

074619

DAILY CHECKS	QPR	R.M.
(1) Daily Walk Around Inspection	Initial	Initial
(2) Detailed Inspection-Weekly (using checklist)	Initial	Initial
(3) H/S Sign Posted (if required)	Initial	Initial
(4) Wet License & Stick Diagram Posted	Initial	Initial
(5) Flame Lines Staked	Initial	Initial
(6) BOP Drills Performed	Initial	Initial
(7) Visually Inspect BOP's - Flowlines & Degasser Lines	Initial	Initial
(1) Rig Site Health and Safety Meeting (once/month)	Initial	Initial
(2) C.A.O.D.C. Rig Safety Inspection Checklist (once/month)	Initial	Initial
(3) Mast Inspection Before Raising or Lowering	Initial	Initial
(4) Cranes Safety Checked	Initial	Initial
(5) Motor Kills checked	Initial	Initial

YEAR	MONTH	DAY	LAST	O.D. (mm)	MIN. I.D. (mm)	kg/m	MAKE	GRADE	NO. OF JOINTS	TOTAL(m) LENGTH	KB. TO CSG HEAD (m)	SET AT (m)	
79	01	22	CASING	177.6	161.6	34.2	Ipsco	L-80	142	1889.95	5.50	1889.	
FUEL @ 8:00													
RIG NO.	379		TUBING OR LINER										
RIG	50												
BOILER													
WEATHER	TEMPERATURE - 35 °C			DC/UP SIZE (mm)	LINEAR MASS (kg/m)	GRADE	MIN. ID (mm)	TOOL JOINT O.D. (mm)	TYPE THREAD	NO. OF JOINTS	PUMP TYPE	PUMP MANUFACTURER	STROKE LTH. (mm)
	CURRENT CONDITIONS CLEAR			120	69.6		56	124	3/4" IF	12	P28	GARDNER DENVER	203
	WIND DIRECTION SE			102	20.84	F	6.8	127	3/4" IF	256	D-375	EMISCO.	356
	ROAD 104 - FAIR												

[illegible]

METRES DRILLED		TIME LOG		DETAILS OF OPERATION IN SEQUENCE AND REMARKS						
FROM	TO	DRLG RM R CORE-C	POTARY R.P.M.	WT ON BIT (1000 gms)	FROM	TO	ELAP TIME	CODE NO		
					08:00	10:00	2	1	TEAR OUT	
					10:00	10:30	1/2	23	CUT OFF CASING	
					10:30	11:30	1	22	INSTALL WELLHEAD	
					11:30	16:00	4 1/2	1	TEAR OUT	
CIRCULATION PRESSURE (kPa)		PUMP NO. 1		PUMP NO. 2						
		LINER SIZE (mm)	S.P.M.	LINER SIZE (mm)	S.P.M.					
REDUCED PUMP SPEED										
	@		@							
DEVIATION SURVEY										
DEPTH (m)	DEVIATION (°)	DIRECTION								
NOTES					RIG RELEASED @ 1630					
					150L FUEL INTO LOADER					
DRILLER SIGNATURE					BOILER		MAXIMUM EXPERIENCED HOOKLOAD		SAFETY TOPIC	
HRS. RUN					ph		STACK TEMP.		M.A.C.P.	
Eric Valenz					8		11 370		COMMUNICATION	

METRES DRILLED						TIME LOG				DETAILS OF OPERATION IN SEQUENCE AND REMARKS			
FROM	TO	O.R.D. R.M.R. CODE-C	POTARY R.P.M.	WT. ON BIT (1000 rev)		FROM	TO	ELAP TIME	CODE NO				
						16:00				CLEAN MUD TANKS.			
										RIG TO & VISUALLY CHECK DERRICK			
										PRIOR TO LOWERING DERRICK & LOWER			
										DERRICK.			
						24:00	8	1		LEAK OUT RIG.			
REDUCED PUMP SPEED													
	@		@										
DEVIATION SURVEY													
DEPTH (m)	DEVIATION (°)		DIRECTION										
DRILLER SIGNATURE						BOILER							
						HRS.	RAN	ph	STACK TEMP.	MAXIMUM EXPERIENCED HOOKLOAD		SAFETY TOPIC	
[Signature]						8	10:3	570				M.A.C.P.	

074618

TIME - HRS	CODE NO.																					TOTAL	SHALE SHAKER(S)		RENTALS/SERVICES	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		NO. TYPE		MORN	DAY
	OPER. WIG LIP & TEAR DOWN	DRILL ACTUAL	REAMING	CORING	COND. MUD & DIRT	TRIPS	RIG SERVICE	REPAIR RIG.	CUT OFF DRILL LINE	DEV SURVEY	WIRE LINE LOGS	REN. CASE & CEMENT	WAIT ON CEMENT	MAKE UP B.O.P.	TEST B.O.P.	DRILL STEM TEST	PLUG BACK	SQUEEZE CEMENT	FISHING	GR. WORK	SAFETY MTG.		8	3		
MORN					3 1/2	7	1/4															8	SCREENS CHANGED	☐ YES ☒ NO		
DAY					2 1/2	2 1/2					1/2	2 3/4										8	TOP	140	TOP	140
EVE					1/2	5 1/4					1/2			1 3/4								8	MIDDLE	1	MIDDLE	1
TOTAL					3 1/2	14 1/2	1/4				1	2 3/4		1 3/4								24	BOTTOM	140	BOTTOM	140

DRILLING ASSEMBLY (At End of Tour)				BIT RECORD										MUD RECORD				METRES DRILLED					TIME LOG				DETAILS OF OPERATION IN SEQUENCE AND REMARKS								
NO	BIT	O.D. mm	LENGTH	BIT NO.											MUD TYPE		☐ WATER BASED		☒ OIL BASED		FROM	TO	D.R.D. R.M.P. CORE-C	ROTARY R.P.M.	WT. ON BIT (1000 daN)	FROM	TO	ELAP. TIME	CODE NO						
				SIZE (mm)											TIME																				
				ADC CODE										DENSITY kg/m ³																					
				MFG.											FUNNEL VIS. - (S/L)																				
				TYPE											W.L. (cm ³)																				
				SERIAL NO.											pH																				
				JETS (mm)																															
				DEPTH OUT (m)											MUD MATERIALS ADDED		SOLIDS CONTROL																		
				DEPTH IN (m)											PRODUCT	AMOUNT X UNIT	DESILTER																		
				TOTAL METRES DRILLED (m)											INVENTORY ADJUSTMENT		HOURS RUN	INTAKE DENSITY (kg/m ³)	OVERFLOW DENSITY (kg/m ³)	UNDERFLOW DENSITY (kg/m ³)															
				TOTAL HOURS RUN													CENTRIFUGE																		
	D.P.	STANDS	1813.96	CUTTING STRUCTURE	T ₁	T ₂	MOD	LOC	B	Gage	OOC	Reason Pulled	Total Run m/hr.	BARITE	175x	HOURS RUN	INTAKE DENSITY (kg/m ³)	OVERFLOW DENSITY (kg/m ³)	UNDERFLOW DENSITY (kg/m ³)																
	D.P.	SINGLES												SAW DUST	255x																				
	KELLY DOWN			HOLE CONDITION										SHRINKAGE		2																			
	TOTAL			HOLE DRAG										FLOOR DRAG		105x																			
WT. OF DC	1000 daN			TORQUE AT BOTTOM													HOURS RUN	INTAKE DENSITY (kg/m ³)	OVERFLOW DENSITY (kg/m ³)	UNDERFLOW DENSITY (kg/m ³)															
WT. OF STRING	3000 daN			FILL ON BOTTOM (m)										INVERT																					

DAY TOUR

FROM	TO	D.R.D. R.M.P. CORE-C	ROTARY R.P.M.	WT. ON BIT (1000 daN)	FROM	TO	ELAP. TIME	CODE NO		
					08:00	09:00	1	6	RUN IN OPEN ENDED	
					09:00	09:30	1/2	5	CIRCULATE	
CIRCULATION PRESSURE (kPa)	PUMP NO. 1 LINER SIZE (mm)	S.P.M.	PUMP NO. 2 LINER SIZE (mm)	S.P.M.	09:30	11:00	1 1/2	5	DISPLACE HOLE TO H ₂ O	
					11:00	13:00	2	12	RIG TO CEMENT + CEMENT PLUG #1	
					13:00	13:30	1/2	6	LAY DOWN 21 SINGLES	
					13:30	14:00	1/2	5	REVERSE CIRCULATE FUNCTION ANN 20/18	
					14:00	14:45	3/4	12	CEMENT PLUG #2	
REDUCED PUMP SPEED					14:45	15:30	3/4	6	LAY DOWN 26 SINGLES	
@					15:30	16:00	1/2	11		

