MORNING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR BN	R.M. DC
(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 Inspect BOPs- Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	22

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
62	

WEATHER

TEMPERATURE	-32
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER

O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070222_1D		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22 W.O.D.	23	24	25	26	TOTALS
MORN	8.0																										8.00
DAY	12.0																										12.00
EVE																						4.0					4.00
TOTAL	20.00																					4.00					24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	38	TOP
MIDDLE		MIDDLE
BOTTOM	38	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
	D.P.	STANDS	
	D.P.	SINGLES	
KELLY DOWN			
TOTAL			
WT. OF D.C.			
WT. OF STRING			

BIT RECORD

BIT NO.		
SIZE		
IADC CODE		
MANUFACTURER		
TYPE		
SERIAL NO.		
JETS		
DEPTH OUT (m)		
DEPTH IN (m)		
TOTAL DRILLED (m)		
TOTAL HRS RUN		

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

MORNING TOUR

MUD RECORD

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE

DAVE D CROWLEY

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
0000	800	8.00	1	TEAR DOWN READY FOR MORNING MOVE

NOTES :

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH							

DAY

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR BN	R.M. DC
(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 Inspect BOPs- Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	22

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
62	

WEATHER
TEMPERATURE: -32
CURRENT CONDITIONS: OVERCAST
WIND DIRECTION: S.W.
ROAD CONDITION: SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070222_1D		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22 W.O.D.	23	24	25	26	TOTALS
MORN	8.0																										8.00
DAY	12.0																										12.00
EVE																						4.0					4.00
TOTAL	20.00																					4.00					24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	38	TOP
MIDDLE		MIDDLE
BOTTOM	38	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
	D.P.	STANDS	
	D.P.	SINGLES	
KELLY DOWN			
TOTAL			
WT. OF D.C.			
WT. OF STRING			

BIT RECORD

BIT NO.		
SIZE		
IADC CODE		
MANUFACTURER		
TYPE		
SERIAL NO.		
JETS		
DEPTH OUT (m)		
DEPTH IN (m)		
TOTAL DRILLED (m)		
TOTAL HRS RUN		

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

DAY TOUR

MUD RECORD

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	0	HRS RUN	
BOILER pH		BOILER pH	
STACK TEMP		STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE: JACK HUSTON

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
0800	2000	12.00	1	TEAR DOWN TEAR OUT RIG LOAD UP MOVE TO NEW LOCATION

NOTES :

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH							

EVENING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR BN	R.M. DC
(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 Inspect BOPs- Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	22

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
62	

WEATHER

TEMPERATURE	-32
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER

O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070222_1D		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22 W.O.D.	23	24	25	26	TOTALS
MORN	8.0																										8.00
DAY	12.0																										12.00
EVE																						4.0					4.00
TOTAL	20.00																					4.00					24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	38	TOP
MIDDLE		MIDDLE
BOTTOM	38	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
	D.P.	STANDS	
	D.P.	SINGLES	
KELLY DOWN			
TOTAL			
WT. OF D.C.			
WT. OF STRING			

BIT RECORD

BIT NO.		
SIZE		
IADC CODE		
MANUFACTURER		
TYPE		
SERIAL NO.		
JETS		
DEPTH OUT (m)		
DEPTH IN (m)		
TOTAL DRILLED (m)		
TOTAL HRS RUN		

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

EVENING TOUR

MUD RECORD

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	0	HRS RUN	
BOILER pH		BOILER pH	
STACK TEMP		STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE

DAVE CROWLEY

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
2000	2400	4.00	22	WAIT ON DAYLIGHT TO MOVE

NOTES :

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH							

DRILLING CREW PAYROLL DATA

WELL NAME & NO.	YEAR	MONTH	DAY	TOUR SHEET SERIAL NO.
PARA ET AL CAMERON E-72	2007	2	22	PREC220_20070222_1D

OPERATOR	CONTRACTOR	RIG NO.
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	220

RIG MANAGER	PROVINCE	CAMP	RIG SAFETY DAYS
DAVE CROWLEY	N.W.T.	X YES ☐ NO	1609

SURFACE LOCATION	CONTRATOR'S JOB NUM	OPERATOR'S AFE
E-72-60 DEG-10-117 DEG-15	79	

MORNING TOUR — FROM 0000 TO 0800

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	8.00			DC
DERRICKHAND		DANNY S CROWLEY	8.00			DC
MOTORHAND		COREY ANDERSON	8.00			CA
FLOORHAND		MIKE BELLAMY	8.00			MB
FLOORHAND		BRECK PICHE	8.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

DAY TOUR — FROM 0800 TO 2000

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		JACK HUSTON	12.00			JH
DERRICKHAND		KARL GEREIN	12.00			KG
MOTORHAND		IAN ROSS	12.00			IR
FLOORHAND		WILL WINTER	12.00			WW
FLOORHAND		BENGIE SWEET	12.00			BS
RIG MANAGER		DAVE CROWLEY				DC

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS

EVENING TOUR — FROM 2000 TO 2400

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS

MORNING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required		
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked		
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering	DC	
(4.) Crown Saver Checked	DC	
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	23

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
62	

WEATHER

TEMPERATURE	-32
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER

O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)

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DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070223_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	TOTALS
	RIGUP & TEARDOWN	DRILL ACTUAL	REAMING	CORING	COND MUD & CIRC	TRIPS	RIG SERVICE	REPAIR RIG	CUT OFF DRILL LINE	DEV. SURVEY	WIRELINE LOGS	RUN CSG & CEMENT	WAIT ON CEMENT	NIPPLE UP B.O.P.	TEST B.O.P.	DRILLSTEM TEST	PLUG BACK	SQUEEZE CEMENT	FISHING	DIR. WORK	SAFETY MEETING						
MORN																						8.0					8.00
DAY	12.0																										12.00
EVE	4.0																										4.00
TOTAL	16.00																					8.00					24.00

SHALE SHAKER(S)			RENTALS / SERVICES	MORN	DAY	EVE
NO. 1	TYPE SWACO	TYPE	CREW VEHICLE			
SCREENS CHANGED		NEW/ USED				
TOP 38		TOP				
MIDDLE		MIDDLE				
BOTTOM 38		BOTTOM				

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
	D.P.	STANDS	
	D.P.	SINGLES	
	KELLY DOWN		
	TOTAL		
	WT. OF D.C.		
	WT. OF STRING		

BIT RECORD

BIT NO.		
SIZE		
IADC CODE		
MANUFACTURER		
TYPE		
SERIAL NO.		
JETS		
DEPTH OUT (m)		
DEPTH IN (m)		
TOTAL DRILLED (m)		
TOTAL HRS RUN		

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

MORNING TOUR

MUD RECORD

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	0	HRS RUN	
BOILER pH		BOILER pH	
STACK TEMP		STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE

DAVE CROWLEY

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
0	800	8.00	22	W.O.D. TO SET UP RIG

NOTES :

SPECIAL EVENT			SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					

DAY

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required		
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked		
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines		
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(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering	DC	
(4.) Crown Saver Checked	DC	
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	23

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
62	

WEATHER
- TEMPERATURE: -32
- CURRENT CONDITIONS: OVERCAST
- WIND DIRECTION: S.W.
- ROAD CONDITION: SLIPPERY

LAST CASING TUBING OR LINER

DC/DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070223_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN																						8.0					8.00
DAY	12.0																										12.00
EVE	4.0																										4.00
TOTAL	16.00																					8.00					24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	38	TOP
MIDDLE		MIDDLE
BOTTOM	38	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
	D.P.	STANDS	
	D.P.	SINGLES	
KELLY DOWN			
TOTAL			
WT. OF D.C.			
WT. OF STRING			

BIT RECORD

BIT NO.		
SIZE		
IADC CODE		
MANUFACTURER		
TYPE		
SERIAL NO.		
JETS		
DEPTH OUT (m)		
DEPTH IN (m)		
TOTAL DRILLED (m)		
TOTAL HRS RUN		

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

DAY TOUR

MUD RECORD

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	4	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	360	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE: JACK HUSTON

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
800	2000	12.00	1	RIG UP ON NEW LOCATION
				VISUALY INSPECT DERICK AND RAISE DC.

NOTES :

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH							

EVENING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC
SURFACE LOCATION	**UNIQUE ID**
E-72-60 DEG-10-117 DEG-15	300E726010117150
SIGNATURE OF OPERATOR'S REPRESENTATIVE	**SIGNATURE OF CONTRACTOR'S RIG MANAGER**
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required		
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked		
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering	DC	
(4.) Crown Saver Checked	DC	
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	23

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
62	

WEATHER

TEMPERATURE	-32
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER

O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070223_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN																						8.0					8.00
DAY	12.0																										12.00
EVE	4.0																										4.00
TOTAL	16.00																					8.00					24.00

SHALE SHAKER(S)			RENTALS / SERVICES	MORN	DAY	EVE
NO. 1	TYPE SWACO	TYPE	CREW VEHICLE			
SCREENS CHANGED		NEW/ USED				
TOP 38		TOP				
MIDDLE		MIDDLE				
BOTTOM 38		BOTTOM				

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
	D.P.	STANDS	
	D.P.	SINGLES	
KELLY DOWN			
TOTAL			
WT. OF D.C.			
WT. OF STRING			

BIT RECORD

BIT NO.		
SIZE		
IADC CODE		
MANUFACTURER		
TYPE		
SERIAL NO.		
JETS		
DEPTH OUT (m)		
DEPTH IN (m)		
TOTAL DRILLED (m)		
TOTAL HRS RUN		

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

EVENING TOUR

MUD RECORD

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	4	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE

DAVE D CROWLEY

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
2000	2200	2.00	1	RIG UP FLOOR, KELLY, PRE-FABS
2200	2400	2.00	1	RIG UP DIVERTER, AND LINES TO FLARE STACK

NOTES :

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH							

DRILLING CREW PAYROLL DATA

WELL NAME & NO.	YEAR	MONTH	DAY	TOUR SHEET SERIAL NO.
PARA ET AL CAMERON E-72	2007	2	23	PREC220_20070223_1C

OPERATOR	CONTRACTOR	RIG NO.
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	220

RIG MANAGER	PROVINCE	CAMP	RIG SAFETY DAYS
DAVE CROWLEY	N.W.T.	X YES / NO	1610

SURFACE LOCATION	CONTRATOR'S JOB NUM	OPERATOR'S AFE
E-72-60 DEG-10-117 DEG-15	79	

MORNING TOUR FROM 0 TO 800

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS

DAY TOUR FROM 800 TO 2000

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		JACK HUSTON	16.00	L3		JH
DERRICKHAND		KARL GEREIN	16.00			KG
MOTORHAND		IAN ROSS	16.00			IR
FLOORHAND		WILL WINTER	10.00			WW
FLOORHAND		BENGIE SWEET	10.00			BS
RIG MANAGER		DAVE CROWLEY				DC

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	JACK HUSTON

EVENING TOUR FROM 2000 TO 2400

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	10.00			DC
DERRICKHAND		DANNY S CROWLEY	10.00			DC
MOTORHAND		COREY ANDERSON	10.00			CA
FLOORHAND		BRECK PICHE	10.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

MORNING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked		
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked	DC	
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	24

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
196	

WEATHER

TEMPERATURE	-23
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER

O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070224_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN	4.0	3.5					0.25														0.25						8.00
DAY		6.5			1.0		0.25			0.25																	8.00
EVE		5.0				1.75	0.25			1.0																	8.00
TOTAL	4.00	15.00			1.00	1.75	0.75			1.25											0.25						24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	38	TOP
MIDDLE		MIDDLE
BOTTOM	38	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE

NO.	DRILLING ASSEMBLY (AT END OF TOUR)	O.D.	LENGTH
1	BIT		.34
1	BIT SUB	218	1.1
2	9 IN. DC	218	18.54
1	BELL SUB	201	.95
1	X/O	154	.92
	D.P.	STANDS	
	D.P.	SINGLES	
	KELLY DOWN		12.15
	TOTAL		34.00
	WT. OF D.C.	10	
	WT. OF STRING	10	

BIT RECORD

BIT NO.	1A		
SIZE	311		
IADC CODE			
MANUFACTURER	VAREL		
TYPE	MXC1		
SERIAL NO.	5039817		
JETS	3X	12.7	
DEPTH OUT (m)			
DEPTH IN (m)	13		
TOTAL DRILLED (m)	21		
TOTAL HRS RUN	3.5		

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

MORNING TOUR

MUD RECORD

MUD TYPE	GEL-CHEM	WATER BASED	X	OIL BASED	

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT
GEL	13	SX
SODA ASH	4	SX

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
1130		105		

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE

DAVE D CROWLEY

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB
13	34	D	150	4

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
0	400	4.00	1	FLANGE UP DIVERTER RUN LINES TO FLARE STACK MEASURE OUT BHA AND MAKE UP
400	415	0.25	21	SAFETY MEETING PRE SPUD
415	430	0.25	7	RIG SERVICE FUNCTION TEST MOTOR KILLS
430	800	3.50	2	DRILL F/13 TO 34

NOTES : FUNCTION TEST CROWN SAVER

VISUALLY INSPECT TONGS LINES BRAKES PINS LINKAGE AND ANCHOR

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					PRE SPUD	25	

DAY

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked		
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked	DC	
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	24

