

FRONT PAGE SUMMARY

License No 31526 Well Name ARCREES HZ SUNRISE K2-25-78-18 Surface Location 02-25-078-18W6 Contractor PRECISION DRILLING, DIV OF PDCLP Rig No 529 Well Type HORIZ Spud Date Time 2016/01/21 19:00

DAILY CHECKS 1) Daily Walk Around Inspection 2) Detailed Inspection - Weekly (Using Check List) 3) H2S Signs Posted if Required 4) Well License & Stick Diagram Posted 5) Flare Lines Staked 6) BOP Drills Performed 7) Visually Inspected BOPs - Flare Lines & Degasser Lines



Table with 25 columns (CODE 1-25) and 10 rows (TOUR 1-3, Total). Columns include Rig Up, Drill Actual, Reaming, Coring, Concl Mud & Circ, Trips, Rig Service, Repair Rig, Cut Off Drill Log, Dev Survey, Wireline Logs, Run Csg & Cement, Wait On Cement, Nipple Up BOP, Test BOP, Drillstem Test, Plug Back, Squeeze Cement, Fishing, Dir Work, Safety Meeting, Tear Down, Waiting On, Rig Watch, Other, TOTAL. Includes FUEL @ 08:00 HOURS and WEATHER section.

TOUR 1 SIGNATURE OF DRILLER DUNCAN STEWART START TIME 00:00 END TIME 08:00

TOUR 1 BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, SOLIDS CONTROL, MUD MATERIALS ADDED, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SAFETY. Includes detailed data for drilling parameters, mud properties, and safety notes.

TOUR 2 SIGNATURE OF DRILLER JOSH GILBERT START TIME 08:00 END TIME 20:00

TOUR 2 BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, SOLIDS CONTROL, MUD MATERIALS ADDED, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SAFETY. Includes detailed data for drilling parameters, mud properties, and safety notes.

TOUR 3 SIGNATURE OF DRILLER DUNCAN STEWART START TIME 20:00 END TIME 24:00

TOUR 3 BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, SOLIDS CONTROL, MUD MATERIALS ADDED, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SAFETY. Includes detailed data for drilling parameters, mud properties, and safety notes.

**FRONT PAGE SUMMARY**

License No 31526 Well Name ARCREX HZ SUNRISE K2-25-78-18  
 Tour Sheet Serial Number 0252529\_20160122\_1A Surface Location 02-25-078-18W6  
 Operator ARC RESOURCES Contractor PRECISION DRILLING, DIV OF PDCLP  
 Operator's AFE 16DRLO15 Contractor's Job No 76  
 Signature of Operator Representative Dean Boehnert Signature of Contractor's Rig Manager MARC RAYMOND

Vendor Software Version Pason Year 2016 Month 01 Day 22  
 Prov BC Loc Type DLS Unique Well Id 102/08-19-078-17W/600  
 Re-Entry

**DAILY CHECKS**

1) Daily Walk Around Inspection	DB	MR
2) Detailed Inspection - Weekly (Using Check List)	DB	MR
3) H2S Signs Posted if Required	DB	MR
4) Well License & Stock Diagram Posted	DB	MR
5) Flare Lines Staked	DB	MR
6) BOP Drills Performed	DB	MR
7) Visually Inspected BOPs - Flare Lines & Degasser Lines	DB	MR

**OP RM**

1) Rig Site Health & Safety Meeting (one/crew/month)	DB	MR
2) CAODC Rig Safety Inspection Checklist (one/rig/month)	DB	MR
3) Mast Inspection before Raising or Lowering	DB	MR
4) Crown Saver Checked	DB	MR
5) Motor Kills Checked	DB	MR

**CAODC**  
**pason**  
Pason

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	TOTAL
HOURS	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drill Log	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple Up BOP	Test BOP	Drillstem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tear Down	Waiting On	Rig Watch	Other	FUEL @ 08:00 HOURS
Tour 1		3.00			0.25	2.25	0.25													2.00	0.25					8.00
Tour 2		1.75			1.50	5.00	0.25						1.00							1.75	0.75					12.00
Tour 3					1.00																0.25					4.00
Total		4.75			2.75	7.25	0.50						3.75							3.75	1.25					24.00

**TOUR 1 SIGNATURE OF DRILLER** DUNCAN STEWART **START TIME** 00:00 **END TIME** 08:00

BITS		DRILLING ASSEMBLY		MUD RECORD		DEVIATION SURVEYS		TIME LOG	
Bit Number 2	No 279	Component 1 BIT	OD 200	ID 0	Length 0.26m	Mud Type 1	Water 0	Oil 0	Time 02:00
Size	279	1 MUD MOTOR	168	0	7.56m	Density 1050	1050	1060	04:00
IADC Code		1 X/O	163	72	0.80m	Funnel Viscosity 42s/l	49s/l		
Manufacturer SICOTTE		1 NMDC	166	71	9.23m	Fluid Loss			
Type SS516GB		1 GAP SUB	166	71	1.64m	pH			
Serial No 12807		1 NMDC	166	71	9.37m	Location of Sample TANKS	SHAKERS		
Jets 11.1 11.1 11.1 11.1		1 SHOCK SUB	164	57	3.79m	Depth 235m	235m		
Depth Out (m) 11.1 11.1 11.1		1 JARS-HYD	168	57	5.48m	PVT 37m3	33m3		
Depth In (m) 235		1 X/O	158	71	0.90m				
Total Drilled (m) 169									
Hrs Run Today 2.50									
Cumulative Hrs Run 2.50									
Entry Date 2016/01/21									

**TOUR 2 SIGNATURE OF DRILLER** JOSH GILBERT **START TIME** 08:00 **END TIME** 20:00

BITS		DRILLING ASSEMBLY		MUD RECORD		DEVIATION SURVEYS		TIME LOG	
Bit Number 2	No 279	Component 1 BIT	OD 200	ID 0	Length 0.26m	Mud Type 1	Water 0	Oil 0	Time 08:00
Size	279	1 MUD MOTOR	168	0	7.56m	Density 1110	1110		
IADC Code		1 X/O	163	72	0.80m	Funnel Viscosity 77s/l			
Manufacturer SICOTTE		1 NMDC	166	71	9.23m	Fluid Loss			
Type SS516GB		1 GAP SUB	166	71	1.64m	pH			
Serial No 12807		1 NMDC	166	71	9.37m	Location of Sample TANKS	SHAKERS		
Jets 11.1 11.1 11.1 11.1		1 SHOCK SUB	164	57	3.79m	Depth 515m	515m		
Depth Out (m) 11.1 11.1 11.1		1 JARS-HYD	168	57	5.48m	PVT 31m3			
Depth In (m) 235		1 X/O	158	71	0.90m				
Total Drilled (m) 280		1 48 HWDP	158	71	449.28m				
Hrs Run Today 1.75									
Cumulative Hrs Run 4.25									
Entry Date 2016/01/21									