DRILLING ASSEMBLY (At End of Tour)			BIT RECORD			MUD RECORD			METRES DRILLED					TIME LOG			DETAILS OF OPERATION IN SEQUENCE AND REMARKS		
NO.	BIT	G.D. (mm)	LENGTH	BIT NO.	MUD TYPE ☐ WATER BASED ☒ OIL BASED			FROM	TO	DRD R.M.S. CORE-C	ROTARY R.P.M.	WT. ON BIT (1000 daN)	FROM	TO	ELAP. TIME	CODE NO.			
				SIZE (mm)				TIME					16:00	16:30	Y ₂	11	FEEL PLUG & RIG OUT WIRE LINE		
				IADC CODE				DENSITY kg/m ³					16:30	17:00	Y ₂	5	REVERSE CIRC DRILL PIPE		
				MFG.				FUNNEL VIS. - (SL)					17:00	22:15	SK	6	LAY DOWN DRILL PIPE		
				TYPE				W.L. (cm ³)					22:15	24:00	17	14	Clean Mud Tanks, Wash Up Night Drilling Rotating Control Equip.		
				SERIAL NO.				pH											
				JETS (mm)															
				DEPTH OUT (m)				MUD MATERIALS ADDED		SOLIDS CONTROL									
				DEPTH IN (m)				PRODUCT	AMOUNT X UNIT	DESILTER									
				TOTAL METRES DRILLED (m)						HOURS RUN	INTAKE DENSITY (kg/m ³)	OVERFLOW DENSITY (kg/m ³)	UNDERFLOW DENSITY (kg/m ³)						
				TOTAL HOURS RUN															
	D.P.	STANDS		CUTTING STRUCTURE				CENTRIFUGE											
	D.P.	SINGLES		T ₁	T ₂	MOC	LOC	B	Gage	ODC	Reason Pulled	Total Run m/hr.							
										HOURS RUN	INTAKE DENSITY (kg/m ³)	OVERFLOW DENSITY (kg/m ³)	UNDERFLOW DENSITY (kg/m ³)						
	KELLY DOWN			HOLE CONDITION															
	TOTAL			HOLE DRAG															
WT. OF DC			1000 daN	TORQUE AT BOTTOM						HOURS RUN	INTAKE DENSITY (kg/m ³)	OVERFLOW DENSITY (kg/m ³)	UNDERFLOW DENSITY (kg/m ³)						
WT. OF STRING			1000 daN	FILL ON BOTTOM (m)															
										DRILLER SIGNATURE			BOILER HRS. RAN		ph	STACK TEMP.	MAXIMUM EXPERIENCED HOOKLOAD	SAFETY TOPIC	M.A.C.P.
										K. L. S. H.			8		105	370		LAYING DOWN D.P.	

074617

EVENING TOUR

074616

074616

LICENCE NO.: 1832 WELL NAME AND NO.: PARAMOUNT ETAL ACTUA M-23-60°-50°123°-00"

OPERATOR: PARAMOUNT RESOURCES LTD. CONTRACTOR: PRECISION DRILLING

SURFACE LOCATION: M-23-60°-50°123°-00" UNIQUE ID:

SIGNATURE OF OPERATOR'S REPRESENTATIVE: SIGNATURE OF CONTRACTOR'S RIG MANAGER:

DAILY CHECKS

(1) Daily Walk Around Inspection
(2) Detailed Inspection Weekly (using checklist)
(3) H/S Signs Posted (if required)
(4) Well License & Stock Diagram Posted
(5) Flare Lines Staked
(6) BOP Drills Performed
(7) Visually Inspected BOP's - Flarelines & Degasser Lines

(1) Rig Site Health and Safety Meeting (once/crow/month)
(2) C.A.D.D.C. Rig Safety Inspection Checklist (once/month)
(3) Meet Inspection Before Raising or Lowering
(4) Crown Saver Checked
(5) Motor Kils checked

YEAR: 2017 MONTH: 01 DAY: 17

RIG NO: 377

FUEL @ 8:00

RIG: 99. BOILER: 168

W E A T H E R

TEMPERATURE °C
CURRENT CONDITIONS
WIND DIRECTION
ROAD

LAST O.D. (mm) 177.6 MIN. I.D. (mm) 161.6 kg/m 34.2 Tps 1.80 142 188895 5.50 1889.

GRADE NO. OF JOINTS TOTAL(m) LENGTH KB TO CSG HEAD (m) SET AT (m)

DC/DP SIZE (mm) 120 LINEAR MASS (kg/m) 68.6 GRADE 56 MIN. ID (mm) 124 TOOL JT O.D. (mm) 127 TYPE 3/4" 12 PUMP TYPE P28 PUMP MANUFACTURER GARDNER DENVER 200 STROKE LTH (mm) 354

NO. OF JOINTS 12 PUMP TYPE P28 PUMP MANUFACTURER GARDNER DENVER 200 STROKE LTH (mm) 354

SHALE SHAKER(S) RENTALS/SERVICES

NO. TYPE 2 Swaco

SCREENS CHANGED YES NO

TOP 140 TOP 140

MIDDLE 1 MIDDLE 1

BOTTOM 140 BOTTOM 140

DRILLING ASSEMBLY (At End of Tour) LENGTH

BIT NO. BIT O.D. (mm)

BIT RECORD

BIT NO. SIZE (mm) IADC CODE MFG. TYPE SERIAL NO. JETS (mm) DEPTH OUT (m) DEPTH IN (m) TOTAL METRES DRILLED (m) TOTAL HOURS RUN

CUTTING STRUCTURE T₁ T₂ MDC LOC B Gage ODC Reason Pulled Total Run m/hr.

D.P. STANDS D.P. SINGLES

KELLY DOWN

TOTAL

WT. OF DC 1000 S&H TORQUE AT BOTTOM

WT. OF STRING 1000 S&H FILL ON BOTTOM (m)

MUD RECORD

MUD TYPE WATER BASED OIL BASED

TIME DENSITY kg/m³ FUNNEL VIS. (S/L) W.L. (cm³) pH

MUD MATERIALS ADDED SOLIDS CONTROL

PRODUCT AMOUNT X UNIT DESILTER

HOURS RUN INTAKE DENSITY (kg/m³) OVERFLOW DENSITY (kg/m³) UNDERFLOW DENSITY (kg/m³)

CENTRIFUGE

HOURS RUN INTAKE DENSITY (kg/m³) OVERFLOW DENSITY (kg/m³) UNDERFLOW DENSITY (kg/m³)

DEVIATION SURVEY

DEPTH (m) DEVIATION (°) DIRECTION

DRILLER SIGNATURE

BOILER HRS. RAN ph STACK TEMP. MAXIMUM EXPERIENCED HOOKLOAD SAFETY TOPIC M.A.C.P.

8 10.5 370 38000 lbs. P28 B.T. 15748

METRES DRILLED

FROM TO DRD RMR CORE-C ROTARY R.P.M. WT. ON BIT (1000 gals)

2280

CIRCULATION PRESSURE (kPa) PUMP NO. 1 PUMP NO. 2

LINEAR SIZE (mm) S.P.M. LINEAR SIZE (mm) S.P.M.

114 140

REDUCED PUMP SPEED

DEPTH (m) DEVIATION (°) DIRECTION

NOTES

220 Liters of Fuel To Rental Equipment, CHECK B.O.P. NUTS & STUDS.

DRILLER SIGNATURE

BOILER HRS. RAN ph STACK TEMP. MAXIMUM EXPERIENCED HOOKLOAD SAFETY TOPIC M.A.C.P.

8 10.5 370 38000 lbs. P28 B.T. 15748

METRES DRILLED

FROM TO DRD RMR CORE-C ROTARY R.P.M. WT. ON BIT (1000 gals)

2280 (7m)

CIRCULATION PRESSURE (kPa) PUMP NO. 1 PUMP NO. 2

LINEAR SIZE (mm) S.P.M. LINEAR SIZE (mm) S.P.M.

114 140

REDUCED PUMP SPEED

DEPTH (m) DEVIATION (°) DIRECTION

NOTES

FUNCTIONED BLEND RAMS C/S

DRILLER SIGNATURE

BOILER HRS. RAN ph STACK TEMP. MAXIMUM EXPERIENCED HOOKLOAD SAFETY TOPIC M.A.C.P.

8 10.5 370 37000 SUSPENDED LOADS 15748

METRES DRILLED

FROM TO DRD RMR CORE-C ROTARY R.P.M. WT. ON BIT (1000 gals)

2280

CIRCULATION PRESSURE (kPa) PUMP NO. 1 PUMP NO. 2

LINEAR SIZE (mm) S.P.M. LINEAR SIZE (mm) S.P.M.

114

REDUCED PUMP SPEED

DEPTH (m) DEVIATION (°) DIRECTION

NOTES

2 G RUN IN D.S.T. #3

6 G HEAD UP & BEGIN D.S.T. #3

DRILLER SIGNATURE

BOILER HRS. RAN ph STACK TEMP. MAXIMUM EXPERIENCED HOOKLOAD SAFETY TOPIC M.A.C.P.

8 10.5 370 42000

10 1000

074613

[illegible][illegible]

DRILLING ASSEMBLY (At End of Tour)				BIT RECORD										MUD RECORD				METRES DRILLED					TIME LOG				DETAILS OF OPERATION IN SEQUENCE AND REMARKS											
NO.	BIT	O.D. mm	LENGTH	BIT NO.											MUD TYPE		☐ WATER BASED		☒ OIL BASED		FROM	TO	DR-D RMR CORE-C	ROTARY R.P.M.	WT. ON BIT (1000 g/m)	FROM	TO	ELAP TIME	CODE NO.									
112	DC	120	113.62	SIZE (mm)											TIME							16:00					4	11	WORKING AND WAITING ON LOGGING									
				IADC CODE											DENSITY kg/m ³																TOOLS							
				MFG.											FUNNEL VIS. - (S/L)							20:00	20:00					4	11	Rig To + Log w/ Barry Hughes								
				TYPE											W.L. (cm ³)																							
				SERIAL NO.											pH																							
				JETS (mm)																																		
				DEPTH OUT (m)											MUD MATERIALS ADDED				SOLIDS CONTROL																			
				DEPTH IN (m)											PRODUCT	AMOUNT X UNIT		DESILTER																				
				TOTAL METRES DRILLED (m)											HOURS RUN	INTAKE DENSITY (kg/m ³)	OVERFLOW DENSITY (kg/m ³)	UNDERFLOW DENSITY (kg/m ³)																				
				TOTAL HOURS RUN															CENTRIFUGE																			
	D.P.	STANDS	2145.62	CUTTING STRUCTURE				B	Gage	ODC	Reason Pulled	Total Run m/hr.					HOURS RUN	INTAKE DENSITY (kg/m ³)	OVERFLOW DENSITY (kg/m ³)	UNDERFLOW DENSITY (kg/m ³)																		
	D.P.	SINGLES		T ₁	T ₂	MDC	LOC.																															
	KELLY DOWN			HOLE CONDITION																																		
	TOTAL			HOLE DRAG																																		
WT. OF DC	10			TORQUE AT BOTTOM																																		
WT. OF STRING				FILL ON BOTTOM (m)																																		
																			DRILLER SIGNATURE				BOILER				MAXIMUM EXPERIENCED HOOKLOAD				SAFETY TOPIC				M.A.C.P.			
																			8/18				8/16/370								15748							

