - Weekly (Using Check List)		
3) H2S Signs Posted if Required	HY	EB
4) Well Licence & Stick Diagram Posted	HY	EB
5) Flare Lines Staked	HY	EB
6) BOP Drills Performed		
7) Visually Inspected BOPs - Flare Lines & Degasser Lines	HY	EB
1) Rig Site Health & Safety Meeting (one/crew/month)		
2) CAODC Rig Safety Inspection Checklist (one/rig/month)		
3) Mast Inspection before Raising or Lowering		
4) Crown Saver Checked		EB
5) Motor Kills Checked		

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	06:00
Temp	-22
Current Conditions	CLEAR
Wind Direction	NE
Wind Strength	UP TO 19 KM/H
Road Condition	FAIR

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)
DP	4"FH	SS95	102	65	23.8300	185	
DC	4.5" XH	DC	158	58	134.0000	18	
HW	4" FH	HWDP	102	65	41.6400	6	

MUD PUMPS

No.	Make	Stroke Length (mm)
1	BPMMP	229
2	BPMMP	229

GENERAL EQUIPMENT & SERVICES

Description	Hours
MUD PUMP	24.00
MANIFOLD	24.00
LOADER	24.00

CAODC Pason v1.0

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)
SURFACE	LKSIDE	J-55	219	206	35.72	28	378	4	378
PRODUCTION	PARAGON	J-55	140	127	20.83	119	1469	4	1468

SHALE SHAKERS

No.	Top Screen			Middle Screen			Middle Screen			Bottom Screen		
	Size	Changed	New	Size	Changed	New	Size	Changed	New	Size	Changed	New
1	50	☐	☐	84	☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐

TOUR 1

SIGNATURE OF DRILLER: JOE LEADLEY

START TIME: 00:00 END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

0	Drill Pipe	Stands (m)	0.00
0	Drill Pipe	Singles (m)	0.00
Weight of DC (kdaN)	0	Kelly Down (m)	0.00
Weight of string (kdaN)	0	Total (m)	0.00

BITS

Bit Number	2				
Size (mm)	200				
IADC Code	M	2	2	2	
Manufacturer	REED				
Type	DSX416M-A3PDC				
Serial No	114176				
Jets (mm)	12.0	12.0	12.0	12.0	
	12.0	12.0			
Depth Out (m)					
Depth In (m)	379				
Total Drilled (m)	932				
Hrs Run Today	6.50				
Cumulative Hrs Run	55.25				
Entry Date	2010/02/12				

DULL GRADE

T_i		Gage (mm)	
T_e		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water [x]	Oil [ ]	Other [ ]
Time	02:00	05:00	06:30
Density (kg/m³)	1050	1050	1040
Funnel Viscosity (s/l)	37	38	37
Fluid Loss (cm³)	11.0	11.0	9.0
pH	9	8	8
Location	SHAKER	SHAKER	SHAKER
Depth (m)	1230	1275	1295
PVT (m³)	43	42	42

MUD MATERIALS ADDED

Product	Amount	Type
DRISPAC PLUS REGULAR	1	SACK
STARDRILL	2	SACK
LIGNITE	3	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)
CENT	8.00	1050	1030	1825

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
CONNECTIONS	45	4448

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)
1221	1311	DRILL	100	4

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
1	2730 @	69 @	1249
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	SINGLE	152	92	4320	7.50
2	SINGLE	152	0	4320	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	4
Hole Drag Down (kdaN)	2
Torque at Bottom (Nm)	0
Fill on Bottom (m)	0

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type
04:15	1267.00	0.5	0	TELEDRIFT

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
00:00	00:30	0.50	6A	TRIP IN TO BOTTOM
00:30	00:45	0.25	5	FILL PIPE
00:45	01:00	0.25	7	RIG SERVICE (FUNC. ANNULAR 13 SEC. TO CLOSE)
01:00	04:15	3.25	2	DRILL 200mm HOLE F/ 1221m TO 1268m
04:15	04:30	0.25	10	SURVEY @ 1267m 0.5DEG
04:30	06:00	1.50	2	DRILL 200mm HOLE F/ 1268m TO 1278m
06:00	06:15	0.25	21	CREW HANDOVER MEETING
06:15	08:00	1.75	2	DRILL 200mm HOLE F/ 1278m TO 1311M

Remarks: DWA FUNC. & RESET CROWN SAVER, FLARE TANK IGNITOR

INSPECTED BRAKES, LINKAGES, ROLLERS & PINS. SLIPS & DIES, FLARE & DEGASSER LINES. BOP LINES, BOP SAFETY CHAINS. VISUALLY INSPECTED DERRICK, PINS & KEEPERS

TONGS, DIES & HOLD BACK LINES

BLEW BOILER 4x 150L

TOUR 2

SIGNATURE OF DRILLER: PETER IWANCZYK

START TIME: 08:00 END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

0	Drill Pipe	Stands (m)	0.00
0	Drill Pipe	Singles (m)	0.00
Weight of DC (kdaN)		Kelly Down (m)	0.00
Weight of string (kdaN)		Total (m)	0.00

BITS

Bit Number	2				
Size (mm)	200				
IADC Code	M	2	2	2	
Manufacturer	REED				
Type	DSX416M-A3PDC				
Serial No	114176				
Jets (mm)	12.0	12.0	12.0	12.0	
	12.0	12.0			
Depth Out (m)					
Depth In (m)	379				
Total Drilled (m)	1020				
Hrs Run Today	7.50				
Cumulative Hrs Run	62.75				
Entry Date	2010/02/12				

DULL GRADE

T_i		Gage (mm)	
T_e		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water [x]	Oil [ ]	Other [ ]
Time	08:00	09:30	10:00
Density (kg/m³)	1045	1045	1050
Funnel Viscosity (s/l)	37	39	39
Fluid Loss (cm³)	10.0	10.0	9.5
pH	10	10	10
Location	SHAKER	SHAKER	SHAKER
Depth (m)	1312	1330	1337
PVT (m³)	41	41	40

MUD MATERIALS ADDED

Product	Amount	Type
CAUSTIC	4	SACK
DRISPAC PLUS REGULAR	3	SACK
STARDRILL	6	SACK
LIGNITE	9	SACK
MF-VIS	6	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)
CENTRIFUGE	8.00	1040	1030	1700

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
WILDLIFE	46	2956

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)
1311	1399	DRILL	95	4

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
1	2665 @	70 @	1315
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	SINGLE	152	90	4287	8.00
2	SINGLE	152	0	4287	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	2
Hole Drag Down (kdaN)	3
Torque at Bottom (Nm)	45
Fill on Bottom (m)	0

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.0	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type
10:30	1344.00	1.0	0	TELEDRIFT

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
08:00	08:15	0.25	7	RIG SERVICE FUNCTION PIPE RAMS CLOSED IN 4 SECONDS
08:15	10:30	2.25	2	DRILL FROM 1311M TO 1345M
10:30	10:45	0.25	10	DEVIATION SURVEY
10:45	16:00	5.25	2	DRILL FROM 1345M TO 1399M

Remarks: FUNCTION CROWN SAVER, VISUALLY INSPECT BRAKE, ROLLERS, PINS, AND LINKAGE.

CHECK DEADMAN NUTS AND BOLTS, TONGS, BACKUP LINES, DC/DP SLIPS, DOG COLLAR,

STABBING VALVE, TUGGER HOOKS, BOOM HOOK, CHECK FLARE/DEGASSER LINES AND FLARE

TANK.

BLOWDOWN BOILER 4X150L

TOUR 3

SIGNATURE OF DRILLER: JOE LEADLEY

START TIME: 16:00 END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	158	64	0.71
1	TELEDRIFT	158	65	2.62
6	DC (6.25 IN)	158	65	49.61
1	JARS-HYD	158	65	5.26
9	DC (6.25 IN)	158	65	82.50
1	X/O	158	65	0.27
6	HWDP(4.0 IN)	135	65	55.44

63	Drill Pipe	Stands (m)	1203.50
1	Drill Pipe	Singles (m)	9.50
Weight of DC (kdaN)	12	Kelly Down (m)	10.39
Weight of string (kdaN)	43	Total (m)	0.00

BITS

Bit Number	2				
Size (mm)	200				
IADC Code	M	2	2	2	
Manufacturer	REED				
Type	DSX416M-A3PDC				
Serial No	114176				
Jets (mm)	12.0	12.0	12.0	12.0	
	12.0	12.0			
Depth Out (m)	1420				
Depth In (m)	379				
Total Drilled (m)	1041				
Hrs Run Today	2.00				
Cumulative Hrs Run	64.75				
Entry Date	2010/02/11				

DULL GRADE

T_i		Gage (mm)	
T_e		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	16.08
BRG			

MUD RECORD

Mud Type	Water [x]	Oil [ ]	Other [ ]
Time	16:00	17:00	19:00
Density (kg/m³)	1040	1040	1040
Funnel Viscosity (s/l)	57	60	59
Fluid Loss (cm³)	7.0	6.0	7.0
pH	10	10	10
Location	SHAKER	SHAKER	SHAKER
Depth (m)	1402	1408	1420
PVT (m³)	41	41	40

MUD MATERIALS ADDED

Product	Amount	Type
MF-VIS	8	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)
CENTRIFUGE	8.00	1050	1040	1790

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
DOWN HOLE TORQUE	46	2956

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)
1399	1420	DRILL	95	4

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
1	2665 @	70 @	1314
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	SINGLE	152	90	3999	6.00
2	SINGLE	152	0	3999	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	1
Hole Drag Down (kdaN)	3
Torque at Bottom (Nm)	45
Fill on Bottom (m)	0

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type
18:30	1420.00	0.5	0	TELEDRIFT

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
16:00	16:15	0.25	7	RIG SERVICE FUNCTION HCR 1SEC OPENED
16:15	18:00	1.75	2	DRILL FROM 1399M TO TD 1415M
18:00	18:15	0.25	21	HANDOVER SAFETY MEETING
18:15	18:30	0.25	2	DRILL 200mm HOLE F/ 1415m TO 1420m
18:30	18:45	0.25	10	SURVEY @ 1419m 0.5 DEG
18:45	20:45	2.00	5	CIRC. HOLE CLEAN & CONDITION MUD
20:45	21:45	1.00	6	CLEAN OUT TRIP(11STANDS, FLOW CHECKS @ 1409, 1314m HOLE FILL VOL. = ACTUAL
				1.58- CALC. 0.57= DIFF. 1.01)
21:45	22:45	1.00	6A	RUN IN 11 STDS TO BOTTOM
22:45	24:00	1.25	5	CIRCULATE HOLE CLEAN & CONDITION MUD FOR LOGGING

Remarks: FUNCTION CROWNSAVER, VISUALLY INSPECT BRAKE, ROLLERS, PINS, LINKAGE.

CHECK DEADMAN NUTS AND BOLTS, TONGS, BACKUP LINES, ELEVATORS, SLIPS, STABBING

VALVE, TUGGER HOOKS, BOOM HOOK, CHECK FLARE/DEGASSER LINES AND FLARE TANK.

BLOWDOWN BOILER 4X150L

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
0Y52245_20100212_1A	Pason	2010	02	12

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	60:06:29.30N/117:29:42.70W	NT	AT-LCNG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD	PRECISION DRILLING, DIV OF PDC	VERT	☐

Operator's AFE	Contractor's Job No	Spud Date	Time
09N010009	354	2010/02/06	01:00

Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
HALE YARDLEY	ERICK BIGRAS		

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection		
2) Detailed Inspection - Weekly (Using Check List)		
3) H2S Signs Posted if Required		
4) Well Licence & Stick Diagram Posted		
5) Flare Lines Staked		
6) BOP Drills Performed		
7) Visually Inspected BOPs - Flare Lines & Degasser Lines		

1) Rig Site Health & Safety Meeting (one/crew/month)	
2) CAODC Rig Safety Inspection Checklist (one/rig/month)	
3) Mast Inspection before Raising or Lowering	
4) Crown Saver Checked	
5) Motor Kills Checked	

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	
Temp	
Current Conditions	
Wind Direction	
Wind Strength	
Road Condition	

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)

MUD PUMPS

No.	Make	Stroke Length (mm)

GENERAL EQUIPMENT & SERVICES

Description	Hours

CAODC

Pason

SHALE SHAKERS

No.	Top Screen			Middle Screen			Middle Screen			Bottom Screen		
	Size	Changed	New	Size	Changed	New	Size	Changed	New	Size	Changed	New
		☐	☐		☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐

TOUR 1

SIGNATURE OF DRILLER: JOE LEADLEY

START TIME: 00:00 END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	158	64	0.71
1	TELEDRIFT	158	65	2.62
6	DC (6.25 IN)	158	65	45.01
1	PONY DC	158	65	4.60
1	JARS-HYD	158	65	5.26
9	DC (6.25 IN)	158	65	82.50
1	X/O	158	65	0.27
6	HWDP(4.0 IN)	135	65	55.44

58	Drill Pipe	Stands (m)	1108.03
0	Drill Pipe	Singles (m)	0.00
Weight of DC (kdaN)	12	Kelly Down (m)	6.36
Weight of string (kdaN)	41	Total (m)	1311.00

BITS

Bit Number	
Size (mm)	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets (mm)	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DULL GRADE

T_I		Gage (mm)	
T_O		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐
Time			
Density (kg/m³)			
Funnel Viscosity (s/l)			
Fluid Loss (cm³)			
pH			
Location			
Depth (m)			
PVT (m³)			

MUD MATERIALS ADDED

Product	Amount	Type

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run

Remarks:

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks

Remarks:

TOUR 2

SIGNATURE OF DRILLER: PETER IWANCZYK

START TIME: 08:00 END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	158	64	0.71
1	TELEDRIFT	158	65	2.62
6	DC (6.25 IN)	158	65	49.61
1	JARS-HYD	158	65	5.26
9	DC (6.25 IN)	158	65	82.50
1	X/O	158	65	0.27
6	HWDP(4.0 IN)	135	65	55.44

62	Drill Pipe	Stands (m)	1184.44
1	Drill Pipe	Singles (m)	9.59
Weight of DC (kdaN)		Kelly Down (m)	8.36
Weight of string (kdaN)		Total (m)	1399.00

BITS

Bit Number	
Size (mm)	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets (mm)	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DULL GRADE

T_I		Gage (mm)	
T_O		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐
Time	12:00	15:00	
Density (kg/m³)	1045	1040	
Funnel Viscosity (s/l)	40	55	
Fluid Loss (cm³)	9.0	8.0	
pH	10	9	
Location	SHAKER	SHAKER	
Depth (m)	1358	1390	
PVT (m³)	41	40	

MUD MATERIALS ADDED

Product	Amount	Type

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run

Remarks:

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks

Remarks:

TOUR 3

SIGNATURE OF DRILLER: JOE LEADLEY

START TIME: 16:00 END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

	Drill Pipe	Stands (m)	
	Drill Pipe	Singles (m)	
Weight of DC (kdaN)		Kelly Down (m)	
Weight of string (kdaN)		Total (m)	1420.00

BITS

Bit Number	
Size (mm)	
IADC Code	
Manufacturer	
Type	
Serial No	
Jets (mm)	
Depth Out (m)	
Depth In (m)	
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	
Entry Date	

DULL GRADE

T_I		Gage (mm)	
T_O		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐
Time	20:30	23:45	
Density (kg/m³)	1040	1040	
Funnel Viscosity (s/l)	65	72	
Fluid Loss (cm³)	7.0	6.5	
pH	10	10	
Location	SHAKER	SHAKER	
Depth (m)	1420	1420	
PVT (m³)	40	13	

MUD MATERIALS ADDED

Product	Amount	Type

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run

Remarks:

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks

Remarks:

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
0YS2245_20100213_1C	Pason	2010	02	13

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	60:36:39.30N/117:28:04.70W	NT	AT-CNG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	VERT	☐
	Operator's AFE	Contractor's Job No	Spud Date	Time
	09N010009	354	2010/02/06	01:00
	Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
	HALE YARDLEY	ERICK BIGRAS		

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection	HY	EB
2) Detailed Inspection - Weekly (Using Check List)	HY	EB
3) H2S Signs Posted if Required	HY	EB
4) Well Licence & Stick Diagram Posted	HY	EB
5) Flare Lines Staked	HY	EB
6) BOP Drills Performed		
7) Visually Inspected BOPs - Flare Lines & Degasser Lines	HY	EB
1) Rig Site Health & Safety Meeting (one/crew/month)		
2) CAODC Rig Safety Inspection Checklist (one/rig/month)		
3) Mast Inspection before Raising or Lowering		
4) Crown Saver Checked		EB
5) Motor Kills Checked		

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	06:00
Temp	-15
Current Conditions	CLEAR
Wind Direction	NE
Wind Strength	UP TO 19 KM/H
Road Condition	FAIR

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)
DP	4"FH	SS95	102	65	23.8300	185	
DC	4.5" XH	DC	158	58	134.0000	18	
HW	4" FH	HWDP	102	65	41.6400	6	

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)
SURFACE	LKSIDE	J-55	219	206	35.72	28	378	4	378
PRODUCTION	PARAGON	J-55	140	127	20.83	119	1469	4	1468

MUD PUMPS

No.	Make	Stroke Length (mm)
1	BPMMP	229
2	BPMMP	229

GENERAL EQUIPMENT & SERVICES

Description	Hours
MUD PUMP	24.00
MANIFOLD	24.00
LOADER	24.00

CAODC Pason V3.1.0

SHALE SHAKERS

No.	Top Screen			Middle Screen			Middle Screen			Bottom Screen		
	Size	Changed	New	Size	Changed	New	Size	Changed	New	Size	Changed	New
1	50			84								

TOUR 1

SIGNATURE OF DRILLER: JOE LEADLEY

START TIME: 00:00 END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

63	Drill Pipe	Stands (m)	1203.50
1	Drill Pipe	Singles (m)	9.50
Weight of DC (kdaN)	12	Kelly Down (m)	10.39
Weight of string (kdaN)	43	Total (m)	1223.39

BITS

Bit Number	2
Size (mm)	200
IADC Code	M 2 2 2
Manufacturer	REED
Type	DSX416M-A3PDC
Serial No	114176
Jets (mm)	12.0 12.0 12.0 12.0 12.0 12.0
Depth Out (m)	
Depth In (m)	379
Total Drilled (m)	1041
Hrs Run Today	
Cumulative Hrs Run	64.75
Entry Date	2010/01/13

DULL GRADE

T_i	1	Gage (mm)	200
T_o	1	ODC	NO
MDC	CT	Reason Pulled	TD
LOC	N	Total Run (m/hr)	
BRG	X		

MUD RECORD

Mud Type	Water ☒	Oil ☐	Other ☐	
Time				
Density (kg/m³)				
Funnel Viscosity (s/l)				
Fluid Loss (cm³)				
pH				
Location				
Depth (m)				
PVT (m³)				

MUD MATERIALS ADDED

Product	Amount	Type
BARITE	15	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
TRIPPING	45	2993

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)		Strokes/min		Depth (m)
1	2700	@	69	@	1420
		@		@	
		@		@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	4
Hole Drag Down (kdaN)	2
Torque at Bottom (Nm)	0
Fill on Bottom (m)	0

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
00:00	00:15	0.25	25	PUMP PILL & BLOW KELLY
00:15	04:45	4.50	6B	POOH FOR LOGGING(HOLE FILL VOL. = ACTUAL 8.88- CALC. 6.20=DIFF. 2.68 FLOW CHECKS @ 1409, 1315, 673, 221, 0M FUNC. BLIND RAMS 4 SEC. TO CLOSE)
04:45	05:00	0.25	7	RIG SERVICE FUNCTION BLIND RAMS 4 SEC TO CLOSE
05:00	05:15	0.25	21D	SAFETY MEETING W/ WEATHERFORD
05:15	06:00	0.75	11	RIG UP LOGGERS
06:00	06:15	0.25	21	SAFETY MEETING
06:15	08:00	1.75	11A	LOGGING - OPEN HOLE LOGS. LOG TOOLS ARE STI/MDA/SPD/CNT/UGR/MRT/DAC TIME IN BOTTOM 8:00AM LOGERS DEPTH 1413m

Remarks: DWA FUNC. CROWN SAVER, FLARE TANK IGNITOR,INS DEGASSER LINE AND FLARE LINE
INSPECTED BRAKES, LINKAGES, ROLLERS & PINS, SLIPS & DIES, TONGS, DIES & HOLD BACK LINES.
BLEW BOILER 4x 150L

TOUR 2

SIGNATURE OF DRILLER: PETER IWANCZYK

START TIME: 08:00 END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

0	Drill Pipe	Stands (m)	0.00
0	Drill Pipe	Singles (m)	0.00
Weight of DC (kdaN)	0	Kelly Down (m)	0.00
Weight of string (kdaN)	0	Total (m)	0.00

BITS

Bit Number	3
Size (mm)	200
IADC Code	
Manufacturer	VAREL
Type	TGR HE18MSV
Serial No	250656
Jets (mm)	18.0 18.0 18.0
Depth Out (m)	
Depth In (m)	1420
Total Drilled (m)	0
Hrs Run Today	
Cumulative Hrs Run	0.00
Entry Date	2010/02/13

DULL GRADE

T_i		Gage (mm)	
T_o		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐	
Time				
Density (kg/m³)				
Funnel Viscosity (s/l)				
Fluid Loss (cm³)				
pH				
Location				
Depth (m)				
PVT (m³)				

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
DRIVING	44	2956

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)		Strokes/min		Depth (m)
		@		@	
		@		@	
		@		@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.0	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
08:00	08:15	0.25	7	RIG SERVICE FUNCTION PIPE RAMS CLOSED IN 4SECONDS
08:15	15:00	6.75	11A	LOGGING - OPEN HOLE LOGS RIG OUT LOG TOOLS
15:00	16:00	1.00	6A	TRIP IN HOLE FLOW CHECK @ 385M 10 min