**TOUR 3 SIGNATURE OF DRILLER** SYLVAIN ARSENAULT **START TIME** 20:00 **END TIME** 24:00

BITS		DRILLING ASSEMBLY		MUD RECORD		DEVIATION SURVEYS		TIME LOG	
Bit Number	No	Component	OD	ID	Length	Mud Type	Water	Oil	Time
Size		1 BIT	200	0	0.26m	Density	1250		22:00
IADC Code		1 MUD MOTOR	168	0	7.56m	Funnel Viscosity	52s/l		1250
Manufacturer		1 X/O	163	72	0.80m	Fluid Loss			52s/l
Type		1 NMDC	166	71	9.23m	Location of Sample	SHAKERS		
Serial No		1 GAP SUB	166	71	1.64m	Depth	515m		515m
Jets		1 NMDC	166	71	9.37m	PVT	25m3		25m3
Depth Out (m)		1 SHOCK SUB	164	57	3.79m				
Depth In (m)		1 JARS-HYD	168	57	5.48m				
Total Drilled (m)		1 X/O	158	71	0.90m				
Hrs Run Today									
Cumulative Hrs Run									
Entry Date									

FRONT PAGE SUMMARY

License No 31526 Well Name ARCREES HZ SUNRISE K2-25-78-18

Tour Sheet Serial Number 02-25-078-18W6 Pason Vendor Software Version 2016 01 23

DAILY CHECKS

- 1) Daily Walk Around Inspection 2) Detailed Inspection - Weekly (Using Check List) 3) H2S Signs Posted if Required 4) Well License & Stick Diagram Posted 5) Flare Lines Staked 6) BOP Drills Performed 7) Visually Inspected BOPs - Flare Lines & Degasser Lines



Operator ARC RESOURCES Operator's AFE 16DRLO015 Signature of Operator Representative Maddison Mike

Contractor PRECISION DRILLING, DIV OF PDCLP Contractor's Job No 76 Signature of Contractor's Rig Manager MARC RAYMOND

Rig No 529 Well Type HORIZ Spud Date Time 2016/01/21 19:00 Rig Release Date Time

Table with 25 columns (CODE 1-25) and 10 rows (TOUR 1-4, Total). Columns include Rig Up, Drill Actual, Reaming, Coring, etc. Includes a 'FUEL @ 08:00 HOURS' section.

TOUR 1 SIGNATURE OF DRILLER SYLVAIN ARSENAULT START TIME 00:00 END TIME 08:00

TOUR 1 Data Form: BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, MUD MATERIALS ADDED, SAFETY.

TOUR 2 SIGNATURE OF DRILLER DUNCAN STEWART START TIME 08:00 END TIME 20:00

TOUR 2 Data Form: BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, MUD MATERIALS ADDED, SAFETY.

TOUR 3 SIGNATURE OF DRILLER SYLVAIN ARSENAULT START TIME 20:00 END TIME 24:00

TOUR 3 Data Form: BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, MUD MATERIALS ADDED, SAFETY.

FRONT PAGE SUMMARY

License No 31526 Well Name ARCREHS HZ SUNRISE K2-25-78-18 Operator ARC RESOURCES... Tour Sheet Serial Number 02-25-078-18W6

DAILY CHECKS 1) Daily Walk Around Inspection 2) Detailed Inspection - Weekly (Using Check List) 3) H2S Signs Posted if Required



Table with 25 columns (CODE 1-25) and 10 rows (Hours 1-5). Columns include Rig Up, Drill Actual, Reaming, Coring, Connd Mud & Circ, Trips, Rig Service, Repair Rig, Cut Off Drill Log, Dev Survey, Wireline Logs, Run Csg & Cement, Wait On Cement, Nipple Up BOP, Test BOP, Drillstem Test, Plug Back, Squeeze Cement, Fishing, Dir Work, Safety Meeting, Tear Down, Waiting On, Rig Watch, Other, TOTAL.

TOUR 1 SIGNATURE OF DRILLER SYLVAIN ARSENAULT START TIME 00:00 END TIME 08:00

TOUR 1 BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, MUD MATERIALS ADDED, SAFETY

TOUR 2 SIGNATURE OF DRILLER DUNCAN STEWART START TIME 08:00 END TIME 20:00

TOUR 2 BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, MUD MATERIALS ADDED, SAFETY

TOUR 3 SIGNATURE OF DRILLER SYLVAIN ARSENAULT START TIME 20:00 END TIME 24:00

TOUR 3 BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, MUD MATERIALS ADDED, SAFETY



FRONT PAGE SUMMARY

License No 31526 Well Name ARCCRES HZ SUNRISE K2-25-78-18

Tour Sheet Serial Number 02-25-078-18W6 Pason Prov BC Loc Type DLS Unique Well Id 102/08-19-078-17W/600

Year 2016 Month 01 Day 25

DAILY CHECKS

- 1) Daily Walk Around Inspection
2) Detailed Inspection - Weekly (Using Check List)
3) H2S Signs Posted if Required
4) Well Licence & Stick Diagram Posted
5) Flare Lines Staked
6) BOP Drills Performed
7) Visually Inspected BOPs - Flare Lines & Degasser Lines



Operator ARC RESOURCES
Operator's AFE 16DRLO15
Signature of Operator Representative Maddison Mike

Contractor PRECISION DRILLING, DIV OF PDCLP
Contractor's Job No 76
Signature of Contractor's Rig Manager MARC RAYMOND

Rig No 529
Well Type HORIZ
Spud Date Time 2016/01/21 19:00
Rig Release Date Time

Table with 25 columns (CODE 1-25) and 10 rows (TOUR 1-4, Total). Columns include Rig Up, Drill Actual, Reaming, Coring, Connd Mag & Circ, Trips, Rig Service, Repair Rig, Cut Off Drill Log, Dev Survey, Wireline Logs, Run Csg & Cement, Wait On Cement, Nipple Up BOP, Test BOP, Drillstem Test, Plug Back, Squeeze Cement, Fishing, Dir Work, Safety Meeting, Tear Down, Waiting On, Rig Watch, Other, TOTAL. Includes weather and fuel info.

TOUR 1 SIGNATURE OF DRILLER SYLVAIN ARSENAULT START TIME 00:00 END TIME 08:00

TOUR 1 data section containing: BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, MUD MATERIALS ADDED, SAFETY.

TOUR 2 SIGNATURE OF DRILLER DUNCAN STEWART START TIME 08:00 END TIME 20:00

TOUR 2 data section containing: BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, MUD MATERIALS ADDED, SAFETY.

TOUR 3 SIGNATURE OF DRILLER SYLVAIN ARSENAULT START TIME 20:00 END TIME 24:00

TOUR 3 data section containing: BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, MUD MATERIALS ADDED, SAFETY.