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
196	

WEATHER: TEMPERATURE -23; CURRENT CONDITIONS OVERCAST; WIND DIRECTION S.W.; ROAD CONDITION SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)

DC/DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070224_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME-HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN	4.0	3.5					0.25														0.25						8.00
DAY		6.5			1.0		0.25			0.25																	8.00
EVE		5.0				1.75	0.25			1.0																	8.00
TOTAL	4.00	15.00			1.00	1.75	0.75			1.25											0.25						24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	38	TOP
MIDDLE		MIDDLE
BOTTOM	38	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
1			.34
1	BIT SUB	218	1.1
2	9 IN. DC	218	18.54
1	BELL SUB	201	.95
1	X/O	154	.67
4	D.C.	161	37.66
	D.P. STANDS		
	D.P. SINGLES		
	KELLY DOWN		13.04
	TOTAL		72.30

WT. OF D.C.	16
WT. OF STRING	16

BIT RECORD

BIT NO.	1A	
SIZE	311	
IADC CODE		
MANUFACTURER	VAREL	
TYPE	MXC1	
SERIAL NO.	5039817	
JETS	3X	12.7
DEPTH OUT (m)		
DEPTH IN (m)	13	
TOTAL DRILLED (m)	59	
TOTAL HRS RUN	10	

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG

TORQUE AT BOTTOM

FILL ON BOTTOM (m)

DAY TOUR

MUD RECORD

MUD TYPE | WATER BASED | OIL BASED

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT
GEL	80	SX
SODA ASH	6	SX
CAUSTIC	2	SX

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB
34	72	D	180	5

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
6200	152	90	152	90

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION
40	.28	

DRILLER SIGNATURE: JACK HUSTON

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
800	900	1.00	5	CONDITION MUD -MIX GEL
900	1415	5.25	2	DRILL 34 TO 53-GRAVEL FROM 32m TO 45m
1415	1430	0.25	10	DEVIATION SURVEY AT 40m
1430	1545	1.25	2	DRILL 53 TO 72
1545	1600	0.25	7	RIG SERVICE

NOTES : VISUAL INSPECT TONGS,LINES,ANCHORS,BRAKES,PINS,LINKAGE

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					ICE	40	

EVENING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked		
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	24

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
196	

WEATHER

TEMPERATURE	-23
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070224_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN	4.0	3.5					0.25														0.25						8.00
DAY		6.5			1.0		0.25			0.25																	8.00
EVE		5.0				1.75	0.25			1.0																	8.00
TOTAL	4.00	15.00			1.00	1.75	0.75			1.25											0.25						24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	38	TOP
MIDDLE		MIDDLE
BOTTOM	38	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE

NO.	DRILLING ASSEMBLY (AT END OF TOUR)		LENGTH
1	BIT	O.D.	.34
1	BIT SUB	218	1.1
2	9 IN. DC	218	18.54
1	BELL SUB	201	.95
1	X/O	154	.67
14	D.C.	161	131.93
	D.P.	STANDS	
	D.P.	SINGLES	
	KELLY DOWN		12.47
	TOTAL		166.00
	WT. OF D.C.	22	
	WT. OF STRING	22	

BIT RECORD

BIT NO.	1A	2A
SIZE	311	311
IADC CODE		
MANUFACTURER	VAREL	
TYPE	MXC1	CHSIGMS
SERIAL NO.	5039817	192271
JETS	3X 12.7	12.7 12.7
		12.7
DEPTH OUT (m)	81	
DEPTH IN (m)	13	81
TOTAL DRILLED (m)	68.00	85
TOTAL HRS RUN	11	4

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR
5	5	FC	A	E	1	NO	DEV	6.18

HOLE CONDITION

HOLE DRAG

TORQUE AT BOTTOM

FILL ON BOTTOM (m)

EVENING TOUR — MUD RECORD

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

TIME	2000	2200	2330
DENSITY (kg/m3)	1210	1220	1225
FUNNEL VISCOSITY	49	45	48
FLUID LOSS (cm3)			
pH	10	10.5	10.5

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	4	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	365	STACK TEMP	

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB
72	166	D	180	8

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
9270	152	95	152	95

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION
68	1.10	
90	.28	
118	1.01	
147	.61	

DRILLER SIGNATURE: DAVE D CROWLEY

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
1600	1700	1.00	2	DRILL 72 TO 81
1700	1715	0.25	10	DEVIATION SURVEY
1715	1900	1.75	6	TRIP FOR BIT
1900	2000	1.00	2	DRILL 81 TO 100
2000	2015	0.25	10	DEVIATION SURVEY
2015	2030	0.25	7	RIG SERVICE FUNCTION TEST ANNULAR 12 SECS TO CLOSE
2030	2130	1.00	2	DRILL F/100 TO 128
2130	2145	0.25	10	DEVIATION SURVEY
2145	2330	1.75	2	DRILL F/128 TO157
2330	2345	0.25	10	DEVIATION SURVEY
2345	0000	0.25	2	DRILL F/157 TO 166

NOTES : FUNCTION TEST CROWN SAVER

VISUALLY INSPECT TONGS LINES BRAKES PINS LINKAGE AND ANCHOR

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					WEEKLY GOALS	25	

DRILLING CREW PAYROLL DATA

WELL NAME & NO.	YEAR	MONTH	DAY	TOUR SHEET SERIAL NO.
PARA ET AL CAMERON E-72	2007	2	24	PREC220_20070224_1C

OPERATOR	CONTRACTOR	RIG NO.
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	220

RIG MANAGER	PROVINCE	CAMP	RIG SAFETY DAYS
DAVE CROWLEY	N.W.T.	X YES ☐ NO	1611

SURFACE LOCATION	CONTRATOR'S JOB NUM	OPERATOR'S AFE
E-72-60 DEG-10-117 DEG-15	79	

MORNING TOUR — FROM 0 TO 800

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	8.00			DC
DERRICKHAND		DANNY S CROWLEY	8.00			DC
MOTORHAND		COREY ANDERSON	8.00			CA
FLOORHAND		KEVIN DRINKWATER	8.00			KD
FLOORHAND		BRECK PICHE	8.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

DAY TOUR — FROM 800 TO 1600

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		JACK HUSTON	12.00	L3		JH
DERRICKHAND		KARL GEREIN	12.00			KG
MOTORHAND		IAN ROSS	12.00			IR
FLOORHAND		WILL WINTER	12.00			WW
FLOORHAND		BENGIE SWEET	12.00			BS
RIG MANAGER		DAVE CROWLEY				DC

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	JACK HUSTON

EVENING TOUR — FROM 1600 TO 2400

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	4.00			DC
DERRICKHAND		DANNY S CROWLEY	4.00			DC
MOTORHAND		COREY ANDERSON	4.00			CA
FLOORHAND		KEVIN DRINKWATER	4.00			KD
FLOORHAND		BRECK PICHE	4.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

MORNING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked		
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked	DC	
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	25

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
145	

WEATHER

TEMPERATURE	-23
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070225_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN		4.25			0.25	2.75	0.25			0.5																	8.00
DAY		6.5					0.25			1.25																	8.00
EVE		3.25			0.5	3.5	0.25			0.5																	8.00
TOTAL		14.00			0.75	6.25	0.75			2.25																	24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	38	TOP
MIDDLE		MIDDLE
BOTTOM	38	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
1			.34
1	BIT SUB	218	1.1
2	9 IN. DC	218	18.54
1	BELL SUB	201	.95
1	X/O	154	.67
16	D.C.	161	150.98
1	X/O	153	.69
6	H.W.D.P.	132	56.15
	D.P. STANDS		
	D.P. SINGLES		
	KELLY DOWN		12.58
	TOTAL		242.00

WT. OF D.C.	22
WT. OF STRING	26

BIT RECORD

BIT NO.	2A	3A
SIZE	311	311
IADC CODE		
MANUFACTURER	VAREL	VAREL
TYPE	CHSIGMS	CHIGJMS
SERIAL NO.	192271	214325
JETS	12.7 12.7 3X 12.7	
	12.7	
DEPTH OUT (m)	185	
DEPTH IN (m)	81	185
TOTAL DRILLED (m)	104.00	57
TOTAL HRS RUN	5.75	2.5

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR
4	4	WT	A	3		WT	DEV	20

HOLE CONDITION

HOLE DRAG

TORQUE AT BOTTOM

FILL ON BOTTOM (m)

MORNING TOUR

MUD RECORD

MUD TYPE | WATER BASED | OIL BASED

TIME	200	400	600
DENSITY (kg/m3)	1230	1230	1235
FUNNEL VISCOSITY	49	47	48
FLUID LOSS (cm3)			
pH	10.5	10.5	10.5

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB
166	242	D	180	5

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
9400	152	95	152	95

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION
173	1.71	
195	.26	

DRILLER SIGNATURE

DAVE D CROWLEY

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
0	130	1.50	2	DRILL F/166 TO 184
130	145	0.25	10	DEVIATION SURVEY
145	200	0.25	2	DRILL F/184 TO 185
200	215	0.25	5	CIRCULATE
215	230	0.25	7	RIG SERVICE
230	515	2.75	6	BIT TRIP
515	630	1.25	2	DRILL F/185 TO 204
630	645	0.25	10	DEVIATION SURVEY
645	800	1.25	2	DRILL F/204 TO 242

NOTES : FUNCTION TEST CROWN SAVER

VISUALLY INSPECT TONGS LINES BRAKES PINS LINKAGE AND ANCHOR

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					NEW GUYS	35	

DAY

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked		
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	25

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
145	

WEATHER

TEMPERATURE	-23
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070225_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN		4.25			0.25	2.75	0.25			0.5																	8.00
DAY		6.5					0.25			1.25																	8.00
EVE		3.25			0.5	3.5	0.25			0.5																	8.00
TOTAL		14.00			0.75	6.25	0.75			2.25																	24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	38	TOP
MIDDLE		MIDDLE
BOTTOM	38	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
1			.34
1	BIT SUB	218	1.1
2	9 IN. DC	218	18.54
1	BELL SUB	201	.95
1	X/O	154	.67
16	D.C.	161	150.98
1	X/O	153	.69
8	H.W.D.P.	132	74.97
6	D.P. STANDS		113.15
	D.P. SINGLES		
	KELLY DOWN		12.76
	TOTAL		374.15

WT. OF D.C.	22
WT. OF STRING	32

BIT RECORD

BIT NO.	3A	
SIZE	311	
IADC CODE		
MANUFACTURER	VAREL	
TYPE	CHIGJMS	
SERIAL NO.	214325	
JETS	3X	12.7
DEPTH OUT (m)		
DEPTH IN (m)	185	
TOTAL DRILLED (m)	189	
TOTAL HRS RUN	9.0	

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

DAY TOUR

MUD RECORD

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

TIME	1000	1300	1700
DENSITY (kg/m3)	1240	1180	1140
FUNNEL VISCOSITY	34	45	40
FLUID LOSS (cm3)			
pH	9.5	9.5	9.5

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT
DRILLING DETERGENT	1	SX
CAUSTIC	2	SX

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB
242	374	D	180	9

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
9000	152	100	152	100

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION
220	.32	
248	1.23	
267	.59	
295	.72	
323	.76	
352	.91	

DRILLER SIGNATURE: JACK HUSTON

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
800	900	1.00	2	DRILL 242 TO 261
900	915	0.25	10	DEVIATION SURVEY AT 248
915	1000	0.75	2	DRILL 261 TO 279
1000	1015	0.25	10	DEVIATION SURVEY AT 267
1015	1130	1.25	2	DRILL 279 TO 308
1130	1145	0.25	10	DEVIATION SURVEY AT 295
1145	1300	1.25	2	DRILL 308 TO 336
1300	1315	0.25	10	DEVIATION SURVEY AT 323
1315	1445	1.50	2	DRILL 336 TO 364
1445	1500	0.25	10	DEVIATION SURVEY AT 352
1500	1515	0.25	7	RIG SERVICE
1515	1600	0.75	2	DRILL 364 TO 374

NOTES : FUNCTION CROWN SAVER

VISUAL INSPECT TONGS,LINES,ANCHORS,BRAKES,PINS,LINKAGE

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					TONGS	45	

EVENING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked		
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	25

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
145	

WEATHER

TEMPERATURE	-23
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)

DC/DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070225_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN		4.25			0.25	2.75	0.25			0.5																	8.00
DAY		6.5					0.25			1.25																	8.00
EVE		3.25			0.5	3.5	0.25			0.5																	8.00
TOTAL		14.00			0.75	6.25	0.75			2.25																	24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	38	TOP
MIDDLE		MIDDLE
BOTTOM	38	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
1			.34
1	BIT SUB	218	1.1
2	9 IN. DC	218	18.54
1	BELL SUB	201	.95
1	X/O	154	.67
16	D.C.	161	150.98
1	X/O	153	.69
8	H.W.D.P.	132	74.97
9	D.P. STANDS		169.53
1	D.P. SINGLES		9.4
	KELLY DOWN		7.83
	TOTAL		435.00

