APPENDIX 2. DAILY DRILLING REPORTS

The Nitro 14 rig was rig released from PD 120A after drilling and cementing the Conductor and Surface sections of the well.

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The PD 120A well was suspended until the 11th December 2012 when Nitro Rig D1 was mobilised to PD 120A to drill the Radius and In-seam sections of the well.

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After an extensive search of internal records, no copies of DDR's for the Conductor and Surface sections for PD 120A could be found.

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Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 8/12/2012
Report #: 1.0
Days From Spud: -4.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101

Well Type	Well Configuration Type	Spud Date	Rig Release Date	Start Date
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan…	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90

Target Depth (mKB)	Total Depth (mKB)	End Depth (mKB)	Depth Progress (m)
1,562.00	1,546.63	0.00	

Rig (Names)	Weather	Latitude (°)	Longitude (°)
Nitro Drilling NitroD1		22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Haul loads to Dysart, washdown at Nitro yard

Operations Next Report Period
Continue hauling out loads

Operations at 6:00

Remarks
06:00-18:00 hours operation on BWP-2 location. 10 loads remaining on site

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Proble m?	Phase	End Depth (mKB)	Activity	Com
16:00	18:00	2.00		Rig Move	61.00	RMO	Top up cement, haul out loads from BWP-2
18:00	00:00	6.00	Yes	Rig Move	61.00	STB	Operations suspended as per AAC / both crews on daylights

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Proble m?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00	Yes	Rig Move	61.00	STB	Operations suspended as per AAC / both crews on daylights

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

NPT

Activity	Start Date	End Date
Waiting on - day light	8/12/2012 18:00	9/12/2012 06:00

Comment
Wait on location, access conditions stipulate activity from 06:00 - 18:00

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #<stringno>, <des>

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

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)

String Components

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
STANDBY	6.00	6.00
MOVE	2.00	2.00

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Robert Craig	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
HAZOBS		Nitro Drilling	
SLAM		Nitro Drilling	12
JSA		Nitro Drilling	
SOP		Nitro Drilling	

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	12	24.00	24.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)

P (bars)	Slow Spd	Strokes (s…	Eff (%)

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)

P (bars)	Slow Spd	Strokes (s…	Eff (%)

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 9/12/2012
Report #: 2.0
Days From Spud: -3.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101
Well Type	**Well Configuration Type**	**Spud Date**	**Rig Release Date**	**Start Date**
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90
Target Depth (mKB)	**Total Depth (mKB)**	**End Depth (mKB)**	**Depth Progress (m)**
1,562.00	1,546.63	0.00	
Rig (Names)	**Weather**	**Latitude (°)**	**Longitude (°)**
Nitro Drilling NitroD1	Slightly overcast	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Finish hauling loads to Dysartfrom Blackwater, washdown at Nitro yard

Operations Next Report Period
Washdown and haul loads to location

Operations at 6:00

Remarks
Directional & ranging requirements still to be finalized.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00	Yes	Rig Move	61.00	STB	Operations suspended as per AAC / both crews on daylights
06:00	18:00	12.00		Rig Move	61.00	RMO	Continue hauling loads from BWP-2. Hornery tank for fluids still on location, vac truck and tilt tray to arrive 10/12/2012 for removal
18:00	00:00	6.00	Yes	Rig Move	61.00	STB	Both crews on daylights

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00	Yes	Rig Move	61.00	STB	Both crews on daylights

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

NPT

Activity	Start Date	End Date
Waiting on - day light	8/12/2012 18:00	9/12/2012 06:00

Comment: Wait on location, access conditions stipulate activity from 06:00 - 18:00

Activity	Start Date	End Date
Waiting on - day light	9/12/2012 18:00	10/12/2012 06:00

Comment: Wait on location, access conditions stipulate activity from 06:00 - 18:00

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #<stringno>, <des>

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

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
String Length (m)	**Weight of String in Air (daN)**	**BHA ROP (m/hr)**

String Components

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
WOB (daN)	**RPM (rpm)**	**SPP (bars)**	**Drill Str Wt (daN)**	**PU Str Wt (daN)**	**SO Str Wt (daN)**	**Drilling Torque**	**Off Btm Tq**

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
STANDBY	12.00	18.00
MOVE	12.00	14.00

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Robert Craig	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
SOP		Nitro Drilling	
SLAM		Nitro Drilling	11
JSA		Nitro Drilling	
HAZOBS		Nitro Drilling	