Remarks: FUNCTION CROWNSAVER, VISUALLY INSPECT BRAKE, ROLLERS, PINS, AND LINKAGE.
CHECK DEADMAN NUTS AND BOLTS. FLARE/DEGASSER LINES AND FLARE. CHECK TUGGER
HOOKS AND BOOM HOOK, DC/DP SLIPS AND ELEVATORS, STABBING VALVE, AND PIPE
SPINNER.
BLOW DOWN BOILER 4X150L

TOUR 3

SIGNATURE OF DRILLER: JOE LEADLEY

START TIME: 16:00 END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

0	Drill Pipe	Stands (m)	0.00
0	Drill Pipe	Singles (m)	0.00
Weight of DC (kdaN)		Kelly Down (m)	0.00
Weight of string (kdaN)		Total (m)	0.00

BITS

Bit Number	3
Size (mm)	200
IADC Code	
Manufacturer	VAREL
Type	TGR HE18MSV
Serial No	250656
Jets (mm)	18.0 18.0 18.0
Depth Out (m)	
Depth In (m)	1420
Total Drilled (m)	0
Hrs Run Today	
Cumulative Hrs Run	0.00
Entry Date	2010/02/13

DULL GRADE

T_i		Gage (mm)	
T_o		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☒	Oil ☐	Other ☐	
Time	19:00	21:30		
Density (kg/m³)	1050	1050		
Funnel Viscosity (s/l)	77	76		
Fluid Loss (cm³)	7.0	7.0		
pH	8	10		
Location	SHAKER	SHAKER		
Depth (m)	1406	1420		
PVT (m³)	17	29		

MUD MATERIALS ADDED

Product	Amount	Type
BARITE	20	SACK
MF-VIS	1	SACK
CAUSTIC	1	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
SLIPS AND FALLS	42	2956

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)		Strokes/min		Depth (m)
1	3750	@	70	@	1409
		@		@	
		@		@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	SINGLE	152	80	3870	3.50
2	SINGLE	152	0	3870	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	2
Hole Drag Down (kdaN)	1
Torque at Bottom (Nm)	0
Fill on Bottom (m)	0

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
16:00	18:00	2.00	6A	TRIP IN HOLE FLOW CHECKS @ 724M 10 min
18:00	18:15	0.25	21	HANDOVER SAFETY MEETING
18:15	20:15	2.00	5	WASH TO BOTTOM
20:15	20:30	0.25	7	RIG SERVICE FUNCTION HYDRILL 13 SEC TO CLOSE
20:30	20:45	0.25	6F	LAY DOWN 3 SINGLES
20:45	21:45	1.00	5	WASH TO BOTTOM & CIRC. HOLE CLEAN
21:45	22:00	0.25	25	PUMP PILL & BLOW KELLY
22:00	24:00	2.00	6F	LAY DOWN DP(FLOW CHECKS @ 1416, 1322M)

Remarks: FUNCTION CROWN SAVER, CHECK BRAKE, ROLLERS, PINS, AND LINKAGE. CHECK DEADMAN
NUTS AND BOLTS, TONGS, BACKUP LINES, DC/DP SLIPS AND ELEVATORS, DOG COLLAR.
CHECK FLARE/DEGASSER LINES AND FLARE TANK.
BLOWDOWN BOILER 4X150L

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
0Y52245_20100213_1C	Pason	2010	02	13

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	60:06:29.30N/117:29:-04.70W	NT	LAT-LONG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	VERT	☐
	Operator's AFE	Contractor's Job No	Spud Date	Time
	09N010009	354	2010/02/06	01:00
	Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
	HALE YARDLEY	ERICK BIGRAS		

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection		
2) Detailed Inspection - Weekly (Using Check List)		
3) H2S Signs Posted if Required		
4) Well Licence & Stick Diagram Posted		
5) Flare Lines Staked		
6) BOP Drills Performed		
7) Visually Inspected BOPs - Flare Lines & Degasser Lines		
1) Rig Site Health & Safety Meeting (one/crew/month)		
2) CAODC Rig Safety Inspection Checklist (one/rig/month)		
3) Mast Inspection before Raising or Lowering		
4) Crown Saver Checked		
5) Motor Kills Checked		

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	
Temp	
Current Conditions	
Wind Direction	
Wind Strength	
Road Condition	

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)

MUD PUMPS

No.	Make	Stroke Length (mm)

GENERAL EQUIPMENT & SERVICES

Description	Hours

CAODC

Pason

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)

SHALE SHAKERS

No.	Top Screen Size	Top Screen Changed	Top Screen New	Middle Screen Size	Middle Screen Changed	Middle Screen New	Middle Screen Size	Middle Screen Changed	Middle Screen New	Bottom Screen Size	Bottom Screen Changed	Bottom Screen New
		☐	☐		☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐

TOUR 1

SIGNATURE OF DRILLER: JOE LEADLEY — START TIME: 00:00 — END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	158	1	0.71
1	TELEDRIFT	158	65	2.62
6	DC (6.25 IN)	158	1	49.61
1	JARS-HYD	158	1	5.26
9	DC (6.25 IN)	158	1	82.50
1	X/O	158	1	0.27
6	HWDP(4.0 IN)	135	1	55.44
63	Drill Pipe	Stands (m)		1203.50
1	Drill Pipe	Singles (m)		9.50
Weight of DC (kdaN)	12	Kelly Down (m)		10.39
Weight of string (kdaN)	43	Total (m)		1420.00

BITS

Bit Number; Size (mm); IADC Code; Manufacturer; Type; Serial No; Jets (mm); Depth Out (m); Depth In (m); Total Drilled (m); Hrs Run Today; Cumulative Hrs Run; Entry Date

DULL GRADE

T_I; T_O; MDC; LOC; BRG; Gage (mm); ODC; Reason Pulled; Total Run (m/hr)

MUD RECORD

Mud Type: Water ☐ Oil ☐ Other; Time; Density (kg/m³); Funnel Viscosity (s/l); Fluid Loss (cm³); pH; Location; Depth (m); PVT (m³)

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN); Hole Drag Down (kdaN); Torque at Bottom (Nm); Fill on Bottom (m)

BOILER

No.	Hours Run	pH	Stack Temp (°C)

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks

Remarks:

TOUR 2

SIGNATURE OF DRILLER: PETER IWANCZYK — START TIME: 08:00 — END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	158	64	0.71
6	DC (6.25 IN)	158	65	49.61
1	JARS-HYD	158	65	5.26
9	DC (6.25 IN)	158	65	82.50
1	X/O	158	65	0.27
6	HWDP(4.0 IN)	135	65	55.44
63	Drill Pipe	Stands (m)		1203.50
1	Drill Pipe	Singles (m)		9.50
Weight of DC (kdaN)		Kelly Down (m)		11.89
Weight of string (kdaN)		Total (m)		1418.88

BITS

Bit Number; Size (mm); IADC Code; Manufacturer; Type; Serial No; Jets (mm); Depth Out (m); Depth In (m); Total Drilled (m); Hrs Run Today; Cumulative Hrs Run; Entry Date

DULL GRADE

T_I; T_O; MDC; LOC; BRG; Gage (mm); ODC; Reason Pulled; Total Run (m/hr)

MUD RECORD

Mud Type: Water ☐ Oil ☐ Other; Time; Density (kg/m³); Funnel Viscosity (s/l); Fluid Loss (cm³); pH; Location; Depth (m); PVT (m³)

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN); Hole Drag Down (kdaN); Torque at Bottom (Nm); Fill on Bottom (m)

BOILER

No.	Hours Run	pH	Stack Temp (°C)

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks

Remarks:

TOUR 3

SIGNATURE OF DRILLER: JOE LEADLEY — START TIME: 16:00 — END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	158	64	0.71
6	DC (6.25 IN)	158	65	49.61
1	JARS-HYD	158	65	5.26
9	DC (6.25 IN)	158	65	82.50
1	X/O	158	65	0.27
6	HWDP(4.0 IN)	135	65	55.44
64	Drill Pipe	Stands (m)		1222.50
0	Drill Pipe	Singles (m)		0.00
Weight of DC (kdaN)	12	Kelly Down (m)		8.38
Weight of string (kdaN)	44	Total (m)		1424.87

BITS

Bit Number; Size (mm); IADC Code; Manufacturer; Type; Serial No; Jets (mm); Depth Out (m); Depth In (m); Total Drilled (m); Hrs Run Today; Cumulative Hrs Run; Entry Date

DULL GRADE

T_I; T_O; MDC; LOC; BRG; Gage (mm); ODC; Reason Pulled; Total Run (m/hr)

MUD RECORD

Mud Type: Water ☐ Oil ☐ Other; Time; Density (kg/m³); Funnel Viscosity (s/l); Fluid Loss (cm³); pH; Location; Depth (m); PVT (m³)

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN); Hole Drag Down (kdaN); Torque at Bottom (Nm); Fill on Bottom (m)

BOILER

No.	Hours Run	pH	Stack Temp (°C)

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks

Remarks:

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
0YS2245_20100214_1A	Pason	2010	02	14

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para el al Cameron F-77	60:06:29.30N/117:29:04.70W	NT	AT-LONG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	VERT	☐
	Operator's AFE	Contractor's Job No	Spud Date	Time
	09N010009	354	2010/02/06	01:00
	Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
	HALE YARDLEY	ERICK BIGRAS		

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection	HY	EB
2) Detailed Inspection - Weekly (Using Check List)	HY	EB
3) H2S Signs Posted if Required	HY	EB
4) Well Licence & Stick Diagram Posted	HY	EB
5) Flare Lines Staked	HY	EB
6) BOP Drills Performed		
7) Visually Inspected BOPs - Flare Lines & Degasser Lines	HY	EB
1) Rig Site Health & Safety Meeting (one/crew/month)		
2) CAODC Rig Safety Inspection Checklist (one/rig/month)		
3) Mast Inspection before Raising or Lowering		
4) Crown Saver Checked		EB
5) Motor Kills Checked		

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	06:00
Temp	-17
Current Conditions	CLEAR
Wind Direction	NE
Wind Strength	UP TO 19 KM/H
Road Condition	FAIR

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)
DP	4"FH	SS95	102	65	23.8300	185	
DC	4.5" XH	DC	158	58	134.0000	18	
HW	4" FH	HWDP	102	65	41.6400	6	

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)
SURFACE	LKSIDE	J-55	219	206	35.72	28	378	4	378
PRODUCTION	PARAGON	J-55	140	127	20.83	119	1469	4	1468

MUD PUMPS

No.	Make	Stroke Length (mm)
1	BPMMP	229
2	BPMMP	229

GENERAL EQUIPMENT & SERVICES

Description	Hours
MUD PUMP	24.00
MANIFOLD	24.00
LOADER	24.00

CAODC

Pason

SHALE SHAKERS

No.	Top Screen			Middle Screen			Middle Screen			Bottom Screen		
	Size	Changed	New	Size	Changed	New	Size	Changed	New	Size	Changed	New
1	50	☐	☐	84	☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐

TOUR 1

SIGNATURE OF DRILLER: JOE LEADLEY

START TIME: 00:00 END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)
1	BIT	200	0	0.20
1	BIT SUB	158	64	0.71
6	DC (6.25 IN)	158	65	49.61
1	JARS-HYD	158	65	5.26
9	DC (6.25 IN)	158	65	82.50
1	X/O	158	65	0.27
6	HWDP(4.0 IN)	135	65	55.44

64	Drill Pipe	Stands (m)	1222.50
0	Drill Pipe	Singles (m)	0.00
Weight of DC (kdaN)	12	Kelly Down (m)	8.38
Weight of string (kdaN)	44	Total (m)	1424.87

BITS

Bit Number	2
Size (mm)	200
IADC Code	M 2 2 2
Manufacturer	REED
Type	DSX416M-A3PDC
Serial No	114176
Jets (mm)	12.0 12.0 12.0 12.0 12.0 12.0
Depth Out (m)	
Depth In (m)	379
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	64.75
Entry Date	2010/01/13

DULL GRADE

T_i	1	Gage (mm)	200
T_s	1	ODC	NO
MDC	CT	Reason Pulled	TD
LOC	N	Total Run (m/hr)	
BRG	X		

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐
Time			
Density (kg/m³)			
Funnel Viscosity (s/l)			
Fluid Loss (cm³)			
pH			
Location			
Depth (m)			
PVT (m³)			

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
LAYING DOWN PIPE	38	2956

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
00:00	04:30	4.50	6F	LAY DOWN STRING(FLOW CHECKS @ 709, 198.0m HOLE FILL VOL. = ACTUAL 8.43 - CALC. 6.20=DIFF. 2.23)
04:30	04:45	0.25	7	RIG SERVICE(FUNC. BLIND RAMS 3 SWEC. TO CLOSE)
04:45	05:15	0.50	12A	RIG UP TO RUN CASING ELEVATOR CERT. #EDM 0303.5566 10243LT TESTED TO 225 TON
05:15	05:30	0.25	21D	SAFETY MEETING W/ TONG HAND
05:30	06:00	0.50	12	RUN 139.7mm CASING
06:00	06:15	0.25	21	CREW CHANGE HANDOVER
06:15	08:00	1.75	12	RUN 139.7mm CASING

Remarks: DWA FUNC. CROWN SAVER, FLARE TANK IGNITOR
INSPECTED BRAKES, LINKAGES, ROLLERS & PINS, TONGS, DIES & BACK UP LINES
VISUALLY INSPECTED DERRICK, BLOCKS, ELEVATORS
BLEW BOILER 4X 150L

TOUR 2

SIGNATURE OF DRILLER: PETER IWANCZYK

START TIME: 08:00 END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

	Drill Pipe	Stands (m)	
	Drill Pipe	Singles (m)	
Weight of DC (kdaN)		Kelly Down (m)	
Weight of string (kdaN)		Total (m)	

BITS

Bit Number	3
Size (mm)	200
IADC Code	
Manufacturer	VAREL
Type	TGR HE18MSV
Serial No	250656
Jets (mm)	18.0 18.0 18.0
Depth Out (m)	
Depth In (m)	1420
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	0.00
Entry Date	2010/02/13

DULL GRADE

T_i		Gage (mm)	
T_s		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☒	Oil ☐	Other ☐
Time	12:30	13:15	
Density (kg/m³)	1050	1050	
Funnel Viscosity (s/l)	71	57	
Fluid Loss (cm³)	8.0	8.0	
pH	10	10	
Location	SHAKER	SHAKER	
Depth (m)	1420	1420	
PVT (m³)	15	13	

MUD MATERIALS ADDED

Product	Amount	Type
CELLOPHANE	5	SACK

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)
CENTRIFUGE	8.00	1050	10140	1890

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
SAFETY CABLES	22	2956

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
1	1628 @	70 @	1417
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1	SINGLE	152	85	1780	3.00
2	SINGLE	0	0	1780	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	1
Hole Drag Down (kdaN)	2
Torque at Bottom (Nm)	0
Fill on Bottom (m)	0

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
08:00	12:00	4.00	12B	RUN CASING.
12:00	12:15	0.25	12A	RIG OUT POWER TONGS AND BRAKE CIRCULATION.
12:15	13:45	1.50	5	CONDITION MUD & CIRCULATE.
13:45	14:00	0.25	21	SAFETY MEETING W/SANJEL PRIOR TO CEMENT LONG STRING.
14:00	15:45	1.75	12C	CEMENTING W SANJEL CEMENT PLUG IN PLACE @ 3:30PM .5M3 OF GOOD CEMENT RETURN. PRESSURE TESTED PLUG TO 21MPA FOR 10 MIN.
15:45	16:00	0.25	12C	RAN 113 JTS OF 139.7 MMK,20.83KG/M J-55 ST & C LENTH 1417.68m TO 1417mkb CIRCULATED AND CEMENT W/3m3 WATER,3m3SCAV, 28.68m3 (23.9 T OF FILL AND 7.06m3 (8T) OF TAIL CEMENT).

Remarks: FUNCTION CROWN SAVER, VISUALLY INSPECT BRAKE, ROLLERS, PINS, AND LINKAGE.
CHECK DEADMAN NUT AND BOLTS, TONGS, CASING SLIPS AND ELEVATORS, TUGGER HOOKS, BOOM HOOK, FLARE/DEGASSER LINES AND FLARE TANK.
BLOWDOWN BOILER 4X150L

TOUR 3

SIGNATURE OF DRILLER: JOE LEADLEY

START TIME: 16:00 END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

	Drill Pipe	Stands (m)	
	Drill Pipe	Singles (m)	
Weight of DC (kdaN)		Kelly Down (m)	
Weight of string (kdaN)		Total (m)	

BITS

Bit Number	3
Size (mm)	200
IADC Code	
Manufacturer	VAREL
Type	TGR HE18MSV
Serial No	250656
Jets (mm)	18.0 18.0 18.0
Depth Out (m)	
Depth In (m)	1420
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	0.00
Entry Date	2010/02/13

DULL GRADE

T_i		Gage (mm)	
T_s		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐
Time			
Density (kg/m³)			
Funnel Viscosity (s/l)			
Fluid Loss (cm³)			
pH			
Location			
Depth (m)			
PVT (m³)			

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
SHUTIN PROCEDURES	2956	31

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min	Depth (m)
	@	@	
	@	@	
	@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
16:00	16:15	0.25	12C	CEMENTING(TEAR OUT CEMENTERS)
16:15	18:00	1.75	13	WAIT ON CEMENT
18:00	18:15	0.25	21	HANDOVER SAFETY MEETING
18:15	22:00	3.75	14B	FLUSH B.O.P. STACK W/CEMENTER NIPPLE DOWN BOPS HCR,KILL LINE FLOW T,FLOW LINE AND SET SLIPS AT STRING W/T.CUT CASING AND LAY OUT.
22:00	22:15	0.25	21	SAFETY MEETING W/STREAM FLOW PRIOR TO NIPPLE UP WELL HEAD.
22:15	24:00	1.75	25	NIPPLE UP WELD HEAD W/ STREAM FLOW

Remarks: DWA FUNC. CROWN SAVER
INSPECTED BRAKES & LINKAGES, BOP SLINGS, BOP LIFTING RAMS, TUGGER LINES, RELATED TOOLS FOR TEAR OUT
BLEW BOILER 4x 150L

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
0Y52245_20100215_1B	Pason	2010	02	15

Rig No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	60:56'39.30N/117°29'04.70W	NT	AT-CNG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	VERT	☐

Operator's AFE	Contractor's Job No	Spud Date	Time
09N010009	354	2010/02/06	01:00

Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
JOSH BLINSTON	ERICK BIGRAS	2010/02/15	08:00

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection		
2) Detailed Inspection - Weekly (Using Check List)		
3) H2S Signs Posted if Required		
4) Well Licence & Stick Diagram Posted		
5) Flare Lines Staked		
6) BOP Drills Performed		
7) Visually Inspected BOPs - Flare Lines & Degasser Lines		

1) Rig Site Health & Safety Meeting (one/crew/month)
2) CAODC Rig Safety Inspection Checklist (one/rig/month)
3) Mast Inspection before Raising or Lowering
4) Crown Saver Checked
5) Motor Kills Checked

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	06:00
Temp	-13
Current Conditions	CLEAR
Wind Direction	NE
Wind Strength	UP TO 19 KM/H
Road Condition	FAIR

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)
DP	4"FH	S95	102	65	23.8300	185	
DC	4.5" XH	DC	158	58	134.0000	18	
HW	4" FH	HWDP	102	65	41.6400	6	

MUD PUMPS

No.	Make	Stroke Length (mm)
1	BPMMP	229
2	BPMMP	229

GENERAL EQUIPMENT & SERVICES

Description	Hours
MUD PUMP	24.00
MANIFOLD	24.00
LOADER	24.00

CAODC

Pason

v3.11

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)
SURFACE	LKSIDE	J-55	219	206	35.72	28	378	4	378
PRODUCTION	PARAGON	J-55	140	127	20.83	119	1469	4	1468

SHALE SHAKERS

No.	Top Screen			Middle Screen			Middle Screen			Bottom Screen		
	Size	Changed	New	Size	Changed	New	Size	Changed	New	Size	Changed	New
1	50	☐	☐	84	☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐

TOUR 1

SIGNATURE OF DRILLER: JOE LEADLEY

START TIME: 00:00 END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

	Drill Pipe	Stands (m)	
	Drill Pipe	Singles (m)	
Weight of DC (kdaN)		Kelly Down (m)	
Weight of string (kdaN)		Total (m)	

BITS

Bit Number	2
Size (mm)	200
IADC Code	M 2 2 2
Manufacturer	REED
Type	DSX416M-A3PDC
Serial No	114176
Jets (mm)	12.0 12.0 12.0 12.0 12.0 12.0
Depth Out (m)	
Depth In (m)	379
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	64.75
Entry Date	2010/01/13

DULL GRADE

T_I	1	Gage (mm)	200
T_S	1	ODC	NO
MDC	CT	Reason Pulled	TD
LOC	N	Total Run (m/hr)	
BRG	X		

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐	
Time				
Density (kg/m³)				
Funnel Viscosity (s/l)				
Fluid Loss (cm³)				
pH				
Location				
Depth (m)				
PVT (m³)				

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
TEAR OUT	0	0

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min		Depth (m)
		@	@	
		@	@	
		@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (hNm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	320.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
00:00	02:00	2.00	22	TEAR OUT FLARE TANK, AND ASSOCIATED LINES. CLOSE UP MANIFOLD SHACK, PUT LINES AWAY. CLOSE UP SHACKS
02:00	02:15	0.25	21D	SAFETY MEETING W/ CREW
02:15	03:15	1.00	9A	SLIP & CUT 12.8m
03:15	04:00	0.75	1	RIG UP FLOOR TO LOWER TOP SECTION & DERRICK
04:00	06:00	2.00	22	CONTINUE TO TEAR OUT REST OF RIG FOR MOVE
06:00	06:15	0.25	21	CREW CHANGE HAND OVER MEETING
06:15	07:30	1.25	22	INSPECT DERRICK PRIOR TO LAY DOWN E.B AND P.I. + LAY OUT DERRICK
07:30	08:00	0.50	22	TEAR DOWN

Remarks: DWA FUNC. CROWN SAVER
INSPECTED BRAKES & LINKAGES,VISUALLY INSPECT DERRICK, BRIDAL LINES
VISUALLY INS DERRICK PRIOR TO LAY DOWN E.B.&P.I.
BLOW BOILER 4x 150L
RIG RELEASE FEB/15/2010 AT 8:00am HALE YARDLEY.