WT. OF D.C.	22
WT. OF STRING	33

BIT RECORD

BIT NO.	3A	
SIZE	311	
IADC CODE		
MANUFACTURER	VAREL	
TYPE	CHIGJMS	
SERIAL NO.	214325	
JETS	3X	12.7
DEPTH OUT (m)		
DEPTH IN (m)	185	
TOTAL DRILLED (m)	250	
TOTAL HRS RUN	9.0	

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

EVENING TOUR

MUD RECORD

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

TIME	1900		
DENSITY (kg/m3)	1130		
FUNNEL VISCOSITY	65		
FLUID LOSS (cm3)			
pH	10		

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB
374	435	D	180	9

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
5500	152	120	152	

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION
380	.44	
408	.53	

DRILLER SIGNATURE: DAVE D CROWLEY

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
1600	1700	1.00	2	DRILL 374 TO 392
1700	1715	0.25	10	DEVIATION SURVEY AT 380
1715	1845	1.50	2	DRILL 392 TO 421
1845	1900	0.25	10	DEVIATION SURVEY AT 408
1900	1930	0.50	2	DRILL 421 TO 430
1930	2000	0.50	5	CIRC HOLE CLEAN
2000	2330	3.50	6	WIPER TRIP
2330	2345	0.25	7	RIG SERVICE
2345	0000	0.25	2	DRILL F/430 TO 435

NOTES : FUNCTION CROWN SAVER

VISUAL INSPECT TONGS,LINES,ANCHORS,BRAKES,PINS,LINKAGE

STRAP 430.53 BOARD 430.53

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					LAYING DWN COLLARS	45	

DRILLING CREW PAYROLL DATA

WELL NAME & NO.	YEAR	MONTH	DAY	TOUR SHEET SERIAL NO.
PARA ET AL CAMERON E-72	2007	2	25	PREC220_20070225_1C

OPERATOR	CONTRACTOR	RIG NO.
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	220

RIG MANAGER	PROVINCE	CAMP	RIG SAFETY DAYS
DAVE CROWLEY	N.W.T.	X YES ☐ NO	1612

SURFACE LOCATION	CONTRATOR'S JOB NUM	OPERATOR'S AFE
E-72-60 DEG-10-117 DEG-15	79	

MORNING TOUR — FROM 0 TO 800

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	8.00			DC
DERRICKHAND		DANNY S CROWLEY	8.00			DC
MOTORHAND		COREY ANDERSON	8.00			CA
FLOORHAND		KEVIN DRINKWATER	8.00			KD
FLOORHAND		BRECK PICHE	8.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

DAY TOUR — FROM 800 TO 1600

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		JACK HUSTON	12.00	L3		JH
DERRICKHAND		KARL GEREIN	12.00			KG
MOTORHAND		IAN ROSS	12.00			IR
FLOORHAND		WILL WINTER	12.00			WW
FLOORHAND		BENGIE SWEET	12.00			BS
RIG MANAGER		DAVE CROWLEY				DC

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	JACK HUSTON

EVENING TOUR — FROM 1600 TO 2400

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	4.00			DC
DERRICKHAND		DANNY S CROWLEY	4.00			DC
MOTORHAND		COREY ANDERSON	4.00			CA
FLOORHAND		KEVIN DRINKWATER	4.00			KD
FLOORHAND		BRECK PICHE	4.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

MORNING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	26

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
132	

WEATHER

TEMPERATURE	-16
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER

O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070226_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME-HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22 WELD BOWL	23	24	25	26	TOTALS
MORN					2.25	3.0	0.25			0.25		2.0									0.25						8.00
DAY												1.5	4.0	1.25							0.25	1.0					8.00
EVE							0.25							5.25	0.75						0.25	1.5					8.00
TOTAL					2.25	3.00	0.50			0.25		3.50	4.00	6.50	0.75						0.75	2.50					24.00

SHALE SHAKER(S)			RENTALS / SERVICES	MORN	DAY	EVE
NO. 1	TYPE SWACO	TYPE	CREW VEHICLE			
SCREENS CHANGED		NEW/ USED				
TOP 38		TOP				
MIDDLE		MIDDLE				
BOTTOM 38		BOTTOM				

NO.	DRILLING ASSEMBLY (AT END OF TOUR)		LENGTH
1	BIT	O.D.	.34
1	BIT SUB	218	1.1
2	9 IN. DC	218	18.54
1	BELL SUB	201	.95
1	X/O	154	.67
16	D.C.	161	150.98
1	X/O	153	.69
8	H.W.D.P.	132	74.97
9	D.P. STANDS		169.53
1	D.P. SINGLES		9.4
	KELLY DOWN		7.83
	TOTAL		435.00

WT. OF D.C.	22
WT. OF STRING	33

BIT RECORD

BIT NO.	3A		
SIZE	311		
IADC CODE			
MANUFACTURER	VAREL		
TYPE	CHIGJMS		
SERIAL NO.	214325		
JETS	3X	12.7	
DEPTH OUT (m)			
DEPTH IN (m)	185		
TOTAL DRILLED (m)	250		
TOTAL HRS RUN	9.0		

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR
5	5	WT	A	3		WT	TD	33

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

MORNING TOUR

MUD RECORD

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT
DESCO	2	SX

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB
	435			

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
445	152	90	152	

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION
430	1.1	

DRILLER SIGNATURE

DAVE D CROWLEY

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
0	0030	0.50	5	CONDITION MUD & CIRCULATE
0030	0045	0.25	10	DEVIATION SURVEY
0045	100	0.25	7	RIG SERVICE
100	400	3.00	6	POOH LAY DWN 9 INCH DC
400	415	0.25	21	SAFETY MEETING
415	615	2.00	12	RUN CASING
615	800	1.75	5	CONDITION MUD & CIRCULATE

NOTES : FUNCTION TEST CROWN SAVER

VISUALLY INSPECT TONGS LINES BRAKES PINS LINKAGE AND ANCHOR

ELEVATORS CIRT #H-12908

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					CASING	43	

DAY

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	26

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
132	

WEATHER

TEMPERATURE	-16
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER

O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070226_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME-HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22 WELD BOWL	23	24	25	26	TOTALS
MORN					2.25	3.0	0.25			0.25		2.0									0.25						8.00
DAY												1.5	4.0	1.25							0.25	1.0					8.00
EVE							0.25							5.25	0.75						0.25	1.5					8.00
TOTAL					2.25	3.00	0.50			0.25		3.50	4.00	6.50	0.75						0.75	2.50					24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	38	TOP
MIDDLE		MIDDLE
BOTTOM	38	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
	D.P.	STANDS	
	D.P.	SINGLES	
	KELLY DOWN		
	TOTAL		
	WT. OF D.C.		
	WT. OF STRING		

BIT RECORD

BIT NO.		
SIZE		
IADC CODE		
MANUFACTURER		
TYPE		
SERIAL NO.		
JETS		
DEPTH OUT (m)		
DEPTH IN (m)		
TOTAL DRILLED (m)		
TOTAL HRS RUN		

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

DAY TOUR

MUD TYPE		WATER BASED	OIL BASED
TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
	152		152	

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE: JACK HUSTON

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
800	815	0.25	21	SAFETY MEETING WITH CEMENTERS
815	945	1.50	12	CEMENT CASING
945	1345	4.00	13	WAIT ON CEMENT
1345	1500	1.25	14	CUT CONDUCTOR-LAY DOWN DIVERTER
1500	1600	1.00	22	WELD ON BOWL
				CEMENT THE CASING WITH 32 TONNE OF 0-10 G WITH 1.5% CACL2
				PLUG DOWN AT 09:20 HRS. WE GOT BACK 5M3 OF CEMENT CONTAMINATED WITH MUD.

NOTES :

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH							

EVENING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC
SURFACE LOCATION	**UNIQUE ID**
E-72-60 DEG-10-117 DEG-15	300E726010117150
SIGNATURE OF OPERATOR'S REPRESENTATIVE	**SIGNATURE OF CONTRACTOR'S RIG MANAGER**
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	26

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
132	

WEATHER

TEMPERATURE	-16
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
	219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070226_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME-HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22 WELD BOWL	23	24	25	26	TOTALS
MORN					2.25	3.0	0.25			0.25		2.0									0.25						8.00
DAY												1.5	4.0	1.25							0.25	1.0					8.00
EVE							0.25							5.25	0.75						0.25	1.5					8.00
TOTAL					2.25	3.00	0.50			0.25		3.50	4.00	6.50	0.75						0.75	2.50					24.00

SHALE SHAKER(S)			RENTALS / SERVICES	MORN	DAY	EVE
NO. 1	TYPE SWACO	TYPE	CREW VEHICLE			
SCREENS CHANGED		NEW/ USED				
TOP 38		TOP				
MIDDLE		MIDDLE				
BOTTOM 38		BOTTOM				

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
	D.P.	STANDS	
	D.P.	SINGLES	
	KELLY DOWN		
	TOTAL		
	WT. OF D.C.		
	WT. OF STRING		

BIT RECORD

BIT NO.		
SIZE		
IADC CODE		
MANUFACTURER		
TYPE		
SERIAL NO.		
JETS		
DEPTH OUT (m)		
DEPTH IN (m)		
TOTAL DRILLED (m)		
TOTAL HRS RUN		

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

EVENING TOUR

MUD RECORD

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	360	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
	152		152	

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE

DAVE D CROWLEY

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
1600	1730	1.50	22	WELD ON BOWL
1730	2245	5.25	14	NIPPLE UP B.O.P.
2245	2300	0.25	21	SAFETY MEETING WITH PRESSURE TESTER
2300	2315	0.25	7	RIG SERVICE
2315	0000	0.75	15	PRESSURE TEST BLIND RAMS AND HCR 1500/10500 FOR 15 MIN'S.

NOTES :

SPECIAL EVENT			SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					

DRILLING CREW PAYROLL DATA

WELL NAME & NO.	YEAR	MONTH	DAY	TOUR SHEET SERIAL NO.
PARA ET AL CAMERON E-72	2007	2	26	PREC220_20070226_1C

OPERATOR	CONTRACTOR	RIG NO.
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	220

RIG MANAGER	PROVINCE	CAMP	RIG SAFETY DAYS
DAVE CROWLEY	N.W.T.	X YES ☐ NO	1613

SURFACE LOCATION	CONTRATOR'S JOB NUM	OPERATOR'S AFE
E-72-60 DEG-10-117 DEG-15	79	

MORNING TOUR — FROM 0 TO 800

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	8.00			DC
DERRICKHAND		DANNY S CROWLEY	8.00			DC
MOTORHAND		COREY ANDERSON	8.00			CA
FLOORHAND		KEVIN DRINKWATER	8.00			KD
FLOORHAND		BRECK PICHE	8.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

DAY TOUR — FROM 800 TO 1600

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		JACK HUSTON	12.00	L3		JH
DERRICKHAND		KARL GEREIN	12.00			KG
MOTORHAND		IAN ROSS	12.00			IR
FLOORHAND		WILL WINTER	12.00			WW
FLOORHAND		BENGIE SWEET	12.00			BS
RIG MANAGER		DAVE CROWLEY				DC

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS

EVENING TOUR — FROM 1600 TO 2400

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	4.00			DC
DERRICKHAND		DANNY S CROWLEY	4.00			DC
MOTORHAND		COREY ANDERSON	4.00			CA
FLOORHAND		KEVIN DRINKWATER	4.00			KD
FLOORHAND		BRECK PICHE	4.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

MORNING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)	BN	DC
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed	BN	DC
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		DC

YEAR	MONTH	DAY
2007	2	27

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
96	

WEATHER

TEMPERATURE	-19
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER

O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070227_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22 DRILL OUT	23 BOP DRILL	24	25	26	TOTALS
MORN						2.75			1.0						3.25							0.75	0.25				8.00
DAY		3.25			0.25	3.0	0.25			0.25					0.5							0.25	0.25				8.00
EVE		7.0					0.25			0.5													0.25				8.00
TOTAL		10.25			0.25	5.75	0.50		1.00	0.75					3.75							1.00	0.75				24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	38	TOP
MIDDLE		MIDDLE
BOTTOM	38	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR)		LENGTH
1	BIT	O.D.	.28
1	TORQUE SUB	160	1.97
1	D.C.	161	9.38
1	STAB	191	1.61
1	SHOCK SUB	161	2.12
11	D.C.	163	103.72
1	JAR	159	4.95
4	D.C.	163	37.53
1	X/O	159	.69
8	H.W.D.P.	101	74.97
	D.P.	STANDS	
	D.P.	SINGLES	
KELLY DOWN			
TOTAL			237.22
WT. OF D.C.			
WT. OF STRING			

BIT RECORD

BIT NO.	1	
SIZE	200	
IADC CODE		
MANUFACTURER	VAREL	
TYPE	MKS55	
SERIAL NO.	2426	
JETS	7X	9.5
DEPTH OUT (m)		
DEPTH IN (m)	435	
TOTAL DRILLED (m)		
TOTAL HRS RUN		