**FRONT PAGE SUMMARY**

License No 31526	Well Name ARCRES HZ SUNRISE K2-25-78-18	Tour Sheet Serial Number 0Y52529_20160126_1D	Vendor Software Version Pason	Year 2016	Month 01	Day 26
Operator ARC RESOURCES		Surface Location 02-25-078-18W6	Prov BC	Loc Type DLS	Unique Well Id 102/08-19-078-17W/600	Re-Entry <input type="checkbox"/>
Operator's AFE 16DRLO015		Contractor PRECISION DRILLING, DIV OF PDCLP	Rig No 529	Well Type HORIZ	Spud Date Time 2016/01/21 19:00	
Signature of Operator Representative Maddison Mike		Contractor's Job No 76	Signature of Contractor's Rig Manager MARC RAYMOND		Rig Release Date Time	

**DAILY CHECKS**

1) Daily Walk Around Inspection	MRM	DA
2) Detailed Inspection - Weekly (Using Check List)	MRM	DA
3) H2S Signs Posted if Required	MRM	DA
4) Well License & Stick Diagram Posted	MRM	DA
5) Flare Lines Staked	MRM	DA
6) BOP Drills Performed	MRM	DA
7) Visually Inspected BOPs - Flare Lines & Degasser Lines	MRM	DA
1) Rig Site Health & Safety Meeting (one/crew/month)	DA	
2) CAODC Rig Safety Inspection Checklist (one/rig/month)	DA	
3) Mast Inspection before Raising or Lowering	DA	
4) Crown Saver Checked	DA	
5) Motor Kills Checked	DA	



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	TOTAL	FUEL @ 08:00 HOURS	WEATHER	
	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drill Log	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple Up BOP	Test BOP	Drillstem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Turn Down	Waiting On	Rig Watch	Other		Temp	Wind	
Tour 1		6.75					0.25													0.75	0.25					8.00	16500.00	06:00	-13.00
Tour 2		4.75			0.75	4.00	0.25													1.75	0.50					12.00			
Tour 3		1.00				2.00	0.25		0.50												0.25					4.00			
Total		12.50			0.75	6.00	0.75		0.50											2.50	1.00					24.00			

**TOUR 1 SIGNATURE OF DRILLER** SYLVAIN ARSENAULT **START TIME** 00:00 **END TIME** 08:00

BITS				DRILLING ASSEMBLY				MUD RECORD				DEVIATION SURVEYS				TIME LOG								
Bit Number 5	Size 159	IADC Code	Manufacturer HALLIBURTON	No 1	Component BIT	OD 159	ID 0	Length 0.26m	Mud Type Water	Water L	Oil O	Time 05:00	Depth 04:00	Deviation 1718.9m	Direction 1.1	Type 98.3	From 00:00	To 06:45	Elapsed 6.75h	Code 6.75A	Details of Operations in Sequence & Remarks DRILL 159MM HOLE FROM 1674M TO 1796M			
CUTTING STRUCTURE				HOLE CONDITION				REDUCED PUMP SPEED				SAFETY												
METRES DRILLED				HOLE CONDITION				REDUCED PUMP SPEED				SAFETY												

**TOUR 2 SIGNATURE OF DRILLER** DUNCAN STEWART **START TIME** 08:00 **END TIME** 20:00

BITS				DRILLING ASSEMBLY				MUD RECORD				DEVIATION SURVEYS				TIME LOG								
Bit Number 6	Size 159	IADC Code	Manufacturer HALLIBURTON	No 1	Component BIT	OD 159	ID 0	Length 0.26m	Mud Type Water	Water L	Oil O	Time 08:00	Depth 11:45	Deviation 1835.9m	Direction 1.5	Type 257	From 08:00	To 12:00	Elapsed 4.00h	Code 4.00A	Details of Operations in Sequence & Remarks DRILL 159MM HOLE FROM 1796M TO 1850M			
CUTTING STRUCTURE				HOLE CONDITION				REDUCED PUMP SPEED				SAFETY												
METRES DRILLED				HOLE CONDITION				REDUCED PUMP SPEED				SAFETY												

**TOUR 3 SIGNATURE OF DRILLER** SYLVAIN ARSENAULT **START TIME** 20:00 **END TIME** 24:00

BITS				DRILLING ASSEMBLY				MUD RECORD				DEVIATION SURVEYS				TIME LOG								
Bit Number 6	Size 159	IADC Code	Manufacturer HALLIBURTON	No 1	Component BIT	OD 159	ID 0	Length 0.26m	Mud Type Water	Water L	Oil O	Time 23:30	Depth 23:30	Deviation 1865.15m	Direction 1.3	Type 267.8	From 20:00	To 22:00	Elapsed 2.00h	Code 2.00A	Details of Operations in Sequence & Remarks TRIP IN HOLE FILL PIPE EVERY 400M FLOW CHECK 10 MIN @ 504M,856M.			
CUTTING STRUCTURE				HOLE CONDITION				REDUCED PUMP SPEED				SAFETY												
METRES DRILLED				HOLE CONDITION				REDUCED PUMP SPEED				SAFETY												

**FRONT PAGE SUMMARY**

License No 31526 Well Name ARCREHS HZ SUNRISE K2-25-78-18  
 Operator ARC RESOURCES  
 Operator's AFE 16DRLO015  
 Signature of Operator Representative Maddison Mike

Vendor Software Version Pason  
 Year 2016 Month 01 Day 27  
 Surface Location 02-25-078-18W6  
 Prov BC Loc Type DLS Unique Well Id 102/08-19-078-17W/600

Contractor PRECISION DRILLING, DIV OF PDCLP  
 Contractor's Job No 76  
 Signature of Contractor's Rig Manager DAVE ACHESON

Rig No 529  
 Well Type HORIZ  
 Spud Date Time 2016/01/21 19:00  
 Rig Release Date Time

Re-Entry

**DAILY CHECKS**

1) Daily Walk Around Inspection  
 2) Detailed Inspection - Weekly (Using Check List)  
 3) H2S Signs Posted if Required  
 4) Well Licence & Stock Diagram Posted  
 5) Flare Lines Staked  
 6) BOP Drills Performed  
 7) Visually Inspected BOPs - Flare Lines & Degasser Lines

1) Rig Site Health & Safety Meeting (one/crew/month)  
 2) CAODC Rig Safety Inspection Checklist (one/rig/month)  
 3) Mast Inspection before Raising or Lowering  
 4) Crown Saver Checked  
 5) Motor Kills Checked



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	TOTAL
HOURS	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drill Log	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple Up BOP	Test BOP	Drillstem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tear Down	Waiting On	Rig Watch	Other	
Tour 1		6.50					0.25														1.25					8.00
Tour 2		10.50					0.25														1.00	0.25				12.00
Tour 3		3.25					0.25														0.50					4.00
Total		20.25					0.75														2.75	0.25				24.00

**FUEL @ 08:00 HOURS**

Rig 28500.00 Fuel 2200.00  
 Meter 28500.00 Temp -2.00  
 Current Conditions CLEAR  
 Wind Direction N Wind Strength CALM  
 Road Condition FAIR