TOUR 2

SIGNATURE OF DRILLER: PETER IWANCZYK

START TIME: 08:00 END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

	Drill Pipe	Stands (m)	
	Drill Pipe	Singles (m)	
Weight of DC (kdaN)		Kelly Down (m)	
Weight of string (kdaN)		Total (m)	

BITS

Bit Number	3
Size (mm)	200
IADC Code	
Manufacturer	VAREL
Type	TGR HE18MSV
Serial No	250656
Jets (mm)	18.0 18.0 18.0
Depth Out (m)	
Depth In (m)	1420
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	0.00
Entry Date	2010/02/13

DULL GRADE

T_I		Gage (mm)	
T_S		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐	
Time				
Density (kg/m³)				
Funnel Viscosity (s/l)				
Fluid Loss (cm³)				
pH				
Location				
Depth (m)				
PVT (m³)				

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
CONFINED SPACE		

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min		Depth (m)
		@	@	
		@	@	
		@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.0	285.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
08:00	16:00	8.00	22	TEAR DOWN + MOVE ALL 3rd PARTY EQUIPMENT INTO NEW LOCATION AND W/ON WELL LICENSE

Remarks: VISUALLY INSPECT BRAKE, ROLLERS, PINS AND LINKAGE, CHECK DEADMAN NUTS AND BOLTS.
BLOWDOWN BOILER 4X150L

TOUR 3

SIGNATURE OF DRILLER: JOE LEADLEY

START TIME: 16:00 END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

	Drill Pipe	Stands (m)	
	Drill Pipe	Singles (m)	
Weight of DC (kdaN)		Kelly Down (m)	
Weight of string (kdaN)		Total (m)	

BITS

Bit Number	3
Size (mm)	200
IADC Code	
Manufacturer	VAREL
Type	TGR HE18MSV
Serial No	250656
Jets (mm)	18.0 18.0 18.0
Depth Out (m)	
Depth In (m)	1420
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	0.00
Entry Date	2010/02/13

DULL GRADE

T_I		Gage (mm)	
T_S		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐	
Time				
Density (kg/m³)				
Funnel Viscosity (s/l)				
Fluid Loss (cm³)				
pH				
Location				
Depth (m)				
PVT (m³)				

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
MAINTENANCE		

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min		Depth (m)
		@	@	
		@	@	
		@	@	

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
16:00	24:00	8.00	25	W/ON MORNING TO MOVE BUILDING INTO NEW LOCATION (W/ON WELL LICENSE)

Remarks:

FRONT PAGE SUMMARY

Tour Sheet Serial Number	Vendor Software Version	Year	Month	Day
0Y52245_20100216_1B	Pason	2010	02	16

No.	Well Name	Surface Location	Prov	Loc Type	Unique Well Id	Kelly Bushing
245	Para et al Cameron F-77	60:06:28.30N/117:29:-04.70W	NT	AT-CNG	300F116010117150	4

License No.	Operator	Contractor	Well Type	Re-Entry
1221	PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	VERT	☐
	Operator's AFE	Contractor's Job No	Spud Date	Time
	09N010009	354	2010/02/06	01:00
	Signature of Operator Representative	Signature of Contractor's Rig manager	Rig Release Date	Time
	JOSH BLINSTON	ERICK BIGRAS	2010/02/15	08:00

DAILY CHECKS

	OP	RM
1) Daily Walk Around Inspection		
2) Detailed Inspection - Weekly (Using Check List)		
3) H2S Signs Posted if Required		
4) Well Licence & Stick Diagram Posted		
5) Flare Lines Staked		
6) BOP Drills Performed		
7) Visually Inspected BOPs - Flare Lines & Degasser Lines		
1) Rig Site Health & Safety Meeting (one/crew/month)		
2) CAODC Rig Safety Inspection Checklist (one/rig/month)		
3) Mast Inspection before Raising or Lowering		
4) Crown Saver Checked		
5) Motor Kills Checked		

FUEL @ 08:00 HOURS

Rig	
Boiler	
Op Fuel	

WEATHER

Time	06:00
Temp	-13
Current Conditions	CLEAR
Wind Direction	NE
Wind Strength	UP TO 19 KM/H
Road Condition	FAIR

DRILL PIPE

Category	Thread Type	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Tool Joint OD (mm)
DP	4"FH	SS95	102	65	23.8300	185	
DC	4.5" XH	DC	158	58	134.0000	18	
HW	4" FH	HWDP	102	65	41.6400	6	

MUD PUMPS

No.	Make	Stroke Length (mm)
1	BPMMP	229
2	BPMMP	229

GENERAL EQUIPMENT & SERVICES

Description	Hours
MUD PUMP	24.00
MANIFOLD	24.00
LOADER	24.00

CAODC Pason v(1.1)

CASING

Category	Make	Grade	OD (mm)	ID (mm)	Linear Mass (kg/m)	No. of Joints	Total Length (m)	KB to CSG Head (m)	KB to CSG Bottom (m)
SURFACE	LKSIDE	J-55	219	206	35.72	28	378	4	378
PRODUCTION	PARAGON	J-55	140	127	20.83	119	1469	4	1468

SHALE SHAKERS

No.	Top Screen Size	Top Screen Changed	Top Screen New	Middle Screen Size	Middle Screen Changed	Middle Screen New	Middle Screen Size	Middle Screen Changed	Middle Screen New	Bottom Screen Size	Bottom Screen Changed	Bottom Screen New
1	50	☑	☑	84	☑	☑		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐
		☐	☐		☐	☐		☐	☐		☐	☐

TOUR 1

SIGNATURE OF DRILLER: JOE LEADLEY — START TIME: 00:00 — END TIME: 08:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

	Drill Pipe	Stands (m)	
	Drill Pipe	Singles (m)	
Weight of DC (kdaN)		Kelly Down (m)	
Weight of string (kdaN)		Total (m)	

BITS

Bit Number	2
Size (mm)	200
IADC Code	M 2 2 2
Manufacturer	REED
Type	DSX416M-A3PDC
Serial No	114176
Jets (mm)	12.0 12.0 12.0 12.0 12.0 12.0
Depth Out (m)	
Depth In (m)	379
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	64.75
Entry Date	2010/01/13

DULL GRADE

T_i	1	Gage (mm)	200
T_o	1	ODC	NO
MDC	CT	Reason Pulled	TD
LOC	N	Total Run (m/hr)	
BRG	X		

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐
Time			
Density (kg/m³)			
Funnel Viscosity (s/l)			
Fluid Loss (cm³)			
pH			
Location			
Depth (m)			
PVT (m³)			

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min @	Strokes/min @	Depth (m) @	Depth (m) @
		@	@	@	@
		@	@	@	@

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)
98	8.00	10.5	300.00

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
00:00	08:00	8.00	25	W/ON WELL LICENSE

Remarks:

TOUR 2

SIGNATURE OF DRILLER: PETER IWANCZYK — START TIME: 08:00 — END TIME: 16:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

	Drill Pipe	Stands (m)	
	Drill Pipe	Singles (m)	
Weight of DC (kdaN)		Kelly Down (m)	
Weight of string (kdaN)		Total (m)	

BITS

Bit Number	3
Size (mm)	200
IADC Code	
Manufacturer	VAREL
Type	TGR HE18MSV
Serial No	250656
Jets (mm)	18.0 18.0 18.0
Depth Out (m)	
Depth In (m)	1420
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	0.00
Entry Date	2010/02/13

DULL GRADE

T_i		Gage (mm)	
T_o		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐
Time			
Density (kg/m³)			
Funnel Viscosity (s/l)			
Fluid Loss (cm³)			
pH			
Location			
Depth (m)			
PVT (m³)			

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)
MOVING W/TRUCK		

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min @	Strokes/min @	Depth (m) @	Depth (m) @
		@	@	@	@
		@	@	@	@

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
08:00	08:15	0.25	21	SAFETY MEETING W/MULLEN
08:15	16:00	7.75	1A	MOVE RIG W/MULLEN

Remarks:

TOUR 3

SIGNATURE OF DRILLER: JOE LEADLEY — START TIME: 16:00 — END TIME: 24:00

DRILLING ASSEMBLY

No.	Component	OD (mm)	ID (mm)	Length (m)

	Drill Pipe	Stands (m)	
	Drill Pipe	Singles (m)	
Weight of DC (kdaN)		Kelly Down (m)	
Weight of string (kdaN)		Total (m)	

BITS

Bit Number	3
Size (mm)	200
IADC Code	
Manufacturer	VAREL
Type	TGR HE18MSV
Serial No	250656
Jets (mm)	18.0 18.0 18.0
Depth Out (m)	
Depth In (m)	1420
Total Drilled (m)	
Hrs Run Today	
Cumulative Hrs Run	0.00
Entry Date	2010/02/13

DULL GRADE

T_i		Gage (mm)	
T_o		ODC	
MDC		Reason Pulled	
LOC		Total Run (m/hr)	
BRG			

MUD RECORD

Mud Type	Water ☐	Oil ☐	Other ☐
Time			
Density (kg/m³)			
Funnel Viscosity (s/l)			
Fluid Loss (cm³)			
pH			
Location			
Depth (m)			
PVT (m³)			

MUD MATERIALS ADDED

Product	Amount	Type

SOLIDS CONTROL

Equipment Name	Hours Run	Intake Density (kg/m³)	Over Flow Density (kg/m³)	Under Flow Density (kg/m³)

SAFETY

Safety Topic	MEHL (kdaN)	MACP (kpa)

METRES DRILLED

From (m)	To (m)	D-R-C	RPM	WOB (kdaN)

REDUCED PUMP SPEED

No.	Pressure (kpa)	Strokes/min @	Strokes/min @	Depth (m) @	Depth (m) @
		@	@	@	@
		@	@	@	@

CIRCULATION

Pump	Type	Liner Size (mm)	SPM	Pressure (kpa)	Hours Run
1		152	0	0	0.00
2		152	0	0	0.00

Remarks:

HOLE CONDITION

Hole Drag Up (kdaN)	
Hole Drag Down (kdaN)	
Torque at Bottom (Nm)	
Fill on Bottom (m)	

BOILER

No.	Hours Run	pH	Stack Temp (°C)

DEVIATION SURVEYS

Time	Depth (m)	Deviation	Direction	Type

TIME LOG

From	To	Elapsed	Code	Details of Operations in Sequence & Remarks
16:00	24:00	8.00	25	OTHER W/ON WELL LICENSE

Remarks:

MARQUIS ALLIANCE
ENERGY GROUP INC

Drilling Fluid Report

Current Activity	Rigging Up		
Date	February 4, 2010	Check Number	1
Spud Date	February 6, 2010	Days From Spud	-2
Location	F-77-60/10-11-15		
Contractor	Precision 245		
Report for	Erick Bigras		

Well Name	Para Cameron Hills
Operator	Paramount Resources
Report For	Josh Blinston (ph. 4038603569)

Bit Record

Bit No.	1
Bit Size(mm)	311
Type	HE04SMRSV

Nozzles (mm)

N1:	14.3	N2:	14.3
N3:	14.3	N4:	
N5:		N6:	
N7:		N8:	

TFA	482
Depth In	0
Depth Out	
Hrs. on Bit.	
Drill Rate	0.0
R.P.M.	
WOB (daN)	
Nozzle Vel	68.6
Bit Press..	2607

Casings

Type	ID	OD	Set at(m)

Drilling Assembly

Type	ID	OD	Length	Open Hole Ann Vel.	Open Hole Flow	Liner Ann Vel.	Liner Flow	Casing Ann Vel.	Casing Flow
D.C.	68.0	212.0	17.9		N/A		N/A	-56.2	N/A
D.C.	65.0	158.0	123.1		N/A		N/A	-101.	N/A
H.W.D.P.	65.0	102.0			N/A		N/A		N/A

Volumes (m3)

Pipe Cap	0.5	Hole Enlarge %	
Ann Vol.	0.0	Circulation Time	
Tank	40.0	BTM's Up	0
Tot. Cir. Vol	40.5	Total	20
Open Hole	0.0	Water Added	
		Mud Lost	

V.G. Readings

Test	#1	#2
600	6	
300	4	
200		
100		
6		
3	1	

Deviation Record

Depth	Inc	Dir

HHP	115.59
% Pressure at Bit	46.56

Solids Control Equipment

Type	Name	Screen Size	Screen Size	Screen Size	Screen Size	
Shakers	Swaco	85	85	85	85	

Type	Name	U.F. (kg/m3)	O.F. (kg/m3)	U.F. Rate (L/min)	Hours Run	Removal Rate (kg/hr)
Centrifuge	United					

Pump Data

Model	F-800	F-800
Liner Dia	152	152
Stroke	229	229
Output(m3/stroke)	0.0125	0.0125
S.P.M.	82	85
Output(m3/min)	0.974	1.009
Total Output (m3/min)	1.983	
Press. (kPa)	5600	

Summary of Activity - Comments, Observations, Pilot Tests

Remarks; Hole conditions tripping & drilling; Cuttings description; Torque & drag; Reaming; Bridges; etc.

Feb 4 2010 : Moved on and rigged to spud.

	Check #1	Check #2
Mud System	WaterBasedMud	
Depth MD / TVD (m)	0 / 0	/
Time Sample Taken	21:00	
Flowline Temp (C)	4	
Funnel Viscosity (sec/L)	28	
Mud Density (kg/m3)	1000	
Hyd. Grad. (kPa/m)	9.81	
ECD (kg/m3)		
pH [x] STRIP [ ] METER	8.0	
Plastic Viscosity (mPa)	2.0	
Yield Point (Pa)	1.0	
Gel Strength (Pa) 10s/10min	0.5 / 0.5	/
N Low / K low	0.41 / 0.26	/
N Med / K med	0.58 / 0.10	/
Filtrate (cm3/30min@700kPa)		
Filter Cake (mm)		
HTHP FILTRATE @ C (cm3/30 min. @ 3500 kPa)	@	@
Filter Cake (mm)		
Sand Content (%)		
Total Solids (%)		
Corr. Solids (%)		
Oil Content (%)		
M.B.T. (kg/m3)		
HGS (kg/m3) / %	/	/
LGS (kg/m3) / %	/	/
Drilled solids (kg/m3)		
Bentonite (kg/m3)		
Avg. Density (kg/m3)		
Alkalinity (PF/MF)	0.1 / 0.1	/
Hydroxyl (mg/L)		
Carbonate (mg/L)	60	
Bicarbonate (mg/L)		
Total Hardness (mg/L)	60	
Chlorides (mg/L)	160	
Potassium (mg/L)		
0.2 N HCl / 2.0 N HCl (cc's)	/	/
Silicate% v/v / Silicate %	/	/
Clear Fluid Density (kg/m3)	1000	
SiO2:K2O Ratio		
Soluble Sulfides [ ] HAC [ ]		
Polymer (kg/m3)		

Recommended Treatment - Suggestions

WHMIS: PROTECTIVE CLOTHING REQUIRED WHEN MIXING CHEMICALS. REFER TO MSDS'S/LABELS FOR MORE INFORMATION.

Spud Report :

- Fill tanks to desired level, gun and agitate all compartments.
- Mix 10 pails of Shure Shale through grating at 1-2 min/pail.
- Mix 1 sx of Millzan to increase funnel visc.
- Mix 2 sxs of Hyperdrill 247 to warm water in pill tank and allow to hydrate for 1-2 hrs. Once circulating , bleed into system over several hours while drilling ahead.
- Run centrifuge consistently to strip drill solids, injecting Alka Pam 1103RD only when weight increases to above 1060 kg/m3.
- Add water to system to maintain 35-40m3 or as per company man. *We need 6-7m3 fresh water per* 100m new hole drilled.

System Maintenance :

- Mud Rings : if bit balling is suspected or connections are sticky, mix 1 pail of Detergent at suction *and 1 visc cup of TKPP per connection down* drill pipe to reduce. Do not mix more than 1 pail DD.

- Allow natural clays to build viscosity, do not mix Gel. Gravel is expected at 30-50m, rocks at 50-60m, and sand 90-120m. Ensure proper visc using Millzan mixed 1 sx per circ, if required, for proper hole cleaning.

- Mix 1 sx of Hyperdrill 247 into pill tank and allow to hydrate for 1 hr. Add to system over 3-4 hrs, each 12 hr shift.

- *If pH increases over 8, mix 1 sx Citric Acid over 1 circ to reduce to 7-7.5*

- Ensure funnel visc of 60-70 sec/L prior to wiper trip, mixing 1 sx Millzan and 5-10 sxs of Gel.

- After wiper trip, add 20 L/min fresh water, 1 sx Millzan and 10 sxs Gel to increase FV to 80-100

Materials Used Since Last Check

Products		Products		Products	

Cost Information

Cost Since Last Check		Total Cost to Date	

Marquis Alliance Representatives

T.S.R	Shannon Williams	Trucking Company	
Cell	780-691-2295	Warehouse	
Pager/Home #	780-895-2688	Phone #	

MARQUIS ALLIANCE
ENERGY GROUP INC

Drilling Fluid Report

Current Activity	Drilling Ahead 311mm Surface at 111m		
Date	February 6, 2010	Check Number	2
Spud Date	February 6, 2010	Days From Spud	0
Location	F-77-60/10-11-15		
Contractor	Precision 245		
Report for	Erick Bigras		

Well Name	Para Cameron Hills
Operator	Paramount Resources
Report For	Josh Blinston (ph. 4038603569)

Bit Record

Bit No.	1RR
Bit Size(mm)	311
Type	HE04SMRSV

Nozzles (mm)

N1:	14.3	N2:	14.3
N3:	14.3	N4:	
N5:		N6:	
N7:		N8:	
TFA	482		

Depth In	0
Depth Out	
Hrs. on Bit.	
Drill Rate	10.0
R.P.M.	
WOB (daN)	
Nozzle Vel	63.7
Bit Press..	2358

Casings

Type	ID	OD	Set at(m)

V.G. Readings

Test	#1	#2
600	16	
300	10	
200		
100		
6		
3	2	

Deviation Record

Depth	Inc	Dir

HHP	97.04
% Pressure at Bit	58.76

Drilling Assembly

Type	ID	OD	Length	Open Hole Ann Vel.	Open Hole Flow	Liner Ann Vel.	Liner Flow	Casing Ann Vel.	Casing Flow
D.C.	68.0	212.0	17.9	45.3	LAM		N/A		N/A
D.C.	65.0	158.0	68.0	32.7	LAM		N/A		N/A
D.P.	65.0	102.0	25.1	27.2	LAM		N/A		N/A

Solids Control Equipment

Type	Name	Screen Size	Screen Size	Screen Size	Screen Size	
Shakers	Swaco	85	85	85	85	

Type	Name	U.F. (kg/m3)	O.F. (kg/m3)	U.F. Rate (L/min)	Hours Run	Removal Rate (kg/hr)
Centrifuge	United					

Volumes (m3)

Pipe Cap	0.4
Ann Vol.	6.3
Tank	54.0
Tot. Cir. Vol	60.6
Open Hole	8.4

Hole Enlarge %

Circulation Time

BTM's Up	3
Total	33
Water Added	
Mud Lost	

Pump Data

Model	F-800	F-800
Liner Dia	152	152
Stroke	229	229
Output(m3/stroke)	0.0125	0.0125
S.P.M.	78	77
Output(m3/min)	0.926	0.914
Total Output (m3/min)	1.841	
Press. (kPa)	4014	

	Check #1	Check #2
Mud System	WaterBasedMud	
Depth MD / TVD (m)	111 / 111	/
Time Sample Taken	11:00	
Flowline Temp (C)	19	
Funnel Viscosity (sec/L)	33	
Mud Density (kg/m3)	1050	
Hyd. Grad. (kPa/m)	10.30	
ECD (kg/m3)	1055	
pH ☑ STRIP ☐ METER	8.0	
Plastic Viscosity (mPa)	6.0	
Yield Point (Pa)	1.9	
Gel Strength (Pa) 10s/10min	1.0 / 2.0	/
N Low / K low	0.25 / 1.34	/
N Med / K med	0.68 / 0.15	/
Filtrate (cm3/30min@700kPa)	16.0	
Filter Cake (mm)	1.0	
HTHP FILTRATE @ C (cm3/30 min. @ 3500 kPa)	@	@
Filter Cake (mm)		
Sand Content (%)	.25	
Total Solids (%)	3.125	
Corr. Solids (%)		
Oil Content (%)		
M.B.T. (kg/m3)	43	
HGS (kg/m3) / %	0.00 / 0.0	/
LGS (kg/m3) / %	81.26 / 3.1	/
Drilled solids (kg/m3)	38.51	
Bentonite (kg/m3)		
Avg. Density (kg/m3)	2600	
Alkalinity (PF/MF)	0.0 / 0.1	/
Hydroxyl (mg/L)		
Carbonate (mg/L)	12	
Bicarbonate (mg/L)	122	
Total Hardness (mg/L)	60	
Chlorides (mg/L)	700	
Potassium (mg/L)		
0.2 N HCl / 2.0 N HCl (cc's)	/	/
Silicate% v/v / Silicate %	/	/
Clear Fluid Density (kg/m3)	1000	
SiO2:K2O Ratio		
Soluble Sulfides ☐ HAC ☐		
Polymer (kg/m3)	0.10	

Summary of Activity - Comments, Observations, Pilot Tests

Remarks; Hole conditions tripping & drilling; Cuttings description; Torque & drag; Reaming; Bridges; etc.