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

MORNING TOUR

MUD RECORD

MUD TYPE | WATER BASED | OIL BASED

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
	152		152	

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE

DAVE D CROWLEY

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
0	315	3.25	15	PRESSURE TEST ANNULAR,PIPES,MANUALL HCR VALVE,STAB VALVE,INSIDE BOP
				UPPER AND LOWER KELLY COCK,KILL LINE VALVES,CHOKE LIN AND ALL MANIFOLD VALVES
				1500 KPA LOW 10500 KPA HIGH TESTS HELD FOR 15 MINUITES
				FUNCTION TEST MOTOR KILLS
315	515	2.00	6	MAKE UP BHA RIH
515	615	1.00	9	CUT OFF DRILLING LINE AND AJUST BRAKE HANDLE
615	0700	0.75	6	FINISH RIH
0700	0715	0.25	23	BOP DRILL
0715	0800	0.75	22	DRILL OUT

NOTES : FUNCTION TEST CROWN SAVER

VISUALLY INSPECT TONGS LINES BRAKES PINS LINKIGE AND ANCHOR

N2 BACK UP #1-1400KPA #2-14500KPA #3-15400KPA

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					PRESSURE TESTING		

DAY

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)	BN	DC
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed	BN	DC
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		DC

YEAR	MONTH	DAY
2007	2	27

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
96	

WEATHER

TEMPERATURE	CURRENT CONDITIONS	WIND DIRECTION	ROAD CONDITION
-19	OVERCAST	S.W.	SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
	219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS	PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
DC	165	136	DC	57	165	41/2 XH	22	F-800	EMSCO	228.8
DP	102	43.2	HWDP	72	134	4FH	8	PZ-7	GARDNER DENVER	178
DP	102	23.38	SS/95	82	134	4FH	235			

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070227_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22 DRILL OUT	23 BOP DRILL	24	25	26	TOTALS
MORN						2.75			1.0						3.25							0.75	0.25				8.00
DAY		3.25			0.25	3.0	0.25			0.25					0.5							0.25	0.25				8.00
EVE		7.0					0.25			0.5													0.25				8.00
TOTAL		10.25			0.25	5.75	0.50		1.00	0.75					3.75							1.00	0.75				24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	38	TOP
MIDDLE		MIDDLE
BOTTOM	38	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR)		LENGTH
1	BIT	O.D.	.28
1	TORQUE SUB	160	1.97
1	D.C.	161	9.38
1	STAB	191	1.61
1	SHOCK SUB	161	2.12
11	D.C.	163	103.72
1	JAR	159	4.95
4	D.C.	163	37.53
1	X/O	159	.69
8	H.W.D.P.	101	74.97
16	D.P. STANDS		301.44
	D.P. SINGLES		
	KELLY DOWN		6.34
	TOTAL		545.00

WT. OF D.C.	20
WT. OF STRING	30

BIT RECORD

BIT NO.	1	
SIZE	200	
IADC CODE		
MANUFACTURER	VAREL	
TYPE	MKS55	
SERIAL NO.	2426	
JETS	7X	9.5
DEPTH OUT (m)		
DEPTH IN (m)	435	
TOTAL DRILLED (m)	110	
TOTAL HRS RUN	3.25	

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG

TORQUE AT BOTTOM

FILL ON BOTTOM (m)

DAY TOUR

MUD RECORD

MUD TYPE | WATER BASED | OIL BASED

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
4400	152	100	152	

REDUCED PUMP SPEED

1960	@	66	@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION
519	.71	

DRILLER SIGNATURE

JACK HUSTON

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB
435	545	D	80	7

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
800	815	0.25	23	BOP DRILL -WELL SECURE IN 95 SECS.
815	830	0.25	22	DRILL OUT
830	845	0.25	2	DRILL 435 TO 447
845	900	0.25	5	CIRCULATE
900	930	0.50	15	FORMATION LEAK OFF TEST
930	1230	3.00	6	POOH-FLOW CHECK AT 435,AT 174 AND OUT OF HOLE
1230	1500	2.50	2	DRILL 447 TO 532
1500	1515	0.25	10	DEVIATION SURVEY AT 519
1515	1530	0.25	7	RIG SERVICE-FUNCTION PIPE RAMS - 3SECS. TO CLOSE
1530	1600	0.50	2	DRILL 532 TO 545

NOTES : FUNCTION CROWN SAVER

VISUAL INSPECT TONGS,LINES,ANCHORS,BRAKES,PINS,LINKAGE

HOLE FILL- ACT. 3.89 / CAL. 3.78

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					BOP DRILL	35	3563

EVENING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)	BN	DC
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed	BN	DC
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked	DC	
(5.) Motor Kills Checked	DC	

YEAR	MONTH	DAY
2007	2	27

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
96	

WEATHER

TEMPERATURE	CURRENT CONDITIONS	WIND DIRECTION	ROAD CONDITION
-19	OVERCAST	S.W.	SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
	219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS	PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
DC	165	136	DC	57	165	41/2 XH	22	F-800	EMSCO	228.8
DP	102	43.2	HWDP	72	134	4FH	8	PZ-7	GARDNER DENVER	178
DP	102	23.38	SS/95	82	134	4FH	235			

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070227_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22 DRILL OUT	23 BOP DRILL	24	25	26	TOTALS
MORN						2.75			1.0						3.25							0.75	0.25				8.00
DAY		3.25			0.25	3.0	0.25			0.25					0.5							0.25	0.25				8.00
EVE		7.0					0.25			0.5													0.25				8.00
TOTAL		10.25			0.25	5.75	0.50		1.00	0.75					3.75							1.00	0.75				24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	38	TOP
MIDDLE		MIDDLE
BOTTOM	38	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR)		LENGTH
1	BIT	O.D.	.28
1	TORQUE SUB	160	1.97
1	D.C.	161	9.38
1	STAB	191	1.61
1	SHOCK SUB	161	2.12
11	D.C.	163	103.72
1	JAR	159	4.95
4	D.C.	163	37.53
1	X/O	159	.69
8	H.W.D.P.	101	74.97
25	D.P. STANDS		470.88
	D.P. SINGLES		9.39
	KELLY DOWN		12.51
	TOTAL		730.00
	WT. OF D.C.	20	
	WT. OF STRING	33	

BIT RECORD

BIT NO.	1
SIZE	200
IADC CODE	
MANUFACTURER	VAREL
TYPE	MKS55
SERIAL NO.	2426
JETS	7X 9.5
DEPTH OUT (m)	
DEPTH IN (m)	435
TOTAL DRILLED (m)	295
TOTAL HRS RUN	10.25

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

EVENING TOUR

MUD RECORD

MUD TYPE | WATER BASED | OIL BASED

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
5671	152	105	152	

REDUCED PUMP SPEED

2073	@	66	@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION
617	.93	
644	.38	

DRILLER SIGNATURE

DAVE D CROWLEY

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB
545	730	D	80	8

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
1600	2000	4.00	2	DRILL 545 TO 627
2000	2015	0.25	10	DEVIATION SURVEY
2015	2130	1.25	2	DRILL F/627 TO654
2130	2145	0.25	10	DEVIATION SURVEY
2145	2200	0.25	7	RIG SERVICE FUNCTION TEST ANNULAR 12 SECS TO CLOSE
2200	2215	0.25	2	DRILL F/654 TO 673
2215	2230	0.25	23	BOP DRILL WELL SECURE IN 90 SECS
2230	0000	1.50	2	DRILL F/673 TO 730

NOTES : FUNCTION CROWN SAVER

VISUAL INSPECT TONGS,LINES,ANCHORS,BRAKES,PINS,LINKAGE

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					BOP DRILL	37	3563

DRILLING CREW PAYROLL DATA

WELL NAME & NO.	YEAR	MONTH	DAY	TOUR SHEET SERIAL NO.
PARA ET AL CAMERON E-72	2007	2	27	PREC220_20070227_1C

OPERATOR	CONTRACTOR	RIG NO.
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	220

RIG MANAGER	PROVINCE	CAMP	RIG SAFETY DAYS
DAVE CROWLEY	N.W.T.	X YES ☐ NO	1614

SURFACE LOCATION	CONTRATOR'S JOB NUM	OPERATOR'S AFE
E-72-60 DEG-10-117 DEG-15	79	

MORNING TOUR — FROM 0 TO 800

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	8.00			DC
DERRICKHAND		DANNY S CROWLEY	8.00			DC
MOTORHAND		COREY ANDERSON	8.00			CA
FLOORHAND		KEVIN DRINKWATER	8.00			KD
FLOORHAND		BRECK PICHE	8.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

DAY TOUR — FROM 800 TO 1600

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		JACK HUSTON	12.00	L3		JH
DERRICKHAND		KARL GEREIN	12.00			KG
MOTORHAND		IAN ROSS	12.00			IR
FLOORHAND		WILL WINTER	12.00			WW
FLOORHAND		BENGIE SWEET	12.00			BS
RIG MANAGER		DAVE CROWLEY				DC

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	JACK HUSTON

EVENING TOUR — FROM 1600 TO 2400

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	4.00			DC
DERRICKHAND		DANNY S CROWLEY	4.00			DC
MOTORHAND		COREY ANDERSON	4.00			CA
FLOORHAND		KEVIN DRINKWATER	4.00			KD
FLOORHAND		BRECK PICHE	4.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

MORNING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed	BN	
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	28

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
109	

WEATHER
TEMPERATURE: -22
CURRENT CONDITIONS: LIGHT SNOW
WIND DIRECTION: S.W.
ROAD CONDITION: SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
	219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435

DC/DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070228_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME-HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN		7.25					0.25			0.5																	8.00
DAY		7.5								0.5																	8.00
EVE		5.25			0.5	2.0				0.25																	8.00
TOTAL		20.00			0.50	2.00	0.25			1.25																	24.00

SHALE SHAKER(S)			RENTALS / SERVICES	MORN	DAY	EVE
1	TYPE: SWACO	TYPE	CREW VEHICLE			
	SCREENS CHANGED	NEW/ USED				
	TOP: 38	TOP				
	MIDDLE	MIDDLE				
	BOTTOM: 38	BOTTOM				

NO.	DRILLING ASSEMBLY (AT END OF TOUR)		LENGTH
1	BIT	O.D.	.28
1	TORQUE SUB	160	1.97
1	D.C.	161	9.38
1	STAB	191	1.61
1	SHOCK SUB	161	2.12
11	D.C.	163	103.72
1	JAR	159	4.95
4	D.C.	163	37.53
1	X/O	159	.69
8	H.W.D.P.	101	74.97
33	D.P. STANDS		621.67
	D.P. SINGLES		
	KELLY DOWN		3.11
	TOTAL		862.00

WT. OF D.C.	20
WT. OF STRING	35

BIT RECORD

BIT NO.	1	
SIZE	200	
IADC CODE		
MANUFACTURER	VAREL	
TYPE	MKS55	
SERIAL NO.	2426	
JETS	7X	9.5
DEPTH OUT (m)		
DEPTH IN (m)	435	
TOTAL DRILLED (m)	427	
TOTAL HRS RUN	17.5	

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG

TORQUE AT BOTTOM

FILL ON BOTTOM (m)

MORNING TOUR

MUD RECORD

MUD TYPE | WATER BASED | OIL BASED

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT
GEL	35	SX
SODA ASH	1	SX
SAWDUST	6	SX
ENVIROFLOC	8	SX

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	360	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
5940	152	100	152	

REDUCED PUMP SPEED

2404	@	65	@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION
738	.84	
834	.23	

DRILLER SIGNATURE: DAVE D CROWLEY

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB
730	862	D	100	7.5

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
0	0045	0.75	2	DRILL F/730 TO 749
0045	100	0.25	10	DEVIATION SURVEY
100	600	5.00	2	DRILL F/749 TO 844
600	615	0.25	7	RIG SERVICE FUNCTION TEST ANNULAR 12 SECS TO CLOSE
615	630	0.25	10	DEVIATION SURVEY
630	800	1.50	2	DRILL 844 TO 862

NOTES : FUNCTION TEST CROWN SAVER

VISUALLY INSPECT TONGS LINES BRAKES PINS LINKAGE AND ANCHOR

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					CONNECTIONS	40	3563

DAY

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed	BN	
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	28

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
109	

WEATHER: TEMPERATURE -22; CURRENT CONDITIONS LIGHT SNOW; WIND DIRECTION S.W.; ROAD CONDITION SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
	219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070228_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME-HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN		7.25					0.25			0.5																	8.00
DAY		7.5								0.5																	8.00
EVE		5.25			0.5	2.0				0.25																	8.00
TOTAL		20.00			0.50	2.00	0.25			1.25																	24.00

SHALE SHAKER(S)			RENTALS / SERVICES	MORN	DAY	EVE
NO. 1	TYPE SWACO	TYPE	CREW VEHICLE			
SCREENS CHANGED		NEW/ USED				
TOP 38		TOP				
MIDDLE		MIDDLE				
BOTTOM 38		BOTTOM				

NO.	DRILLING ASSEMBLY (AT END OF TOUR)			LENGTH
1	BIT	O.D.		.28
1	TORQUE SUB	160		1.97
1	D.C.	161		9.38
1	STAB	191		1.61
1	SHOCK SUB	161		2.12
11	D.C.	163		103.72
1	JAR	159		4.95
4	D.C.	163		37.53
1	X/O	159		.69
8	H.W.D.P.	101		74.97
45	D.P.		STANDS	847.57
1	D.P.		SINGLES	9.39
KELLY DOWN				12.84
TOTAL				1107.02
WT. OF D.C.	20			
WT. OF STRING	40			