074609

[illegible]

NO.				DRILLING ASSEMBLY (At End of Tour)		LENGTH		BIT RECORD				MUD RECORD				METRES DRILLED				TIME LOG				DETAILS OF OPERATION IN SEQUENCE AND REMARKS			
NO.		BIT		O.D. mm		.20		BIT NO.		3 B.		MUD-TYPE		☐ WATER BASED		☒ OIL BASED		FROM		TO		ELAP. TIME		CODE NO.			
1		BIT		O.D. mm		.20		BIT NO.		3 B.		MUD-TYPE		☐ WATER BASED		☒ OIL BASED		FROM		TO		ELAP. TIME		CODE NO.			
1		ATC SUB		120		.92		SIZE (mm)		155.6		TIME		18:00		21:00		24:00		2218		2231		13		60	
12		DC 3		120		113.62		IADC CODE		537X		DENSITY kg/m ³		1020		1020		1020		20:45		20:45		44		2	
		BAA		116.64				MFG		STC.		FUNNEL VIS. (S/L)		49		47		46		21:00		24:00		3		2	
								TYPE		F-3		W.L. (cm ²)															
								SERIAL NO.		1T-1922		pH															
								JETS (mm)		3/127																	
								DEPTH OUT (m)				MUD MATERIALS ADDED				SOLIDS CONTROL											
								DEPTH IN (m)		2189		PRODUCT		AMOUNT X UNIT		DESILTER											
								TOTAL METRES DRILLED (m)		42		HOURS RUN		INTAKE DENSITY (kg/m ³)		OVERFLOW DENSITY (kg/m ³)		UNDERFLOW DENSITY (kg/m ³)									
								TOTAL HOURS RUN		27 1/2		CENTRIFUGE															
110		D.P.		STANDS		2106.62		CUTTING STRUCTURE		T ₁ T ₂ MDC LOC B Gage ODC Reason Pulled Total Run m/hr.		HOURS RUN		INTAKE DENSITY (kg/m ³)		OVERFLOW DENSITY (kg/m ³)		UNDERFLOW DENSITY (kg/m ³)									
		D.P.		SINGLES								HOURS RUN		INTAKE DENSITY (kg/m ³)		OVERFLOW DENSITY (kg/m ³)		UNDERFLOW DENSITY (kg/m ³)									
		KELLY DOWN		8.74				HOLE CONDITION																			
		TOTAL		2231.00				HOLE DRAG		1-2																	
WT. OF DC		10		1000 gN				TORQUE AT BOTTOM		20-65		HOURS RUN		INTAKE DENSITY (kg/m ³)		OVERFLOW DENSITY (kg/m ³)		UNDERFLOW DENSITY (kg/m ³)									
WT. OF STRING		49		1000 gN				FILL ON BOTTOM (m)																			

074607

DAILY CHECKS	OPR.	R.M.
(1) Daily Walk Around Inspection	initial	initial
(2) Detailed Inspection-Weekly (using checklist)	initial	initial
(3) H/S Sign Posted (if required)	initial	initial
(4) Walk Line and Stick Diagram Posted	initial	initial
(5) Flare Lines Staked	initial	initial
(6) BOP Drills Performed	initial	initial
(7) Visually inspect BOP's - Flarelines & Degasser Lines	initial	initial
(1) Rig Site Health and Safety Meeting (one/crew/month)		initial
(2) C.A.O.D.C. Rig Safety Inspection Checklist (one/lig/month)		initial
(3) Mast Inspection Before Raising or Lowering		initial
(4) Crown Sevier Checked		initial
(5) Motor Kills checked		initial

[illegible]

DRILLING ASSEMBLY (At End of Tour)					BIT RECORD					MUD RECORD					METRES DRILLED					TIME LOG				DETAILS OF OPERATION IN SEQUENCE AND REMARKS																													
NO.	BIT		O.D. mm	LENGTH	BIT NO.					MUD TYPE	☐ WATER BASED			☒ OIL BASED		FROM	TO	D.R.S. T.M.F.T. CORE-C	R.P.M.	WT. ON BIT (1000's lbs)	FROM	TO	ELAP. TIME	CODE NO.																													
1	BIT SUB		120	.20 m	SIZE (mm)	2 B				TIME	02:00			04:00		06:00		2149	2157	8	70	7	00:00	07:45	7 1/2	DRILL F-2149m - 2157m																											
12	D.C.		120	113.62 m	IADC CODE	5 3 7 X				DENSITY kg/m³	1060			1060		1060							07:45	08:00	1/4	7	RIG SERVICE																										
	BHA HLBH		116.64	m	MFG.	VAREL				FUNNEL VIS. s (S/L)	44			44		45																																					
				m	TYPE	ETD 537				W.L. (cm³)																																											
				m	SERIAL NO.	136380				pH																																											
				m	JETS (mm)	3/12.7																																															
				m	DEPTH OUT (m)					MUD MATERIALS ADDED				SOLIDS CONTROL																																							
				m	DEPTH IN (m)	2083				PRODUCT	AMOUNT X UNIT			DESILTER																																							
				m	TOTAL METRES DRILLED (m)	2083.74				INVENTORY ADJUST				HOURS RUN	INTAKE DENSITY (g/cm³)	OVERFLOW DENSITY (g/cm³)	UNDERFLOW DENSITY (g/cm³)																																				
				m	TOTAL HOURS RUN	48 1/4																																															
106	D.P.	STANDS	2028.50	m	CUTTING STRUCTURE				MILBAR 50 SX				CENTRIFUGE																																								
	D.P.	SINGLES		m	T ₁	T ₂	MDC	LOC	B	Gage	ODC	Reason Pulled	Total Run m/hr.	SHRINK WRAP 33				HOURS RUN	INTAKE DENSITY (g/cm³)	OVERFLOW DENSITY (g/cm³)	UNDERFLOW DENSITY (g/cm³)																																
	KELLY DOWN		12.35	m	HOLE CONDITION																																																
	TOTAL		2157.49	m	HOLE DRAG																																																
WT.OF DC			10	1000 daN	TORQUE AT BOTTOM												HOURS RUN	INTAKE DENSITY (g/cm³)	OVERFLOW DENSITY (g/cm³)	UNDERFLOW DENSITY (g/cm³)																																	
WT.OF STRING			40	1000 daN	FILL ON BOTTOM (m)																																																
MORNING TOUR																									REDUCED PUMP SPEED																												
																									DEVIATION SURVEY																												
																									DEPTH (m)				DEVIATION (°)				DIRECTION																				
																									NOTES				180 Liters OF Fuel Added To Rental Pump.																								
																									DRILLER SIGNATURE				BOILER				MAXIMUM EXPERIENCED HOOKLOAD				SAFETY TOPIC				M.A.G.P.												
																									New Barbours				hrs. ran ph STACK TEMP.				48000				welding w/steam				14975												

[illegible][illegible]

074606

TIME - HRS	CODE NO.																										TOTALS	SHALE SHAKER(S)		RENTALS/SERVICES									
	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		NO.	TYPE	MORN.	DAY	EVE							
OPER.	RIG UP & TEST 30 MIN	DRILL ACTUAL	NEARING	CORING	CONC. MUD & CEMENT	TRIPS	RIG SERVICE	REPAIR RIG	OUT OF DRILL LINE	DEV. SURVEY	WIRE LINE LOGS	RUN CASE & CEMENT	WAIT ON CEMENT	PIPELINE UP 8 0.0 P	TEST 8 0.0 P	DRILL STEM TEST	FLUID BACK	SQUEEZE CEMENT	FISHING	DIR. WORK	SAFETY MTG.	BOP Function											2	SWACO					
MORN.		7 3/4					1/4																				8	SCREENS CHANGED	☐ YES ☒ NO										
DAY		7 1/4					1/4			1/2																	8	TOP	140	TOP	140								
EVE		7 3/4																									8	MIDDLE		MIDDLE									
TOTAL		22 3/4					1/2			1/2																	24	BOTTOM	140	BOTTOM	140								

[illegible]

074604

DAILY CHECKS	OPR.	R.M.
(1) Daily Walk Around Inspection	Initial	Initial
(2) Detailed Inspection-Weekly (using checklist)	Initial	Initial
(3) H/S Signs Posted (if required)	Initial	Initial
(4) Well License & Stick Diagram Posted	Initial	Initial
(5) Flame Lines Staked	Initial	Initial
(6) BOP Drills Performed	Initial	Initial
(7) Visually inspect BOP's - Flarelines & Degasser Lines	Initial	Initial
(1) Rig Site Health and Safety Meeting (one/crew/month)	Initial	Initial
(2) C.A.O.D.C. Rig Safety Inspection Checklist (one/ring/month)	Initial	Initial
(3) Mast Inspection Before Raising or Lowering	Initial	Initial
(4) Crown Saver Checked	Initial	Initial
(5) Motor Kicks checked	Initial	Initial

YEAR	MONTH	DAY	LAST	O.D. (mm)	MIN. I.D. (mm)	kg/m	MAKE	GRADE	NO. OF JOINTS	TOTAL(m) LENGTH	KB. TO CSG HEAD (m)	SET AT (m)
99	01	07	CASING	127.6	161.6	34.2	IPSCO	L-80	142	1889.95	5.50	1889
RIG NO.	379		TUBING OR LINER									
FUEL @ 8:00												
RIG	211		SOILER	164								
WEATHER	TEMPERATURE	35 °C	DC/DP SIZE (mm)	LINEAR MASS (kg/m)	GRADE	MIN. ID (mm)	TOOL JT O.D. (mm)	TYPE THREAD	NO. OF JOINTS	PUMP TYPE	PUMP MANUFACTURER	
	CURRENT CONDITIONS	Clear	159	129		58	159 45H 70	22		P-Z 8	GARDNER DENVER 20	
	WIND DIRECTION	CalM	102	20.84	E	68	127 3/4 IF 256			D-375	EMSCO 354	
	ROAD	104- Fair	120	69.6		56	124 3/4 IF 12					