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	12	144.00	144.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3
Liner Size (mm)	**Vol/Stk OR (m³/stk)**	
P (bars)	**Slow Spd**	**Strokes (s... Eff (%)**

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4
Liner Size (mm)	**Vol/Stk OR (m³/stk)**	
P (bars)	**Slow Spd**	**Strokes (s... Eff (%)**

Report Printed: 24/01/2013

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Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 10/12/2012
Report #: 3.0
Days From Spud: -2.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101
Well Type	**Well Configuration Type**	**Spud Date**	**Rig Release Date**	**Start Date**
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90
Target Depth (mKB)	**Total Depth (mKB)**	**End Depth (mKB)**	**Depth Progress (m)**
1,562.00	1,546.63	0.00	
Rig (Names)	**Weather**	**Latitude (°)**	**Longitude (°)**
Nitro Drilling NitroD1	Partly overcast	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Move loads from Nitro yard to Dysart to location. Sign location over from construction to drilling. Spot mud tanks and pump with crane. Spot sub and other loads.

Operations Next Report Period
Continue to spot loads, commence rig up. Attend safety meeting in Moranbah

Operations at 6:00

Remarks
Bits needed to make up tools. Nitro investigating feasibility of doing this in their shop

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00	Yes	Rig Move	61.00	STB	Both crews on daylights
06:00	18:00	12.00		Rig Move	61.00	RMO	Continue hauling loads from Dysart. Spot mud tanks and pump with LMR crane service. Spot sub and other loads on location. Break tower tomorrow evening
18:00	00:00	6.00	Yes	Rig Move	61.00	STB	Both crews on daylights

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00	Yes	Rig Move	61.00	STB	Both crews on daylights

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

NPT

Activity	Start Date	End Date
Waiting on - day light	9/12/2012 18:00	10/12/2012 06:00

Comment: Wait on location, access conditions stipulate activity from 06:00 - 18:00

Activity	Start Date	End Date
Waiting on - day light	10/12/2012 18:00	11/12/2012 06:00

Comment: Both crews on daylights

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #<stringno>, <des>

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

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
String Length (m)	**Weight of String in Air (daN)**	**BHA ROP (m/hr)**

String Components

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
WOB (daN)	**RPM (rpm)**	**SPP (bars)**	**Drill Str Wt (daN)**	**PU Str Wt (daN)**	**SO Str Wt (daN)**	**Drilling Torque**	**Off Btm Tq**

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
STANDBY	12.00	30.00
MOVE	12.00	26.00

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Robert Craig	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
SOP		Nitro Drilling	
SLAM		Nitro Drilling	10
JSA		Nitro Drilling	
HAZOBS		Nitro Drilling	

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	12	144.00	144.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)

P (bars)	Slow Spd	Strokes (s...	Eff (%)

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)

P (bars)	Slow Spd	Strokes (s...	Eff (%)

Report Printed: 24/01/2013

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

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Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 11/12/2012
Report #: 4.0
Days From Spud: -1.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101

Well Type	Well Configuration Type	Spud Date	Rig Release Date	Start Date
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90

Target Depth (mKB)	Total Depth (mKB)	End Depth (mKB)	Depth Progress (m)
1,562.00	1,546.63	0.00	

Rig (Names)	Weather	Latitude (°)	Longitude (°)
Nitro Drilling NitroD1	Partly overcast	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Continue moving loads from Dysart to location and rig up. Spot rig on sub structure and raise. Rig up office trailers and misc equipment. Unable to bring in new loads due to pipeline digging making access unpassable from 10:00-14:15. Raise mast and nipple up BOP. Haul in loads and break tower.

Operations Next Report Period
Continue and complete rig move onto location. Continue rigging up.

Operations at 6:00
Continue rig move & rigging up.

Remarks
Have re run 8-1/2" bit on location. Would like new 8-1/2" bit.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00	Yes	Rig Move	61.00	STB	Both crews on daylights
06:00	15:00	9.00		Rig Move	61.00	RMO	Shift loads from Dysart wash down bay to location
15:00	00:00	9.00		Rig Up	61.00	RUU	Finish spotting loads / rig up

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	13:00	13.00		Rig Up	61.00	RUU	Finish rigging up, nipple up BOP's, prepare to PT

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

NPT

Activity	Start Date	End Date
Waiting on - day light	10/12/2012 18:00	11/12/2012 06:00

Comment
Both crews on daylights

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #<stringno>, <des>

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

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)