BIT RECORD

BIT NO.	1
SIZE	200
IADC CODE	
MANUFACTURER	VAREL
TYPE	MKS55
SERIAL NO.	2426
JETS	7X 9.5
DEPTH OUT (m)	
DEPTH IN (m)	435
TOTAL DRILLED (m)	672
TOTAL HRS RUN	25

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG

TORQUE AT BOTTOM

FILL ON BOTTOM (m)

DAY TOUR

MUD RECORD

MUD TYPE | WATER BASED | OIL BASED

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT
GEL	67	SX
ENVIROFLOC	2	SX
SODA ASH	6	SX
CAUSTIC	1	SX

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11.0	BOILER pH	
STACK TEMP	360	STACK TEMP	

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB
862	1107	D	100	8

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
7900	152	100	152	

REDUCED PUMP SPEED

2300	@	65	@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION
887	.83	
990	.69	

DRILLER SIGNATURE: JACK HUSTON

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
800	845	0.75	2	DRILL 862 TO 909
845	900	0.25	10	DEVIATION SURVEY AT 887-LOSSES .62m3 OVER 18mins.
900	1245	3.75	2	DRILL ACTUAL 909 TO 1003
1245	1300	0.25	10	DEVIATION SURVEY AT 990 - LOSSES - .22M3 OVER 18mins.
1300	1600	3.00	2	DRILL 1003 TO 1107

NOTES : FUNCTION CROWN SAVER

VISUAL INSPECT TONGS,LINES,ANCHORS,BRAKES,PINS,LINKAGE

START TO MUD UP AT 1515hrs./1080m

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					CONNECTIONS	45	3563

EVENING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed	BN	
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked	DC	
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	2	28

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
109	

WEATHER

TEMPERATURE	-22
CURRENT CONDITIONS	LIGHT SNOW
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
	219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070228_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN		7.25					0.25			0.5																	8.00
DAY		7.5								0.5																	8.00
EVE		5.25			0.5	2.0				0.25																	8.00
TOTAL		20.00			0.50	2.00	0.25			1.25																	24.00

SHALE SHAKER(S)			RENTALS / SERVICES	MORN	DAY	EVE
NO. 1	TYPE SWACO	TYPE	CREW VEHICLE			
SCREENS CHANGED		NEW/ USED				
TOP 38		TOP				
MIDDLE		MIDDLE				
BOTTOM 38		BOTTOM				

NO.	DRILLING ASSEMBLY (AT END OF TOUR)		LENGTH
1	BIT	O.D.	.28
1	TORQUE SUB	160	1.97
1	D.C.	161	9.38
1	STAB	191	1.61
1	SHOCK SUB	161	2.12
11	D.C.	163	103.72
1	JAR	159	4.95
4	D.C.	163	37.53
1	X/O	159	.69
8	H.W.D.P.	101	74.97
50	D.P.	STANDS	941.8
1	D.P.	SINGLES	9.58
	KELLY DOWN		4.4
	TOTAL		1193.00

WT. OF D.C.	20
WT. OF STRING	40

BIT RECORD

BIT NO.	1	
SIZE	200	
IADC CODE		
MANUFACTURER	VAREL	
TYPE	MKS55	
SERIAL NO.	2426	
JETS	7X	9.5
DEPTH OUT (m)		
DEPTH IN (m)	435	
TOTAL DRILLED (m)	758	
TOTAL HRS RUN	30.25	

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

EVENING TOUR

MUD RECORD

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	360	STACK TEMP	

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB
1107	1193	D	100	6

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
9000	152	102	152	

REDUCED PUMP SPEED

3236	@	62	@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION
1094	.59	

DRILLER SIGNATURE

DAVE D CROWLEY

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
1600	1615	0.25	10	DEVIATION SURVEY at 1094-LOSSES - .21m3 OVER 23mins
1615	2130	5.25	2	DRILL 1107 TO 1193
2130	2200	0.50	5	CIRCULATE
2200	0000	2.00	6	BIT TRIP FLOW CHECK @1188,1110, TIGHT @1000-850

NOTES : FUNCTION CROWN SAVER

VISUAL INSPECT TONGS,LINES,ANCHORS,BRAKES,PINS,LINKAGE

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					TRIPPIN	53	3563

DRILLING CREW PAYROLL DATA

WELL NAME & NO.	YEAR	MONTH	DAY	TOUR SHEET SERIAL NO.
PARA ET AL CAMERON E-72	2007	2	28	PREC220_20070228_1C

OPERATOR	CONTRACTOR	RIG NO.
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	220

RIG MANAGER	PROVINCE	CAMP	RIG SAFETY DAYS
DAVE CROWLEY	N.W.T.	X YES ☐ NO	1615

SURFACE LOCATION	CONTRATOR'S JOB NUM	OPERATOR'S AFE
E-72-60 DEG-10-117 DEG-15	79	

MORNING TOUR — FROM 0 TO 800

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	8.00			DC
DERRICKHAND		DANNY S CROWLEY	8.00			DC
MOTORHAND		COREY ANDERSON	8.00			CA
FLOORHAND		KEVIN DRINKWATER	8.00			KD
FLOORHAND		BRECK PICHE	8.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

DAY TOUR — FROM 800 TO 1600

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		JACK HUSTON	12.00	L3		JH
DERRICKHAND		KARL GEREIN	12.00			KG
MOTORHAND		IAN ROSS	12.00			IR
FLOORHAND		WILL WINTER	12.00			WW
FLOORHAND		BENGIE SWEET	12.00			BS
RIG MANAGER		DAVE CROWLEY				DC

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	JACK HUSTON

EVENING TOUR — FROM 1600 TO 2400

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	4.00			DC
DERRICKHAND		DANNY S CROWLEY	4.00			DC
MOTORHAND		COREY ANDERSON	4.00			CA
FLOORHAND		KEVIN DRINKWATER	4.00			KD
FLOORHAND		BRECK PICHE	4.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

MORNING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	3	1

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
199	

WEATHER

TEMPERATURE	-22
CURRENT CONDITIONS	LIGHT SNOW
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER

O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070301_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME-HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN		1.75			0.25	5.5	0.25			0.25																	8.00
DAY		7.5					0.25			0.25																	8.00
EVE		7.0			0.5		0.25			0.25																	8.00
TOTAL		16.25			0.75	5.50	0.75			0.75																	24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	105	TOP
MIDDLE		MIDDLE
BOTTOM	105	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
1			.28
1	TORQUE SUB	160	1.97
1	D.C.	161	9.38
1	STAB	191	1.61
1	SHOCK SUB	161	2.12
11	D.C.	163	103.72
1	JAR	159	4.95
4	D.C.	163	37.53
1	X/O	159	.69
8	H.W.D.P.	101	74.97
51	D.P. STANDS		951.38
	D.P. SINGLES		9.35
KELLY DOWN			12.05
TOTAL			1210.00
WT. OF D.C.	20		
WT. OF STRING	42		

BIT RECORD

BIT NO.	2
SIZE	200
IADC CODE	
MANUFACTURER	VAREL
TYPE	MKS65
SERIAL NO.	2734
JETS	5X 11.1
DEPTH OUT (m)	
DEPTH IN (m)	1193
TOTAL DRILLED (m)	17
TOTAL HRS RUN	1.75

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR
0	4	BT	G		1		PR	

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

MORNING TOUR / MUD RECORD

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

TIME			600
DENSITY (kg/m3)			1110
FUNNEL VISCOSITY			35
FLUID LOSS (cm3)			
pH			9.5

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT
GEL	10	SX
DRISPAC REG	1	SX
HUMALITE	2	SX
SAWDUST	10	SX
BARITE	12	SX

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB
1193	1210	D	100	6

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
2	1140	1130	1820
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
8	1010	1000	

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
8417	152	102	152	

REDUCED PUMP SPEED

3236	@	62	@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION
1190	.79	

DRILLER SIGNATURE

DAVE D CROWLEY

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
0	230	2.50	6	bit trip continued FLOW CHECK@649,237,0
230	245	0.25	7	RIG SERVICE FUNCTION TEST BLINDS 3 SECS TO CLOSE
245	545	3.00	6	RIH
545	600	0.25	5	FILL PIPE WASH SINGLE DWN
600	745	1.75	2	DRILL F/1193 TO 1210
745	800	0.25	10	DEVIATION SURVEY

NOTES : TRIP SHEET CAL 6.25/ACT 6.44

FUNCTION TEST CROWN SAVER

VISUALLY INSPECT TONGS LINES BRAKES PINS LINKAGE AND ANCHOR

STRAP 1193.03/BOARD 1193

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					trippin	50	3435

DAY

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	3	1

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
199	

WEATHER

TEMPERATURE	-22
CURRENT CONDITIONS	LIGHT SNOW
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
	219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS	PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
DC	165	136	DC	57	165	41/2 XH	22	F-800	EMSCO	228.8
DP	102	43.2	HWDP	72	134	4FH	8	PZ-7	GARDNER DENVER	178
DP	102	23.38	SS/95	82	134	4FH	235			

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070301_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN		1.75			0.25	5.5	0.25			0.25																	8.00
DAY		7.5					0.25			0.25																	8.00
EVE		7.0			0.5		0.25			0.25																	8.00
TOTAL		16.25			0.75	5.50	0.75			0.75																	24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	105	TOP
MIDDLE		MIDDLE
BOTTOM	105	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR)		LENGTH
1	BIT	O.D.	.28
1	TORQUE SUB	160	1.97
1	D.C.	161	9.38
1	STAB	191	1.61
1	SHOCK SUB	161	2.12
11	D.C.	163	103.72
1	JAR	159	4.95
4	D.C.	163	37.53
1	X/O	159	.69
8	H.W.D.P.	101	74.97
58	D.P. STANDS		1092.44
	D.P. SINGLES		
	KELLY DOWN		9.34
	TOTAL		1339.00

WT. OF D.C.	20
WT. OF STRING	45

BIT RECORD

BIT NO.	2	
SIZE	200	
IADC CODE		
MANUFACTURER	VAREL	
TYPE	MKS65	
SERIAL NO.	2734	
JETS	5X	11.1
DEPTH OUT (m)		
DEPTH IN (m)	1193	
TOTAL DRILLED (m)	146	
TOTAL HRS RUN	9.25	

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG

TORQUE AT BOTTOM

FILL ON BOTTOM (m)

DAY TOUR

MUD RECORD

MUD TYPE | WATER BASED | OIL BASED

TIME	1000	1500	1900
DENSITY (kg/m3)	1135	1130	1120
FUNNEL VISCOSITY	45	46	65
FLUID LOSS (cm3)	12	9	12
pH	10.5	10.5	10.5

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT
CAUSTIC	4	SX
DRISPAC REG	2	SX
ALKAPAM 1103D	3	SX
HUMALITE	3	SX
GEL	10	SX
DESCO	1	SX

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
8	1130	1120	1780
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
8	1010	1000	

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
7500	152	100	152	

REDUCED PUMP SPEED

3300	@	64	@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION
1301	.45	

DRILLER SIGNATURE

JACK HUSTON

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB
1210	1339	D	80	8

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
800	1330	5.50	2	DRILL 1210 TO 1314
1330	1345	0.25	10	DEVIATION SURVEY AT 1301
1345	1400	0.25	7	RIG SERVICE-FUNCTION ANNULAR 12secs. TO CLOSE
1400	1600	2.00	2	DRILL 1314 TO 1339

NOTES : FUNCTION CROWN SAVER

VISUAL INSPECT TONGS,LINES,ANCHORS,BRAKES,PINS,LINKAGE

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					LOADER	50	2965

EVENING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	3	1

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
199	

WEATHER

TEMPERATURE	-22
CURRENT CONDITIONS	LIGHT SNOW
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
	219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070301_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME-HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN		1.75			0.25	5.5	0.25			0.25																	8.00
DAY		7.5					0.25			0.25																	8.00
EVE		7.0			0.5		0.25			0.25																	8.00
TOTAL		16.25			0.75	5.50	0.75			0.75																	24.00

SHALE SHAKER(S) NO.	TYPE	TYPE	RENTALS / SERVICES	MORN	DAY	EVE
1	SWACO		CREW VEHICLE			
SCREENS CHANGED		NEW/ USED				
TOP	105	TOP				
MIDDLE		MIDDLE				
BOTTOM	105	BOTTOM				

NO.	DRILLING ASSEMBLY (AT END OF TOUR)		LENGTH
1	BIT	O.D.	.28
1	TORQUE SUB	160	1.97
1	D.C.	161	9.38
1	STAB	191	1.61
1	SHOCK SUB	161	2.12
11	D.C.	163	103.72
1	JAR	159	4.95
4	D.C.	163	37.53
1	X/O	159	.69
8	H.W.D.P.	101	74.97
61	D.P.	STANDS	1148.89
1	D.P.	SINGLES	9.57
	KELLY DOWN		12.32
	TOTAL		1408.00

WT. OF D.C.	20
WT. OF STRING	46

BIT RECORD

BIT NO.	2			
SIZE	200			
IADC CODE				
MANUFACTURER	VAREL			
TYPE	MKS65			
SERIAL NO.	2734			
JETS	5X	11.1		
DEPTH OUT (m)	1408			
DEPTH IN (m)	1193			
TOTAL DRILLED (m)	215.00			
TOTAL HRS RUN	16.25			