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	SHALE SHAKER(S)		RENTALS/SERVICES						
	OPER.	RIG UP & TEAR DOWN	DRILL ACTUAL	REAMING	CORING	COND. MUD & CIRC.	TRIPS	RIG SERVICE	REPAIR RIG	CUT OFF DRILL LINE	DEV. SURVEY	WIRE LINE LOGS	REN. CASE & CEMENT	WASH ON CEMENT	NIPLER UP B.O.P.	TEST B.O.P.	DRILL STEM TEST	PLUG BACK	SQUEEZE CEMENT	FISHING	DIR. WORK	SAFETY MTG.	WASH TO BOTTOM								NO.	TYPE		MORN	DAY	EVE	
	MORN.				2 1/2		5 1/2	1/4																						8	SWACO	SWACO					
	DAY				2 1/4		3	1/4																2 1/2						8	TOP	140	TOP	140			
	EVE				2 1/2		5 1/2																							8	MIDDLE		MIDDLE				
TOTAL					7		14	1/2															2 1/2					24	BOTTOM	140	BOTTOM	140					

DRILLING ASSEMBLY (At End of Tour)				BIT RECORD										MUD RECORD													
NO.	BIT	O.D. mm	LENGTH	BIT NO.						MUD TYPE					☐ WATER BASED		☒ OIL BASED										
1	CORE BARREL	121	11.12	SIZE (mm)	156					TIME																	
1	JARS	121	2.06	ADC CODE						DENSITY kg/m ³																	
1	FLOAT SHO	118	.73	MFG.	H.C.C					FUNNEL VIS. - (StL)																	
12	B.C.	120	113.62	TYPE	ARC 325					W.L. (cm ³)																	
				SERIAL NO.	1900248					pH																	
	BHA		12.786	JETS (mm)	TFA. 56																						
				DEPTH OUT (m)						MUD MATERIALS ADDED					SOLIDS CONTROL												
				DEPTH IN (m)	20.80					PRODUCT					AMOUNT X UNIT		DESILTER										
				TOTAL METRES DRILLED (m)													HOURS RUN		INTAKE DENSITY (kg/m.)		OVERFLOW DENSITY (kg/m.)		UNDERFLOW DENSITY (kg/m.)				
				TOTAL HOURS RUN																							
20	D.P.	STANDS	368.94	CUTTING STRUCTURE														CENTRIFUGE									
				T ₁	T ₂	T ₃	MDC	LOC	B.	Gage	ODC	Reason Pulled	Total Run m/hr.					HOURS RUN				INTAKE DENSITY (kg/m.)		OVERFLOW DENSITY (kg/m.)		UNDERFLOW DENSITY (kg/m.)	
	D.P.	SINGLES																									
	KELLY DOWN			HOLE CONDITION																							
	TOTAL			HOLE DRAG																							
WT.OFDC	10			TORQUE AT BOTTOM														HOURS RUN				INTAKE DENSITY (kg/m.)		OVERFLOW DENSITY (kg/m.)		UNDERFLOW DENSITY (kg/m.)	
WT.OF STRING	22			FILL ON BOTTOM (m)																							

METRES DRILLED					TIME LOG				DETAILS OF OPERATION IN SEQUENCE AND REMARKS			
FROM	TO	D.R.D. R.M.R CORE C.	ROTARY R.P.M.	WT. ON BIT (T.O.B.S.)	FROM	TO	ELAP. TIME	CODE NO.				
2080					00:00	02:30	2 1/2	G	P.O.O.H FOR CORE POINT FLOW VS			
					02:30	02:45	1/4	7	RIG SERVICE FCT. BLIND RAMS 5/5			
CIRCULATION PRESSURE (kPa)	PUMP NO. 1	S.P.M.	LINER SIZE (mm)	S.P.M.	02:45	05:00	2 1/2	Y	PICK UP + MAKE UP CORING TOOLS			
	114		140		05:00	08:00	3	G	RUN IN HOLE WITH CORE BARREL			
REDUCED PUMP SPEED												
@			@									
DEVIATION SURVEY												
DEPTH (m)	DEVIAION (°)			DIRECTION								
NOTES					HOLE FILLS CALC G. 15 m ³ ACT. 7.38 m ³ DIFF + 1.23 m ³							
					STRAP 2074.12 TALLY 2073.89m DIFF + 0.23m							
DRILLER SIGNATURE					BOILER		MAXIMUM EXPERIENCED HOOKLOAD		SAFETY TOPIC		M.A.C.P.	
Eric Holmes					HRS. RAN	ph	STACK TEMP.	24 000		HAND SIGNALS		15 361

DRILLING ASSEMBLY (At End of Tour)				LENGTH	BIT RECORD										MUD RECORD							
NO.	BIT		O.D. mm		BIT NO.						MUD TYPE					☐ WATER BASED		☒ OIL BASED				
1	CORE BBL	121	11.12	m	SIZE (mm)	156					TIME					1200						
1	JARS	121	2.06	m	IADC CODE						DENSITY kg/m ³					1050						
1	FOOT SUB	118	.73	m	MFG	H.C.C.					FUNNEL VIS. - (S/L)					52						
12	D.C.S	120	113.62	m	TYPE	ARC 325					W.L. (cm ³)											
	BHA		127.86	m	SERIAL NO.	1910218					pH											
				m	JETS (mm)	TFA.56																
				m	DEPTH OUT (m)						MUD MATERIALS ADDED					SOLIDS CONTROL						
				m	DEPTH IN (m)	2080					PRODUCT					AMOUNT X UNIT						
				m	TOTAL METRES DRILLED (m)	3.2					BARYTE					20 SXS						
				m	TOTAL HOURS RUN	2 1/4					LIME					10 SXS						
102	D.P.	STANDS	1950.51	m	CUTTING STRUCTURE					B	Gage	ODC	Reason Pulled	Total Run m/hr	CARBO-TEC 2 BBLs							
	D.P.	SINGLES		m	T ₁	T ₂	MDC	LOC							CENTRIFUGE							
	KELLY DOWN		4.93	m	HOLE CONDITION										HOURS RUN					INTAKE DENSITY (g/cm ³)	OVERFLOW DENSITY (g/cm ³)	UNDERFLOW DENSITY (g/cm ³)
	TOTAL		2083.20	m	HOLE DRAG																	
WT. OF DC			10	1000 lb/in	TORQUE AT BOTTOM										HOURS RUN					INTAKE DENSITY (g/cm ³)	OVERFLOW DENSITY (g/cm ³)	UNDERFLOW DENSITY (g/cm ³)
WT. OF STRING			46	1000 lb/in	FILL ON BOTTOM (in)																	

METRES DRILLED						TIME LOG				DETAILS OF OPERATION IN SEQUENCE AND REMARKS			
FROM	TO	DR-D BMT (CORE)	R.P.M.	WT. ON BIT (1000 daN)	FROM	TO	ELAP TIME	CODE NO					
2080	2083	3		3	0800	10:00	2	6	RUN IN w/CORE BBL. w/FLOW v @ 1090 F200				
					10:00	10:15	1/4	7	RIG SERVICE				
					10:15	13:45	2 1/2	22	CLEAN To BOTTOM w/CORE BBL.				
					12:45	15:00	2 1/4	4	DROP BAIL ECUT CORE #1				
					15:00	16:00	1	6	CIRC. DOWN PILL & HOIST CORE #1 w/FLOW v @				
CIRCULATION PRESSURE (kPa)						PUMP NO. 1		PUMP NO. 2		2078, 1980 1030, 210 M.			
						LINER SIZE (mm)	S.P.M.	LINER SIZE (mm)	S.P.M.				
5600	114	120	140										
REDUCED PUMP SPEED													
2600	@	78	@										
DEVIATION SURVEY													
DEPTH (m)		DEVIATION (°)		DIRECTION									
NOTES						RENTAL EQUIPMENT 240L DIESEL							
DRILLER SIGNATURE						BOILER		MAXIMUM EXPERIENCED HOOKLOAD		SAFETY TOPIC		M.A.C.P.	
HRS. RAN						ph. STACK TEMP.							
8						105 370						15 168	

DRILLING ASSEMBLY (At End of Tour)				BIT RECORD				MUD RECORD			
NO.	LENGTH		BIT NO.		MUD TYPE		☐ WATER BASED		☒ OIL BASED		
1	BIT	O.D. (mm)	20	m	1C	2B R R	TIME				
1	BIT	120	.92	m	156	155.6	DENSITY: kg/m ³				
12	B.C's	120	113.62	m		53 7 1 X	FUNNEL VIS. - (S/L)				
	BHA		116.64	m	H.C.C	YAREL	W.L. (cm ³)				
				m	TYPE	ARC 325 ETD 537	pH				
				m	SERIAL NO.	1900 248 136 380					
				m	JETS (mm)	TFA. 56 38 12.7					
				m	DEPTH OUT (m)	2083	MUD MATERIALS ADDED	SOLIDS CONTROL			
				m	DEPTH IN (m)	2080	PRODUCT	AMOUNT X UNIT	DESILTER		
				m	TOTAL METRES DRILLED (m)	3			HOURS RUN	INTAKE DENSITY (g/cm ³)	
				m	TOTAL HOURS RUN	2 1/4			OVERFLOW DENSITY (g/cm ³)	UNDERFLOW DENSITY (g/cm ³)	
24	D.P.	STANDS	454.03	m	CUTTING STRUCTURE						
	D.P.	SINGLES		m	T ₁	T ₂	MDC	LOC	B	Gage	
				m					ODC	Reason Pulled	
				m					Total Run m/hr.		
	KELLY DOWN			m	HOLE CONDITION						
	TOTAL		5706.7	m	HOLE DRAG						
WT. OF DC			10	1000 daN	TORQUE AT BOTTOM						
WT. OF STRING			24	1000 daN	FILL ON BOTTOM (m)						
									HOURS RUN	INTAKE DENSITY (g/cm ³)	
									OVERFLOW DENSITY (g/cm ³)	UNDERFLOW DENSITY (g/cm ³)	