**TOUR 1 SIGNATURE OF DRILLER** SYLVAIN ARSENAULT **START TIME** 00:00 **END TIME** 08:00

BITS				DRILLING ASSEMBLY				MUD RECORD				DEVIATION SURVEYS				TIME LOG				
Bit Number 6 Size 159 IADC Code Manufacturer HALLIBURTON Type MM54R Serial No 12620495 Jets 8.7 8.7 8.7 Depth Out (m) 8.7 Depth In (m) 1857 Total Drilled (m) 127 Hrs Run Today 6.50 Cumulative Hrs Run 7.50 Entry Date 2016/01/26	No 1 Component BIT OD 159 ID 0 Length 0.26m	No 2 Component MOTOR HS OD 127 ID 0 Length 8.66m	No 3 Component NON MAG MONEL OD 119 ID 69 Length 9.35m	No 4 Component GAP SUB OD 121 ID 68 Length 1.71m	No 5 Component NON MAG FLEX MONEL OD 118 ID 69 Length 9.30m	No 6 Component NON MAG FLEX MONEL OD 118 ID 69 Length 9.27m	No 7 Component CROSSOVER SUB OD 134 ID 61 Length 0.94m	No 8 Component 15-4" HWDP OD 140 ID 72 Length 46.81m	No 9 Component CROSSOVER SUB OD 134 ID 75 Length 0.96m	No 10 Component JARS-HYD/MECH OD 136 ID 62 Length 5.19m	No 11 Component CROSSOVER SUB OD 134 ID 68 Length 0.94m	No 12 Component 144-4" HWDP OD 140 ID 72 Length 412.01m	Mud Type Water Oil Other	Time 01:30 Depth 1894.4m Deviation 1.1 Direction 272.3	Time 03:45 Depth 1923.65m Deviation 1.2 Direction 279.8	Time 05:45 Depth 1952.9m Deviation 1 Direction 287.8	Time 07:45 Depth 1982.15m Deviation 0.9 Direction 306.4	From 00:00 To 06:30 Elapsed 6:30 Code DRILL 159MM FROM 1877M TO 1984M	From 06:30 To 07:45 Elapsed 1:25 Code 20A DIRECTIONAL SURVEYS CONNECTION TIME	From 07:45 To 08:00 Elapsed 0:25 Code 257 RIG SERVICE FCT ANNUAL 19 SEC TO CLOSE

**TOUR 2 SIGNATURE OF DRILLER** DUNCAN STEWART **START TIME** 08:00 **END TIME** 20:00

BITS				DRILLING ASSEMBLY				MUD RECORD				DEVIATION SURVEYS				TIME LOG						
Bit Number 6 Size 159 IADC Code Manufacturer HALLIBURTON Type MM54R Serial No 12620495 Jets 8.7 8.7 8.7 Depth Out (m) 8.7 Depth In (m) 1857 Total Drilled (m) 234 Hrs Run Today 10.50 Cumulative Hrs Run 18.00 Entry Date 2016/01/26	No 1 Component BIT OD 159 ID 0 Length 0.26m	No 2 Component MOTOR HS OD 127 ID 0 Length 8.66m	No 3 Component NON MAG MONEL OD 119 ID 69 Length 9.35m	No 4 Component GAP SUB OD 121 ID 68 Length 1.71m	No 5 Component NON MAG FLEX MONEL OD 118 ID 69 Length 9.30m	No 6 Component NON MAG FLEX MONEL OD 118 ID 69 Length 9.27m	No 7 Component CROSSOVER SUB OD 134 ID 61 Length 0.94m	No 8 Component 15-4" HWDP OD 140 ID 72 Length 46.81m	No 9 Component CROSSOVER SUB OD 134 ID 75 Length 0.96m	No 10 Component JARS-HYD/MECH OD 136 ID 62 Length 5.19m	No 11 Component CROSSOVER SUB OD 134 ID 68 Length 0.94m	No 12 Component 144-4" HWDP OD 140 ID 72 Length 412.01m	Mud Type Water Oil Other	Time 10:45 Depth 2011.4m Deviation 1.7 Direction 351	Time 14:15 Depth 2040.69m Deviation 0.7 Direction 31.9	Time 17:15 Depth 2069.9m Deviation 0.5 Direction 85.5	Time 18:00 Depth 2079.65m Deviation 0.7 Direction 81.3	Time 19:45 Depth 2089.4m Deviation 1.6 Direction 98.2	From 08:00 To 18:30 Elapsed 10:50 Code DRILL 159mm HOLE FROM 1984M TO 2091M	From 18:30 To 19:30 Elapsed 1:00 Code 20A DIRECTIONAL SURVEYS/CONNECTIONS	From 19:30 To 19:45 Elapsed 0:25 Code 257 RIG SERVICE/FUNCTION UPPER PIPE RAMS 4 SECONDS TO CLOSE	From 19:45 To 20:00 Elapsed 0:25 Code 251 SAFETY MEETING/CREW CHANGE

**TOUR 3 SIGNATURE OF DRILLER** SYLVAIN ARSENAULT **START TIME** 20:00 **END TIME** 24:00

BITS				DRILLING ASSEMBLY				MUD RECORD				DEVIATION SURVEYS				TIME LOG					
Bit Number 6 Size 159 IADC Code Manufacturer HALLIBURTON Type MM54R Serial No 12620495 Jets 8.7 8.7 8.7 Depth Out (m) 8.7 Depth In (m) 1857 Total Drilled (m) 258 Hrs Run Today 3.25 Cumulative Hrs Run 21.25 Entry Date 2016/01/26	No 1 Component BIT OD 159 ID 0 Length 0.26m	No 2 Component MOTOR HS OD 127 ID 0 Length 8.66m	No 3 Component NON MAG MONEL OD 119 ID 69 Length 9.35m	No 4 Component GAP SUB OD 121 ID 68 Length 1.71m	No 5 Component NON MAG FLEX MONEL OD 118 ID 69 Length 9.30m	No 6 Component NON MAG FLEX MONEL OD 118 ID 69 Length 9.27m	No 7 Component CROSSOVER SUB OD 134 ID 61 Length 0.94m	No 8 Component 15-4" HWDP OD 140 ID 72 Length 46.81m	No 9 Component CROSSOVER SUB OD 134 ID 75 Length 0.96m	No 10 Component JARS-HYD/MECH OD 136 ID 62 Length 5.19m	No 11 Component CROSSOVER SUB OD 134 ID 68 Length 0.94m	No 12 Component 144-4" HWDP OD 140 ID 72 Length 412.01m	Mud Type Water Oil Other	Time 21:15 Depth 2099.15m Deviation 3.5 Direction 119					From 20:00 To 23:15 Elapsed 3:25 Code DRILL 159mm HOLE FROM 2091M TO 2115	From 23:15 To 23:45 Elapsed 0:50 Code 20A DIRECTIONAL SURVEYS/CONNECTIONS	From 23:45 To 24:00 Elapsed 0:25 Code 257 RIG SERVICE/FUNCTION LOWER PIPE RAMS 4 SECONDS TO CLOSE

FRONT PAGE SUMMARY

License No 31526 Well Name ARCCRES HZ SUNRISE K2-25-78-18

Tour Sheet Serial Number 02-25-078-18W6 Surface Location 02-25-078-18W6

Vendor Software Version Pason Year 2016 Month 01 Day 28

DAILY CHECKS table with 7 columns and 7 rows of inspection items.



Operator ARC RESOURCES Contractor PRECISION DRILLING, DIV OF PDCLP

Re-Entry Well Type HORIZ Spud Date Time 2016/01/21 19:00

Hours table with columns for codes 1-25 and rows for Tour 1, 2, 3, and Total.

TOUR 1 SIGNATURE OF DRILLER SYLVAIN ARSENAULT START TIME 00:00 END TIME 08:00

TOUR 1 detailed log form including sections for BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, and SAFETY.

TOUR 2 SIGNATURE OF DRILLER DUNCAN STEWART START TIME 08:00 END TIME 20:00

TOUR 2 detailed log form including sections for BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, and SAFETY.

TOUR 3 SIGNATURE OF DRILLER SYLVAIN ARSENAULT START TIME 20:00 END TIME 24:00

TOUR 3 detailed log form including sections for BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, and SAFETY.