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

EVENING TOUR

MUD RECORD

MUD TYPE: GEL-CHEM — WATER BASED: X — OIL BASED:

TIME	2100	2300	
DENSITY (kg/m3)	1130	1130	
FUNNEL VISCOSITY	95	90	
FLUID LOSS (cm3)	12	12	
pH	10.5	10.5	
CALCIUM		580	

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT
DESCO	2	SX
GEL	7	SX

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
8	1130	1120	1795
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
8	1010	1000	

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
8564	152	102	152	

REDUCED PUMP SPEED

5659	@	55	@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION
1398	.13	

DRILLER SIGNATURE: DAVE D CROWLEY

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB
1339	1408	D	80	8

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
1600	2300	7.00	2	DRILL 1339 TO 1408
2300	2330	0.50	5	CONDITION MUD & CIRCULATE UP SAMPLE
2330	2345	0.25	7	RIG SERVICE FUNCTION TEST PIPES 3 SECS TO CLOSE
2345	0000	0.25	10	DEVIATION SURVEY

NOTES : FUNCTION CROWN SAVER

VISUAL INSPECT TONGS,LINES,ANCHORS,BRAKES,PINS,LINKAGE

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					PIPE SPINNER	47	2965

DRILLING CREW PAYROLL DATA

WELL NAME & NO.	YEAR	MONTH	DAY	TOUR SHEET SERIAL NO.
PARA ET AL CAMERON E-72	2007	3	1	PREC220_20070301_1C

OPERATOR	CONTRACTOR	RIG NO.
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	220

RIG MANAGER	PROVINCE	CAMP	RIG SAFETY DAYS
DAVE CROWLEY	N.W.T.	X YES ☐ NO	1616

SURFACE LOCATION	CONTRATOR'S JOB NUM	OPERATOR'S AFE
E-72-60 DEG-10-117 DEG-15	79	

MORNING TOUR — FROM 0 TO 800

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	8.00			DC
DERRICKHAND		DANNY S CROWLEY	8.00			DC
MOTORHAND		COREY ANDERSON	8.00			CA
FLOORHAND		KEVIN DRINKWATER	8.00			KD
FLOORHAND		BRECK PICHE	8.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

DAY TOUR — FROM 800 TO 1600

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		JACK HUSTON	12.00	L3		JH
DERRICKHAND		KARL GEREIN	12.00			KG
MOTORHAND		IAN ROSS	12.00			IR
FLOORHAND		WILL WINTER	12.00			WW
FLOORHAND		BENGIE SWEET	12.00			BS
RIG MANAGER		DAVE CROWLEY				DC

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	JACK HUSTON

EVENING TOUR — FROM 1600 TO 2400

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	4.00			DC
DERRICKHAND		DANNY S CROWLEY	4.00			DC
MOTORHAND		COREY ANDERSON	4.00			CA
FLOORHAND		KEVIN DRINKWATER	4.00			KD
FLOORHAND		BRECK PICHE	4.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

MORNING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	3	2

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
142	

WEATHER

TEMPERATURE	-41
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
	219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070302_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN					2.5	5.25	0.25																				8.00
DAY					1.75	5.0					1.0										0.25						8.00
EVE						1.5	0.25				6.25																8.00
TOTAL					4.25	11.75	0.50				7.25										0.25						24.00

SHALE SHAKER(S)			RENTALS / SERVICES	MORN	DAY	EVE
1	TYPE SWACO	TYPE	CREW VEHICLE			
	SCREENS CHANGED	NEW/ USED				
	TOP 105	TOP				
	MIDDLE	MIDDLE				
	BOTTOM 105	BOTTOM				

NO.	DRILLING ASSEMBLY (AT END OF TOUR)		LENGTH
1	BIT	O.D.	.28
1	TORQUE SUB	160	1.97
1	D.C.	161	9.38
1	STAB	191	1.61
1	SHOCK SUB	161	2.12
11	D.C.	163	103.72
1	JAR	159	4.95
4	D.C.	163	37.53
1	X/O	159	.69
8	H.W.D.P.	101	74.97
61	D.P. STANDS		1148.89
1	D.P. SINGLES		9.57
	KELLY DOWN		12.32
	TOTAL		1408.00

WT. OF D.C.	20
WT. OF STRING	46

BIT RECORD

BIT NO.	2	
SIZE	200	
IADC CODE		
MANUFACTURER	VAREL	
TYPE	MKS65	
SERIAL NO.	2734	
JETS	5X	11.1
DEPTH OUT (m)	1408	
DEPTH IN (m)	1193	
TOTAL DRILLED (m)	215.00	
TOTAL HRS RUN	16.25	

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG

TORQUE AT BOTTOM

FILL ON BOTTOM (m)

MORNING TOUR

MUD RECORD

MUD TYPE | WATER BASED | OIL BASED

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT
ALKAPAM 1103D	3	SX
ENVIROFLOC	48	SX
BARITE	22	SX

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	360	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
8486	152	102	152	

REDUCED PUMP SPEED

5200	@	57	@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE

DAVE D CROWLEY

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB
	1408			

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
0	215	2.25	6	WIPER TRIP FLOW CHECK @1395,1318,1000
215	315	1.00	5	CONDITION MUD & CIRCULATE
315	615	3.00	6	WIPER TRIP#2 @ 1395,1308,926
615	630	0.25	7	RIG SERVICE FUNCTION ANNULAR 12 SEC TO CLOSE
630	800	1.50	5	CONDITION MUD & CIRCULATE

NOTES : FUNCTION TEST CROWN SAVER

VISUALLY INSPECT TONGS LINES BRAKES PINS LINKAGE AND ANCOR

TRIP SHEET CAL 1.36 ACT 1.42

TRIP SHEET #2 CAL 1.24/ACT 1.4

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					TRIPPIN	50	3008

DAY

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	3	2

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
142	

WEATHER

TEMPERATURE	-41
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
	219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS	PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
DC	165	136	DC	57	165	41/2 XH	22	F-800	EMSCO	228.8
DP	102	43.2	HWDP	72	134	4FH	8	PZ-7	GARDNER DENVER	178
DP	102	23.38	SS/95	82	134	4FH	235			

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070302_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN					2.5	5.25	0.25																				8.00
DAY					1.75	5.0					1.0										0.25						8.00
EVE						1.5	0.25				6.25																8.00
TOTAL					4.25	11.75	0.50				7.25										0.25						24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	105	TOP
MIDDLE		MIDDLE
BOTTOM	105	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
1			.28
1	TORQUE SUB	160	1.97
1	D.C.	161	9.38
1	STAB	191	1.61
1	SHOCK SUB	161	2.12
11	D.C.	163	103.72
1	JAR	159	4.95
4	D.C.	163	37.53
1	X/O	159	.69
8	H.W.D.P.	101	74.97
61	D.P. STANDS		1148.89
1	D.P. SINGLES		9.57
KELLY DOWN			12.32
TOTAL			1408.00

WT. OF D.C.	20
WT. OF STRING	46

BIT RECORD

BIT NO.	2	
SIZE	200	
IADC CODE		
MANUFACTURER	VAREL	
TYPE	MKS65	
SERIAL NO.	2734	
JETS	5X	11.1
DEPTH OUT (m)	1408	
DEPTH IN (m)	1193	
TOTAL DRILLED (m)	215.00	
TOTAL HRS RUN	16.25	

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

DAY TOUR

MUD RECORD

MUD TYPE		WATER BASED	OIL BASED
TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
8600	152	105	152	

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE

JACK HUSTON

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
800	945	1.75	5	CONDITION MUD & CIRCULATE
945	1445	5.00	6	POOH-FLOW CHECK AT 1394, AT 1298, AT 684
1445	1500	0.25	21	SAFETY MEETING WITH LOGGERS
1500	1600	1.00	11	WIRELINE LOGS-MCG,MFE,MTC,MGS,MML,MDN,MPD,MSS,MAI
				HELD MAN DOWN DRILL

NOTES : VISUALY INSPECT BRAKE BANDS LINGAGE AND PINS DC.

FUNCTION CROWN SAVER

VISUAL INSPECT TONGS,LINES,ANCHORS,BRAKES,PINS,LINKAGE

HOLE FILL-ACT.7.93 / CAL. 6.93

STRAP 1408.22 / BOARD- 1408 /DIFF. .22

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					LOGGING	60	3008

EVENING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	3	2

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
142	

WEATHER

TEMPERATURE	-41
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
	219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS	PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
DC	165	136	DC	57	165	41/2 XH	22	F-800	EMSCO	228.8
DP	102	43.2	HWDP	72	134	4FH	8	PZ-7	GARDNER DENVER	178
DP	102	23.38	SS/95	82	134	4FH	235			

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE		TIME	
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070302_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME-HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN					2.5	5.25	0.25																				8.00
DAY					1.75	5.0					1.0										0.25						8.00
EVE						1.5	0.25				6.25																8.00
TOTAL					4.25	11.75	0.50				7.25										0.25						24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	105	TOP
MIDDLE		MIDDLE
BOTTOM	105	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR)		LENGTH
1	BIT	O.D.	.28
1	TORQUE SUB	160	1.97
1	D.C.	161	9.38
1	STAB	191	1.61
1	SHOCK SUB	161	2.12
11	D.C.	163	103.72
1	JAR	159	4.95
4	D.C.	163	37.53
1	X/O	159	.69
8	H.W.D.P.	101	74.97
61	D.P. STANDS		1148.89
1	D.P. SINGLES		9.57
	KELLY DOWN		12.32
	TOTAL		1408.00

WT. OF D.C.	20
WT. OF STRING	46

BIT RECORD

BIT NO.	2	
SIZE	200	
IADC CODE		
MANUFACTURER	VAREL	
TYPE	MKS65	
SERIAL NO.	2734	
JETS	5X	11.1
DEPTH OUT (m)	1408	
DEPTH IN (m)	1193	
TOTAL DRILLED (m)	215.00	
TOTAL HRS RUN	16.25	

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG

TORQUE AT BOTTOM

FILL ON BOTTOM (m)

EVENING TOUR

MUD RECORD

MUD TYPE | WATER BASED | OIL BASED

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
	152		152	

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE

DAVE D CROWLEY

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
1600	2215	6.25	11	WIRELINE LOGS
2215	2230	0.25	7	RIG SERVICE FUNCTION BLIND RAMS 4 SEC TO CLOSE
2230	2400	1.50	6	TRIPS M/U BHA RIH

NOTES : HELD MAN DWN DRILL

FUNCTION TEST CROWN SAVER

VISUALLY INSPECT TONGS LINES BRAKES PINS LINKAGE AND ANCHOR

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					LOGGIN		3008

DRILLING CREW PAYROLL DATA

WELL NAME & NO.	YEAR	MONTH	DAY	TOUR SHEET SERIAL NO.
PARA ET AL CAMERON E-72	2007	3	2	PREC220_20070302_1C

OPERATOR	CONTRACTOR	RIG NO.
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	220

RIG MANAGER	PROVINCE	CAMP	RIG SAFETY DAYS
DAVE CROWLEY	N.W.T.	X YES ☐ NO	1617

SURFACE LOCATION	CONTRATOR'S JOB NUM	OPERATOR'S AFE
E-72-60 DEG-10-117 DEG-15	79	

MORNING TOUR — FROM 0 TO 800

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	8.00			DC
DERRICKHAND		DANNY S CROWLEY	8.00			DC
MOTORHAND		COREY ANDERSON	8.00			CA
FLOORHAND		KEVIN DRINKWATER	8.00			KD
FLOORHAND		BRECK PICHE	8.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

DAY TOUR — FROM 800 TO 1600

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		JACK HUSTON	12.00	L3		JH
DERRICKHAND		KARL GEREIN	12.00			KG
MOTORHAND		IAN ROSS	12.00			IR
FLOORHAND		WILL WINTER	12.00			WW
FLOORHAND		BENGIE SWEET	12.00			BS
RIG MANAGER		DAVE CROWLEY				DC

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS

EVENING TOUR — FROM 1600 TO 2400

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	4.00			DC
DERRICKHAND		DANNY S CROWLEY	4.00			DC
MOTORHAND		COREY ANDERSON	4.00			CA
FLOORHAND		KEVIN DRINKWATER	4.00			KD
FLOORHAND		BRECK PICHE	4.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

MORNING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked	DC	
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	3	3

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
97	

WEATHER

TEMPERATURE	-34
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
	219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435
	139.7	125.7	23.07	IPSCO	J-55	116	1409.23	.6	1408.63

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE	2007/03/04	TIME	23:59
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070303_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN					1.0	6.0	0.25		0.75																		8.00
DAY						4.0	0.25					3.5									0.25						8.00
EVE					2.75							4.5		0.5							0.25						8.00
TOTAL					3.75	10.00	0.50		0.75			8.00		0.50							0.50						24.00

SHALE SHAKER(S)			RENTALS / SERVICES	MORN	DAY	EVE
NO. 1	TYPE SWACO	TYPE	CREW VEHICLE			
SCREENS CHANGED		NEW/ USED				
TOP 105		TOP				
MIDDLE		MIDDLE				
BOTTOM 105		BOTTOM				