Feb 6 2010 : Prespud safety meeting. Spud well at 01:00 hrs. Drilled ahead 311mm surface hole from 0-111m at mudcheck. Added Shure Shale, Millzan and Hyperdrill 247 RD to tanks. Currently drilling ahead with no problems reported.

Recommended Treatment - Suggestions

WHMIS: PROTECTIVE CLOTHING REQUIRED WHEN MIXING CHEMICALS. REFER TO MSDS'S/LABELS FOR MORE INFORMATION.

Daylights

Mix Millzan as required, 1 sx per circulation, to increase funnel visc to 40-45 sec/L and maintain.

System Maintenance :

- Mud Rings : if bit balling is suspected or connections are sticky, mix 1 pail of Detergent at suction and 1 visc cup of TKPP per connection down drill pipe to reduce. Do not mix more than 1 pail DD.

- Allow natural clays to build viscosity, do not mix Gel. Gravel is expected at 30-50m, rocks at 50-60m, and sand 90-120m. Ensure proper visc using Millzan mixed 1 sx per circ, if required, for proper hole cleaning.

- Mix 1 sx of Hyperdrill 247 into pill tank and allow to hydrate for 1 hr. Add to system over 3-4 hrs, each 12 hr shift.

- If pH increases over 8, mix 1 sx Citric Acid over 1 circ to reduce to 7-7.5

- Ensure funnel visc of 60-70 sec/L prior to wiper trip, mixing 1 sx Millzan and 5-10 sxs of Gel.

- After wiper trip, add 20 L/min fresh water, 1 sx Millzan and 10 sxs Gel to increase FV to 80-100 sec/L.

Thanks,

Shannon

Materials Used Since Last Check

Products		Products		Products	

Cost Information

Cost Since Last Check	$950.00	Total Cost to Date	$950.00

Marquis Alliance Representatives

T.S.R	Shannon Williams	Trucking Company	
Cell	780-691-2295	Warehouse	
Pager/Home #	780-895-2688	Phone #	

MARQUIS ALLIANCE
ENERGY GROUP INC

Drilling Fluid Report

Current Activity	Drilling Ahead 311mm Surface at 320m		
Date	February 7, 2010	Check Number	3
Spud Date	February 6, 2010	Days From Spud	1
Location	F-77-60/10-11-15		
Contractor	Precision 245		
Report for	Erick Bigras		
Report for			

Well Name	Para Cameron Hills
Operator	Paramount Resources
Report For	Josh Blinston (ph. 4038603569)
Report For	Hale Yardley

Bit Record

Bit No.	1RR
Bit Size(mm)	311
Type	HE04SMRSV

Nozzles (mm)

N1:	14.3	N2:	14.3
N3:	14.3	N4:	
N5:		N6:	
N7:		N8:	

TFA	482
Depth In	0
Depth Out	
Hrs. on Bit.	25.5
Drill Rate	13.0
R.P.M.	142
WOB (daN)	
Nozzle Vel	67.0
Bit Press..	2633

Casings

Type	ID	OD	Set at(m)

V.G. Readings

Test	#1	#2
600	18	
300	13	
200	10	
100	8	
6	4	
3	3	

Deviation Record

Depth	Inc	Dir

HHP	113.93
% Pressure at Bit	37.97

	Check #1	Check #2
Mud System	WaterBasedMud	
Depth MD / TVD (m)	320 / 320	/
Time Sample Taken	07:40	
Flowline Temp (C)	24	
Funnel Viscosity (sec/L)	40	
Mud Density (kg/m3)	1060	
Hyd. Grad. (kPa/m)	10.40	
ECD (kg/m3)	1065	
pH ☑ STRIP ☐ METER	8.0	
Plastic Viscosity (mPa)	5.5	
Yield Point (Pa)	3.4	
Gel Strength (Pa) 10s/10min	2.0 / 2.5	/
N Low / K low	0.24 / 2.02	/
N Med / K med	0.53 / 0.47	/
Filtrate (cm3/30min@700kPa)	8.5	
Filter Cake (mm)	1.0	
HTHP FILTRATE @ C (cm3/30 min. @ 3500 kPa)	@	@
Filter Cake (mm)		
Sand Content (%)	.25	
Total Solids (%)	3.75	
Corr. Solids (%)		
Oil Content (%)		
M.B.T. (kg/m3)	57	
HGS (kg/m3) / %	0.00 / 0.0	/
LGS (kg/m3) / %	97.52 / 3.8	/
Drilled solids (kg/m3)	40.52	
Bentonite (kg/m3)		
Avg. Density (kg/m3)	2600	
Alkalinity (PF/MF)	0.0 / 0.1	/
Hydroxyl (mg/L)		
Carbonate (mg/L)	24	
Bicarbonate (mg/L)	85	
Total Hardness (mg/L)	80	
Chlorides (mg/L)	1000	
Potassium (mg/L)		
0.2 N HCl / 2.0 N HCl (cc's)	/	/
Silicate% v/v / Silicate %	/	/
Clear Fluid Density (kg/m3)	1000	
SiO2:K2O Ratio		
Soluble Sulfides ☐ HAC ☐		
Polymer (kg/m3)	0.50	

Drilling Assembly

Type	ID	OD	Length	Open Hole Ann Vel.	Open Hole Flow	Liner Ann Vel.	Liner Flow	Casing Ann Vel.	Casing Flow
D.C.	68.0	212.0	17.9	47.6	LAM		N/A		N/A
D.C.	65.0	158.0	68.0	34.3	LAM		N/A		N/A
D.P.	65.0	102.0	234.1	28.6	LAM		N/A	-236.	N/A

Solids Control Equipment

Type	Name	Screen Size	Screen Size	Screen Size	Screen Size	
Shakers	Swaco	85	85	85	85	

Type	Name	U.F. (kg/m3)	O.F. (kg/m3)	U.F. Rate (L/min)	Hours Run	Removal Rate (kg/hr)
Centrifuge	United					

Volumes (m3)

Pipe Cap	1.1	Hole Enlarge %	
Ann Vol.	20.4	Circulation Time BTM's Up	11
Tank	50.2	Total	37
Tot. Cir. Vol	71.7	Water Added	
Open Hole	24.3	Mud Lost	15

Pump Data

Model	F-800	F-800
Liner Dia	152	152
Stroke	229	229
Output(m3/stroke)	0.0125	0.0125
S.P.M.	81	82
Output(m3/min)	0.962	0.974
Total Output (m3/min)	1.936	
Press. (kPa)	6935	

Summary of Activity - Comments, Observations, Pilot Tests

Remarks; Hole conditions tripping & drilling; Cuttings description; Torque & drag; Reaming; Bridges; etc.

Feb 6 2010: Spud surface and drilled ahead to 236m at midnight. Some minor losses reported, slugged hole w/Kwik Seal, Cellophane, and Sawdust. Mixed sawdust consistently to reduce. No problems reported on connections.
Feb 7 2010: Continued drilling ahead from 236m to 320m at mudcheck. No foaming issues reported. Mixed 1 sx TKPP and 1 pail DD to reduce stickiness at shakers. MBT increased to 57 kg/m3.

Recommended Treatment - Suggestions

WHMIS: PROTECTIVE CLOTHING REQUIRED WHEN MIXING CHEMICALS. REFER TO MSDS'S/LABELS FOR MORE INFORMATION.

Daylights :

- @ 350m isolate to one suction compartment. Mix Milizan and Gel at 1:10 ratio over even circs to increase FV to 60-70 sec/L prior to wiper trip.

After wiper trip, increase FV to 80-100 sec/L (depending on how wiper trip goes) with above ratio, ensuring we add water to system at 15-20 L/min to ensure proper hydration of system.

For cement : isolate to one suction compartment, drop fluid to just above suction. Mix 2 sxs Desco CF
and water at 40L/min (about 2 inch stream) over 1 full circ to reduce FV to 45-50 sec/L.

Thanks,

Shannon

Materials Used Since Last Check

Products		Products		Products	
Cellophane	1	Hyperdrill AF247RD	3	Kelzan XCD Polymer	6
Kwik Seal Medium	3	Sawdust	90	Shure Shale	10

Cost Information

Cost Since Last Check	$6,989.14	Total Cost to Date	$7,939.14

Marquis Alliance Representatives

T.S.R	Shannon Williams	Trucking Company	
Cell	780-691-2295	Warehouse	
Pager/Home #	780-895-2688	Phone #	

MARQUIS ALLIANCE
ENERGY GROUP INC

Drilling Fluid Report

Current Activity	WOC at 379m		
Date	February 8, 2010	Check Number	4
Spud Date	February 6, 2010	Days From Spud	2
Location	F-77-60/10-11-15		
Contractor	Precision 245		
Report for	Erick Bigras		
Report for			

Well Name	Para Cameron Hills
Operator	Paramount Resources
Report For	Josh Blinston (ph. 4038603569)
Report For	Hale Yardley

Bit Record

Bit No.	1RR
Bit Size(mm)	200
Type	HE04SMRSV

Nozzles (mm)

N1:	10.3	N2:	10.3
N3:	10.3	N4:	10.3
N5:	10.3	N6:	10.3
N7:		N8:	

TFA	500
Depth In	379
Depth Out	
Hrs. on Bit.	
Drill Rate	
R.P.M.	
WOB (daN)	
Nozzle Vel	43.5
Bit Press..	1051

Casings

Type	ID	OD	Set at(m)
Surface	206.0	219.0	379.0

Drilling Assembly

Type	ID	OD	Length	Open Hole Ann Vel.	Open Hole Flow	Liner Ann Vel.	Liner Flow	Casing Ann Vel.	Casing Flow	
D.C.	65.0	158.0	68.0		N/A		N/A	95.2	TUR	
H.W.D.P.	65.0	102.0	150.0		N/A		N/A	51.9	TUR	
D.P.	85.0	102.0	161.0		N/A		N/A	51.9	TUR	

Volumes (m3) — Hole Enlarge %

Pipe Cap	1.6	Circulation Time	
Ann Vol.	8.8	BTM's Up	7
Tank	8.0	Total	14
Tot. Cir. Vol	18.4	Water Added	
Open Hole	0.0	Mud Lost	15

V.G. Readings

Test	#1	#2
600	5	
300	3	
200		
100		
6		
3	1	
HHP		
% Pressure at Bit		

Deviation Record

Depth	Inc	Dir
30.68		
15.15		

Solids Control Equipment

Type	Name	Screen Size	Screen Size	Screen Size	Screen Size	
Shakers	Swaco	85	85	85	85	

Type	Name	U.F. (kg/m3)	O.F. (kg/m3)	U.F. Rate (L/min)	Hours Run	Removal Rate (kg/hr)
Centrifuge	United					

Pump Data

Model	F-800	F-800
Liner Dia	152	152
Stroke	229	229
Output(m3/stroke)	0.0125	0.0125
S.P.M.	110	
Output(m3/min)	1.306	
Total Output (m3/min)	1.306	
Press. (kPa)	6935	

Summary of Activity - Comments, Observations, Pilot Tests

Remarks; Hole conditions tripping & drilling; Cuttings description; Torque & drag; Reaming; Bridges; etc.

Feb 08 2010 : RIH w/219 mm surface csg. Conditioned mud for cement w/Desco CF II and fresh water. Cemented with good returns. WOC. Cut csg. Welded on bowl and nippled up. Pressure tested BOP's.

	Check #1	Check #2
Mud System	WaterBasedMud	
Depth MD / TVD (m)	379 / 379	/
Time Sample Taken	15:00	
Flowline Temp (C)	16	
Funnel Viscosity (sec/L)	28	
Mud Density (kg/m3)	1000	
Hyd. Grad. (kPa/m)	9.81	
ECD (kg/m3)	1003	
pH ☑ STRIP ☐ METER	8.0	
Plastic Viscosity (mPa)	2.0	
Yield Point (Pa)	0.5	
Gel Strength (Pa) 10s/10min	0.5 /	/
N Low / K low	0.28 / 0.32	/
N Med / K med	0.74 / 0.03	/
Filtrate (cm3/30min@700kPa)		
Filter Cake (mm)		
HTHP FILTRATE @ C (cm3/30 min. @ 3500 kPa)	@	@
Filter Cake (mm)		
Sand Content (%)		
Total Solids (%)		
Corr. Solids (%)		
Oil Content (%)		
M.B.T. (kg/m3)		
HGS (kg/m3) / %	/	/
LGS (kg/m3) / %	/	/
Drilled solids (kg/m3)		
Bentonite (kg/m3)		
Avg. Density (kg/m3)		
Alkalinity (PF/MF)	0.0 / 0.1	/
Hydroxyl (mg/L)		
Carbonate (mg/L)	36	
Bicarbonate (mg/L)	49	
Total Hardness (mg/L)	60	
Chlorides (mg/L)	160	
Potassium (mg/L)		
0.2 N HCl / 2.0 N HCl (cc's)	/	/
Silicate% v/v / Silicate %	/	/
Clear Fluid Density (kg/m3)	1000	
SiO2:K2O Ratio		
Soluble Sulfides ☐ HAC ☐		
Polymer (kg/m3)		

Recommended Treatment - Suggestions

WHMIS: PROTECTIVE CLOTHING REQUIRED WHEN MIXING CHEMICALS. REFER TO MSDS'S/LABELS FOR MORE INFORMATION.

Drill Out Report :

1) Isolate to #2 suction compart. Fill tank with 10m3 of water.

2) Drill out cement, float and shoe with water. We will leave Calcium levels high as we are floc water drilling until 1100-1200m.

3) Mix Citric Acid at 10 min/sx to reduce pH to 9-10.

4) Fill one injection tank w/4m3. Mix in 20 visc cups of Alkapam 1103RD and allow to hydrate 1 hr before use.

5) Bring fluid over from #2 400bbl and blend into active system until desired PVT is attained.

6) Start injecting Alkapam 1103RD at 10-15 L/min to maintain clear water.

7) Fill #1 suction 3/4 full and build a 100 + visc slurry with gel and 1/4 sx of Caustic to be used for sweeps.

Severe to total losses are expected at +-550 m. When encountered, isolate to # 1 suction compartment, feeding from 400bbl tanks as needed to maintain volume until circulation is regained.

Drill ahead with floc water to 750m.

Thanks,

Materials Used Since Last Check

Products		Products		Products	
Bentonite (Gel)	25	Detergent L (20L)	1	Hyperdrill AF247RD	2
Kelzan XCD Polymer	3	Sawdust	25	TKPP	1

Cost Information

Cost Since Last Check	$3,228.51	Total Cost to Date	$11,167.65

Marquis Alliance Representatives

T.S.R	Shannon Williams	Trucking Company	
Cell	780-691-2295	Warehouse	
Pager/Home #	780-895-2688	Phone #	

MARQUIS ALLIANCE
ENERGY GROUP INC

Drilling Fluid Report

Well Name	Para Cameron Hills
Operator	Paramount Resources
Report For	Hale Yardley
Report For	Hale Yardley

Current Activity	Drilling Ahead 200mm Intermediate Hole - Floc		
Date	February 10, 2010	Check Number	5
Spud Date	February 6, 2010	Days From Spud	4
Location	F-77-60/10-11-15		
Contractor	Precision 245		
Report for	Erick Bigras		
Report for			

Bit Record

Bit No.	1RR
Bit Size(mm)	200
Type	HE04SMRSV

Nozzles (mm)

N1:	10.3	N2:	10.3
N3:	10.3	N4:	10.3
N5:	10.3	N6:	10.3
N7:		N8:	

TFA	500
Depth In	379
Depth Out	
Hrs. on Bit.	20.0
Drill Rate	
R.P.M.	93
WOB (daN)	
Nozzle Vel	36.4
Bit Press..	768

Casings

Type	ID	OD	Set at(m)
Surface	206.0	219.0	379.0

V.G. Readings

Test	#1	#2
600	7	
300	5	
200	4	
100	3	
6	1	
3	1	

Deviation Record

Depth	Inc	Dir
379	0.50	

HHP	18.76
% Pressure at Bit	19.75

Drilling Assembly

Type	ID	OD	Length	Open Hole Ann Vel.	Open Hole Flow	Liner Ann Vel.	Liner Flow	Casing Ann Vel.	Casing Flow
D.C.	65.0	158.0	68.0	92.5	TUR		N/A		N/A
H.W.D.P.	65.0	102.0	150.0	47.0	TUR		N/A		N/A
D.P.	85.0	102.0	515.0	47.0	TUR		N/A	43.4	TUR

Solids Control Equipment

Type	Name	Screen Size	Screen Size	Screen Size	Screen Size	
Shakers	Swaco	200	200	200	200	

Type	Name	U.F. (kg/m3)	O.F. (kg/m3)	U.F. Rate (L/min)	Hours Run	Removal Rate (kg/hr)
Centrifuge	United	1830	1010	12	20	1318

Volumes (m3)

Pipe Cap	3.6	Hole Enlarge %	
Ann Vol.	17.0	Circulation Time	
Tank	46.0	BTM's Up	16
Tot. Cir. Vol	66.6	Total	61
Open Hole	11.1	Water Added	
		Mud Lost	15

Pump Data

Model	F-800	F-800	
Liner Dia	152	152	
Stroke	229	229	
Output(m3/stroke)	0.0125	0.0125	
S.P.M.	92		
Output(m3/min)	1.093		
Total Output (m3/min)	1.093		
Press. (kPa)	3889		

	Check #1	Check #2
Mud System	WaterBasedMud	
Depth MD / TVD (m)	733 / 733	/
Time Sample Taken	08:30	
Flowline Temp (C)	21	
Funnel Viscosity (sec/L)	32	
Mud Density (kg/m3)	1045	
Hyd. Grad. (kPa/m)	10.25	
ECD (kg/m3)	1051	
pH ☑ STRIP ☐ METER	8.0	
Plastic Viscosity (mPa)	2.0	
Yield Point (Pa)	1.4	
Gel Strength (Pa) 10s/10min	0.5 / 0.5	/
N Low / K low	0.50 / 0.22	/
N Med / K med	0.49 / 0.24	/
Filtrate (cm3/30min@700kPa)		
Filter Cake (mm)		
HTHP FILTRATE @ C (cm3/30 min. @ 3500 kPa)	@	@
Filter Cake (mm)		
Sand Content (%)		
Total Solids (%)	2.8125	
Corr. Solids (%)		
Oil Content (%)		
M.B.T. (kg/m3)	20	
HGS (kg/m3) / %	0.00 / 0.0	/
LGS (kg/m3) / %	73.14 / 2.8	/
Drilled solids (kg/m3)	53.14	
Bentonite (kg/m3)		
Avg. Density (kg/m3)	2600	
Alkalinity (PF/MF)	0.0 / 0.8	/
Hydroxyl (mg/L)		
Carbonate (mg/L)	0	
Bicarbonate (mg/L)	952	
Total Hardness (mg/L)	350	
Chlorides (mg/L)	750	
Potassium (mg/L)		
0.2 N HCl / 2.0 N HCl (cc's)	/	/
Silicate% v/v / Silicate %	/	/
Clear Fluid Density (kg/m3)	1000	
SiO2:K2O Ratio		
Soluble Sulfides ☐ HAC ☐		
Polymer (kg/m3)		

Summary of Activity - Comments, Observations, Pilot Tests

Remarks; Hole conditions tripping & drilling; Cuttings description; Torque & drag; Reaming; Bridges; etc.

Feb 9 2010: Prepare to RIH. P/U tools. Tagged cement at 363m. Drilled cement to 379m. Drilled out shoe and 200mm intermediate hole with floc water from 379m to 579m at midnight.

Feb 10 2010 : Continue drilling ahead from 579m to 733m with seepage losses. Mixed sawdust as needed. Weight climbing, calcium low. Recommend increased Cal Nitrate additions and Alka Pam 1103 additions to strip solids out of system.

Recommended Treatment - Suggestions

WHMIS: PROTECTIVE CLOTHING REQUIRED WHEN MIXING CHEMICALS. REFER TO MSDS'S/LABELS FOR MORE INFORMATION.

Drilling Ahead with Floc Water

1) Fill one centrifuge injection tank w/4m3. Mix in 16-20 visc cups of Alkapam 1103RD and allow to hydrate 1 hr before use. Inject at 10-12 L/min to maintain clear water. Adjust as required.

2) Mix 2-3 sxs Cal Nitrate per 100m new hole drilled. Monitor Calcium concentration with regular mudchecks. If fluid is muddy, mix 3 extra sks of Cal Nitrate over 1 circ and increase injection rate of flocculant until overflow is coming back clear.

3) PVT - Bring fluid over from #2 400bbl and blend into active system as required.

4) pH at 8-9 with Caustic Soda as needed via chem barrel.

5) Fill pill tank 3/4 full with water from #2 400bbl, add 4-5 visc cups of Caustic and build a 100 + visc slurry with gel to be used for sweeps.

6) Trickle Kelzan XDC into system very slowly to maintain a 30-32 sec/L visc (aid in hole cleaning).

7) Mix 1-2 sxs Sawdust per 10m new hole drilled.