**FRONT PAGE SUMMARY**

License No 31526 Well Name ARCREES HZ SUNRISE K2-25-78-18  
 Operator ARC RESOURCES  
 Operator's AFE 16DRLO015  
 Signature of Operator Representative Paul Boutlier

Tour Sheet Serial Number 02-25-078-18W6  
 Surface Location 02-25-078-18W6  
 Vendor Software Version Pason  
 Year 2016 Month 01 Day 30  
 Prov BC Loc Type DLS Unique Well Id 102/08-19-078-17W/600  
 Contractor PRECISION DRILLING, DIV OF PDCLP  
 Contractor's Job No 76  
 Signature of Contractor's Rig Manager DAVE ACHESON

Rig No 529  
 Well Type HORIZ  
 Spud Date Time 2016/01/21 19:00  
 Rig Release Date Time

**DAILY CHECKS**

1) Daily Walk Around Inspection  
 2) Detailed Inspection - Weekly (Using Check List)  
 3) H2S Signs Posted if Required  
 4) Well Licence & Stick Diagram Posted  
 5) Flare Lines Staked  
 6) BOP Drills Performed  
 7) Visually Inspected BOPs - Flare Lines & Degasser Lines

1) Rig Site Health & Safety Meeting (one/crew/month)  
 2) CAODC Rig Safety Inspection Checklist (one/rig/month)  
 3) Mast Inspection before Raising or Lowering  
 4) Crown Saver Checked  
 5) Motor Kills Checked



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	TOTAL
Hours		4.75					0.25								0.25						2.75	0.25				8.00
Tour 1		10.75					0.25								0.25						0.50	0.25				12.00
Tour 2		3.25					0.25														0.50					4.00
Tour 3		18.75					0.75								0.25						3.75	0.50				24.00

**FUEL @ 08:00 HOURS**

Rig	19500.00	Water	0.00
Temp	06.00	Temp	-8.00
Current Conditions	CLEAR	Wind Direction	N
Wind Speed	0	Wind Strength	CALM
Road Condition	FAIR		

**TOUR 1 SIGNATURE OF DRILLER** SYLVAIN ARSENAULT **START TIME** 00:00 **END TIME** 08:00

BITS		DRILLING ASSEMBLY		MUD RECORD		DEVIATION SURVEYS		TIME LOG										
Bit Number 7	Size 159	No 1 BIT	Component 159	OD 0	ID 0.26m	Mud Type 02:00	Water 1225	Oil 1225	Time 00:15	Depth 2333.5m	Deviation 55.5	Direction 124.9	Type	From 00:00	To 04:45	Elapsed 4.75	Code	DRILL 159MM HOLE FROM 2332M TO
IADC Code	Manufacturer SMITH	1 MOTOR HS	128	0	8.68m	Time 02:00	Density 1225	Funnel Viscosity	04:45	05:30	0.75	20	DIRECTIONAL SURVEYS CONNECTION TIME/DOWNLINK TOOLS					
Type R613	Serial No JK6229	1 NEAR BIT SUB	127	45	1.35m	Fluid Loss	Location of Sample SHAKERS	Depth 2336m	05:30	07:30	2.00	20E	TROUBLE SHOOT EM TOOL					
Jets 7.9 7.9 7.9 7.9	1 NON MAG FLEX MONEL	119	69	9.35m	pH	1 CROSSOVER SUB	134	61	0.94m	07:30	07:45	0.25	RIG SERVICE FCT ANNUAL 19 SEC TO CLOSE					
Depth Out (m) 2259	1 GAP SUB	121	68	1.69m	SHAKERS	15 HWDP	114	72	46.81m	07:45	08:00	0.25	SAFETY MEETING/CREW CHANGE					
Depth In (m) 94	1 NON MAG FLEX MONEL	118	69	9.30m	SHAKERS	1 CROSSOVER SUB	134	75	0.96m	<b>SOLIDS CONTROL</b> Equipment Name Hours Run Intake Density Over Flow Density Under Flow Density CENTRIFUGE 2 1230 1210 1900								
Total Drilled (m) 94	1 NON MAG FLEX MONEL	118	69	9.27m	SHAKERS	1 CROSSOVER SUB	134	68	0.94m	<b>MUD MATERIALS ADDED</b> Product Amount Type BARITE 50 EACH OPTI-GLIDE 1 EACH								
Hrs Run Today 4.75	1 NON MAG FLEX MONEL	118	69	9.27m	SHAKERS	1 CROSSOVER SUB	134	68	0.94m	<b>REDUCED PUMP SPEED</b> Pump No. Pressure Strokes/min Depth 1 5660 @ 50 @ 2337								
Cumulative Hrs Run 17.25	1 CROSSOVER SUB	134	68	0.94m	SHAKERS	1 CROSSOVER SUB	134	68	0.94m	<b>Boiler</b> Boiler # Hours Run pH Stack Temp 396 8 11 270								
Entry Date 2016/01/29	144 HWDP	114	72	412.01m	SHAKERS	144 HWDP	114	72	412.01m	<b>SAFETY</b> Safety Topic MEHL MACP CHANGE HEAD ON PUMP 82.00kdaN 3158kPa								
<b>CUTTING STRUCTURE</b> TI TO Gage ODC MDC Reason Pulled LOC Total Run (m/hr) BRG		<b>HOLE CONDITION</b> Kelly Down Total 2353.00m Weight of DC 0kdaN Weight of String 78kdaN		<b>REDUCED PUMP SPEED</b> Pump No. Pressure Strokes/min Depth 1 5660 @ 50 @ 2337		<b>Boiler</b> Boiler # Hours Run pH Stack Temp 396 8 11 270		<b>SAFETY</b> Safety Topic MEHL MACP CHANGE HEAD ON PUMP 82.00kdaN 3158kPa										