METRES DRILLED						TIME LOG				DETAILS OF OPERATION IN SEQUENCE AND REMARKS			
FROM	TO	O.R.D. R.M.P. CORE-C	ROTARY F.L.P.M.	WT. ON BIT (1000-GR)		FROM	TO	ELAP. TIME	CODE NO.				
2083						19:00	20:00	4	G	P.O.O.H WITH CORE #1 FLOW OUT OF			
						20:00	22:38	2h	4	RECOVER CORE #1, LAY OUT CORE TOOL			
						22:30	24:00	1h	G	RUN IN WITH BIT #2B			
CIRCULATION PRESSURE (kPa)	PUMP NO. 1	PUMP NO. 2											
	LINER SIZE (mm)	S.P.M.	LINER SIZE (mm)	S.P.M.									
	114		140										
REDUCED PUMP SPEED													
	@		@										
DEVIATION SURVEY													
DEPTH (m)	DEVIATION (°)	DIRECTION											
NOTES						FUNCTIONED BLIND RAMS WHILE OUT OF HOLE 5/5							
						HOLE FILL CALC. 6.12m³ ACT. 6.38m³ DIFF +0.26m³							
DRILLER SIGNATURE						BOILER		MAXIMUM EXPERIENCED HOOKLOAD		SAFETY TOPIC		M.A.C.P.	
Eric J. Alay						HRS. RAN	ph	STACK TEMP.					
						8	105	370	24000	COLD WEATHER	15	168	

074602

[illegible]

074601

DAILY CHECKS	OPR.	R.M.
(1) Daily Walk Around Inspection	Initial	Initial
(2) Detailed Inspection Weekly (using checklist)	Initial	Initial
(3) HPS Signs Posted (if required)	Initial	Initial
(4) Wall License & Stick Diagram Posted	Initial	Initial
(5) Flare Lines Etablish	Initial	Initial
(6) BOP Drills Performed	Initial	Initial
(7) Visually Inspect BOP's - Flarelines & Degasser Lines	Initial	Initial
(1) Rig Site Health and Safety Meeting (one/week/month)		Initial
(2) C.A.O.D.C. Rig Safety Inspection Checklist (one/night/month)		Initial
(3) Meet Inspection Before Raising or Lowering		Initial
(4) Crown Saver Checked		Initial
(5) Motor Kills checked		Initial

METRES DRILLED					TIME LOG				DETAILS OF OPERATION IN SEQUENCE AND REMARKS				
FROM	TO	D.H.B. P.M.T. CORE-C	ROTARY R.P.M.	WT. ON BIT (1000MM)	FROM	TO	ELAP TIME	CODE NO.					
2001	2021	19	60	6	00:00	00:45	3/4	22	DISPLACE HOLE				
					00:45	03:30	2 1/4	2	DRILL + 2002m → 2012m				
					03:30	03:45	3/4	7	RIG SERVICE				
					03:45	08:00	4 1/4	2	DRILL + 2012m → 2021m				
CIRCULATION PRESSURE (kPa)					PUMP NO. 1		PUMP NO. 2						
					LINER SIZE (mm)	S.P.M.	LINER SIZE (mm)	S.P.M.					
4200	114	59	140										
REDUCED PUMP SPEED													
@													
DEVIATION SURVEY													
DEPTH (m)		DEVIATION (°)		DIRECTION									
NOTES					CHECKED CROWN SAVER, AND BRAKE LINKAGE, GREASED BLOCKS								
DRILLER SIGNATURE					BOILER		MAXIMUM EXPERIENCED HOOKLOAD		SAFETY TOPIC		M.A.C.P.		
					HRS. RAN	ph	STACK TEMP.						
Eric Holmes					8	11	360	51 000		ROTARY TABLE			

METRES DRILLED					TIME LOG				DETAILS OF OPERATION IN SEQUENCE AND REMARKS				
FROM	TO	DRD P.M. CORE-C	ROTARY R.P.M.	WT. ON BIT (1000-lbf)	FROM	TO	ELAP. TIME	CODE NO.					
2035	2046	11	60	8	16:00	21:00	5	2	DRILL + 2035m ⇒ 2041m				
					21:00	31:15	14	24	B.O.P. FUNCTION CHECK ANN. 11/12 PIPERAM #1				
									5/4 PIPE RAM #2 4/4				
					21:15	21:45	1/2	35	LAY DOWN ROTATING HEAD				
					21:45	24:00	24	2	DRILL + 2041m ⇒ 2046m				
REDUCED PUMP SPEED													
1570 kPa	@ 66	@ 2041m											
DEVIATION SURVEY													
DEPTH (m)	DEVIATION (°)	DIRECTION											
					NOTES								
DRILLER SIGNATURE					HRS. RAN	BOILER ph	STACK TEMP.	MAXIMUM EXPERIENCED HOOKLOAD	SAFETY TOPIC	M.A.C.P.			
[Signature]					8	11	360	50 000	PINCH POINTS	16 521			

074596

FOLD HERE →

074595

LICENCE NO.: 1832 WELL NAME AND NO.: PARAMOUNT FT AL NEITA M-23

OPERATOR: PARAMOUNT RESOURCES LTD. CONTRACTOR: PRECISION DRILLING

SURFACE LOCATION: M-23-60°-50'-133°-00" UNIQUE ID: 100-5000

SIGNATURE OF OPERATOR'S REPRESENTATIVE: SIGNATURE OF CONTRACTOR'S RIG MANAGER:

DAILY CHECKS

(1) Daily Walk Around Inspection
(2) Detailed Inspection Weekly (using checklist)
(3) HPS Signa Posted (if required)
(4) Well License & Stick Diagram Posted
(5) Flare Lines Staked
(6) BOP Drills Performed
(7) Visually Inspect BOP's - Flarelines & Degasser Lines

(1) Rig Site Health and Safety Meeting (once/week/month)
(2) C.A.O.D.C. Rig Safety Inspection Checklist (once/week/month)
(3) Mast Inspection Before Raising or Lowering
(4) Crown Saver Checked
(5) Motor Kils checked

YEAR: 2018 MONTH: 12 DAY: 29

RIG NO: 379

FUEL @ 8:00

W: TEMPERATURE -30 °C
E: CURRENT CONDITIONS OVERCAST
A: WIND DIRECTION NW
R: ROAD 104

LAST CASING TUBING OR LINER

O.D. (mm): 339.7 MIN. I.D. (mm): 320.4 kg/m: 81.1

GRADE: K-5539 TOTAL(m) LENGTH: 501 KB TO CSG HEAD (m): 5.50 SET AT (m): 499

DC/DP SIZE (mm): 159 LINEAR MASS (kg/m): 129 GRADE: 55 MIN. ID (mm): 159 TOOL JT O.D. (mm): 127 TYPE THREAD: 3/4" 22 PUMP TYPE: P28 PUMP MANUFACTURER: Gardner Denver STROKE LTH. (mm): 203

NO. OF JOINTS: 336

TIME	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	SHALE SHAKER(S)	RENTALS/SERVICES	MORN	DAY	EVE
OPER.	RIG UP & TEAR DOWN	DRILL ACTUAL	REAMING	CORING	COND. MUD & CIRC.	TRIPS	RIG SERVICE	REPAIR RIG	OUT OFF DRILL LINE	DEV. SURVEY	WIRE LINE LOGS	RUN GAGE & CEMENT	WAIT ON CEMENT	MIPPLE UP B.O.P.	TEST B.O.P.	DRILL STEM TEST	PLUG BACK	SQUEEZE CEMENT	FISHING	DIR WORK	SAFETY MTG.	WASH TO BURN											
MORN.																																	
DAY																																	
EVE																																	
TOTAL																																	

DRILLING ASSEMBLY (At End of Tour)

NO. 20 BIT O.D. (mm) 159 LENGTH 18138m

BIT RECORD

BIT NO. SIZE (mm) IADC CODE MFG. TYPE SERIAL NO. JETS (mm) DEPTH OUT (m) DEPTH IN (m) TOTAL METRES DRILLED (m) TOTAL HOURS RUN

MUD RECORD

MUD TYPE ☐ WATER BASED ☒ OIL BASED

TIME DENSITY kg/m³ FUNNEL VIS. (S/L) W.L. (cm³) pH

MUD MATERIALS ADDED

PRODUCT AMOUNT X UNIT

SOLIDS CONTROL

DESILTER HOURS RUN INTAKE DENSITY (kg/m³) OVERFLOW DENSITY (kg/m³) UNDERFLOW DENSITY (kg/m³)

CENTRIFUGE

HOURS RUN INTAKE DENSITY (kg/m³) OVERFLOW DENSITY (kg/m³) UNDERFLOW DENSITY (kg/m³)

HOLE CONDITION

KELLYDOWN TOTAL HOLE DRAG TORQUE AT BOTTOM (1000 daN) FILL ON BOTTOM (m)

WT. OF DC 1000 daN

WT. OF STRING 1000 daN

METRES DRILLED

FROM TO DRD R.P.M. ROTARY R.P.M. WT. ON BIT (1000 daN)

TIME LOG

FROM TO ELAP. TIME CODE NO.