Thanks,

Shannon

Materials Used Since Last Check

Products		Products		Products	
Bentonite (Gel)	15	Cellophane	6	Citric Acid	7
Desco	2	Envirofloc	10	Sawdust	33

Cost Information

Cost Since Last Check	$3,222.11	Total Cost to Date	$14,389.76

Marquis Alliance Representatives

T.S.R	Shannon Williams	Trucking Company	
Cell	780-691-2295	Warehouse	
Pager/Home #	780-895-2688	Phone #	

MARQUIS ALLIANCE
ENERGY GROUP INC

Drilling Fluid Report

Current Activity	Drilling Ahead 200mm Intermediate Hole - Poly Mud		
Date	February 11, 2010	Check Number	6
Spud Date	February 6, 2010	Days From Spud	5
Location	F-77-60/10-11-15		
Contractor	Precision 245		
Report for	Erick Bigras		
Report for			

Well Name	Para Cameron Hills
Operator	Paramount Resources
Report For	Hale Yardley
Report For	Hale Yardley

Bit Record

Bit No.	1
Bit Size(mm)	200
Type	DSX426m

Nozzles (mm)

N1:	12	N2:	12
N3:	12	N4:	12
N5:	12	N6:	12
N7:		N8:	

TFA	679
Depth In	379
Depth Out	
Hrs. on Bit.	52.0
Drill Rate	
R.P.M.	93
WOB (daN)	5
Nozzle Vel	29.2
Bit Press..	490

Casings

Type	ID	OD	Set at(m)
Surface	206.0	219.0	379.0

V.G. Readings

Test	#1	#2
600	19	
300	14	
200	11	
100	8	
6	4	
3	3	

Deviation Record

Depth	Inc	Dir

HHP	13.01
% Pressure at Bit	12.60

Drilling Assembly

Type	ID	OD	Length	Open Hole Ann Vel.	Open Hole Flow	Liner Ann Vel.	Liner Flow	Casing Ann Vel.	Casing Flow
D.C.	65.0	158.0	68.0	95.8	TUR		N/A		N/A
H.W.D.P.	65.0	102.0	150.0	48.7	LAM		N/A		N/A
D.P.	85.0	102.0	972.0	48.7	LAM		N/A	47.2	LAM

Solids Control Equipment

Type	Name	Screen Size	Screen Size	Screen Size	Screen Size	
Shakers	Swaco	200	200	200	200	

Type	Name	U.F. (kg/m3)	O.F. (kg/m3)	U.F. Rate (L/min)	Hours Run	Removal Rate (kg/hr)
Centrifuge	United	1830	1010	12	20	1318

Volumes (m3)

Pipe Cap	6.2	Hole Enlarge %	5
Ann Vol.	28.5	Circulation Time	
Tank	41.8	BTM's Up	24
Tot. Cir. Vol	76.6	Total	64
Open Hole	26.4	Water Added	
		Mud Lost	

Pump Data

Model	F-800	F-800	
Liner Dia	152	152	
Stroke	229	229	
Output(m3/stroke)	0.0125	0.0125	
S.P.M.	100		
Output(m3/min)	1.188		
Total Output (m3/min)	1.188		
Press. (kPa)	3889		

	Check #1	Check #2
Mud System	WaterBasedMud	
Depth MD / TVD (m)	1190 / 1190	/
Time Sample Taken	16:16	
Flowline Temp (C)	24	
Funnel Viscosity (sec/L)	33	
Mud Density (kg/m3)	1040	
Hyd. Grad. (kPa/m)	10.20	
ECD (kg/m3)	1055	
pH ☑ STRIP ☐ METER	9.0	
Plastic Viscosity (mPa)	5.5	
Yield Point (Pa)	3.8	
Gel Strength (Pa) 10s/10min	2.0 / 2.5	/
N Low / K low	0.27 / 1.92	/
N Med / K med	0.49 / 0.62	/
Filtrate (cm3/30min@700kPa)	12.5	
Filter Cake (mm)	1.0	
HTHP FILTRATE @ C (cm3/30 min. @ 3500 kPa)	@	@
Filter Cake (mm)		
Sand Content (%)	.25	
Total Solids (%)	2.5	
Corr. Solids (%)		
Oil Content (%)		
M.B.T. (kg/m3)	15	
HGS (kg/m3) / %	0.00 / 0.0	/
LGS (kg/m3) / %	65.01 / 2.5	/
Drilled solids (kg/m3)	50.01	
Bentonite (kg/m3)		
Avg. Density (kg/m3)	2600	
Alkalinity (PF/MF)	0.1 / 0.5	/
Hydroxyl (mg/L)		
Carbonate (mg/L)	96	
Bicarbonate (mg/L)	415	
Total Hardness (mg/L)	1000	
Chlorides (mg/L)	1250	
Potassium (mg/L)		
0.2 N HCl / 2.0 N HCl (cc's)	/	/
Silicate% v/v / Silicate %	/	/
Clear Fluid Density (kg/m3)	1000	
SiO2:K2O Ratio		
Soluble Sulfides ☑ HAC ☐	0.00	
Polymer (kg/m3)	0.00	

Summary of Activity - Comments, Observations, Pilot Tests

Remarks; Hole conditions tripping & drilling; Cuttings description; Torque & drag; Reaming; Bridges; etc.

Feb 10 2010 : Continue drilling ahead from 579m to 947m with seepage losses. Mixed sawdust as required, slugging hole to help reduce and clean hole.

Feb 11 2010 : Continued drilling ahead 200mm hole to 1190m while mudding up. Currently conditioning to increase FV to 37 sec/L prior to wiper trip. Connections are mostly good, working sticky connections when required.

Recommended Treatment - Suggestions

WHMIS: PROTECTIVE CLOTHING REQUIRED WHEN MIXING CHEMICALS. REFER TO MSDS'S/LABELS FOR MORE INFORMATION.

Mud Up Report: The Depth for mud up will be determined by Hale (1100-1200m)

- Mix 6 pails of Shure Shale at 30 min/pail through grating at suction.
- Mix MF-Vis , 1 round per circ to increase funnel visc to 40-45 sec/L.
- Mix Drispac R, Stardril, and Lignite at 1:2:3 ratio to lower WL to 6-8cc's/30min.
- Maintain pH at 9.0-9.5 w/Caustic Soda mixed with H20 via chem barrel.
- Mix 1 sx of Hyperdrill 247 through suction grating over 3-4 hrs.

Maintain for Drilling:

1. Viscosity @40 sec/l with MF-Vis mixed evenly over 1 full circ. At 1300m, mix to increase FV to 46 sec/L using MF-Vis.
2. Add 1 pail of Shure Shale per 75-100m new hole drilled from 1200m to TD.
3. Mix 2 sx Hyperdrill 247 per 12 hr shift through grating at suction while drilling ahead.
4. Maintain pH @ 9-9.5 with caustic through chemical barrel with cold water, mix caustic into water and add to system as required.
5. Fluid loss @ 6-8cc with Drispac R, Stardrill, and lignite @ 1:2:3 ratio evenly over full circs.
6. Continue injecting Alka Pam 1103 to maintain wt at 1040 kg/m3 until 50m from TD.
7. Density ALAP with proper solids control. Run water @ 5-10 litres a minute to keep system hydrated.
8. Prior to penetrating the Sulphur Point formation, ensure we increase pH to 10-10.5 using Caustic Soda, mixed via chem barrel 1 sx per circ as required and maintain. This is a sour formation and we have to stay on top of this with 1/2 hr pH checks while circulating in this formation.

Prior to TD : At 30m from TD, mix MF-Vis and Drispac R at 1:2 ratio. 2 rounds per circ to increase FV to 55 sec/L. Allow wt to climb to 1060 kg/m3 by shutting down injection of AlkaPam 1103RD.

Shannon.

Materials Used Since Last Check

Products		Products		Products	
Alkapam A-1103D	1	Bentonite (Gel)	12	Caustic Soda	3
Envirofloc	25	Kelzan XCD Polymer	2	Lime-Hydrated-20 KG	0
Sawdust	52				

Cost Information

Cost Since Last Check	$3,472.11	Total Cost to Date	$17,861.87

Marquis Alliance Representatives

T.S.R	Shannon Williams	Trucking Company	
Cell	780-691-2295	Warehouse	
Pager/Home #	780-895-2688	Phone #	

Drilling Fluid Report

MARQUIS ALLIANCE ENERGY GROUP INC

Current Activity	Condition to log/run csg.		
Date	February 12, 2010	Check Number	7
Spud Date	February 6, 2010	Days From Spud	6
Well Name	Para Cameron Hills	Location	F-77-60/10-11-15
Operator	Paramount Resources	Contractor	Precision 245
Report For	Hale Yardley	Report for	Erick Bigras
Report For	Hale Yardley	Report for	

Bit Record

Bit No.	1
Bit Size(mm)	200
Type	DSX426m

Nozzles (mm)

N1:	12	N2:	12
N3:	12	N4:	12
N5:	12	N6:	12
N7:		N8:	

TFA	679
Depth In	379
Depth Out	
Hrs. on Bit.	52.0
Drill Rate	
R.P.M.	93
WOB (daN)	5
Nozzle Vel	23.3
Bit Press..	314

Casings

Type	ID	OD	Set at(m)
Surface	206.0	219.0	379.0

Drilling Assembly

Type	ID	OD	Length	Open Hole Ann Vel.	Open Hole Flow	Liner Ann Vel.	Liner Flow	Casing Ann Vel.	Casing Flow
D.C.	65.0	158.0	68.0	76.6	LAM		N/A		N/A
H.W.D.P.	65.0	102.0	150.0	38.9	LAM		N/A		N/A
D.P.	85.0	102.0	1202.0	38.9	LAM		N/A	37.8	LAM

Volumes (m3)

Pipe Cap	7.5	Hole Enlarge %	5
Ann Vol.	34.1	Circulation Time	
Tank	8.5	BTM's Up	36
Tot. Cir. Vol	50.2	Total	53
Open Hole	33.9	Water Added	
		Mud Lost	

V.G. Readings

Test	#1	#2
600	57	70
300	45	55
200	39	48
100	30	38
6	13	18
3	11	14
HHP		6.66
% Pressure at Bit		8.07

Deviation Record

Depth	Inc	Dir

Solids Control Equipment

Type	Name	Screen Size	Screen Size	Screen Size	Screen Size	
Shakers	Swaco	200	200	200	200	
Type	Name	U.F. (kg/m3)	O.F. (kg/m3)	U.F. Rate (L/min)	Hours Run	Removal Rate (kg/hr)
Centrifuge	United	1830	1010	12	20	1318

Pump Data

Model	F-800	F-800
Liner Dia	152	152
Stroke	229	229
Output(m3/stroke)	0.0125	0.0125
S.P.M.	80	
Output(m3/min)	0.950	
Total Output (m3/min)	0.950	
Press. (kPa)	3889	

	Check #1	Check #2
Mud System	WaterBasedMud	WaterBasedMud
Depth MD / TVD (m)	1415 / 1415	1420 / 1420
Time Sample Taken	17:00	20:36
Flowline Temp (C)		
Funnel Viscosity (sec/L)	62	67
Mud Density (kg/m3)	1040	1040
Hyd. Grad. (kPa/m)	10.20	10.20
ECD (kg/m3)	1099	1107
pH [✓] STRIP [ ] METER	10.0	9.5
Plastic Viscosity (mPa)	12.0	15.0
Yield Point (Pa)	15.8	19.2
Gel Strength (Pa) 10s/10min	7.0 / 8.5	8.5 / 10.0
N Low / K low	0.29 / 6.80	0.28 / 8.85
N Med / K med	0.34 / 5.37	0.35 / 6.29
Filtrate (cm3/30min@700kPa)	6.0	6.0
Filter Cake (mm)	0.5	0.5
HTHP FILTRATE @ C (cm3/30 min. @ 3500 kPa)	@	@
Filter Cake (mm)		
Sand Content (%)	.25	.25
Total Solids (%)	2.5	2.5
Corr. Solids (%)		
Oil Content (%)		
M.B.T. (kg/m3)	20	15
HGS (kg/m3) / %	0.00 / 0.0	0.00 / 0.0
LGS (kg/m3) / %	65.01 / 2.5	65.01 / 2.5
Drilled solids (kg/m3)	45.01	50.01
Bentonite (kg/m3)		
Avg. Density (kg/m3)	2600	2600
Alkalinity (PF/MF)	0.1 / 0.8	0.1 / 0.8
Hydroxyl (mg/L)		
Carbonate (mg/L)	168	168
Bicarbonate (mg/L)	610	586
Total Hardness (mg/L)	800	800
Chlorides (mg/L)	1700	1700
Potassium (mg/L)		
0.2 N HCl / 2.0 N HCl (cc's)	/	/
Silicate% v/v / Silicate %	/	/
Clear Fluid Density (kg/m3)	1000	1000
SiO2:K2O Ratio		
Soluble Sulfides [ ] HAC [ ]		
Polymer (kg/m3)	0.50	0.50

Summary of Activity - Comments, Observations, Pilot Tests

Remarks; Hole conditions tripping & drilling; Cuttings description; Torque & drag; Reaming; Bridges; etc.

Feb 11 2010 : Continued drilling ahead 200mm hole to 1190m while mudding up. Drilled ahead to 1221m. Conditioned mud. POOH to shoe for wiper trip.

Feb 12 2010 : RIH. No problems reported. Continued drilling ahead from 1205m to 1420m (TD). Conditioned mud to 65 visc prior to wiper trip.

Recommended Treatment - Suggestions

WHMIS: PROTECTIVE CLOTHING REQUIRED WHEN MIXING CHEMICALS. *REFER TO MSDS'S/LABELS FOR MORE INFORMATION.*

Today : Mix MF - Vis at 25 min/sx to increase visc to 63-65sec/L.
Trickle water in at 2-5 L/min to hydrate polymers.
Monitor pH while circulating and ensure we have 10-10.5 with Caustic Soda.

On wiper trip to L/D pipe : circulate while adding fresh H20 at 15 L/min to help hydrate mud system. United (Les) will be stripping fluid back when we start to hoist to l/d pipe.

Cement : Isolate to one suction tank, mix 2-4 sxs Desco CF at 30 min/sx, dependent on circulation rate and run water at 20 L/min to reduce funnel visc to 35-40 sec/L.

Strip fluid back to 1030 wt with centrifuge, time permitting.

Thanks,

Shannon

Materials Used Since Last Check

Products		Products		Products	
Alkapam A-1103D	2	*Barite*	15	Bicarb of Soda	3
Caustic Soda	3	Drispac R	3	Envirofloc	10
Kelzan XCD Polymer	1	Lignite	6	MF-VIS	8
Sawdust	5	Shure Shale	8	Stardril	4

Cost Information

Cost Since Last Check	$9,480.31	Total Cost to Date	$27,342.18

Marquis Alliance Representatives

T.S.R	Shannon Williams	Trucking Company	
Cell	780-691-2295	Warehouse	
Pager/Home #	780-895-2688	Phone #	

MARQUIS ALLIANCE
ENERGY GROUP INC

Drilling Fluid Report

Current Activity	Condition for cement		
Date	February 14, 2010	Check Number	9
Spud Date	February 6, 2010	Days From Spud	8
Location	F-77-60/10-11-15		
Contractor	Precision 245		
Report for	Erick Bigras		
Report for			

Well Name	Para Cameron Hills
Operator	Paramount Resources
Report For	Hale Yardley
Report For	Hale Yardley

Bit Record

Bit No.	1
Bit Size(mm)	200
Type	DSX426m

Nozzles (mm)

N1:	12	N2:	12
N3:	12	N4:	12
N5:	12	N6:	12
N7:		N8:	

TFA	679
Depth In	379
Depth Out	
Hrs. on Bit.	52.0
Drill Rate	
R.P.M.	93
WOB (daN)	5
Nozzle Vel	24.8
Bit Press..	354

Casings

Type	ID	OD	Set at(m)
Surface	206.0	219.0	379.0

Drilling Assembly

Type	ID	OD	Length	Open Hole Ann Vel.	Open Hole Flow	Liner Ann Vel.	Liner Flow	Casing Ann Vel.	Casing Flow
D.P.	129.0	139.7	1417.0	62.7	LAM		N/A	56.1	LAM
Other					N/A		N/A		N/A
Other					N/A		N/A		N/A

Volumes (m3)

Pipe Cap	18.5	Hole Enlarge %	
Ann Vol.	23.5	Circulation Time	
Tank	8.5	BTM's Up	23
Tot. Cir. Vol	50.5	Total	50
Open Hole	32.6	Water Added	
		Mud Lost	

V.G. Readings

Test	#1	#2
600	51	
300	36	
200		
100		
6		
3	5	

Deviation Record

Depth	Inc	Dir

HHP	7.99
% Pressure at Bit	9.11

Solids Control Equipment

Type	Name	Screen Size	Screen Size	Screen Size	Screen Size	
Shakers	Swaco	200	200	200	200	

Type	Name	U.F. (kg/m3)	O.F. (kg/m3)	U.F. Rate (L/min)	Hours Run	Removal Rate (kg/hr)
Centrifuge	United	1830	1010	12	20	1318

Pump Data

Model	F-800	F-800
Liner Dia	152	152
Stroke	229	229
Output(m3/stroke)	0.0125	0.0125
S.P.M.	85	
Output(m3/min)	1.009	
Total Output (m3/min)	1.009	
Press. (kPa)	3889	

	Check #1	Check #2
Mud System	WaterBasedMud	
Depth MD / TVD (m)	1417 / 1417	/
Time Sample Taken	14:45	
Flowline Temp (C)	27	
Funnel Viscosity (sec/L)	50	
Mud Density (kg/m3)	1040	
Hyd. Grad. (kPa/m)	10.20	
ECD (kg/m3)	1113	
pH ☑ STRIP ☐ METER	9.5	
Plastic Viscosity (mPa)	15.0	
Yield Point (Pa)	10.1	
Gel Strength (Pa) 10s/10min	6.5 / 8.0	/
N Low / K low	0.41 / 2.58	/
N Med / K med	0.50 / 1.57	/
Filtrate (cm3/30min@700kPa)	8.0	
Filter Cake (mm)	0.5	
HTHP FILTRATE @ C (cm3/30 min. @ 3500 kPa)	@	@
Filter Cake (mm)		
Sand Content (%)		
Total Solids (%)	2.5	
Corr. Solids (%)		
Oil Content (%)		
M.B.T. (kg/m3)	10	
HGS (kg/m3) / %	0.00 / 0.0	/
LGS (kg/m3) / %	65.01 / 2.5	/
Drilled solids (kg/m3)	55.01	
Bentonite (kg/m3)		
Avg. Density (kg/m3)	2600	
Alkalinity (PF/MF)	0.1 / 0.6	/
Hydroxyl (mg/L)		
Carbonate (mg/L)	156	
Bicarbonate (mg/L)	366	
Total Hardness (mg/L)	600	
Chlorides (mg/L)	1100	
Potassium (mg/L)		
0.2 N HCl / 2.0 N HCl (cc's)	/	/
Silicate% v/v / Silicate %	/	/
Clear Fluid Density (kg/m3)	1000	
SiO2:K2O Ratio		
Soluble Sulfides ☐ HAC ☐		
Polymer (kg/m3)	0.25	

Summary of Activity - Comments, Observations, Pilot Tests

Remarks; Hole conditions tripping & drilling; Cuttings description; Torque & drag; Reaming; Bridges; etc.

Feb 13 2010 : Pumped weighted pill. POOH. Rigged up loggers. Logged well (STI/MDA/SPD/CBT/URG/MRT/DAC)to 1413m. 7m fill reported. Rigged out loggers. M/U and RIH w/tricone. Washed/reamed to btm (hard pack requiring up to 8 kdaN wt) for last 10m approx. Conditioned mud. POOH sideways.

Feb 14 2010 : Continued POOH sideways. P/U and RIH w/139.7mm csg. Washed last jt to 1417m. Circ'd to condition for cement. Reduced FV to 50 sec/L. Cemented w/.....m3 returns to surface.

Recommended Treatment - Suggestions

WHMIS: PROTECTIVE CLOTHING REQUIRED WHEN MIXING CHEMICALS. REFER TO MSDS'S/LABELS FOR MORE INFORMATION.

Cement : Isolate to one suction tank, mix 2-4 sxs Desco CF at 30 min/sx, dependent on circulation rate and run water at 20 L/min to reduce funnel visc to 40-50 sec/L.

Strip fluid back to 1030 wt with centrifuge, time permitting.

Wrap up all product and ready to move to next location....please straighten up pails and sxs in mudvan.

Thanks,

Shannon

Materials Used Since Last Check

Products		Products		Products	
Barite	25	Caustic Soda	1	Drispac R	4
Lignite	12	MF-VIS	12	Stardril	8

Cost Information

Cost Since Last Check	$9,972.04	Total Cost to Date	$37,314.22

Marquis Alliance Representatives

T.S.R	Shannon Williams	Trucking Company	
Cell	780-691-2295	Warehouse	
Pager/Home #	780-895-2688	Phone #	

MARQUIS ALLIANCE
ENERGY GROUP INC

Drilling Fluid Report

Current Activity	Rigging Out/Waiting on New location		
Date	February 15, 2010	Check Number	10
Spud Date	February 6, 2010	Days From Spud	9
Location	F-77-60/10-11-15		
Contractor	Precision 245		
Report for	Erick Bigras		
Report for			

Well Name	Para Cameron Hills
Operator	Paramount Resources
Report For	Hale Yardley
Report For	Hale Yardley

Bit Record

Bit No.	1
Bit Size(mm)	200
Type	DSX426m

Nozzles (mm)

N1:	12	N2:	12
N3:	12	N4:	12
N5:	12	N6:	12
N7:		N8:	

TFA	679
Depth In	379
Depth Out	
Hrs. on Bit.	52.0
Drill Rate	
R.P.M.	93
WOB (daN)	5
Nozzle Vel	0.0
Bit Press..	0

Casings

Type	ID	OD	Set at(m)
Surface	206.0	219.0	379.0	

Drilling Assembly

Type	ID	OD	Length	Open Hole Ann Vel.	Open Hole Flow	Liner Ann Vel.	Liner Flow	Casing Ann Vel.	Casing Flow
D.P.	129.0	139.7	1417.0	62.7	N/A		N/A	56.1	N/A
Other					N/A		N/A		N/A
Other					N/A		N/A		N/A

Volumes (m3)

Hole Enlarge %

Pipe Cap	18.5	Circulation Time	
Ann Vol.	23.5	BTM's Up	23
Tank	8.5	Total	50
Tot. Cir. Vol	50.5	Water Added	
Open Hole	32.6	Mud Lost	

V.G. Readings

Test	#1	#2
600		
300		
200		
100		
6		
3		

Deviation Record

Depth	Inc	Dir

HHP	0.00
% Pressure at Bit	0.00

Solids Control Equipment

Type	Name	Screen Size	Screen Size	Screen Size	Screen Size	
Shakers	Swaco	200	200	200	200	

Type	Name	U.F. (kg/m3)	O.F. (kg/m3)	U.F. Rate (L/min)	Hours Run	Removal Rate (kg/hr)
Centrifuge	United	1830	1010	12	20	1318

Pump Data

Model	F-800	F-800
Liner Dia	152	152
Stroke	229	229
Output(m3/stroke)	0.0125	0.0125
S.P.M.	85	
Output(m3/min)	1.009	
Total Output (m3/min)	1.009	
Press. (kPa)	3889	

Summary of Activity - Comments, Observations, Pilot Tests

Remarks; Hole conditions tripping & drilling; Cuttings description; Torque & drag; Reaming; Bridges; etc.