NO.	DRILLING ASSEMBLY (AT END OF TOUR)		LENGTH
1	BIT	O.D.	.28
1	TORQUE SUB	160	1.97
1	D.C.	161	9.38
1	STAB	191	1.61
1	SHOCK SUB	161	2.12
11	D.C.	163	103.72
1	JAR	159	4.95
4	D.C.	163	37.53
1	X/O	159	.69
8	H.W.D.P.	101	74.97
61	D.P. STANDS		1148.89
1	D.P. SINGLES		9.57
	KELLY DOWN		12.32
	TOTAL		1408.00

WT. OF D.C.	20
WT. OF STRING	46

BIT RECORD

BIT NO.	2			
SIZE	200			
IADC CODE				
MANUFACTURER	VAREL			
TYPE	MKS65			
SERIAL NO.	2734			
JETS	5X	11.1		
DEPTH OUT (m)	1408			
DEPTH IN (m)	1193			
TOTAL DRILLED (m)	215.00			
TOTAL HRS RUN	16.25			

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

MORNING TOUR

MUD RECORD

MUD TYPE | WATER BASED | OIL BASED

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
9900	152	100	152	

REDUCED PUMP SPEED

4901	@	56	@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE

DAVE D CROWLEY

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
00	0045	0.75	9	CUT OFF DRILLING LINE
0045	100	0.25	7	RIG SERVICE FUNCTION TEST ANNULAR 12 SECS TO CLOSE
100	315	2.25	6	FINISH RIH
315	415	1.00	5	CONDITION MUD & CIRCULATE
415	800	3.75	6	LAY OUT STRING FLOW CHECK @1402,1277,703,

NOTES : FUNCTION TEST CROWN SAVER

VISUALLY INSPECT TONGS LINES BRAKES PINS LINKAGE AND ANCHOR

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					LAYIN OUT PIPE	49	3008

DAY

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	3	3

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
97	

WEATHER

TEMPERATURE	-34
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
	219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435
	139.7	125.7	23.07	IPSCO	J-55	116	1409.23	.6	1408.63

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE	2007/03/04	TIME	23:59
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070303_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN					1.0	6.0	0.25		0.75																		8.00
DAY						4.0	0.25					3.5									0.25						8.00
EVE					2.75							4.5		0.5							0.25						8.00
TOTAL					3.75	10.00	0.50		0.75			8.00		0.50							0.50						24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	105	TOP
MIDDLE		MIDDLE
BOTTOM	105	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
	D.P.	STANDS	
	D.P.	SINGLES	
	KELLY DOWN		
	TOTAL		
	WT. OF D.C.		
	WT. OF STRING		

BIT RECORD

BIT NO.	
SIZE	
IADC CODE	
MANUFACTURER	
TYPE	
SERIAL NO.	
JETS	
DEPTH OUT (m)	
DEPTH IN (m)	
TOTAL DRILLED (m)	
TOTAL HRS RUN	

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

DAY TOUR

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

MUD RECORD

TIME	900		
DENSITY (kg/m3)	1110		
FUNNEL VISCOSITY	65		
FLUID LOSS (cm3)			
pH	10		

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT
BARITE	10	SX
HUMALITE	3	SX
DESCO	1	SX
ALKAPAM 1103D	3	SX
ENVIROFLOC	2	SX

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	360	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
	152		152	

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE: JACK HUSTON

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
800	1200	4.00	6	POOH- LAY DOWN PIPE BREAK KELY AND SUBS BLOW LINES
1200	1215	0.25	7	RIG SERVICE FUNCTION BLIND RAMS 3 SEC TO CLOSE
1215	1230	0.25	21	SAFETY MEETING W/ TONG HAND- ELEVATORS-# 55576
1230	1600	3.50	12	RIG UPTO RUN CASING AND RUN CASING

NOTES : HOLE FILL- ACT. 7.23 / CAL.- 7.27

FUNCTION CROWN SAVER

VISUAL INSPECT TONGS,LINES,ANCHORS,BRAKES,PINS,LINKAGE

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					CASING	30	3008

EVENING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required	BN	DC
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked	BN	DC
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines	BN	DC
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		DC
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	3	3

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
97	

WEATHER

TEMPERATURE	-34
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER

O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435
139.7	125.7	23.07	IPSCO	J-55	116	1409.23	.6	1408.63

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE	2007/03/04	TIME	23:59
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070303_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME-HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN					1.0	6.0	0.25		0.75																		8.00
DAY						4.0	0.25					3.5									0.25						8.00
EVE					2.75							4.5		0.5							0.25						8.00
TOTAL					3.75	10.00	0.50		0.75			8.00		0.50							0.50						24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	105	TOP
MIDDLE		MIDDLE
BOTTOM	105	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
	D.P.	STANDS	
	D.P.	SINGLES	
	KELLY DOWN		
	TOTAL		
	WT. OF D.C.		
	WT. OF STRING		

BIT RECORD

BIT NO.	
SIZE	
IADC CODE	
MANUFACTURER	
TYPE	
SERIAL NO.	
JETS	
DEPTH OUT (m)	
DEPTH IN (m)	
TOTAL DRILLED (m)	
TOTAL HRS RUN	

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

EVENING TOUR

MUD RECORD

MUD TYPE GEL-CHEM WATER BASED ☐ OIL BASED ☐

TIME	2200
DENSITY (kg/m3)	1120
FUNNEL VISCOSITY	43
FLUID LOSS (cm3)	14
pH	10

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
	152		152	

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE

DAVE D CROWLEY

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
1600	1815	2.25	12	RUN CASING
1815	2100	2.75	5	CONDITION MUD & CIRCULATE
2100	2115	0.25	21	SAFETY MEETING WITH CEMENTERS
2115	2330	2.25	12	CEMENT CASING
2330	0000	0.50	14	NIPPLE DWN
				CEMENT THE PRODUCTION CASING WITH 22 TONNE OF THIXLITE + 1% SMS
				& 11 TONNE OF EXPANDOMIX LWL; +.1% CFL-3 +.2% LTR + .2% SPC-II, WE GOT BACK
				2.2M3 OF GOOD CEMENT RETUTRN'S, PLUG DOWN AT 23:12 HRS MAR 3/07 BJN

NOTES : FUNCTION TEST CROWN SAVER

VISUALLY INSPECT TONGS LINES BRAKES PINS LINKAGE AND ANCHOR

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					CEMENTING		3008

DRILLING CREW PAYROLL DATA

WELL NAME & NO.	YEAR	MONTH	DAY	TOUR SHEET SERIAL NO.
PARA ET AL CAMERON E-72	2007	3	3	PREC220_20070303_1C

OPERATOR	CONTRACTOR	RIG NO.
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	220

RIG MANAGER	PROVINCE	CAMP	RIG SAFETY DAYS
DAVE CROWLEY	N.W.T.	X YES ☐ NO	1618

SURFACE LOCATION	CONTRATOR'S JOB NUM	OPERATOR'S AFE
E-72-60 DEG-10-117 DEG-15	79	

MORNING TOUR — FROM 0 TO 800

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	8.00			DC
DERRICKHAND		DANNY S CROWLEY	8.00			DC
MOTORHAND		COREY ANDERSON	8.00			CA
FLOORHAND		KEVIN DRINKWATER	8.00			KD
FLOORHAND		BRECK PICHE	8.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

DAY TOUR — FROM 800 TO 1600

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		JACK HUSTON	12.00	L3		JH
DERRICKHAND		KARL GEREIN	12.00			KG
MOTORHAND		IAN ROSS	12.00			IR
FLOORHAND		WILL WINTER	12.00			WW
FLOORHAND		BENGIE SWEET	12.00			BS
RIG MANAGER		DAVE CROWLEY				DC

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	JACK HUSTON

EVENING TOUR — FROM 1600 TO 2400

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	4.00			DC
DERRICKHAND		DANNY S CROWLEY	4.00			DC
MOTORHAND		COREY ANDERSON	4.00			CA
FLOORHAND		KEVIN DRINKWATER	4.00			KD
FLOORHAND		BRECK PICHE	4.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

MORNING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required		
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked		
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering	DC	
(4.) Crown Saver Checked	DC	
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	3	4

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
80	

WEATHER

TEMPERATURE	-44
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER

O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435
139.7	125.7	23.07	IPSCO	J-55	116	1409.23		

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS	PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
DC	165	136	DC	57	165	41/2 XH	22	F-800	EMSCO	228.8
DP	102	43.2	HWDP	72	134	4FH	8	PZ-7	GARDNER DENVER	178
DP	102	23.38	SS/95	82	134	4FH	235			

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE	2007/03/04	TIME	23:59
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070304_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN	1.0											3.25		3.0								0.75					8.00
DAY	8.0																										8.00
EVE	8.0																										8.00
TOTAL	17.00											3.25		3.00								0.75					24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	105	TOP
MIDDLE		MIDDLE
BOTTOM	105	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
	D.P.	STANDS	
	D.P.	SINGLES	
	KELLY DOWN		
	TOTAL		

WT. OF D.C.

WT. OF STRING

BIT RECORD

BIT NO.		
SIZE		
IADC CODE		
MANUFACTURER		
TYPE		
SERIAL NO.		
JETS		
DEPTH OUT (m)		
DEPTH IN (m)		
TOTAL DRILLED (m)		
TOTAL HRS RUN		

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG

TORQUE AT BOTTOM

FILL ON BOTTOM (m)

MORNING TOUR

MUD RECORD

MUD TYPE | WATER BASED | OIL BASED

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	370	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
	152		152	

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE

DAVE D CROWLEY

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
0	300	3.00	14	NIPPLE DWN
300	345	0.75	22	SET CASING SLIPS AT 33,000 DaN
345	700	3.25	12	CEMENT ANULAS BETWEEN SURFACE AND CONDUCTOR
700	800	1.00	1	TEAR DOWN

NOTES :

SPECIAL EVENT					SAFETY TOPIC	MEHL	MACP
TIME / DEPTH							

DAY

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
	BN	DC
(1.) Daily Walk Around Inspection		
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required		
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked		
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering	DC	
(4.) Crown Saver Checked	DC	
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	3	4

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
80	

WEATHER

TEMPERATURE	-44
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER

O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435
139.7	125.7	23.07	IPSCO	J-55	116	1409.23		

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE	2007/03/04	TIME	23:59
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070304_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN	1.0											3.25		3.0								0.75					8.00
DAY	8.0																										8.00
EVE	8.0																										8.00
TOTAL	17.00											3.25		3.00								0.75					24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	105	TOP
MIDDLE		MIDDLE
BOTTOM	105	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
	D.P.	STANDS	
	D.P.	SINGLES	
	KELLY DOWN		
	TOTAL		
	WT. OF D.C.		
	WT. OF STRING		

BIT RECORD

BIT NO.	
SIZE	
IADC CODE	
MANUFACTURER	
TYPE	
SERIAL NO.	
JETS	
DEPTH OUT (m)	
DEPTH IN (m)	
TOTAL DRILLED (m)	
TOTAL HRS RUN	

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

DAY TOUR

MUD TYPE		WATER BASED	OIL BASED

MUD RECORD

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	360	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
	152		152	

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE

JACK HUSTON

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
800	1600	8.00	1	TEAR DOWN
				VISUALY INSPECT DERICK AND LAY OVER DC.
				TOP CEMENT THE SURFACE CASING WE PUMPED 3 TONNE OF 0-1-0 G WITH
				1% CACL2. WE GOT BACK 1M3 OF GOOD CEMENT. WE WHERE DONE AT 07:11 HRS MAR 4/07
				THANK YOU GUYS FOR A JOB WELL DONE THIS WINTER, IT WAS A PLEASURE WORKING WITH
				YOU GUY'S BJN.