DETAILS OF OPERATION IN SEQUENCE AND REMARKS

1889. 00:00 02:45 24 14. Nipple Up. C/O Flanges + Washline B.O.P.'s
02:45 08:00 54 11 R.P. 1st Log w/ Baker Washline.

REDUCED PUMP SPEED

DEVIATION SURVEY

DEPTH (m) DEVIATION (°) DIRECTION

DRILLER SIGNATURE

HRS. RAN ph STACK TEMP. MAXIMUM EXPERIENCED HOOKLOAD SAFETY TOPIC M.A.C.P.

DRILLING ASSEMBLY (At End of Tour)

NO. 1 BIT O.D. (mm) 159 LENGTH 16585m

BIT RECORD

BIT NO. SIZE (mm) IADC CODE MFG. TYPE SERIAL NO. JETS (mm) DEPTH OUT (m) DEPTH IN (m) TOTAL METRES DRILLED (m) TOTAL HOURS RUN

MUD RECORD

MUD TYPE ☐ WATER BASED ☒ OIL BASED

TIME DENSITY kg/m³ FUNNEL VIS. (S/L) W.L. (cm³) pH

MUD MATERIALS ADDED

PRODUCT AMOUNT X UNIT

SOLIDS CONTROL

DESILTER HOURS RUN INTAKE DENSITY (kg/m³) OVERFLOW DENSITY (kg/m³) UNDERFLOW DENSITY (kg/m³)

CENTRIFUGE

HOURS RUN INTAKE DENSITY (kg/m³) OVERFLOW DENSITY (kg/m³) UNDERFLOW DENSITY (kg/m³)

HOLE CONDITION

KELLYDOWN TOTAL HOLE DRAG TORQUE AT BOTTOM (1000 daN) FILL ON BOTTOM (m)

WT. OF DC 1000 daN

WT. OF STRING 1000 daN

METRES DRILLED

FROM TO DRD R.P.M. ROTARY R.P.M. WT. ON BIT (1000 daN)

TIME LOG

FROM TO ELAP. TIME CODE NO.

DETAILS OF OPERATION IN SEQUENCE AND REMARKS

1889 18:00 10:00 11 11 RUN LOG #1 HDIL + DAL 1 GR
10:00 10:15 14 14 NIPPLE DOWN WIRELINE BOP + RAISE
10:15 12:30 24 11 RIG OUT LOG #1, RIG UP LOG #2
12:30 12:45 24 14 NIPPLE UP WIRELINE BOP.
12:45 16:00 34 11 RUN LOG #2 ZDL-CN 1 GR + XY

REDUCED PUMP SPEED

DEVIATION SURVEY

DEPTH (m) DEVIATION (°) DIRECTION

DRILLER SIGNATURE

HRS. RAN ph STACK TEMP. MAXIMUM EXPERIENCED HOOKLOAD SAFETY TOPIC M.A.C.P.

DRILLING ASSEMBLY (At End of Tour)

NO. 1 BIT O.D. (mm) 159 LENGTH 16778m

BIT RECORD

BIT NO. SIZE (mm) IADC CODE MFG. TYPE SERIAL NO. JETS (mm) DEPTH OUT (m) DEPTH IN (m) TOTAL METRES DRILLED (m) TOTAL HOURS RUN

MUD RECORD

MUD TYPE ☐ WATER BASED ☒ OIL BASED

TIME DENSITY kg/m³ FUNNEL VIS. (S/L) W.L. (cm³) pH

MUD MATERIALS ADDED

PRODUCT AMOUNT X UNIT

SOLIDS CONTROL

DESILTER HOURS RUN INTAKE DENSITY (kg/m³) OVERFLOW DENSITY (kg/m³) UNDERFLOW DENSITY (kg/m³)

CENTRIFUGE

HOURS RUN INTAKE DENSITY (kg/m³) OVERFLOW DENSITY (kg/m³) UNDERFLOW DENSITY (kg/m³)

HOLE CONDITION

KELLYDOWN TOTAL HOLE DRAG TORQUE AT BOTTOM (1000 daN) FILL ON BOTTOM (m)

WT. OF DC 1000 daN

WT. OF STRING 1000 daN

METRES DRILLED

FROM TO DRD R.P.M. ROTARY R.P.M. WT. ON BIT (1000 daN)

TIME LOG

FROM TO ELAP. TIME CODE NO.

DETAILS OF OPERATION IN SEQUENCE AND REMARKS

1889 16:00 16:30 13 14 NIPPLE DOWN + LAY OUT WIRELINE B.O.P.'s
16:30 17:30 11 11 R-6 OUT LOGGERS
17:30 18:45 13 14 NIPPLE DOWN C/O FLANGES + NIPPLE UP FLOW
NIPPLE + FLOW LINE
18:45 23:45 3 6 RUN IN HOLE. CLEAN OUT TRIP
Flow Log 1889, 228, 1334, 1875m.
23:45 24:00 14 22 Clean To Bottom 1889m - 1889m (No F.H.).

REDUCED PUMP SPEED

DEVIATION SURVEY

DEPTH (m) DEVIATION (°) DIRECTION

DRILLER SIGNATURE

HRS. RAN ph STACK TEMP. MAXIMUM EXPERIENCED HOOKLOAD SAFETY TOPIC M.A.C.P.

074594

EVENING TOUR

074590

DAILY CHECKS	OPR.	R.M.
(1) Daily Walk Around Inspection	Initial	Initial
(2) Detailed Inspection-Weekly (Using checkat)	Initial	Initial
(3) H/S Signs Posted (if required)	Initial	Initial
(4) Walk License & Stick Diagram Posted	Initial	Initial
(5) Flame Lines Staked	Initial	Initial
(6) BOP Drills Performed	Initial	Initial
(7) Visually inspect BOP's - Flarelines & Degasser Lines	Initial	Initial
(1) Rig Site Health and Safety Meeting (once/month)		Initial
(2) C.A.O.D.C. Rig Safety Inspection Checklist (one/night)		Initial
(3) Mast Inspection Before Raising or Lowering		Initial
(4) Crown Sensor Checked		Initial
(5) Motor Kills checked		Initial

TIME - HRS	CODE NO.																											TOTALS	SHALE SHAKER(S)		RENTALS/SERVICES										
		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		NO.	TYPE	MORN.	DAY	EVE.								
	OPER.	REG UP & TEAR DOWN	DRILL ACTUAL	REAMING	DORING	CONC. MUD & CIRC.	TRIPS	RIG SERVICE	REPAIR RIG	CUT OFF DRILL LINE	DEV SURVEY	WIRE LINE LOSS	RUN CASE & CEMENT	WAIT ON CEMENT	NOBLE UP B.O.P.	TEST B.O.P.	DRILL STEM TEST	PLUG BACK	SQUEEZE CEMENT	FISHING	DR. WORK	SAFETY MTC.	B.O.P. Drill											8	NO. TYPE						
MORN.			7					1/4			3/4																							8	SCREENS CHANGED	☐ YES ☒ NO					
DAY			6 3/4					1 1/4			3 1/4												1 1/4											8	TOP	140	TOP	140			
EVE.			7								1.0																							8	MIDDLE		MIDDLE				
TOTAL			30 3/4					1/2			2 1/2												1 1/4											24	BOTTOM	140	BOTTOM	140			

METRES DRILLED						TIME LOG				DETAILS OF OPERATION IN SEQUENCE AND REMARKS					
FROM	TO	D.R.D. R.P.M. CORRECTION	ROTARY R.P.M.	WT. ON BIT (1000 LBS)	FROM	TO	ELAP. TIME	CODE NO.							
1159	1232	73	30	7-12	00:00	00:45	3/4	2	Dr. Drill Fl 1159m - 1166m Rig Sees. Function 2 Pipe Rans 6/5. Die Drill Fl 1166m M.W.D. Surveys.						
					00:45	01:00	1/4	7							
					01:00		6/4	2							
CIRCULATION PRESSURE (KPa)		PUMP NO. 1		PUMP NO. 2											
		LINER SIZE (mm)	S.P.M.	LINER SIZE (mm)	S.P.M.										
9000	165	105													
REDUCED PUMP SPEED															
3400	@	60	@												
DEVIATION SURVEY															
DEPTH (m)		DEVIATION (°)		DIRECTION											
1166		3.3													
1185		3.2													
1205		3.3													
1213		3.2													
1222		3.2													
DRILLER SIGNATURE						BOILER HRS. RAN ph		STACK TEMP.		MAXIMUM EXPERIENCED HOOKLOAD		SAFETY TOPIC		M.A.C.P.	
[Signature]						8 105		365		43000 lbs		M.W.D. Corrosion Check		4228	

METRES DRILLED						TIME LOG		DETAILS OF OPERATION IN SEQUENCE AND REMARKS			
FROM	TO	DR. D. R.M.R. CORE C.	ROTARY R.P.M.	WT. ON BIT (1000 lbs)	FROM	TO	ELAP. TIME	CODE NO.			
1232	1306	74	30	10-12	08:00		24	2	DIR. DRILL - 1232m → 1260m		
						11:00	1/4	10	M.W.D. SURVEYS		
					11:00	11:15	1/4	20	B.O.P. DRILL - DRILL SECURE IN 65 SECS.		
					11:15		1/4	2	DIR. DRILL - 1260m → 1274m		
						12:00	1/4	10	M.W.D. SURVEYS		
					13:00	13:15	1/4	7	RTG. SERVICE		
					13:15		24	2	DIR. DRILL f 1274m → 1306m		
						16:00	1/4	10	M.W.D. SURVEYS		
CIRCULATION PRESSURE (kPa)											
PUMP NO. 1		PUMP NO. 2									
LINER SIZE (mm)		S.P.M.		LINER SIZE (mm)		S.P.M.					
4500	165	105									
REDUCED PUMP SPEED											
3700	@	60	@	1301m							
DEVIATION SURVEY											
DEPTH (m)		DEVIATION (°)		DIRECTION							
1232m		2.8°		1274m 4.7°							
1241m		2.7°		1286m 1.4°							
1251m		1.8°		1299m 1.3°							
1261m		1.6°									
1270m		1.1°									
DRILLER SIGNATURE						BOILER		MAXIMUM EXPERIENCED HOOKLOAD		SAFETY TOPIC	
HRS. RAN						ph. STACK TEMP.				M.A.C.P.	
8 105						70		413 105		SLIPPERY SURFACE 4/228	