	Check #1	Check #2
Mud System	WaterBasedMud	
Depth MD / TVD (m)	1417 / 1417	/
Time Sample Taken	10:37	
Flowline Temp (C)		
Funnel Viscosity (sec/L)		
Mud Density (kg/m3)		
Hyd. Grad. (kPa/m)		
ECD (kg/m3)	0	
pH ☑ STRIP ☐ METER		
Plastic Viscosity (mPa)		
Yield Point (Pa)		
Gel Strength (Pa) 10s/10min	/	/
N Low / K low	/	/
N Med / K med	/	/
Filtrate (cm3/30min@700kPa)		
Filter Cake (mm)		
HTHP FILTRATE @ C (cm3/30 min. @ 3500 kPa)	@	@
Filter Cake (mm)		
Sand Content (%)		
Total Solids (%)		
Corr. Solids (%)		
Oil Content (%)		
M.B.T. (kg/m3)		
HGS (kg/m3) / %	/	/
LGS (kg/m3) / %	/	/
Drilled solids (kg/m3)		
Bentonite (kg/m3)		
Avg. Density (kg/m3)		
Alkalinity (PF/MF)	/	/
Hydroxyl (mg/L)		
Carbonate (mg/L)		
Bicarbonate (mg/L)		
Total Hardness (mg/L)		
Chlorides (mg/L)		
Potassium (mg/L)		
0.2 N HCl / 2.0 N HCl (cc's)	/	/
Silicate% v/v / Silicate %	/	/
Clear Fluid Density (kg/m3)	1000	
SiO2:K2O Ratio		
Soluble Sulfides ☐ HAC ☐		
Polymer (kg/m3)		

Recommended Treatment - Suggestions

WHMIS: PROTECTIVE CLOTHING REQUIRED WHEN MIXING CHEMICALS. REFER TO MSDS'S/LABELS FOR MORE INFORMATION.

Cement : Isolate to one suction tank, mix 2-4 sxs Desco CF at 30 min/sx, dependent on circulation rate and run water at 20 L/min to reduce funnel visc to 40-50 sec/L.

Strip fluid back to 1030 wt with centrifuge, time permitting.

Wrap up all product and ready to move to next location....please straighten up pails and sxs in mudvan.

Thanks,

Shannon

Materials Used Since Last Check

Products		Products		Products	
Cellophane	8	Desco	10		

Cost Information

Cost Since Last Check	$1,858.80	Total Cost to Date	$39,173.02

Marquis Alliance Representatives

T.S.R	Shannon Williams	Trucking Company	
Cell	780-691-2295	Warehouse	
Pager/Home #	780-895-2688	Phone #	

Paramount resources ltd.

Daily Completion and Workover

PARA ET AL CAMERON F-77
Rig: Concord Well Service

Business Unit: NE BC & NWT COU

Report Date: 2/28/2010
Report #: 1.0
Total AFE Amount: 251,680.00
AFE Number: 10N020023
Daily Cost Total: 36,887
Cum Cost to Date: 36,887

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065
Well Configuration Type	**Casing Flange Elevation (m)**	**Ground Elevation (m)**	**Original KB Elevation (m)**
VERT	721.72	720.17	725.92
Last Casing String	**PBTD (All) (mKB)**	**Casing Pressure (kPa)**	**Tubing Pressure (kPa)**
Production, 1,417.00mKB		0	0

Objective
Evaluate sulphur point dolomite as potential oil well .

Operations Summary
Move rig and equipment from M - 74 to F - 77 , rig in equipment . Run into hole bit and scrapper , displace to clean KCL ware . POOH tubing and bond log casing .

Operations Next Report Period
Swab down casing

Road Condition	Weather	Start Date	End Date
good	Sunny	2/28/2010	3/4/2010

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

Daily Contacts

Title	Job Contact	Mobile
Rig Manager	Dwayne Palmer	403 357 - 6841
Consultant	Kim MacLeod	780 542 - 1897
P Enginer	Dick Heenan	403 818 - 4408

Time Log

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Comment
07:00	07:30	0.50	0.50	Crew change , held pre - job safety meeting on moving rig equipment on ice roads .
07:30	11:30	4.00	4.50	Move rig equipment to F - 77 , spot 2 - 60m3 tanks with bed truck . Un - load 36m3 into clean tank , spot rig mats and cat walk pipe racks with picker .
11:30	13:30	2.00	6.50	Rig up rig , pump , tank and boiler . Rig in vessel and flare stack , spot air trailer at front of location . Perform surface casing vent flow test , monitor for 15 minutes no bubles .
13:30	15:00	1.50	8.00	Nipple down well head , remove tubing hanger . Stump test class III BOP stack , 2,000 kPa low and 21,000 kPa . Nipple up class III BOP stack , function and pressure test . Low pressure test 2,000 kPa , high pressure test 21,000 kPa .
15:00	16:00	1.00	9.00	Rig up work floor and tubing equipment , pressure test casing to 14,000 kPa . Monitor for 15 minutes good test . Make up bit and scrapper on cat walk .
16:00	18:30	2.50	11.50	Run into hole with bit and scrapper , 151 - joint's yeliow band tubing . Tally and drift on way into hole , tag fill @ 1404mKB .
18:30	19:00	0.50	12.00	Rig up pump lines , pressure test lines to 21,000 kPa . good test . Rig in circulating head to tubing .
19:00	19:30	0.50	12.50	Crew change , held pre - job safety meeting on pumping procredures and high pressure lines .
19:30	22:00	2.50	15.00	Pull out of hole standing in derrick , lay down onto cat walk bit and scrapper .
22:00	00:00	2.00	17.00	Rig in pure energy e - line truck , held safety meeting with all personal on location . Run into hole with CBL bond log , tag plug back @ 1400.05mKB log from PBTD to surface , cement top @ surface . Good cement to surface ,
00:00	00:00	0.00	17.00	Finish logging to surface , rig down e - line truck . Stand - by on location . Swab down casing to 1150m

Report Fluids Summary

Fluid	To well (m^3)	From well (m^3)	Cum from Well (m^3)	Left to recover (m^3)
Water	33.00	17.00	17.00	16.00

Perforations

Date	Zone	Top (mKB)	Btm (mKB)	Current Status
3/1/2010	Sulphur Point, Original Hole	1,366.00	1,370.50	

Tubing Components

Item Description	Top (mKB)

Casing Strings

Casing Description	Grade	Wt (kg/m)	Set Depth (mKB)
Surface	K-55	35.716	379.00
Production	J-55	20.834	1,417.00

Paramount resources ltd.

Daily Completion and Workover

PARA ET AL CAMERON F-77
Rig: Concord Well Service

Business Unit: NE BC & NWT COU

Report Date: 3/1/2010
Report #: 2.0
Total AFE Amount: 251,680.00
AFE Number: 10N020023
Daily Cost Total: 47,987
Cum Cost to Date: 84,874

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065
Well Configuration Type	**Casing Flange Elevation (m)**	**Ground Elevation (m)**	**Original KB Elevation (m)**
VERT	721.72	720.17	725.92
Last Casing String	**PBTD (All) (mKB)**	**Casing Pressure (kPa)**	**Tubing Pressure (kPa)**
Production, 1,417.00mKB		0	0

Objective
Evaluate sulphur point dolomite as potential oil well .

Operations Summary
Perforate sulphur point , run into hole production string , land @ 1390m . Swab to evaluate .

Operations Next Report Period
Continue swabbing

Road Condition	Weather	Start Date	End Date
good	Sunny	2/28/2010	3/4/2010

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

Daily Contacts

Title	Job Contact	Mobile
Rig Manager	Dwayne Palmer	403 357 - 6841
Consultant	Kim MacLeod	780 542 - 1897
P Enginer	Dick Heenan	403 818 - 4408

Time Log

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Comment
00:01	01:30	1.49	1.49	Finish logging to surface , rig down e - line truck . Stand by on location .
01:30	06:00	4.50	5.99	Rig in casing swab equipment , swab to rig tank
06:00	07:00	1.00	6.99	Rig in pure energy e - line truck .
07:00	07:30	0.50	7.49	Crew change , held pre - job safety meeting on e - line procedures . Walk around rig equipment .
07:30	10:00	2.50	9.99	Finish rigging in Pure Energy e - line truck , held safety meeting with all personal on locxation . Run into hole with 101.6mm 4.5m gun , ERHSC 25 SDP , 17 SPM , 60 degree phasing . Total shots 79 , log into place @ 1366m - 1370.5mKB . Fire gun , pull out of hole . SICP @ 7 kPa . Rig down and release E - line truck . Continue monitoring pressure SICP @ 46 kPa after 1 - hour .
10:00	12:30	2.50	12.49	Bleed off casing to rig tank , confirmed sweet gas . Run into hole with re - entry guide , 1 - joint tubing , 1 - perforated pup joint , pump seating nipple , 4 - joint's tubing , tubing anchor (shear set @ 40,000 daN) , 142 - joint's , 2 - pup joint's , 1 - joint tubing , tubing hanger . Land tubing hanger , T.E @ 1390.15mKB , PSN @ 1380.52mKB , Tubing anchor @ 1343.75mKB
12:30	19:00	6.50	18.99	Rig in swab equipment swab to vessel , first swab tag fluid level 1100m . Recovered .84m3 , .72m3 water , .13m3 oil . Continue swabbing to vessel
19:00	19:30	0.50	19.49	Crew change , held pre - job safety meeting on swabbing procedures .
19:30	23:59	4.48	23.97	Continue pulling 1 - hour swabs , total swabs today - 13 , total fluided recovered 7.66m3 (.14m3 oil , 7.52m3 water)
23:59	23:59		23.97	Continue pulling 1 - hour swabs

Report Fluids Summary

Fluid	To well (m³)	From well (m³)	Cum from Well (m³)	Left to recover (m³)
Water			17.00	16.00

Perforations

Date	Zone	Top (mKB)	Btm (mKB)	Current Status
3/1/2010	Sulphur Point, Original Hole	1,366.00	1,370.50	

Tubing Components

Item Description	Top (mKB)

Casing Strings

Casing Description	Grade	Wt (kg/m)	Set Depth (mKB)
Surface	K-55	35.716	379.00
Production	J-55	20.834	1,417.00

Paramount resources ltd.

Daily Completion and Workover

PARA ET AL CAMERON F-77
Rig: Concord Well Service

Business Unit: NE BC & NWT COU

Report Date: 3/2/2010
Report #: 3.0
Total AFE Amount: 251,680.00
AFE Number: 10N020023
Daily Cost Total: 27,016
Cum Cost to Date: 111,890

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065
Well Configuration Type	**Casing Flange Elevation (m)**	**Ground Elevation (m)**	**Original KB Elevation (m)**
VERT	721.72	720.17	725.92
Last Casing String	**PBTD (All) (mKB)**	**Casing Pressure (kPa)**	**Tubing Pressure (kPa)**
Production, 1,417.00mKB		0	0

Objective
Evaluate sulphur point dolomite as potential oil well .

Operations Summary
Swab to 11:00 Am , kill well . Pull out of hole with tubing . Note : Road bands on today

Operations Next Report Period
Run into hole with tubing set Bridge plug

Road Condition	Weather	Start Date	End Date
good	Sunny	2/28/2010	3/4/2010

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

Daily Contacts

Title	Job Contact	Mobile
Rig Manager	Dwayne Palmer	403 357 - 6841
Consultant	Kim MacLeod	780 542 - 1897
P Enginer	Dick Heenan	403 818 - 4408

Time Log

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Comment
00:01	07:00	6.99	6.99	Continue swabbing to vessel , total fluid recovered to date 10.49m3 (10.35m3 water , .14m3 oil) .
07:00	07:30	0.50	7.49	Crew change , held pre - job safety meeting on swabbing procedures .
07:30	11:30	4.00	11.49	Confirm with calgary , shut down swabbing . Total swabs pulled - 23 , total fluid recovered to date 11.84m3 (11.7m3 water , .14m3 oil) . Rig down swab , rig in pump lines .
11:30	13:00	1.50	12.99	Pressure test lines , rig in testers to casing . Foward circulate 18m3 , returns @ 15m3 . Shut down pump , monitor well 15 minutes confirm dead .
13:00	15:30	2.50	15.49	Pull out of hole laying down onto pipe racks , clean up work floor . Close and lock blind rams .
15:30	19:00	3.50	18.99	Clean up around work floor , drain pump lines . Tranfer fluid out of vessel , monitor pressure on well .
19:00	19:30	0.50	19.49	Crew change , held pre - job safety meeting on road bands . Walk around equipment .
19:30	01:00	5.50	24.99	Service rig equipment , wait on road bands .

Report Fluids Summary

Fluid	To well (m^3)	From well (m^3)	Cum from Well (m^3)	Left to recover (m^3)
Water	18.00	14.70	31.70	19.30

Perforations

Date	Zone	Top (mKB)	Btm (mKB)	Current Status
3/1/2010	Sulphur Point, Original Hole	1,366.00	1,370.50	

Tubing Components

Item Description	Top (mKB)

Casing Strings

Casing Description	Grade	Wt (kg/m)	Set Depth (mKB)
Surface	K-55	35.716	379.00
Production	J-55	20.834	1,417.00

Paramount resources ltd.

Daily Completion and Workover

PARA ET AL CAMERON F-77
Rig: Concord Well Service

Business Unit: NE BC & NWT COU

Report Date: 3/3/2010
Report #: 4.0
Total AFE Amount: 251,680.00
AFE Number: 10N020023
Daily Cost Total: 30,842
Cum Cost to Date: 142,732

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065
Well Configuration Type	*Casing Flange Elevation (m)*	Ground Elevation (m)	Original KB Elevation (m)
VERT	721.72	720.17	725.92
Last Casing String	PBTD (All) (mKB)	Casing Pressure (kPa)	Tubing Pressure (kPa)
Production, 1,417.00mKB		0	0

Objective
Evaluate sulphur point dolomite as potential oil well .

Operations Summary
Run into hole bridge plug on tubing , set bridge plug . Pull out of hole tubing , rig down rig and equipment .

Operations Next Report Period
Rig in wireline , bail cement .

Road Condition	Weather	Start Date	End Date
good	Cloudy	2/28/2010	3/4/2010

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

Daily Contacts

Title	Job Contact	Mobile
Rig Manager	Dwayne Palmer	403 357 - 6841
Consultant	Kim MacLeod	780 542 - 1897
P Enginer	Dick Heenan	403 818 - 4408

Time Log

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Comment
07:00	07:30	0.50	0.50	Held pre - job safety meeting on tripping into hole weatherford bridge plug . Walk around equipment .
07:30	08:30	1.00	1.50	Check pressure on well SICP 0 kPa , un - lock blind rams . Make up on cat walk weatherford bridge plug C / W collar locator .
08:30	10:30	2.00	3.50	Run into hole with weatherford bridge plug , click collar to confirm depth . Set weatherford bridge plug @ 1360.95mCE , pressured up to 7,000 kPa . Released off bridge plug , pick up 2m confirm off bridge plug
10:30	11:30	1.00	4.50	Pump inhibitor down tubing , circulate inhibitor . Shut in casing , pressure test bridge plug to 17,000 kPa . Monitor for 15 minutes , good test . Bleed off pressure , rig down pump lines .
11:30	14:00	2.50	7.00	Pull out of hole laying down onto pipe racks , lay down weatherford tool's onto cat walk .
14:00	16:00	2.00	9.00	Rig down tubing equipment and work floor , remove tarps . Nipple down class III BOP stack , pump 200L deisel into casing . Nipple up well head and pressure test rig seal 5,000 kPa , monitor for 15 minutes good test .
16:00	19:00	3.00	12.00	Rig down rig , pump , tank and boiler . Rig down vessel and flare stack , clean up around well head .

Report Fluids Summary

Fluid	To well (m³)	From well (m³)	Cum from Well (m³)	Left to recover (m³)
Water			31.70	19.30

Perforations

Date	Zone	Top (mKB)	Btm (mKB)	Current Status
3/1/2010	Sulphur Point, Original Hole	1,366.00	1,370.50	

Tubing Components

Item Description	Top (mKB)

Casing Strings

Casing Description	Grade	Wt (kg/m)	Set Depth (mKB)
Surface	K-55	35.716	379.00
Production	J-55	20.834	1,417.00

Paramount resources ltd.

Daily Completion and Workover

PARA ET AL CAMERON F-77
Rig: Concord Well Service

Business Unit: NE BC & NWT COU

Report Date: 3/4/2010
Report #: 5.0
Total AFE Amount: 251,680.00
AFE Number: 10N020023
Daily Cost Total: 38,600
Cum Cost to Date: 181,332

API/UWI	Surface Legal Location	Field Name	License No.
300/F-77/6010-11715/0	F-77/6010-11715/0	CAMERON HILLS	2065
Well Configuration Type	**Casing Flange Elevation (m)**	**Ground Elevation (m)**	**Original KB Elevation (m)**
VERT	721.72	720.17	725.92
Last Casing String	**PBTD (All) (mKB)**	**Casing Pressure (kPa)**	**Tubing Pressure (kPa)**
Production, 1,417.00mKB			

Objective
Evaluate sulphur point dolomite as potential oil well .

Operations Summary
Rig up e - line truck and picker . Bail cement on top of bridge plug .

Operations Next Report Period
Hand - over to production

Road Condition	Weather	Start Date	End Date
good	Cloudy	2/28/2010	3/4/2010

Head Count	Personnel Total Hours (hrs)	Cum Personnel Total Hours (hrs)

Daily Contacts

Title	Job Contact	Mobile
Rig Manager	Dwayne Palmer	403 357 - 6841
Consultant	Kim MacLeod	780 542 - 1897
P Enginer	Dick Heenan	403 818 - 4408

Time Log

Start Time	End Time	Dur (hrs)	Cum Dur (hrs)	Comment
01:30	02:00	0.50	0.50	Held pre - job safety meeting on E - line procedures and picker procedures .
02:00	03:00	1.00	1.50	Rig in Pure Energy E - line truck and picker truck , remove well head . Install flange on tubing spool .
03:00	06:00	3.00	4.50	Run into hole with cement bailer 3 - runs , bail 30m cement on top of bridge plug @ 1360m . Rig down and release picker truck , e - line truck spot on L - 29 .

Report Fluids Summary

Fluid	To well (m³)	From well (m³)	Cum from Well (m³)	Left to recover (m³)
Water			31.70	19.30

Perforations

Date	Zone	Top (mKB)	Btm (mKB)	Current Status
3/1/2010	Sulphur Point, Original Hole	1,366.00	1,370.50	

Tubing Components

Item Description	Top (mKB)

Casing Strings

Casing Description	Grade	Wt (kg/m)	Set Depth (mKB)
Surface	K-55	35.716	379.00
Production	J-55	20.834	1,417.00

DAILY JOB REPORT

Rig No.: **041**

A CCS Company
Concord Well Servicing
3606 Highway St,Valleyview,AB,T0H 3N0

Day on Well: **1**	Client: **Paramount Resources Ltd.**	Date: **28-Feb-2010**	Report No: **CWS-041-60-3-100**	PO# Acct. No.
Operator Rep.: **Kim MacLeod**	Well Name: **Paramount et al Cameron** Location: **F-77**		Prov: **NT**	MWO#: AFE#: **Cameron**
Well Depth: **1455**	Csg Size: **139.7**	*Lease Conditions*: **Good**	Lease Temperature: **-2**	CC: Approver:
WellHead Connection: **73** mm **21** MPa	GPS: H2S	Tubing Press **n/a** kPa Casing Press **Dead** kPa2		Charge Code: **03**

From	To	Time	Details Of Operation
07:00	12:00	5.00	Crew change at 07:00 am. Bump test gas monitor. Sweep area for hazardous environments. Area clear. Walk around and visually check rig and equipment. (Good) Service and start equipment. Hold pre-job safety meeting. Assist picker to load all suport equipment. Move rig and equipment to F-77 lease entrance. Chain up all equipment. Move onto location.
12:00	14:00	2.00	Spot rig and equipment to company and govnerment regulations. Raise derrick and level over hole. Rig in and secure out riggers. Function test crown saver, E-kills, and air horn. (Good) Fill and fire boiler, heat kill fluid and wellhead. Rig in accumulator lines and class 3 system. Complete vent flow bubble test. No bubbles.
14:00	15:00	1.00	Stump test BOPs to 2000 and 21000 kPa for 10 min ea. (Good)
15:00	16:00	1.00	Remove wellhead and install BOP stack. Pressure test BOPs to 2000 kPa and 21000 kPa for 10 min ea. (Good) Rig in work floor, power tongs and air slips. Rig in and pressure test csg to 14,000 kPa for 15 min. (Good) Prepare to trip tbg.
16:00	18:30	2.50	Tally, assemble and RIH w/bit and csg scraper.
18:30	19:30	1.00	Rig in and reverse circulate well over to filtered KCL. Pump 17.0 m3 total.
19:30	21:30	2.00	POOH and stand 150 jts of 73mm tbg. Lay out csg scraper.
21:30	23:59	2.50	Rig in Pure Energy. Hold pre-job safety meeting. RIH w/CBL bond log. Tag PBTD @ 1400.5 mKB. Cement top @ surface. Rig out wireline unit.