NOTES :

SPECIAL EVENT			SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					

EVENING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC
SURFACE LOCATION	**UNIQUE ID**
E-72-60 DEG-10-117 DEG-15	300E726010117150
SIGNATURE OF OPERATOR'S REPRESENTATIVE	**SIGNATURE OF CONTRACTOR'S RIG MANAGER**
BRIAN NEIGUM	DAVE CROWLEY

DAILY CHECKS	OPR	R.M.
(1.) Daily Walk Around Inspection	BN	DC
(2.) Detailed Inspection - Weekly (Using Check List)		
(3.) H2S Signs Posted if Required		
(4.) Well Licence & Stick Diagram Posted	BN	DC
(5.) Flare Lines Staked		
(6.) BOP Drills Performed		
(7.) Visually Inspect BOPs- Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering	DC	
(4.) Crown Saver Checked	DC	
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	3	4

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
80	

WEATHER

TEMPERATURE	-44
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER

O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435
139.7	125.7	23.07	IPSCO	J-55	116	1409.23		

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE	2007/03/04	TIME	23:59
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070304_1C		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN	1.0											3.25		3.0								0.75					8.00
DAY	8.0																										8.00
EVE	8.0																										8.00
TOTAL	17.00											3.25		3.00								0.75					24.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	105	TOP
MIDDLE		MIDDLE
BOTTOM	105	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
	D.P.	STANDS	
	D.P.	SINGLES	
	KELLY DOWN		
	TOTAL		
	WT. OF D.C.		
	WT. OF STRING		

BIT RECORD

BIT NO.	
SIZE	
IADC CODE	
MANUFACTURER	
TYPE	
SERIAL NO.	
JETS	
DEPTH OUT (m)	
DEPTH IN (m)	
TOTAL DRILLED (m)	
TOTAL HRS RUN	

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

EVENING TOUR

MUD RECORD

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	8	HRS RUN	
BOILER pH	11	BOILER pH	
STACK TEMP	360	STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
	152		152	

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE: DAVE D CROWLEY

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
1600	2400	8.00	1	TEAR DOWN
				RIG RELEASED AT 24:00 HRS MAR 4/07

NOTES :

SPECIAL EVENT			SAFETY TOPIC	MEHL	MACP
TIME / DEPTH					

DRILLING CREW PAYROLL DATA

WELL NAME & NO.	YEAR	MONTH	DAY	TOUR SHEET SERIAL NO.
PARA ET AL CAMERON E-72	2007	3	4	PREC220_20070304_1C

OPERATOR	CONTRACTOR	RIG NO.
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	220

RIG MANAGER	PROVINCE	CAMP	RIG SAFETY DAYS
DAVE CROWLEY	N.W.T.	X YES / NO	1619

SURFACE LOCATION	CONTRATOR'S JOB NUM	OPERATOR'S AFE
E-72-60 DEG-10-117 DEG-15	79	

MORNING TOUR — FROM 0 TO 800

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	8.00			DC
DERRICKHAND		DANNY S CROWLEY	8.00			DC
MOTORHAND		COREY ANDERSON	8.00			CA
FLOORHAND		KEVIN DRINKWATER	8.00			KD
FLOORHAND		BRECK PICHE	8.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

DAY TOUR — FROM 800 TO 1600

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		JACK HUSTON	12.00			JH
DERRICKHAND		KARL GEREIN	12.00			KG
MOTORHAND		IAN ROSS	12.00			IR
FLOORHAND		WILL WINTER	12.00			WW
FLOORHAND		BENGIE SWEET	12.00			BS
RIG MANAGER		DAVE CROWLEY				DC

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	JACK HUSTON

EVENING TOUR — FROM 1600 TO 2400

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	4.00			DC
DERRICKHAND		DANNY S CROWLEY	4.00			DC
MOTORHAND		COREY ANDERSON	4.00			CA
FLOORHAND		KEVIN DRINKWATER	4.00			KD
FLOORHAND		BRECK PICHE	4.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

MORNING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
	DAVE CROWLEY

DAILY CHECKS	OPR BN	R.M. DC
(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 Inspect BOPs- Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	3	5

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
80	

WEATHER

TEMPERATURE	-44
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER

O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435
139.7	125.7	23.07	IPSCO	J-55	116	1409.23		

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE	2007/03/04	TIME	23:59
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070305_1B		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN	8.0																										8.00
DAY	12.0																										12.00
EVE																											
TOTAL	20.00																										20.00

SHALE SHAKER(S)			RENTALS / SERVICES	MORN	DAY	EVE
NO. 1	TYPE SWACO	TYPE	CREW VEHICLE			
SCREENS CHANGED		NEW/ USED				
TOP 105		TOP				
MIDDLE		MIDDLE				
BOTTOM 105		BOTTOM				

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
	D.P.	STANDS	
	D.P.	SINGLES	
	KELLY DOWN		
	TOTAL		
	WT. OF D.C.		
	WT. OF STRING		

BIT RECORD

BIT NO.		
SIZE		
IADC CODE		
MANUFACTURER		
TYPE		
SERIAL NO.		
JETS		
DEPTH OUT (m)		
DEPTH IN (m)		
TOTAL DRILLED (m)		
TOTAL HRS RUN		

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

MORNING TOUR

MUD RECORD

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	0	HRS RUN	
BOILER pH		BOILER pH	
STACK TEMP		STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
	152		152	

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE

DAVE D CROWLEY

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
0	800	8.00	1	TEAR DOWN

NOTES :

SPECIAL EVENT				SAFETY TOPIC	MEHL	MACP
TIME / DEPTH						

DAY

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC

SURFACE LOCATION	UNIQUE ID
E-72-60 DEG-10-117 DEG-15	300E726010117150

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S RIG MANAGER
	DAVE CROWLEY

DAILY CHECKS	OPR BN	R.M. DC
(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 Inspect BOPs- Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	3	5

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
80	

WEATHER

TEMPERATURE	-44
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
	219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435
	139.7	125.7	23.07	IPSCO	J-55	116	1409.23		

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE	2007/03/04	TIME	23:59
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070305_1B		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN	8.0																										8.00
DAY	12.0																										12.00
EVE																											
TOTAL	20.00																										20.00

SHALE SHAKER(S) NO.	TYPE	TYPE
1	SWACO	
SCREENS CHANGED		NEW/ USED
TOP	105	TOP
MIDDLE		MIDDLE
BOTTOM	105	BOTTOM

RENTALS / SERVICES	MORN	DAY	EVE
CREW VEHICLE			

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
	D.P.	STANDS	
	D.P.	SINGLES	
	KELLY DOWN		
	TOTAL		
	WT. OF D.C.		
	WT. OF STRING		

BIT RECORD

BIT NO.		
SIZE		
IADC CODE		
MANUFACTURER		
TYPE		
SERIAL NO.		
JETS		
DEPTH OUT (m)		
DEPTH IN (m)		
TOTAL DRILLED (m)		
TOTAL HRS RUN		

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

DAY TOUR

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

MUD RECORD

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	0	HRS RUN	
BOILER pH		BOILER pH	
STACK TEMP		STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
	152		152	

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE: JACK HUSTON

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS
800	2000	12.00	1	TEAR OUT LOAD UP RIG FOR RACKING
				TRAVEL TO STEEN RIVER AND FLY THE MEN HOME

NOTES :

SPECIAL EVENT				SAFETY TOPIC	MEHL	MACP
TIME / DEPTH						

EVENING

LICENCE NO.	WELL NAME & NO.
2048	PARA ET AL CAMERON E-72

OPERATOR	CONTRACTOR NAME
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC
SURFACE LOCATION	**UNIQUE ID**
E-72-60 DEG-10-117 DEG-15	300E726010117150
SIGNATURE OF OPERATOR'S REPRESENTATIVE	**SIGNATURE OF CONTRACTOR'S RIG MANAGER**
	DAVE CROWLEY

DAILY CHECKS	OPR BN	R.M. DC
(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 Inspect BOPs- Flare Lines & Degasser Lines		
(1.) Rig Site Health & Safety Meeting (one/crew/month)		
(2.) CAODC Rig Safet Inspection Checklist (one/rig/month)		
(3.) Mast Inspection before Raising or Lowering		
(4.) Crown Saver Checked		
(5.) Motor Kills Checked		

YEAR	MONTH	DAY
2007	3	5

RIG NO. 220

FUEL @ 08:00 HRS

RIG	BOILER
80	

WEATHER

TEMPERATURE	-44
CURRENT CONDITIONS	OVERCAST
WIND DIRECTION	S.W.
ROAD CONDITION	SLIPPERY

LAST CASING TUBING OR LINER	O.D. (mm)	MIN I.D. (mm)	MASS (kg/m3)	MAKE	GRADE	NO. of JOINTS	TOTAL LENGTH	KB TO CSG HEAD	SET AT (m)
	219.1	205.7	35.7	IPSCO	J-55	32	435.53	.53	435
	139.7	125.7	23.07	IPSCO	J-55	116	1409.23		

DC/ DP	DC / DP SIZE	MASS	GRADE	MINIMUM I.D.	T. JNT. O.D.	TYPE THREAD	NO. of JOINTS
DC	165	136	DC	57	165	41/2 XH	22
DP	102	43.2	HWDP	72	134	4FH	8
DP	102	23.38	SS/95	82	134	4FH	235

PUMP TYPE	PUMP MANUFACTURER	STROKE LENGTH
F-800	EMSCO	228.8
PZ-7	GARDNER DENVER	178

SPUD DATE	2007/02/24	TIME	04:30
RIG RELEASE	2007/03/04	TIME	23:59
WELL TYPE	VERT.	RE-ENTRY	NO
OPERATOR'S AFE			
KELLY BSHG		OP FUEL	
CONTRACTOR'S JOB NUM	79		
TOUR SHEET SERIAL NUM	PREC220_20070305_1B		
VENDOR SOFTWARE VERSION	EDR_3-2-4_HF2 ETS 2.2		

TIME - HRS

CODE NO.	1 RIGUP & TEARDOWN	2 DRILL ACTUAL	3 REAMING	4 CORING	5 COND MUD & CIRC	6 TRIPS	7 RIG SERVICE	8 REPAIR RIG	9 CUT OFF DRILL LINE	10 DEV. SURVEY	11 WIRELINE LOGS	12 RUN CSG & CEMENT	13 WAIT ON CEMENT	14 NIPPLE UP B.O.P.	15 TEST B.O.P.	16 DRILLSTEM TEST	17 PLUG BACK	18 SQUEEZE CEMENT	19 FISHING	20 DIR. WORK	21 SAFETY MEETING	22	23	24	25	26	TOTALS
MORN	8.0																										8.00
DAY	12.0																										12.00
EVE																											
TOTAL	20.00																										20.00

SHALE SHAKER(S)			RENTALS / SERVICES	MORN	DAY	EVE
NO. 1	TYPE SWACO	TYPE	CREW VEHICLE			
SCREENS CHANGED		NEW/ USED				
TOP 105		TOP				
MIDDLE		MIDDLE				
BOTTOM 105		BOTTOM				

NO.	DRILLING ASSEMBLY (AT END OF TOUR) BIT	O.D.	LENGTH
	D.P.	STANDS	
	D.P.	SINGLES	
	KELLY DOWN		
	TOTAL		
	WT. OF D.C.		
	WT. OF STRING		

BIT RECORD

BIT NO.		
SIZE		
IADC CODE		
MANUFACTURER		
TYPE		
SERIAL NO.		
JETS		
DEPTH OUT (m)		
DEPTH IN (m)		
TOTAL DRILLED (m)		
TOTAL HRS RUN		

CUTTING STRUCTURE

TI	To	MDC	LOC	BRG	GAGE	ODC	REASON PULLED	TOTAL RUN m/HR

HOLE CONDITION

HOLE DRAG	
TORQUE AT BOTTOM	
FILL ON BOTTOM (m)	

EVENING TOUR — MUD RECORD

MUD TYPE | WATER BASED ☐ | OIL BASED ☐

TIME			
DENSITY (kg/m3)			
FUNNEL VISCOSITY			
FLUID LOSS (cm3)			
pH			

MUD MATERIALS ADDED

PRODUCT	AMOUNT	UNIT

SOLIDS CONTROL

CENTRIFUGE

HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY
HOURS RUN	INTAKE DENSITY (kg/m3)	OVER FLOW DENSITY	UNDER FLOW DENSITY

BOILERS

1		2	
HRS RUN	0	HRS RUN	
BOILER pH		BOILER pH	
STACK TEMP		STACK TEMP	

CIRCULATION PRESSURE kPa	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM
	152		152	

REDUCED PUMP SPEED

	@		@	

DEVIATION SURVEYS

DEPTH (m)	DEVIATION	DIRECTION

DRILLER SIGNATURE

METRES DRILLED

FROM	TO	D-R-C	RPM	WOB

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATIONS IN SEQUENCE & REMARKS

NOTES :

SPECIAL EVENT				SAFETY TOPIC	MEHL	MACP
TIME / DEPTH						

DRILLING CREW PAYROLL DATA

WELL NAME & NO.	YEAR	MONTH	DAY	TOUR SHEET SERIAL NO.
PARA ET AL CAMERON E-72	2007	3	5	PREC220_20070305_1B

OPERATOR	CONTRACTOR	RIG NO.
PARAMOUNT RESOURCES LTD.	PRECISION DRILLING, DIV OF PDC	220

RIG MANAGER	PROVINCE	CAMP	RIG SAFETY DAYS
DAVE CROWLEY	N.W.T.	X YES ☐ NO	1620

SURFACE LOCATION	CONTRATOR'S JOB NUM	OPERATOR'S AFE
E-72-60 DEG-10-117 DEG-15	79	

MORNING TOUR — FROM 0 TO 800

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		DAVE D CROWLEY	12.00			DC
DERRICKHAND		DANNY S CROWLEY	12.00			DC
MOTORHAND		COREY ANDERSON	12.00			CA
FLOORHAND		KEVIN DRINKWATER	12.00			KD
FLOORHAND		BRECK PICHE	12.00			BP

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	DAVE D CROWLEY

DAY TOUR — FROM 800 TO 2000

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO
DRILLER		JACK HUSTON	12.00			JH
DERRICKHAND		KARL GEREIN	12.00			KG
MOTORHAND		IAN ROSS	12.00			IR
FLOORHAND		WILL WINTER	12.00			WW
FLOORHAND		BENGIE SWEET	12.00			BS
RIG MANAGER		DAVE CROWLEY				DC

RATE SCHEDULE	X	REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS
	JACK HUSTON

EVENING TOUR — FROM 2000 TO 2400

CREW	SOC INS. NO.	NAME	HRS		INJURIES YES	INJURIES NO

RATE SCHEDULE		REGULAR		REPAIR		INVERT

CREW SAFETY DAYS	DRIVERS