METRES DRILLED						TIME LOG				DETAILS OF OPERATION IN SEQUENCE AND REMARKS			
FROM	TO	DRD RPM CORE-C	ROTARY R.P.M.	WT. ON BIT (1000 psi)	FROM	TO	ELAP. TIME	CODE NO.					
1306	1388	92	30	10-12	16:00		7:0	2	DIR DRILL + 1306m ⇒ 1388m				
						24:00	1:0	10	MWD SURVEYS				
CIRCULATION PRESSURE (WPa)		PUMP NO. 1		PUMP NO. 2									
		LINER SIZE (mm)	S.P.M.	LINER SIZE (mm)	S.P.M.								
950/10300		165	105										
REDUCED PUMP SPEED													
3700		@	65	@									
DEVIATION SURVEY													
DEPTH (m)		DEVIATION (°)		DIRECTION									
1308m		1.3°											
1318m		1.4°											
1327m		1.5°											
1347		2.2											
1375		2.1											
DRILLER SIGNATURE													
HRS. RAN		BOILER ph		STACK TEMP.		MAXIMUM EXPERIENCED HOOKLOAD		SAFETY TOPIC		M.A.C.P.			
8		10		375		45,000 lbs.		Block & Tackle		4228			

TIME - HRS	CODE NO.																										TOTAL	SHALE SHAKER(S)		RENTALS/SERVICES								
	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		NO	TYPE	MORN	DAY	EVE						
	OFFER	RIG UP & TEST DOWN	DRL ACTUAL	HEAVING	CORING	COND. MUD & GISC	TURNS	R/O SERVICE	REPAIR RIG	CUT OFF DRL LINE	DEV SURVY	WIRE LINE LOGS	FURN CASE & CEMENT	WAIT ON CEMENT	NIPPLE UP B.O.P.	TEST B.O.P.	DRILL STEM TEST	P.L.G. BACK	SQUEEZE CEMENT	FISHING	DIF. WORK	SAFETY MTG.	B.O.P. DRILL								8	SWACO	SWACO	PASON / TOTCO SURVEY 88L				
MORN		6 1/2						1/4			1 1/4																				8	SCREENS CHANGED	☒ YES ☐ NO					
DAY		7						1/4			3/4																				8	TOP	140	TOP	140			
EVE		6 1/2				1/2					3/4													1/4							8	MIDDLE		MIDDLE				
TOTAL		30 1/2				1 1/2		1 1/2			2 3/4													1/4							32	BOTTOM	140	BOTTOM	140			

[illegible]

074585

DAILY CHECKS	OPR.	R.M.
(1) Daily Walk Around Inspection	Initial	Initial
(2) Detailed Inspection Weekly (using checklist)	Initial	Initial
(3) H2S Signs Posted (if required)	Initial	Initial
(4) Well License & Stick Diagram Posted	Initial	Initial
(5) Flame Lines Staked	Initial	Initial
(6) BOP Drills Performed	Initial	Initial
(7) Visually inspect BOP's - Flowlines & Discharge Lines	Initial	Initial
(1) Rig Site Health and Safety Meeting (on/after/monthly)	Initial	Initial
(2) C.A.D.C. Rig Safety Inspection Checklist (on/after/monthly)	Initial	Initial
(3) Mast Inspection Before Raising or Lowering	Initial	Initial
(4) Green Sails Cracked	Initial	Initial
(5) Motor Kils checked	Initial	Initial

[illegible]

TIME - HRS	CODE NO.																											TOTALS	SHALE SHAKER(S)		RENTALS/SERVICES	
		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		NO.	TYPE	MORE	DAY
	OPER	RIG-UP & TEAR-DOWN	DRILL ACTUAL	HEAVING	CORING	CONC. VALD & CIRC.	TRIPS	RIG SERVICE	REPAIR RIG	CUT OFF DRILL LINE	DEV. SURVEY	WIRE LINE LOGS	REIN. CASE & CEMENT	WALL ON CEMENT	APPROX. UP B.O.P.	TEST B.O.P.	DRILL STEM TEST	PLUG BACK	SQUEEZE CEMENT	FISHING	DRL. WORK	SAFETY MTG.							8	2 SWACO		
MORN			3				4 3/4				25																		8	SCREENS CHANGED	☐ YES ☒ NO	
DAY			7 1/2					1/4			1/4																		8	TOP 110	TOP 110	
EVE			7 1/2					1/4			1/4																		8	MIDDLE	MIDDLE	
TOTAL			18				4 3/4	1/2			3/4																		24	BOTTOM 110	BOTTOM 110	

METRES DRILLED					TIME LOG		DETAILS OF OPERATION IN SEQUENCE AND REMARKS				
FROM	TO	D.R.D. R.A.R. CORE C	ROTARY R.P.M.	WEIGHT (1000 lbs)	FROM	TO	ELAP TIME	CODE NO			
675	711	36	160	4.5	08:00	09:30	1 1/2	9	Drill F-675m-684m		
					09:30	09:45	1/4	10	Survey		
					09:45	11:15	1 3/4	2	Drill F/684m-694m		
					11:15	11:30	1/4	7	Rig Serv.		
					11:30	16:00	4 1/2	2	Drill F-694m-711m		
CIRCULATION PRESSURE (kPa)					PUMP NO. 1		PUMP NO. 2				
					LINER SIZE (mm)		S.P.M.		LINER SIZE (mm)		
					S.P.M.						
3000					165-85						
REDUCED PUMP SPEED											
2900					@ 60		@				
DEVIATION SURVEY											
DEPTH (m)					DEVIATION (°)					DIRECTION	
671					3 1/2						
NOTES											
DRILLER SIGNATURE					BOILER ph		STACK TEMP.		MAXIMUM EXPERIENCED HOOKLOAD		SAFETY TOPIC
[Signature]					8.		10 325.				House Running
											M.A.C.P.
											4298

METRES DRILLED						TIME LOG				DETAILS OF OPERATION IN SEQUENCE AND REMARKS			
FROM	TO	DRD M.D. CODE C	ROTARY R.P.M.	WT. ON BIT (1000 MET)	FROM	TO	ELAP. TIME	CODE NO.					
711	741	30	160	4	16:00	16:45	75.2		Drill F/711m - 713m				
					16:45	17:00	75.10		Survey				
CIRCULATION PRESSURE (kPa)	PUMP NO. 1	PUMP NO. 2			17:00	23:45	63.2		Drill F/713m - 741m				
	LINER SIZE (mm)	S.P.M.	LINER SIZE (mm)	S.P.M.	23:45	24:00	1/4	7	RIG SERVICE & FUNCTION ✓ HYDRIL.				
5000	165	85											
REDUCED PUMP SPEED													
2900	@	62	@										
DEVIATION SURVEY													
DEPTH (m)	DEVIATION (°)	DIRECTION											
677	374												
NOTES													
DRILLER SIGNATURE						BOILER		MAXIMUM EXPERIENCED HOOKLOAD		SAFETY TOPIC		M.A.C.P.	
R. Puckett						HRS. RAN	ph	STACK TEMP.					
						8	10	360			STEAM		4228

FOLD HERE →

074582

LICENCE NO.:	WELL NAME AND NO.:
OPERATOR:	CONTRACTOR:
SURFACE LOCATION:	UNIQUE ID.:
SIGNATURE OF OPERATOR'S REPRESENTATIVE:	
SIGNATURE OF CONTRACTOR'S RIG MANAGER:	

DAILY CHECKS
(1) Daily Walk Around Inspection
(2) Detailed Inspection Weekly (using checklist)
(3) H/S Signs Posted (if required)
(4) Well License & Stick Diagram Posted
(5) Flare Lines Staked
(6) BOP Drills Performed
(7) Visually inspect BOP's - Flarelines & Degasser Lines
(1) Rig Site Health and Safety Meeting (one/two/month)
(2) C.A.D.C. Rig Safety Inspection Checklist (one/month)
(3) Mast Inspection Before Raising or Lowering
(4) Crown Sealer Checked
(5) Motor Kils checked

OPR	R.M.
Initial	Initial
Initial	Initial
Initial	Initial
Initial	Initial
Initial	Initial
Initial	Initial
Initial	Initial
Initial	Initial
Initial	Initial
Initial	Initial
Initial	Initial

YEAR	MONTH	DAY	LAST	O.D. (mm)	MIN. I.D. (mm)	kg/m	MAKE	GRADE	NO. OF JOINTS	TOTAL(m) LENGTH	KB TO CSG HEAD (m)	SET AT (m)
2018	12	17	CASING									
RIG NO.	379		TUBING									
BOILER	229	212	OR									
TEMPERATURE	-17 °C		LINEAR									
CURRENT CONDITIONS	159		MASS									
WIND DIRECTION	102		GRADE									
ROAD	G000		MIN. ID (mm)									
			TOOL JOINT (mm)									
			TYPE THREAD									
			NO. OF JOINTS									
			PUMP TYPE									
			PUMP MANUFACTURER									
			STROKE LTH (mm)									

TIME	CODE	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	SHAPE SHAKER(S)	RENTALS/SERVICES	MORNING	DAY	EVE
MORN																																	
DAY																																	
EVE																																	
TOTAL																																	