Safety / BOP

Meeting Details:

Rig move. Spot and rig up.
Pressure test and install BOPs.
Tripping tbg. Circulate well to clean KCL.

- ☑ BOP Drill
- ☑ Daily Walk around Inspection
- ☑ Emergency Airhorn Tested
- ☑ Crown Saver Tested
- ☑ Rig Motor Shut-off
- ☑ Pump Motor Shut-off
- ☑ Lockout System Compliance
- ☐ Anchors Installed/Guylines secured
- ☐ Escape Buggy Installed
- ☑ KillLine Connected/Secured
- ☐ Power to PumpJack Off/Secured
- ☑ Rig and Equip. Bonded to Wellhead
- ☑ Mains and Drum Brake Linkage
- ☑ Self-Retracting Lifelines Tested
- ☑ Fall Arrest Harnesses Inspected
- ☑ Lanyards Inspected
- ☐ Rod B.O.P Function Test
- ☑ Pipe Function Tested
- ☑ Blind Function Tested
- ☑ Annular Function Tested
- ☑ Ram Saver Function Tested
- ☐ B.O.P. Remote Function Tested
- ☑ Accumulator pre-charge checked

Well Secure Time **44** sec
SCBA Drill Date: **2/28/2010**
Number of SCBA's **2**
Number of Fire Ext **4**
Pump Relief Valve set @ **21000** kPa
Initial Accumulator Pres.: **14500** kPa
Final Accum. Pressure: **11200** kPa
Piperams Proper Size: **73**

Piperams Tested
Low Pres : **2000** kPa **10** min
High Pres : ***21000*** kPa **10** *min*

Annular Tested
Low Pres : **2000** kPa **10** min
High Pres : **10000** kPa **10** min

Blindrams Tested
Low Pres : **2000** kPa **10** min
High Pres : **21000** kPa **10** min

Safety Valve Tested
Low Pres : **2000** kPa **10** min
High Pres : **21000** kPa **10** min

Pump Manifold Valves Tested
Low Pres : **2000** kPa **10** min
High Pres : **21000** kPa **10** min

Tubing Memo

Hauled in 171 jts of 73mm tbg.

Fluids Memo

Hauled in 36.0 m3 for the 400 bbl tank.

Rods Memo

Basic Well Servicing Costs

Description	Unit	Qty	Rate	Total
Rig Hours Operating	Hour	17	$615.00	$10,455.00
Rig O/T After 8 Hrs(NWT)	Hour	8	$210.00	$1,680.00
Rig Manager (110Km Min)	Km	110	$1.05	$115.50
Crew Vehicle (*110 Km Min*)	*Km*	220	$1.05	$231.00
Boiler (fuel out) 24 Hr BC	Day	1	$1,600.00	$1,600.00

Basic Well Costs Total: $14,081.50

Expendables Costs

Description	Qty	Rate	Total

Expendable Cost Total: $0.00

Third Party Cost

Item	Description	Qty	Amount	Total
	Personal Monitors	5	$30.00	$150.00
	Well Site Radios	8	$7.00	$56.00
	Csg scraper 5 day min	1	$550.00	$550.00

Third Party Cost: $756.00

Rig Crew

Position	Truck km	Travel Time	First Name	Last Name	Hours	Safety Days
Rig Manager-NWT #	110		Dwayne	Palmer	20	
Driller-NWT #1	110		Trevor	Norton	12	
Driller-NWT #1	110		Doug	Palmer	12	
Derrickhand-NWT #1			John	O'Reilly	12	
Derrickhand-NWT #1			Michael	Trojan	12	
Floorhand-NWT #1			Christopher	Wilson	12	
Floorhand-NWT #1			Scott	Gregory	12	
Floorhand-NWT #1			Michael	Gabrijelcic	12	
Floorhand-NWT #1			Shaun	Beecher	12	
Boilerhand-NWT #1	110		David	Brandle	12	

Totals

Basic Well Cost Total :	$14,081.50
Expendables Cost Total :	$0.00
Third Party Cost Total :	$756.00
Subtotal:	**$14,837.50**
GST(865-985469 RT003) :	$741.88
Estimated Total:	**$15,579.38**

OC Initial
cpatience

Rig Time: 17 **Stand By Time:0** **Repair Time: 0**

Signatures
Rig Manager's Signature:
Operator's Representative:

DAILY JOB REPORT

Rig No.: **041**

A CCS Company
Concord Well Servicing
3606 Highway St,Valleyview,AB,T0H 3N0

Day on Well	Client	Date	Report No:	PO#
2	**Paramount Resources Ltd.**	01-Mar-2010	CWS-041-60-3-101	Acct. No.

Operator Rep.	Well Name	Prov:	MWO#:
Kim MacLeod	Location **F-77**	**NT**	AFE#: **Cameron**

Well Depth	Csg Size	Lease Conditions	Lease Temperature	CC:
1455	**139.7**	**Good**	**-12**	*Approver:*

WellHead Connection	GPS:	Tubing Press **n/a** kPa	Charge Code
73 mm **21** MPa	H2S	Casing Press **Dead** kPa2	**03**

From	To	Time	Details Of Operation
00:00	01:30	1.50	Wireline continues to log well. Rig out wireline.
01:30	06:00	4.50	Rig in to csg swab well. Pull 17 swabs w/14.72 m3 returned to the rig tank.
06:00	09:00	3.00	Rig in Pure Energy wireline unit. Hold tailgate meeting. Rig in wireline. Hold pre-job safety meeting w/all personnel on location. Ensure all phones, two way radios and pagers are turned off. RIH w/101mm pref gun. Tag fluid level @ 1150.0 mKB. Perforate Lower Point Dolomite 1366.0 - 1370.5 mKB. Rig out wireline unit.
09:00	10:00	1.00	Read and record pressures. Csg pressure builds to 49 kPa.
10:00	12:30	2.50	Bleed of csg and prepare to trip tbg. Assemble and RIH w/73mm tbg.
12:30	19:00	6.50	Rig in and swab well to test vessel. Pull 10 swabs w/6.06 m3 recovered.
19:00	23:59	5.00	Crew change. Continue to swab sour to testers. Pull 1 swab ever hour w/1.6 m3 recovered.

Safety / BOP

Meeting Details:

Csg swab non perforated well.
Wireline operations. Perforate well.
Tripping tbg. Swab/flow well.

- ☐ BOP Drill
- ☑ Daily Walk around Inspection
- ☑ Emergency Airhorn Tested
- ☑ Crown Saver Tested
- ☑ Rig Motor Shut-off
- ☑ Pump Motor Shut-off
- ☑ Lockout System Compliance
- ☐ Anchors Installed/Guylines secured
- ☑ Escape Buggy Installed
- ☑ KillLine Connected/Secured
- ☐ Power to PumpJack Off/Secured
- ☑ Rig and Equip. Bonded to Wellhead
- ☑ Mains and Drum Brake Linkage
- ☑ Self-Retracting Lifelines Tested
- ☑ Fall Arrest Harnesses Inspected
- ☑ Lanyards Inspected
- ☐ Rod B.O.P Function Test
- ☑ Pipe Function Tested
- ☑ Blind Function Tested
- ☐ Annular Function Tested
- ☑ Ram Saver Function Tested
- ☐ B.O.P. Remote Function Tested
- ☐ Accumulator pre-charge checked

Well Secure Time **45** sec
SCBA Drill Date: **2/28/2010**
Number of SCBA's **2**
Number of Fire Ext **4**
Pump Relief Valve set @ **21000** kPa
Initial Accumulator Pres.: kPa
Final Accum. Pressure: kPa
Piperams Proper Size: **73**

Piperams Tested
Low Pres : kPa min
High Pres : kPa min

Annular Tested
Low Pres : kPa min
High Pres : kPa min

Blindrams Tested
Low Pres : kPa min
High Pres : kPa min

Safety Valve Tested
Low Pres : kPa min
High Pres : kPa min

Pump Manifold Valves Tested
Low Pres : kPa min
High Pres : kPa min

Tubing Memo

73mm Wireline re-entry guide 0.13m
1 jt of 73mm tbg 8.55m
Perforated pup jt 0.62m
PSN 0.33m
4 jts of 73mm tbg 36.77m
Tbg anchor 0.91m
142 jts of 73mm tbg 1323.47m
73mm tbg pup jt 2.48m
73mm tbg pup jt 3.12m
1 jt of 73mm tbg 9.46m
Tbg hanger 0.26m
KB only 4.05m

Fluids Memo

Rods Memo

Basic Well Servicing Costs

Description	Unit	Qty	Rate	Total
Rig Hours Operating	Hour	24	$615.00	$14,760.00
Rig O/T After 8 Hrs(NWT)	Hour	8	$210.00	$1,680.00
Rig Manager (110Km Min)	Km	110	$1.05	$115.50
Crew Vehicle (110 Km Min)	Km	220	$1.05	$231.00
Boiler (fuel out) 24 Hr BC	Day	1	$1,600.00	$1,600.00
Inhibitor Injector	Day	1	$100.00	$100.00

Basic Well Costs Total: $18,486.50

Expendables Costs

Description	Qty	Rate	Total
Sandline Inhibitor(lit)	5	$15.00	$75.00
Saver Rubber	4	$16.00	$64.00
73mm Swap Cup	4	$35.00	$140.00
140mm Csg Cup	9	$20.00	$180.00

Expendable Cost Total: $459.00

Third Party Cost

Item	Description	Qty	Amount	Total
	Personal Monitors	5	$30.00	$150.00
	Well Site Radios	8	$7.00	$56.00

Third Party Cost: $206.00

Rig Crew

Position	Truck km	Travel Time	First Name	Last Name	Hours	Safety Days
Rig Manager-NWT #	110		Dwayne	Palmer	20	
Driller-NWT #1	110		*Trevor*	Norton	12	
Driller-NWT #1	110		Doug	Palmer	12	
Derrickhand-NWT #			John	O'Reilly	12	
Derrickhand-NWT #			Michael	Trojan	12	
Floorhand-NWT #1			Christopher	Wilson	12	
Floorhand-NWT #1			Scott	Gregory	12	
Floorhand-NWT #1			Michael	Gabrijelcic	12	
Floorhand-NWT #1			*Shaun*	*Beecher*	12	
Boilerhand-NWT #1	110		David	Brandle	12	

Totals

Basic Well Cost Total :	$18,486.50
Expendables Cost Total :	$459.00
Third Party Cost Total :	$206.00
Subtotal:	**$19,151.50**
GST(865-985469 RT003) :	$957.58
Estimated Total:	**$20,109.08**

OC Initial
cpatience

Rig Time: 24 **Stand By Time:0** **Repair Time: 0**

Signatures
Rig Manager's Signature:
Operator's Representative:

DAILY JOB REPORT

Rig No.: **041**

A GCS Company
Concord Well Servicing
3606 Highway St,Valleyview,AB,T0H 3N0

Day on Well	Client	Date	Report No:	PO#
3	**Paramount Resources Ltd.**	02-Mar-2010	CWS-041-60-3-102	Acct. No.

Operator Rep.	Well Name	Prov:	MWO#:
Kim MacLeod	**Paramount et al Cameron** Location **F-77**	**NT**	AFE#: **Cameron**

Well Depth	Csg Size	Lease Conditions	Lease Temperature	CC:
1455	139.7	**Good**	**2**	Approver:

WellHead Connection	GPS:	Tubing Press kPa	Charge Code
73 mm **21** MPa	H2S	Casing Press kPa2	**03**

From	To	Time	Details Of Operation
00:00	07:00	7.00	Continue to pull hourly swabs. Pull 7 swabs w/2.83 m3 recovered.
07:00	12:00	5.00	Continue to pull hourly swabs. Pull 4 swabs, w/1.76 m3 recovered.
12:00	13:00	1.00	Bleed off csg to testers, Rig in and forward circulate well to testers. Pump 18.0 m3 w/m3 recovered. Well dead.
13:00	16:00	3.00	POOH sideways w/73mm tbg.
16:00	19:00	3.00	Wait on wireline.
19:00	23:59	5.00	Crew change. Continue to wait on wireline unit. Wireline can't make it tomorrow. Stand tbg in the derrick, set-up for tbg run bridge plug. SDFN. Note: night shift is released.

Safety / BOP

Meeting Details:

Swab sour well to testers.
Tripping tbg.
Wait on wireline unit.

- ☑ BOP Drill
- ☑ Daily Walk around Inspection
- ☑ Emergency Airhorn Tested
- ☑ Crown Saver Tested
- ☑ Rig Motor Shut-off
- ☑ Pump Motor Shut-off
- ☑ Lockout System Compliance
- ☐ Anchors Installed/Guylines secured
- ☑ Escape Buggy Installed
- ☑ KillLine Connected/Secured
- ☐ Power to PumpJack Off/Secured
- ☑ Rig and Equip. Bonded to Wellhead
- ☑ Mains and Drum Brake Linkage
- ☑ Self-Retracting Lifelines Tested
- ☑ Fall Arrest Harnesses Inspected
- ☑ Lanyards Inspected
- ☐ Rod B.O.P Function Test
- ☑ Pipe Function Tested
- ☑ Blind Function Tested
- ☐ Annular Function Tested
- ☑ Ram Saver Function Tested
- ☑ B.O.P. Remote Function Tested
- ☐ Accumulator pre-charge checked

Well Secure Time **51** sec
SCBA Drill Date: **2/28/2010**
Number of SCBA's **2**
Number of Fire Ext **4**
Pump Relief Valve set @ **21000** kPa
Initial Accumulator Pres.: kPa
Final Accum. Pressure: kPa
Piperams Proper Size: **73**

Piperams Tested
Low Pres : kPa min
High Pres : kPa min

Annular Tested
Low Pres : kPa min
High Pres : kPa min

Blindrams Tested
Low Pres : kPa min
High Pres : kPa min

Safety Valve Tested
Low Pres : kPa min
High Pres : kPa min

Pump Manifold Valves Tested
Low Pres : kPa min
High Pres : kPa min

Tubing Memo

Fluids Memo

Rods Memo

Basic Well Servicing Costs

Description	Unit	Qty	Rate	Total
Rig Hours Operating	Hour	24	$615.00	$14,760.00
Rig O/T After 8 Hrs(NWT)	Hour	8	$210.00	$1,680.00
Rig Manager (110Km Min)	Km	110	$1.05	$115.50
Crew Vehicle (110 Km Min)	Km	220	$1.05	$231.00
Boiler (fuel out) 24 Hr BC	Day	1	$1,600.00	$1,600.00

Basic Well Costs Total: $18,386.50

Expendables Costs

Description	Qty	Rate	Total
Saver Rubber	2	$16.00	$32.00
73mm Swap Cup	4	$35.00	$140.00

Expendable Cost Total: $172.00

Third Party Cost

Item	Description	Qty	Amount	Total
	Personal Monitors	5	$30.00	$150.00
	Well Site Radios	8	$7.00	$56.00

Third Party Cost: $206.00

Rig Crew

Position	Truck km	Travel Time	First Name	Last Name	Hours	Safety Days
Rig Manager-NWT #	110		Dwayne	Palmer	20	
Driller-NWT #1	110		Doug	Palmer	12	
Driller-NWT #1	110		Trevor	Norton	9	
Derrickhand-NWT #			John	O'Reilly	12	
Derrickhand-NWT #			Michael	Trojan	9	
Floorhand-NWT #1			Christopher	Wilson	12	
Floorhand-NWT #1			Scott	Gregory	12	
Floorhand-NWT #1			Michael	Gabrijelcic	9	
Floorhand-NWT #1			Shaun	Beecher	9	
Boilerhand-NWT #1	110		David	Brandle	12	

Totals

Basic Well Cost Total :	$18,386.50
Expendables Cost Total :	$172.00
Third Party Cost Total :	$206.00
Subtotal:	**$18,764.50**
GST(865-985469 RT003) :	$938.23
Estimated Total:	**$19,702.73**

OC Initial
jtuttle

Rig Time: 24 **Stand By Time: 0** **Repair Time: 0**

Signatures
Rig Manager's Signature:
Operator's Representative:

DAILY JOB REPORT

Rig No.: **041**

A CCS Company
Concord Well Servicing
3606 Highway St,Valleyview,AB,T0H 3N0

Day on Well	Client	Date	Report No:	PO#
4	**Paramount Resources Ltd.**	03-Mar-2010	CWS-041-60-3-103	Acct. No.

Operator Rep.	Well Name / Location	Prov:	MWO#:
Kim MacLeod	**Paramount et al Cameron** / **F-77**	**NT**	AFE#: **Cameron**

Well Depth	Csg Size	Lease Conditions	Lease Temperature	CC:
1455	**139.7**	**Good**	**2**	Approver:

WellHead Connection	GPS:	Tubing Press / Casing Press	Charge Code
73 mm **21** MPa	H2S	**n/a** kPa / **Dead** kPa2	**03**

From	To	Time	Details Of Operation
00:00	01:00	1.00	Wait on road conditions. Night shift cannot move out @ midnight, wait until 1 am then travel home.
01:00	07:00	6.00	Fire boiler.
07:00	19:00	12.00	Bump test gas monitor. Sweep area for hazardous environments. Area clear. Walk around and visually check rig and equipment. (Good) Service and start equipment. Hold pre-job safety meeting. Prepare to run tbg. RIH w/tbg set bridge plug. Space out. Rig in and fill tbg. Pressure up to 7000 kPa and set plug. Continue to pump and fill hole. Pump 7.2m3 w/1.9 m3 returned to the vessel. Shut in and pressure test bridge plug to 17,000 kPa for 15 min. (Good) Remove BOPs and install wellhead. Pump 200 liters of diesel down csg. Pressure test wellhead to 5000 kPa (Good) Rig out rig and equipment. Cool and drain boiler. Rig out class 3 system.
19:00	23:59	5.00	Wait on trucks. Prepare for rig move.

Safety / BOP

Meeting Details:

RIH w/brigde plug.
Fill tbg and set plug.
POOH sideways.

- ☑ BOP Drill
- ☑ Daily Walk around Inspection
- ☑ Emergency Airhorn Tested
- ☑ Crown Saver Tested
- ☑ Rig Motor Shut-off
- ☑ Pump Motor Shut-off
- ☑ Lockout System Compliance
- ☐ Anchors Installed/Guylines secured
- ☑ Escape Buggy Installed
- ☑ KillLine Connected/Secured
- ☐ Power to PumpJack Off/Secured
- ☑ Rig and Equip. Bonded to Wellhead
- ☑ Mains and Drum Brake Linkage
- ☑ Self-Retracting Lifelines Tested
- ☑ Fall Arrest Harnesses Inspected
- ☑ Lanyards Inspected
- ☐ Rod B.O.P Function Test
- ☑ Pipe Function Tested
- ☑ Blind Function Tested
- ☐ Annular Function Tested
- ☐ Ram Saver Function Tested
- ☐ B.O.P. Remote Function Tested
- ☐ Accumulator pre-charge checked

Well Secure Time **44** sec
SCBA Drill Date: **2/28/2010**
Number of SCBA's **2**
Number of Fire Ext **4**
Pump Relief Valve set @ **21000** kPa
Initial Accumulator Pres.: kPa
Final Accum. Pressure: kPa
Piperams Proper Size:

Piperams Tested
Low Pres : kPa min
High Pres : kPa min

Annular Tested
Low Pres : kPa min
High Pres : kPa min

Blindrams Tested
Low Pres : kPa min
High Pres : kPa min

Safety Valve Tested
Low Pres : kPa min
High Pres : kPa min

Pump Manifold Valves Tested
Low Pres : kPa min
High Pres : kPa min

Tubing Memo

171 jts of 73mm tbg hauled off location

Fluids Memo

Rods Memo

Basic Well Servicing Costs

Description	Unit	Qty	Rate	Total
Rig Hours Operating	Hour	12	$615.00	$7,380.00
Rig O/T After 8 Hrs(NWT)	Hour	4	$210.00	$840.00
Rig Manager (110Km Min)	Km	110	$1.05	$115.50
Crew Vehicle (110 Km Min)	Km	2585	$1.05	$2,714.25
Travel Allowance	Hour	86	$17.00	$1,462.00
Extra Labour	Hour	16	$65.00	$1,040.00
Extra Labour O/T	Hour	12	$85.00	$1,020.00
Boilerhand Kms	Km	1175	$1.05	$1,233.75
Boiler (fuel out) 24 Hr BC	Day	1	$1,600.00	$1,600.00

Basic Well Costs Total: $17,405.50

Expendables Costs

Description	Qty	Rate	Total

Expendable Cost Total: $0.00

Third Party Cost

Item	Description	Qty	Amount	Total
	Personal Monitors	5	$30.00	$150.00
	Well Site Radios	8	$7.00	$56.00

Third Party Cost: $206.00

Rig Crew

Position	Truck km	Travel Time	First Name	Last Name	Hours	Safety Days
Rig Manager-NWT #	110		Dwayne	Palmer	20	
Driller-NWT #1	110		Doug	Palmer	12	
Driller-NWT #1	1190	12	Trevor	Norton	1	
Driller-NWT #1	1285	13	Glen	Woodworth	12	
Derrickhand-NWT #		12	Michael	Trojan	1	
Derrickhand-NWT #			John	O'Reilly	12	
Floorhand-NWT #1			Christopher	Wilson	12	
Floorhand-NWT #1			Scott	Gregory	12	
Floorhand-NWT #1		12	Michael	Gabrijelcic	1	
Floorhand-NWT #1		12	Shaun	Beecher	1	
Floorhand-NWT #1		13	Landon	Graham	12	
Boilerhand-NWT #1	1175	12	David	Brandle		

Totals

Basic Well Cost Total :	$17,405.50
Expendables Cost Total :	$0.00
Third Party Cost Total :	$206.00
Subtotal:	$17,611.50
GST(865-985469 RT003) :	$880.58
Estimated Total:	$18,492.08

OC Initial
cpatience

Rig Time: 12 **Stand By Time:0** **Repair Time: 0**

Signatures
Rig Manager's Signature:
Operator's Representative:

SWAB/CLEAN UP

PAS-PRD

PARAMOUNT RESOURCES LTD.