**TOUR 2 SIGNATURE OF DRILLER** DUNCAN STEWART **START TIME** 08:00 **END TIME** 20:00

BITS		DRILLING ASSEMBLY		MUD RECORD		DEVIATION SURVEYS		TIME LOG										
Bit Number 7	Size 159	No 1 BIT	Component 159	OD 0	ID 0.26m	Mud Type 08:00	Water 1120	Oil 1120	Time 08:00	Depth 2362.75m	Deviation 61.5	Direction 122	Type	From 08:00	To 18:45	Elapsed 10.75	Code	DRILL 159mm BUILD SECTION FROM 2353M TO 2401M
IADC Code	Manufacturer SMITH	1 MOTOR HS	128	0	8.68m	Time 08:00	Density 1220	Funnel Viscosity 65s/l	18:45	19:15	0.50	20A	DIRECTIONAL SURVEYS/CONNECTIONS					
Type R613	Serial No JK6229	1 NEAR BIT SUB	127	45	1.35m	Fluid Loss	Location of Sample SHAKERS SHAKERS	Depth 2353m	19:15	19:30	0.25	15B	RIG SERVICE/FUNCTION UPPER PIPE RAMS 4 SECONDS TO CLOSE					
Jets 7.9 7.9 7.9 7.9	1 NON MAG FLEX MONEL	119	69	9.35m	pH	1 CROSSOVER SUB	134	61	0.94m	19:30	19:45	0.25	WEEKLY 5 PART ACC CHK INITIAL PRESS 21000 KPA PRESSURE REMAINING 11000 KPA					
Depth Out (m) 2259	1 GAP SUB	121	68	1.69m	SHAKERS	15 HWDP	114	72	46.81m	19:45	20:00	0.25	TIME TO RECHARGE 2 MIN 37 SEC FUNC TESTED UPPER AND LOWER 2 SEC T/OPEN FUNC					
Depth In (m) 142	1 NON MAG FLEX MONEL	118	69	9.30m	SHAKERS	1 CROSSOVER SUB	134	75	0.96m	<b>SOLIDS CONTROL</b> Equipment Name Hours Run Intake Density Over Flow Density Under Flow Density CENTRIFUGE 3 1230 1200 1630								
Total Drilled (m) 142	1 NON MAG FLEX MONEL	118	69	9.27m	SHAKERS	1 CROSSOVER SUB	134	68	0.94m	<b>MUD MATERIALS ADDED</b> Product Amount Type BARITE 42 EACH LIME 20 EACH CAL CHLORIDE HT 30 EACH OPTI-GLIDE 1 EACH OPTI-FLUS 1 EACH OPTI-WET 1 EACH								
Hrs Run Today 10.75	1 NON MAG FLEX MONEL	118	69	9.27m	SHAKERS	1 CROSSOVER SUB	134	68	0.94m	<b>REDUCED PUMP SPEED</b> Pump No. Pressure Strokes/min Depth 1 5700 @ 50 @ 2378								
Cumulative Hrs Run 28.00	1 CROSSOVER SUB	134	68	0.94m	SHAKERS	1 CROSSOVER SUB	134	68	0.94m	<b>Boiler</b> Boiler # Hours Run pH Stack Temp 396 12 11 280								
Entry Date 2016/01/29	144 HWDP	114	72	412.01m	SHAKERS	144 HWDP	114	72	412.01m	<b>SAFETY</b> Safety Topic MEHL MACP INSTALL GEN #1 RAD 87.00kdaN 3107kPa								
<b>CUTTING STRUCTURE</b> TI TO Gage ODC MDC Reason Pulled LOC Total Run (m/hr) BRG		<b>HOLE CONDITION</b> Kelly Down -7.00m Total 2401.00m Weight of DC 0kdaN Weight of String 78kdaN		<b>REDUCED PUMP SPEED</b> Pump No. Pressure Strokes/min Depth 1 5700 @ 50 @ 2378		<b>Boiler</b> Boiler # Hours Run pH Stack Temp 396 12 11 280		<b>SAFETY</b> Safety Topic MEHL MACP INSTALL GEN #1 RAD 87.00kdaN 3107kPa										

**TOUR 3 SIGNATURE OF DRILLER** SYLVAIN ARSENAULT **START TIME** 20:00 **END TIME** 24:00

BITS		DRILLING ASSEMBLY		MUD RECORD		DEVIATION SURVEYS		TIME LOG										
Bit Number 7	Size 159	No 1 BIT	Component 159	OD 0	ID 0.26m	Mud Type 20:00	Water 1230	Oil 1220	Time 20:00	Depth 2406.6m	Deviation 69.9	Direction 120.8	Type	From 20:00	To 23:15	Elapsed 3.25	Code	DRILL 159MM HOLE FROM 2401M TO 2415M
IADC Code	Manufacturer SMITH	1 MOTOR HS	128	0	8.68m	Time 20:00	Density 1230	Funnel Viscosity 62s/l	23:15	23:45	0.50	20A	DIRECTIONAL SURVEYS CONNECTION TIME					
Type R613	Serial No JK6229	1 NEAR BIT SUB	127	45	1.35m	Fluid Loss	Location of Sample SHAKERS SHAKERS	Depth 2405m	23:45	24:00	0.25	7	RIG SERVICE FCT LOWER PIPE RAM 4 SEC TO CLOSE					
Jets 7.9 7.9 7.9 7.9	1 NON MAG FLEX MONEL	119	69	9.35m	pH	1 CROSSOVER SUB	134	61	0.94m	<b>SOLIDS CONTROL</b> Equipment Name Hours Run Intake Density Over Flow Density Under Flow Density CENTRIFUGE 0 0 0 0 0								
Depth Out (m) 2259	1 GAP SUB	121	68	1.69m	SHAKERS	15 HWDP	114	72	46.81m	<b>MUD MATERIALS ADDED</b> Product Amount Type CAL CHLORIDE HT 20 EACH OPTI-GLIDE 1 EACH LIME 10 EACH GILSONITE 1 EACH NEWVEX 3 EACH CYBER SEAL 3 EACH CALCIUM NITRATE 3 EACH								
Depth In (m) 156	1 NON MAG FLEX MONEL	118	69	9.30m	SHAKERS	1 CROSSOVER SUB	134	75	0.96m	<b>REDUCED PUMP SPEED</b> Pump No. Pressure Strokes/min Depth 1 5700 @ 50 @ 17700								
Total Drilled (m) 156	1 NON MAG FLEX MONEL	118	69	9.27m	SHAKERS	1 CROSSOVER SUB	134	68	0.94m	<b>Boiler</b> Boiler # Hours Run pH Stack Temp 396 4 11 280								
Hrs Run Today 3.25	1 CROSSOVER SUB	134	68	0.94m	SHAKERS	1 CROSSOVER SUB	134	68	0.94m	<b>SAFETY</b> Safety Topic MEHL MACP SOUR DRILL 83.00kdaN 3158kPa								
Cumulative Hrs Run 31.25	144 HWDP	114	72	412.01m	SHAKERS	144 HWDP	114	72	412.01m	<b>SAFETY</b> Safety Topic MEHL MACP SOUR DRILL 83.00kdaN 3158kPa								
Entry Date 2016/01/29	144 HWDP	114	72	412.01m	SHAKERS	144 HWDP	114	72	412.01m	<b>SAFETY</b> Safety Topic MEHL MACP SOUR DRILL 83.00kdaN 3158kPa								
<b>CUTTING STRUCTURE</b> TI TO Gage ODC MDC Reason Pulled LOC Total Run (m/hr) BRG		<b>HOLE CONDITION</b> Kelly Down 7.00m Total 2415.00m Weight of DC 0kdaN Weight of String 78kdaN		<b>REDUCED PUMP SPEED</b> Pump No. Pressure Strokes/min Depth 1 5700 @ 50 @ 17700		<b>Boiler</b> Boiler # Hours Run pH Stack Temp 396 4 11 280		<b>SAFETY</b> Safety Topic MEHL MACP SOUR DRILL 83.00kdaN 3158kPa										









FRONT PAGE SUMMARY

License No 31526 Well Name ARCREHS HZ SUNRISE K2-25-78-18

Tour Sheet Serial Number 0252529\_20160202\_1A Surface Location 02-25-078-18W6

Vendor Software Version Pason Year 2016 Month 02 Day 02

- 1) Daily Walk Around Inspection 2) Detailed Inspection - Weekly (Using Check List) 3) H2S Signs Posted if Required 4) Well Licence & Stick Diagram Posted 5) Flare Lines Staked 6) BOP Drills Performed 7) Visually Inspected BOPs - Flare Lines & Degasser Lines



Operator ARC RESOURCES Operator's AFE 16DRLO015 Signature of Operator Representative Sheldon Kashuba

Contractor PRECISION DRILLING, DIV OF PDCLP Contractor's Job No 76 Signature of Contractor's Rig Manager DAVE ACHESON

Rig No 529 Well Type HORIZ Spud Date Time 2016/01/21 19:00 Rig Release Date Time

OP RM table with columns for various parameters and values.