DRILLING ASSEMBLY (At End of Tour)	LENGTH	BIT NO.	MUD TYPE	WATER BASED	OIL BASED
1 BIT SUB	9.2	222			
1 DC	9.33	127			
1 RMR	1.41	VAREL			
3 DC's	27.90	127T-XG			
1 RMR	1.47	144966			
12 DC's	110.43	3/10.3			
1 %	.78				
BHA	152.49				
CUTTING STRUCTURE					
1 D.P.	330.77				
1 D.P.	4.80				
KELLY DOWN	488.06				
TOTAL	488.06				
WT. OF DC	17000				
WT. OF STRING	29000				

DRILLING ASSEMBLY (At End of Tour)	LENGTH	BIT NO.	MUD TYPE	WATER BASED	OIL BASED
1 BIT SUB	9.2	222			
1 DC	9.33	127			
1 RMR	1.41	VAREL			
3 DC's	27.90	127T-XG			
1 RMR	1.47	144966			
12 DC's	110.43	3/10.3			
1 %	.78				
BHA	152.49				
CUTTING STRUCTURE					
1 D.P.	331.38				
1 D.P.	9.39				
KELLY DOWN	7.71				
TOTAL	491.1				
WT. OF DC	17000				
WT. OF STRING	23000				

DRILLING ASSEMBLY (At End of Tour)	LENGTH	BIT NO.	MUD TYPE	WATER BASED	OIL BASED
1 BIT SUB	9.2	222			
1 DC	9.33	127			
1 RMR	1.41	VAREL			
3 DC's	27.90	127T-XG			
1 RMR	1.47	144966			
12 DC's	110.43	3/10.3			
1 %	.78				
BHA	152.49				
CUTTING STRUCTURE					
1 D.P.	349.85				
1 D.P.	11.66				
KELLY DOWN	514.00				
TOTAL	514.00				
WT. OF DC	17000				
WT. OF STRING	23000				

METRES DRILLED	TIME LOG	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
FROM TO	FROM TO	
513	00:00 01:45	6 PICK UP & RUN IN DRILL PIPE
	01:45	15 PRESSURE TEST UPPER FLOWER PIPE RAM
		HYDRIL INSIDE BOP, STABBING VALVE, SHCR
	05:15 05:30	22 HELD BLOW OUT DRILL W/CREW.
	05:30 05:45	21 HELD SAFETY MTG W/CREW.
	05:45 06:00	7 RIG SERVICE
	06:00 08:00	2 5 DISPLACE HOLE TO INVERT
		(FROST PILED UP @ WASH PIPE ON SWIVEL CLEAN UP W/STEAM).
		NOTES MANIFOLD SET FOR DRILLING W/VALVE TO DEGASSER LEFT CLOSED. TAGGED PLUG @ 488.06
DRILLER SIGNATURE	BOILER	MAXIMUM EXPERIENCED HOOKLOAD
	8 10 370	
		SAFETY TOPIC
		M.A.C.P.

METRES DRILLED	TIME LOG	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
FROM TO	FROM TO	
513	08:00 12:00	4 5 Displace Hole To Invert (THAW OUT. Frozen Transfer Hoses.
	12:00 12:15	7 RIG SERV.
	12:15 12:30	22 B.O.P. Drill Functions & Motor Kils (O.K.)
	12:30 14:00	8 Repair Wash Pipe.
	14:00 16:00	2 23 Drill Out.
		NOTES
DRILLER SIGNATURE	BOILER	MAXIMUM EXPERIENCED HOOKLOAD
	8	
		SAFETY TOPIC
		M.A.C.P.

METRES DRILLED	TIME LOG	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
FROM TO	FROM TO	
499	16:00 19:30	23 DRILL OUT.
	19:30 21:45	2 DRILL TO 509m
	21:45 22:15	5 RUN FORMATION LEAK OFF CIRC BOTTOMS UP.
	22:15 22:45	5 RUN FORMATION LEAK OFF
	22:45 24:00	2 DRILL.
		NOTES
DRILLER SIGNATURE	BOILER	MAXIMUM EXPERIENCED HOOKLOAD
	8	
		SAFETY TOPIC
		M.A.C.P.

074581

DAILY CHECKS

- (1) Daily Walk Around Inspection
- (2) Detailed Inspection-Weekly (using checklist)
- (3) H/S Signs Posted (if required)
- (4) Well Labeled & Stick Diagram Posted
- (5) Flare Lines Staked
- (6) BOP Drills Performed
- (7) Visually inspect BOP's - Flarelines & Degasser Lines

- (1) Rig Site Health and Safety Meeting (one/crew/month)
- (2) C A O D.C. Rig Safety Inspection Checklist (one/hg/month)
- (3) Mast Inspection Before Raising or Lowering
- (4) Crown Saver Checked
- (5) Motor Kilts checked

[illegible][illegible]

METRES DRILLED							TIME LOG				DETAILS OF OPERATION IN SEQUENCE AND REMARKS			
FROM	TO	D.R.D. R.M.F.I CORE-C	ROTARY R.P.M.	WT. ON BIT (1000 daN)	FROM	TO	ELAP. TIME	CODE NO.						
					00:00	08:00	8	14	NIPPLE UP B.O.P.'s. (STRING FLARE & DEGRASSING)					
CIRCULATION PRESSURE (kPa)	PUMP NO. 1		PUMP NO. 2											
	LINER SIZE (mm)	S.P.M.	LINER SIZE (mm)	S.P.M.										
REDUCED PUMP SPEED														
@		@												
DEVIATION SURVEY														
DEPTH (m)	DEVIATION (°)		DIRECTION											
					NOTES									
DRILLER SIGNATURE					HRS. RAN	BOILER ph	STACK TEMP.	MAXIMUM EXPERIENCED HOOKLOAD	SAFETY TOPIC	M.A.C.P.				
Don Puckett					8	7	355°C							

MORNING TOUR

METRES DRILLED						TIME LOG				DETAILS OF OPERATION AND REMARKS				
FROM	TO	DR-D RM-R CORE-C	ROTARY R.P.M.	WT. ON BIT (1000 daN)	FROM	TO	ELAP. TIME	CODE NO.						
					08:00	11:00	3	14	Nipple W. B.O.P.					
					11:00	16:00	5	15	Press. Test. Blind Run, Annular Values.					
CIRCULATION PRESSURE (kPa)		PUMP NO. 1		PUMP NO. 2										
		LINE SIZE (mm)	S.P.M.	LINE SIZE (mm)	S.P.M.									
REDUCED PUMP SPEED														
		@		@										
DEVIATION SURVEY														
DEPTH (m)	DEVIATION (°)		DIRECTION											
					NOTES									
DRILLER SIGNATURE					BOILER ph		STACK TEMP.		MAXIMUM EXPERIENCED HOOKLOAD		SAFETY TOPIC		M.A.C.P.	
[Signature]					8		90350							

METRES DRILLED					TIME LOG				DETAILS OF OPERATION IN SEQUENCE AND REMARKS				
FROM	TO	D.R.D. M.M.B. CORE-C	ROTARY R.P.M.	WT. ON BIT (1000 daN)	FROM	TO	ELAP. TIME	CODE NO.					
					16:00	17:30	1.5.15.		Press. Test Kith. Values + HCR Values.				
					17:30	22:15	4.75.22		Pick up B.N.A.				
					22:15	24:00	1.75.6		Pick up F.Ren in Drill Pipe.				
CIRCULATION PRESSURE (kPa)		PUMP NO. 1		PUMP NO. 2									
		LINER SIZE (mm)	S.P.M.	LINER SIZE (mm)	S.P.M.								
165													
REDUCED PUMP SPEED													
@			@										
DEVIATION SURVEY													
DEPTH (m)	DEVIATION (°)	DIRECTION											
					NOTES								
DRILLER SIGNATURE					BOILER		MAXIMUM EXPERIENCED HOOKLOAD		SAFETY TOPIC		M.A.C.P.		
A. M. P. K. K.					HRS. RAN	ph	STACK TEMP.						
					8	10	370						

060210

TIME - HRS	CODE NO.																											TOTALS	SHALE SHAKER(S)		RENTALS/SERVICES		MOON	DAY			
		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		NO.	TYPE							
	OPER.	RIG UP & TEAR DOWN	DRILL ACTUAL	REAMING	CORING	COND. MUD-A CIP	TRIPS	RIG SERVICE	REPAIR RIG	OUT OFF DRILL LINE	DEV SURVEY	WIRE LINE LOGS	FLN CASE & CEMENT	WAIT ON CEMENT	HOVILE UP B.O.P.	TEST B.O.P.	DRILL STEM TEST	PLUG BACK	SQUEEZE CEMENT	FISHING	DIP WORK	SAFETY MTG.	CUT CHINA CO.														
	MORN.	8						6	8													WILDL BOWL.											8	SCREENS CHANGED	☐ YES ☐ NO		
	DAY	4 1/2																				3 1/2											8	TOP	TOP		
	EVE																					2											8	MIDDLE	MIDDLE		
	TOTAL	12 1/2																				5 1/2											24	BOTTOM	BOTTOM		

[illegible]

DAILY CHECKS	OPR.	R.M.
(1) Daily Walk Around Inspection	Initial	Initial
(2) Detailed Inspection-Weekly (using checklist)	Initial	Initial
(3) H/S Signs Posted (if required)	Initial	Initial
(4) Wet License & Stick Diagram Posted	Initial	Initial
(5) Flame Lines Stated	Initial	Initial
(6) BOP Drills Performed	Initial	Initial
(7) Visually Inspect BOP's - Flarelines & Degasser Lines	Initial	Initial
(1) Rig Site Health and Safety Meeting (one/one/month)	Initial	Initial
(2) C.A.O.D.C. Rig Safety Inspection Checklist (one/monthly)	Initial	Initial
(3) Master Inspection Before Raising or Lowering	Initial	Initial
(4) Crown Sizer Checked	Initial	Initial
(5) Motor Kills checked	Initial	Initial

[illegible][illegible]

1832
Netla M.23
Dec 14/98 - Jan 22/99

Dec. 14/98 to
Jan. 22/99