Well Name: Para et al Cameron F-77

UWI: 60-10-117-15

FIELD: Cameron Hills

FORMATION: Lower Sulphur Point

Test/Prod Intervals: 1366.0 - 1370.5 mKB

TEST DATE (s): February 28 - March 3, 2010

DISTRIBUTION: Well Completions - Calgary, AB - 2 copies

PREPARED BY: Enertec Systems enertec@telus.net
Roberta (Robbie) Lailey
Cell: (403) 651-1350

Axel Production Services Ltd.
4th Floor, 522 - 11th Avenue SW
Calgary, AB T2R 0C8
Phone: (403) 266-8613 Cell: (403) 507-5169 Fax: (403) 266-8617
email: Jason Haffner - jasonh@axelltd.ca

Field Production Notes (PAS_PRD) v. 4.00

GENERAL INFORMATION

Well Info:

Oil Company Name:	PARAMOUNT RESOURCES LTD.		
Well Name:	Para et al Cameron F-77		
Unique Well ID (UWI):	60-10-117-15		
Surface Location:		EUB Well License No.:	
Formation:	Lower Sulphur Point	Drilling Leg:	01
Field:	Cameron Hills		

Well Fluid Type at Test Date:

	01 - Oil
	02 - Gas
X	03 - Water
	17 - Crude Bitumen

Test Data:

Service Company Name:	Axel Production Services Ltd.	Recorders Run:	No
Service Company Code:	AXEL		
Test Final Date/Time:	3-Mar-10 11:00		
		Previous Gas Prod.:	0.0000 10^3m^3
		Gas Flared:	0.0000 10^3m^3
Test/Prod. Interval Top mKB (Log):	1366.00 m	Gas Incinerated:	0.0000 10^3m^3
Test/Prod. Interval Base mKB (Log):	1370.50 m	Gas Produced to Pipeline:	0.0000 10^3m^3
		Gas Vented:	0.0000 10^3m^3

Meters:

Gas Meter1

Metering Device Type:	Orifice	Gas Relative Density:	0.650
Meter Run/Prover Size:	97.200 mm	Nitrogen (N2):	0.0000 %
		Carbon Dioxide (CO2):	0.0000 %
Atmospheric Pressure:	93.01 kPa	Hydrogen Sulphide (H2S):	0.0000 %
Tap Type:	Flanged		
Tap Location:	Downstream		

Liquid Meter1

Liquid Type Indicator:	Water
Metering Device Type:	Produced Volume
Tank Measurement Indicator:	Incremental
pH:	7
Salinity:	104000
API (Oil Gravity):	

Liquid Meter2

Liquid Type Indicator:	Oil/Condensate
Metering Device Type:	Produced Volume
Tank Measurement Indicator:	Incremental

PRD File Name: F-77-Lower Sulphur Point-PRD-2010-03-03

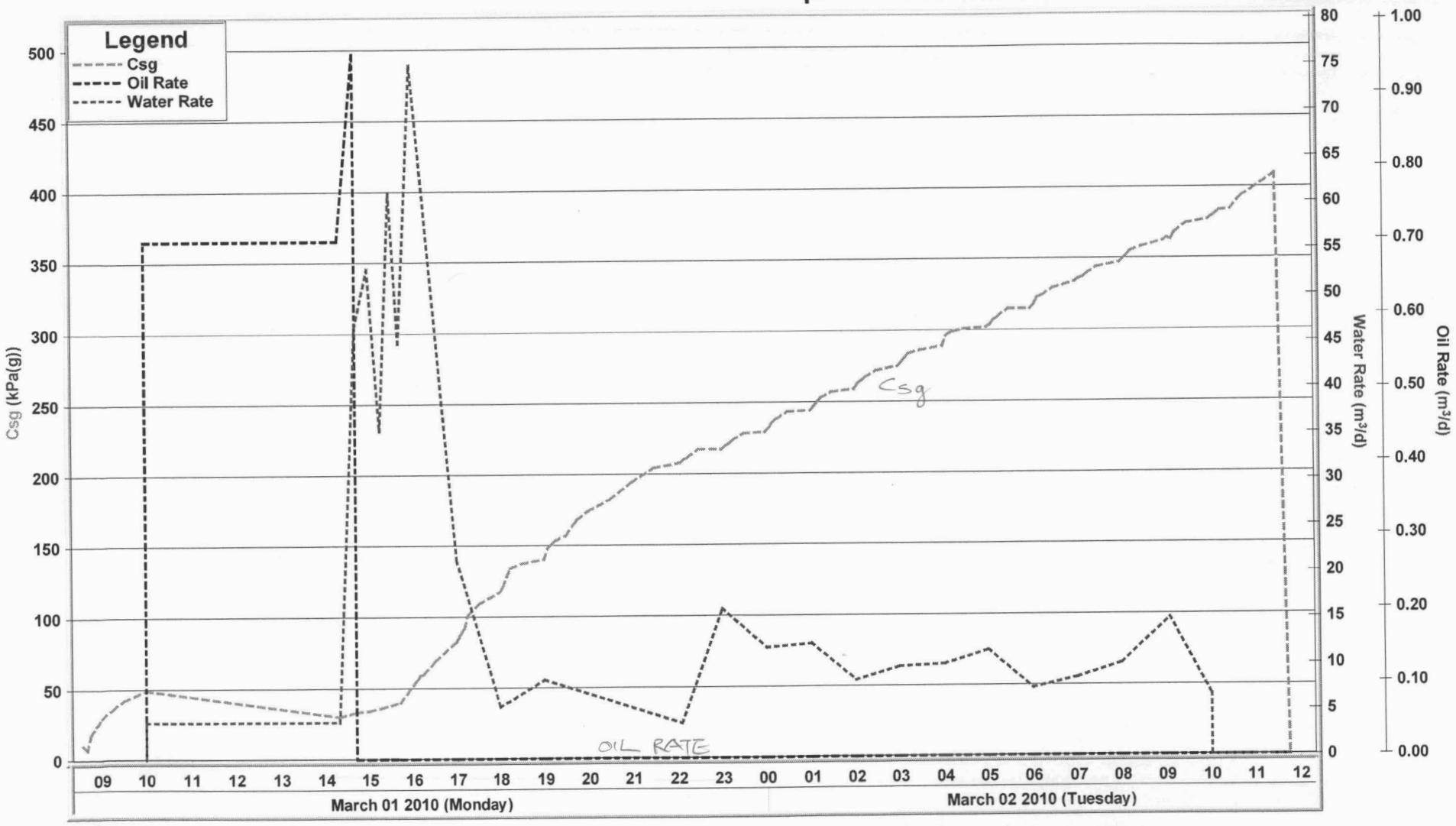
REMARKS

An ERCB PAS-PRD (v. 4.00) file has been created, using the above mentioned information. No Gas Samples were obtained for this report.

Company: PARAMOUNT RESOURCES LTD.
Unique Well ID: 60-10-117-15
Start DateTime: 2010/02/28 07:00
End DateTime: 2010/03/03 11:00

Well / Lease Name: PARA et al CAMERON F-77
Formation: LOWER SULPHUR POINT
Pool:
Job Number: 1020

Swab/Clean Up



Company: PARAMOUNT RESOURCES LTD.
Unique Well ID: 60-10-117-15
Start DateTime: 2010/02/28 07:00
End DateTime: 2010/03/03 11:00

Well / Lease Name: PARA et al CAMERON F-77
Formation: LOWER SULPHUR POINT
Pool:
Job Number: 1020

				Wellhead				Gas Orifice Meter									Recovered/Produced Fluid Volumes								
	Date	Time	Cum Time	Tbg	Csg	WHT	Flow Time	Orifice	Static	Diff	Temp	Gas Rate	Cum Gas	Swab	Tag	Pull	Fld Vol	BSW	Oil Gain	Oil Cum	Water Gain	Cum Water	pH	Salinity	API
	YYYY/MM/DD	HH:mm:ss	h	kPa(g)	kPa(g)	°C	h	mm	kPa(g)	kPa	°C	$10^3m^3/d$	10^3m^3		m	m	m^3	%	m^3	m^3	m^3	m^3		ppm	°API
1	2010/02/28	07:00:00	0.00	ARRIVE ON LOCATION, HOLD SAFETY MEETING																					
2		08:00:00	1.00	SPOT & RIG IN EQUIPMENT TO REGULATION																					
3	2010/03/01	06:00:00	23.00	SWAB CASING TO 1150 m / 2.00 m^3 HOLE VOLUME LEFT																					
4		07:00:00	24.00	ATTEND SAFETY MEETING 11 PERSONAL ON LOCATION																					
5		08:16:00	25.27	LOWER SULPHUR POINT ZONE PERFORATED																					
6		08:35:00	25.58	RIG OUT E-LINE UNIT / MONITOR PRESSURES																					
7		08:35:00	25.58		10		0.00																		
8		08:40:00	25.67		7		0.00																		
9		08:45:00	25.75		18		0.00																		
10		09:00:00	26.00		30		0.00																		
11		09:15:00	26.25		36		0.00																		
12		09:30:00	26.50		42		0.00																		
13		10:00:00	27.00		49		0.00		0	0.0	0.0	0.000	0.0000				0.000		0.000	0.000	0.000	0.000			
14		10:00:00	27.00	BEGIN RUNNING IN HOLE WITH TUBING																					
15		12:30:00	29.50	TUBING ON DEPTH / RIG IN TO SWAB TUBING																					
16		14:19:00	31.32	13	30		4.32							1		1348	0.844	85.0	0.127	0.127	0.717	0.717			
17		14:42:00	31.70	13	33		4.70							2	1103	1348	0.765	98.0	0.015	0.142	0.750	1.467			
18		14:42:00	31.70	TRACE OF BURNABLE GAS AT SURFACE																					
19		15:00:00	32.00	9	34		5.00							3	1145	1380	0.665	100.0	0.000	0.142	0.665	2.132			
20		15:00:00	32.00	**NOTE** H_2S SAMPLE TAKEN WITH RAE. = 2500 ppm																					
21		15:16:00	32.27	3	36		5.27							4	1227	1380	0.395		0.000	0.142	0.395	2.527	6	106000	
22		15:30:00	32.50	11	38		5.50							5	1227	1380	0.598		0.000	0.142	0.598	3.125			
23		15:42:00	32.70	18	40		5.70							6	1227	1380	0.376		0.000	0.142	0.376	3.501	6	82000	
24		16:00:00	33.00	18	52		6.00							7	1267	1380	0.942		0.000	0.142	0.942	4.443			
25		16:05:00	33.08	17	55		6.08																		
26		16:10:00	33.17	16	59		6.17																		
27		16:15:00	33.25	10	60		6.25																		
28		16:30:00	33.50	-1	69		6.50																		
29		17:00:00	34.00	6	83		7.00							8	1267	1380	0.895		0.000	0.142	0.895	5.338	6	40000	
30		17:00:00	34.00	**NOTE** SAMPLES SHOW TRACE OF OIL																					
31		17:05:00	34.08	-1	88		7.08																		
32		17:10:00	34.17	-1	92		7.17																		
33		17:15:00	34.25	-1	101		7.25																		
34		17:30:00	34.50	-1	109		7.50																		

Company: PARAMOUNT RESOURCES LTD.
Unique Well ID: 60-10-117-15
Start DateTime: 2010/02/28 07:00
End DateTime: 2010/03/03 11:00

Well / Lease Name: PARA et al CAMERON F-77
Formation: LOWER SULPHUR POINT
Pool:
Job Number: 1020

				Wellhead				Gas Orifice Meter									Recovered/Produced Fluid Volumes								
	Date	Time	Cum Time	Tbg	Csg	WHT	Flow Time	Orifice	Static	Diff	Temp	Gas Rate	Cum Gas	Swab	Tag	Pull	Fld Vol	BSW	Oil Gain	Oil Cum	Water Gain	Cum Water	pH	Salinity	API
	YYYY/MM/DD	HH:mm:ss	h	kPa(g)	kPa(g)	°C	h	mm	kPa(g)	kPa	°C	$10^3m^3/d$	10^3m^3		m	m	m^3	%	m^3	m^3	m^3	m^3		ppm	°API
35	2010/03/01	18:00:00	35.00	-1	117		8.00	0.00						9	1267	1380	0.234	100.0	0.000	0.142	0.234	5.572	6	42000	
36		18:05:00	35.08	-1	121		8.08																		
37		18:10:00	35.17	-1	128		8.17																		
38		18:15:00	35.25	-1	134		8.25																		
39		18:30:00	35.50	-1	137		8.50																		
40		19:00:00	36.00	-1	140		9.00							10	1267	1380	0.356		0.000	0.142	0.356	5.928	6	48000	
41		19:00:00	36.00	**NOTE** H_2S SAMPLE TAKEN WITH RAE. = 10000 ppm (1%)																					
42		19:05:00	36.08	-1	148		9.08																		
43		19:10:00	36.17	-1	150		9.17																		
44		19:15:00	36.25	-1	153		9.25																		
45		19:30:00	36.50	-1	157		9.50																		
46		19:45:00	36.75	-1	168		9.75																		
47		20:00:00	37.00	-1	174		10.00																		
48		20:30:00	37.50	-1	182		10.50																		
49		21:00:00	38.00	-1	194		11.00																		
50		21:30:00	38.50	-1	204		11.50																		
51		22:00:00	39.00	-1	207		12.00							11	1267	1380									
52		22:05:00	39.08	-1	208		12.08										0.480		0.000	0.142	0.480	6.408	6	100000	
53		22:10:00	39.17	-1	210		12.17																		
54		22:15:00	39.25	-1	211		12.25																		
55		22:30:00	39.50	-1	217		12.50																		
56		23:00:00	40.00	-1	217		13.00							12	1267	1380	0.616		0.000	0.142	0.616	7.024	6	104000	
57		23:05:00	40.08	-1	219		13.08																		
58		23:10:00	40.17	-1	221		13.17																		
59		23:15:00	40.25	-1	223		13.25																		
60		23:30:00	40.50	-1	228		13.50																		
61	2010/03/02	00:00:00	41.00	-1	229		14.00							13	1285	1380	0.496		0.000	0.142	0.496	7.520	6	104000	
62		00:05:00	41.08	-1	232		14.08																		
63		00:10:00	41.17	-1	236		14.17																		
64		00:15:00	41.25	-1	238		14.25																		
65		00:30:00	41.50	-1	243		14.50																		
66		01:00:00	42.00	-1	244		15.00							14	1209	1380	0.513		0.000	0.142	0.513	8.033	6	112000	
67		01:05:00	42.08	-1	247		15.08																		
68		01:10:00	42.17	-1	250		15.17																		

Company: PARAMOUNT RESOURCES LTD.
Unique Well ID: 60-10-117-15
Start DateTime: 2010/02/28 07:00
End DateTime: 2010/03/03 11:00

Well / Lease Name: PARA et al CAMERON F-77
Formation: LOWER SULPHUR POINT
Pool:
Job Number: 1020

				Wellhead				Gas Orifice Meter									Recovered/Produced Fluid Volumes								
	Date	Time	Cum Time	Tbg	Csg	WHT	Flow Time	Orifice	Static	Diff	Temp	Gas Rate	Cum Gas	Swab	Tag	Pull	Fld Vol	BSW	Oil Gain	Oil Cum	Water Gain	Cum Water	pH	Salinity	API
	YYYY/MM/DD	HH:mm:ss	h	kPa(g)	kPa(g)	°C	h	mm	kPa(g)	kPa	°C	$10^3m^3/d$	10^3m^3		m	m	m^3	%	m^3	m^3	m^3	m^3		ppm	°API
69	2010/03/02	01:15:00	42.25	-1	253		15.25	0.00										100.0							
70		01:30:00	42.50	-1	257		15.50																		
71		02:00:00	43.00	-1	259		16.00							15	1264	1380	0.347		0.000	0.142	0.347	8.380	6	113000	
72		02:05:00	43.08	-1	263		16.08																		
73		02:10:00	43.17	-1	265		16.17																		
74		02:15:00	43.25	-1	267		16.25																		
75		02:30:00	43.50	-1	272		16.50																		
76		03:00:00	44.00	-1	275		17.00							16	1244	1380	0.408		0.000	0.142	0.408	8.788	6	110000	
77		03:05:00	44.08	-1	278		17.08																		
78		03:10:00	44.17	-1	281		17.17																		
79		03:15:00	44.25	-1	284		17.25																		
80		03:30:00	44.50	-1	286		17.50																		
81		04:00:00	45.00	-1	289		18.00							17	1241	1380	0.418		0.000	0.142	0.418	9.206	6	110000	
82		04:05:00	45.08	-1	296		18.08																		
83		04:10:00	45.17	-1	298		18.17																		
84		04:15:00	45.25	-1	299		18.25																		
85		04:30:00	45.50	-1	301		18.50																		
86		05:00:00	46.00	-1	302		19.00							18	1220	1380	0.481		0.000	0.142	0.481	9.687	6	106000	
87		05:05:00	46.08	-1	304		19.08																		
88		05:10:00	46.17	-1	307		19.17																		
89		05:15:00	46.25	-1	309		19.25																		
90		05:30:00	46.50	-1	315		19.50																		
91		06:00:00	47.00	-1	315		20.00							19	1277	1380	0.308		0.000	0.142	0.308	9.995	6	104000	
92		06:05:00	47.08	-1	318		20.08																		
93		06:10:00	47.17	-1	323		20.17																		
94		06:15:00	47.25	-1	324		20.25																		
95		06:30:00	47.50	-1	329		20.50																		
96		07:00:00	48.00	-1	334		21.00							20	1290	1380	0.356		0.000	0.142	0.356	10.351	7	106000	
97		07:00:00	48.00	**NOTE** SAMPLES SHOW TRACE OF OIL																					
98		07:00:00	48.00	**NOTE** H^2S SAMPLE TAKEN WITH RAE. = 50000 ppm (5%)																					
99		07:05:00	48.08	-1	336		21.08																		
100		07:10:00	48.17	-1	337		21.17																		
101		07:15:00	48.25	-1	339		21.25																		
102		07:30:00	48.50	-1	344		21.50																		

Company: PARAMOUNT RESOURCES LTD.
Unique Well ID: 60-10-117-15
Start DateTime: 2010/02/28 07:00
End DateTime: 2010/03/03 11:00

Well / Lease Name: PARA et al CAMERON F-77
Formation: LOWER SULPHUR POINT
Pool:
Job Number: 1020

				Wellhead				Gas Orifice Meter									Recovered/Produced Fluid Volumes								
	Date	Time	Cum Time	Tbg	Csg	WHT	Flow Time	Orifice	Static	Diff	Temp	Gas Rate	Cum Gas	Swab	Tag	Pull	Fld Vol	BSW	Oil Gain	Oil Cum	Water Gain	Cum Water	pH	Salinity	API
	YYYY/MM/DD	HH:mm:ss	h	kPa(g)	kPa(g)	°C	h	mm	kPa(g)	kPa	°C	$10^3m^3/d$	10^3m^3		m	m	m^3	%	m^3	m^3	m^3	m^3		ppm	°API
103	2010/03/02	08:00:00	49.00	-1	347		22.00	0.00						21	1240	1380	0.420	100.0	0.000	0.142	0.420	10.771	7	108000	
104		08:05:00	49.08	-1	349		22.08																		
105		08:10:00	49.17	-1	352		22.17																		
106		08:15:00	49.25	-1	355		22.25																		
107		08:30:00	49.50	-1	358		22.50																		
108		09:00:00	50.00	-1	362		23.00																		
109		09:05:00	50.08	-1	364		23.08							22	1155	1380	0.676		0.000	0.142	0.676	11.447	7	108000	
110		09:10:00	50.17	-1	363		23.17																		
111		09:15:00	50.25	-1	368		23.25																		
112		09:30:00	50.50	-1	374		23.50																		
113		10:00:00	51.00	-1	377		24.00							23	1296	1380	0.253		0.000	0.142	0.253	11.700	7	104000	
114		10:05:00	51.08	-1	379		24.00																		
115		10:10:00	51.17	-1	381		24.00																		
116		10:15:00	51.25	-1	383		24.00																		
117		10:30:00	51.50	-1	384		24.00																		
118		10:45:00	51.75	-1	393		24.00																		
119		11:00:00	52.00	-1	398		24.00																		
120		11:30:00	52.50	-1	409		24.00																		
121		11:45:00	52.75	0	0		24.00		0	0.0	0.0	0.000	0.0000				0.000		0.000	0.142	0.000	11.700			
122		11:45:00	52.75	RIG OUT SWAB EQUIPMENT/ RIG UP TO PULL TUBING																					
123		16:15:00	57.25	TUBING ON SURFACE / PREPARE FOR WIRELINE WORK / SECURE WELL																					
124	2010/03/03	07:00:00	72.00	ATTEND SAFETY MEETING 9 PERSONAL ON LOCATION																					
125		08:00:00	73.00	BEGIN RUNNING IN HOLE WITH BRIDGE PLUG																					
126		10:30:00	75.50	BRIDGE PLUG SET AT 1360 METERS																					
127		11:00:00	76.00	RIG OUT TEST EQUIPMENT																					
128		11:00:00	76.00	**NOTE** NO SAMPLES TAKEN																					