HOURLY LOG table with columns for CODE, RIG UP, DRILL ACTUAL, REAMING, CORING, CONDUCTIVITY, etc.

TOUR 1 SIGNATURE OF DRILLER JOSH GILBERT START TIME 00:00 END TIME 08:00

TOUR 1 data section including BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, and SAFETY.

TOUR 2 SIGNATURE OF DRILLER SYLVAIN ARSENAULT START TIME 08:00 END TIME 20:00

TOUR 2 data section including BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, and SAFETY.

TOUR 3 SIGNATURE OF DRILLER JOSH GILBERT START TIME 20:00 END TIME 24:00

TOUR 3 data section including BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, and SAFETY.

FRONT PAGE SUMMARY

License No 31526 Well Name ARCREX HZ SUNRISE K2-25-78-18 Tour Sheet Serial Number 02-25-078-18W6 Pason Vendor Software Version 2016 02 03

DAILY CHECKS

- 1) Daily Walk Around Inspection
2) Detailed Inspection - Weekly (Using Check List)
3) H2S Signs Posted if Required
4) Well License & Stick Diagram Posted
5) Flare Lines Staked
6) BOP Drills Performed
7) Visually Inspected BOPs - Flare Lines & Degasser Lines



Operator ARC RESOURCES Contractor PRECISION DRILLING, DIV OF PDCLP
Operator's AFE 16DRLO015 Contractor's Job No 76
Signature of Operator Representative Sheldon Kashuba Signature of Contractor's Rig Manager DAVE ACHESON

Table with 25 columns (CODE 1-25) and 10 rows (TOUR 1-3, Total). Columns include Rig Up, Drill Actual, Reaming, Coring, etc. Includes a WEATHER section on the right.

TOUR 1 SIGNATURE OF DRILLER JOSH GILBERT START TIME 00:00 END TIME 08:00

TOUR 1 Data Section: BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, MUD MATERIALS ADDED, SAFETY.

TOUR 2 SIGNATURE OF DRILLER SYLVAIN ARSENAULT START TIME 08:00 END TIME 20:00

TOUR 2 Data Section: BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, MUD MATERIALS ADDED, SAFETY.

TOUR 3 SIGNATURE OF DRILLER JOSH GILBERT START TIME 20:00 END TIME 24:00

TOUR 3 Data Section: BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, MUD MATERIALS ADDED, SAFETY.

FRONT PAGE SUMMARY

License No 31526 Well Name ARGRES HZ SUNRISE K2-25-78-18

Tour Sheet Serial Number 0252529\_20160204\_1A Surface Location 02-25-078-18W6

Vendor Software Version Pason Year 2016 Month 02 Day 04

- 1) Daily Walk Around Inspection
2) Detailed Inspection - Weekly (Using Check List)
3) H2S Signs Posted if Required
4) Well License & Stick Diagram Posted
5) Flare Lines Staked
6) BOP Drills Performed
7) Visually Inspected BOPs - Flare Lines & Degasser Lines

OP RM table with columns for various inspection items and status (MR, SDK).



Operator ARC RESOURCES
Operator's AFE 16DRLO015
Signature of Operator Representative Sheldon Kashuba

Contractor PRECISION DRILLING, DIV OF PDCLP
Contractor's Job No 76
Signature of Contractor's Rig Manager MARC RAYMOND

Rig No 529
Well Type HORIZ
Spud Date Time 2016/01/21 19:00
Rig Release Date Time

- 1) Rig Site Health & Safety Meeting (one/crew/month)
2) CAODC Rig Safety Inspection Checklist (one/rig/month)
3) Mast Inspection before Raising or Lowering
4) Crown Saver Checked
5) Motor Kills Checked

Table with 25 columns for hours (1-25) and rows for Tour 1, 2, 3, and Total. Includes sub-headers for Rig Up, Drill Actual, Reaming, Coring, etc.

TOUR 1 SIGNATURE OF DRILLER JOSH GILBERT START TIME 00:00 END TIME 08:00

TOUR 1 data section including BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, and SAFETY.

TOUR 2 SIGNATURE OF DRILLER SYLVAIN ARSENAULT START TIME 08:00 END TIME 20:00

TOUR 2 data section including BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, and SAFETY.

TOUR 3 SIGNATURE OF DRILLER JOSH GILBERT START TIME 20:00 END TIME 24:00

TOUR 3 data section including BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, CUTTING STRUCTURE, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, SOLIDS CONTROL, and SAFETY.

FRONT PAGE SUMMARY

License No 31526 Well Name ARCRES HZ SUNRISE K-25-78-18
Tour Sheet Serial Number 0252529\_20160205\_1A
Vendor Software Version Pason
Year 2016 Month 02 Day 05
Surface Location 02-25-078-18W6
Prov BC Loc Type DLS Unique Well Id 102/08-19-078-17W6/00
Operator ARC RESOURCES
Contractor PRECISION DRILLING, DIV OF PDCLP
Rig No 529
Well Type HORIZ
Signature of Operator Representative Sheldon Kashuba
Signature of Contractor's Rig Manager MARC RAYMOND
Rig Release Date Time

DAILY CHECKS

1) Daily Walk Around Inspection
2) Detailed Inspection - Weekly (Using Check List)
3) H2S Signs Posted if Required
4) Well License & Stick Diagram Posted
5) Flare Lines Staked
6) BOP Drills Performed
7) Visually Inspected BOPs - Flare Lines & Degasser Lines
8) BOP Drills Performed
9) Rig Site Health & Safety Meeting (one/crew/month)
10) CAODC Rig Safety Inspection Checklist (one/rig/month)
11) Mast Inspection before Raising or Lowering
12) Crown Saver Checked
13) Motor Kills Checked



Table with 25 columns (CODE 1-25) and 10 rows (TOUR 1-3, Total). Columns include Rig Up, Drill Actual, Reaming, Coring, Concl Mud & Circ, Trips, Rig Service, Repair Rig, Cut Off Drill Line, Dev Survey, Wireline Logs, Run Csg & Cement, Wait On Cement, Nipple Up BOP, Test BOP, Drillstem Test, Plug Back, Squeeze Cement, Fishing, Dir Work, Safety Meeting, Tear Down, Waiting On, Rig Watch, Other, TOTAL. Includes FUEL @ 08:00 HOURS and WEATHER summary.

TOUR 1 SIGNATURE OF DRILLER JOSH GILBERT START TIME 00:00 END TIME 08:00

TOUR 1 BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, SOLIDS CONTROL, MUD MATERIALS ADDED, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, Boiler, SAFETY. Includes detailed logs for drilling parameters, mud properties, and safety checks.

TOUR 2 SIGNATURE OF DRILLER SYLVAIN ARSENAULT START TIME 08:00 END TIME 20:00

TOUR 2 BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, SOLIDS CONTROL, MUD MATERIALS ADDED, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, Boiler, SAFETY. Includes detailed logs for drilling parameters, mud properties, and safety checks.

TOUR 3 SIGNATURE OF DRILLER JOSH GILBERT START TIME 20:00 END TIME 24:00

TOUR 3 BITS, DRILLING ASSEMBLY, MUD RECORD, DEVIATION SURVEYS, TIME LOG, SOLIDS CONTROL, MUD MATERIALS ADDED, METRES DRILLED, HOLE CONDITION, REDUCED PUMP SPEED, Boiler, SAFETY. Includes detailed logs for drilling parameters, mud properties, and safety checks.



**FRONT PAGE SUMMARY**

Tour Sheet Serial Number: Y52529\_20160206\_1B  
 Vendor Software Version: Pason  
 Year: 2016, Month: 02, Day: 06  
 License No: 31526, Well Name: ARCRES HZ SUNRISE K2-25-78-18  
 Surface Location: 02-25-078-18W6  
 Prov BC, Loc Type DLS, Unique Well Id: 102/08-19-078-17W6/00  
 Operator: ARC RESOURCES  
 Contractor: PRECISION DRILLING, DIV OF PDCLP  
 Operator's AFE: 16DRLO15  
 Signature of Operator Representative: Sheldon Kashuba  
 Contractor's Job No: 76  
 Signature of Contractor's Rig Manager: MARC RAYMOND  
 Rig No: 529  
 Well Type: HORIZ  
 Spud Date Time: 2016/01/21 19:00  
 Rig Release Date Time: 2016/02/06 07:00

**DAILY CHECKS**

1) Daily Walk Around Inspection  
 2) Detailed Inspection - Weekly (Using Check List)  
 3) H2S Signs Posted if Required  
 4) Well License & Stock Diagram Posted  
 5) Flare Lines Staked  
 6) BOP Drills Performed  
 7) Visually Inspected BOPs - Flare Lines & Degasser Lines  
 1) Rig Site Health & Safety Meeting (one/crew/month)  
 2) CAODC Rig Safety Inspection Checklist (one/rig/month)  
 3) Mast Inspection before Raising or Lowering  
 4) Crown Saver Checked  
 5) Motor KILLS Checked



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	TOTAL
HOURS	Rig Up	Drill Actual	Reaming	Coring	Cond Mud & Circ	Trips	Rig Service	Repair Rig	Cut Off Drill Log	Dev Survey	Wireline Logs	Run Csg & Cement	Wait On Cement	Nipple Up BOP	Test BOP	Drillstem Test	Plug Back	Squeeze Cement	Fishing	Dir Work	Safety Meeting	Tear Down	Waiting On	Rig Watch	Other	
Tour 1					1.25							2.25			3.00											8.00
Tour 2																					0.50	0.75				6.00
Tour 3																										
Total					1.25							2.25			3.00							0.50	0.75			14.00

Kelly Busting: 6:30, On Fuel: 2526.00  
 FUEL @ 08:00 HOURS  
 Rig: 12000.00, Meter: 0.00  
 Time: 06:00, Meter: -1.00  
 WEATHER: Wind Direction: CLEAR, Wind Strength: CALM, Cloud Condition: FAIR

**TOUR 1 SIGNATURE OF DRILLER** JOSH GILBERT **START TIME** 00:00 **END TIME** 08:00

BITS				DRILLING ASSEMBLY				MUD RECORD				DEVIATION SURVEYS				TIME LOG								
Bit Number	Size	IADC Code	Manufacturer	No	Component	OD	ID	Length	Mud Type	Water	Oil	Time	Depth	Deviation	Direction	Type	From	To	Elapsed	Code	Details of Operations in Sequence & Remarks			
																	00:00	01:15	1.25	2	pump 31.5m3 invert bottoms up, cement with 5.0m3 opitflush W/S-4 & MS-7, fill cement 25.4 tonne (31.70m3) Titanium 1500, pump tail cement 12 tonne (8.7m3) Gastight 1850			
																	01:15	02:30	1.25	2C	cont. cement with 5.0m3 Opitflush W/S-4 & MS-7, fill 24.06 TONNE (31.5m3) Titanium 1500, Pump tail cement 12 tonne (8.7m3) GASTIGHT 1850, Displaced W/ 19.28m3 inhibited water, bump plug 13 mpa OFCP			
																	02:30	03:30	1.00	2C	had good steady returns to nsurface with 5.0m3 good cement returns to surface, PLUG DOWN @ 02:57HR, 02/6/2016, job went very well with Trican			
																	03:30	03:45	0.25	21	SAFETY MEETING PRIOR TO NIPPLE DOWN/ COP 5-5			
																	03:45	06:45	3.00	14B	NIPPLE DOWN BOPs/ RIG OUT UPPER/LOWER HCRS/ KILL LINES/FLOWLINE/FLOW T/ SUB BEAMS			
																	06:45	07:00	0.25	25	SET CASING SLIPS/ SLIPS SET AT 65 DECN			
																	07:00	07:15	0.25	21	SAFETY MEETING/ CREW CHANGE MEETING			
																	07:15	08:00	0.75	22	TEAR DOWN, FINISH CLEANING MUD TANKS			
Remarks: INSPECT FLOOR EQUIPMENT, TONG, BACK UP SLINGS, DEAD MAN, CAT HEAD, ST-80, TUGGER LINE HOOK, INSPECT CATWALK, PIPE RACKS, PIPE RACK PINS/CHAINS, FLARE AND DEGASSER LINES, LOAD LINE, FUNCTIONED UPPER & LOWER TRAVEL LIMITS & E- STOPS, CROWN SAVER, IGNITER AND PASON CHOKE, MANUAL CHOKE INSPECT STABBING VALVE/INSIDE BOP																								
<b>SAFETY</b>																								
Safety Topic: NIPPLE DOWN, MEHL, MACP, 85.00kda, 2109kPa																								

**TOUR 2 SIGNATURE OF DRILLER** SYLVAIN ARSENAULT **START TIME** 08:00 **END TIME** 20:00

BITS				DRILLING ASSEMBLY				MUD RECORD				DEVIATION SURVEYS				TIME LOG								
Bit Number	Size	IADC Code	Manufacturer	No	Component	OD	ID	Length	Mud Type	Water	Oil	Time	Depth	Deviation	Direction	Type	From	To	Elapsed	Code	Details of Operations in Sequence & Remarks			
																	08:00	14:00	6.00	22	TEAR DOWN RIG / WALK RIG / PREP FOR TRUCKS, RIG RELEASED @ 7:00 HRS ON FEBRUARY 6/2016			
Remarks: INSPECT FLOOR EQUIPMENT, TONG, BACK UP SLINGS, DEAD MAN, CAT HEAD, ST-80, TUGGER LINE HOOK, INSPECT CATWALK, PIPE RACKS, PIPE RACK PINS/CHAINS, FLARE AND DEGASSER LINES, LOAD LINE, FUNCTIONED UPPER & LOWER TRAVEL LIMITS & E- STOPS, CROWN SAVER, IGNITER AND PASON CHOKE, MANUAL CHOKE																								
<b>SAFETY</b>																								
Safety Topic: TEAR OUT RIG/ WALK RIG, MEHL, MACP, 15.00kda, 0kPa																								

**TOUR 3 SIGNATURE OF DRILLER** MARC RAYMOND **START TIME** 20:00 **END TIME** 24:00

BITS				DRILLING ASSEMBLY				MUD RECORD				DEVIATION SURVEYS				TIME LOG								
Bit Number	Size	IADC Code	Manufacturer	No	Component	OD	ID	Length	Mud Type	Water	Oil	Time	Depth	Deviation	Direction	Type	From	To	Elapsed	Code	Details of Operations in Sequence & Remarks			
																					Remarks:			
<b>SAFETY</b>																								
Safety Topic: MEHL, MACP																								