String Components

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
MOVE	18.00	44.00
STANDBY	6.00	36.00

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Robert Craig	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
HAZOBS		Nitro Drilling	2
JSA		Nitro Drilling	1
SLAM		Nitro Drilling	2
SOP		Nitro Drilling	

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	12	144.00	144.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)

P (bars)	Slow Spd	Strokes (s...	Eff (%)

2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)

P (bars)	Slow Spd	Strokes (s...	Eff (%)

Report Printed: 24/01/2013

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 12/12/2012
Report #: 5.0
Days From Spud: 0.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101

Well Type	Well Configuration Type	Spud Date	Rig Release Date	Start Date
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90

Target Depth (mKB)	Total Depth (mKB)	End Depth (mKB)	Depth Progress (m)
1,562.00	1,546.63	0.00	

Rig (Names)	Weather	Latitude (°)	Longitude (°)
Nitro Drilling NitroD1	Partly overcast	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Finish rig up and begin pressure testing of stack. Make up BHA, and RIH to DOC. FIT test completed this morning.

Operations Next Report Period
Drill ahead 8 1/2" hole w/ Pathfinder

Operations at 6:00
Preparing to make up directional BHA

Remarks
Pathfinder directional drillers on location.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Proble m?	Phase	End Depth (mKB)	Activity	Com
00:00	13:00	13.00		Rig Up	61.00	RUU	Finish rigging up, nipple up BOP's, prepare to PT
13:00	22:00	9.00		Rig Up	51.90	NUD	Pressure test BOP and choke manifold, 2000PSI high, 750PSI low
22:00	23:30	1.50		Rig Up	51.90	MBH	Make up BHA to rill out cement, RIH, tag at 48mGL
23:30	00:00	0.50		Radius Bend	51.90 70.68	DCM	Drill out cement

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Proble m?	Phase	End Depth (mKB)	Activity	Com
00:00	02:15	2.25		Radius Bend	73.00	DCM	Drill cement and shoe track as well as three meters of new hole for FIT
02:15	02:45	0.50		Radius Bend	73.00	CIR	Circulate clean mud for FIT test
02:45	03:00	0.25		Radius Bend	73.00	FIT	Conduct FIT. Leak back to ~90psi (86.93psi calculated) where it stabilized for two minutes, bleed back. EMW calculated at 15.38ppg
03:00	04:00	1.00		Radius Bend	73.00	TRI	Pull out of hole to make up directional tools
04:00	04:30	0.50		Radius Bend	73.00	BBH	Lay out BHA
04:30	08:30	4.00		Radius Bend	73.00	MBH	Make up directional tools with Pathfinder

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #1, Drill out

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
1	215.9	NOV	SKP616M	___	130909	0.30

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
		-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
75.61	4,092	8.6

String Components
NOV SKP616M, Bit Sub, Drill Collar, XO Sub, HWDP

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Original Hole	51.90	69.10	17.20	2.00	2.00	8.6	

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
	80	70.68	18.78			9.4	

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
MOVE	13.00	57.00
WORKTIME	11.00	11.00
STANDBY	0.00	36.00

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Robert Craig	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
HAZOBS		Nitro Drilling	
JSA		Nitro Drilling	
SLAM		Nitro Drilling	
SOP		Nitro Drilling	

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	12	144.00	144.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)

P (bars)	Slow Spd	Strokes (s...	Eff (%)

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)

Report Printed: 24/01/2013

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

P (bars)	Slow Spd	Strokes (s…	Eff (%)

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 13/12/2012
Report #: 6.0
Days From Spud: 1.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101
Well Type	**Well Configuration Type**	**Spud Date**	**Rig Release Date**	**Start Date**
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90
Target Depth (mKB)	**Total Depth (mKB)**	**End Depth (mKB)**	**Depth Progress (m)**
1,562.00	1,546.63	138.80	68.12
Rig (Names)	**Weather**	**Latitude (°)**	**Longitude (°)**
Nitro Drilling NitroD1	Clear	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Complete FIT test - 15.38ppg achieved at leak off. Pull out to make up directional tools and run in hole with same. Drill ahead to 138m. Pump failure, repair suction line welds.

Operations Next Report Period
Drill ahead to ICP

Operations at 6:00
Drilling ahead at 237m

Remarks
Order to come out of stores this morning

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	02:15	2.25		Radius Bend	73.00	DCM	Drill cement and shoe track as well as three meters of new hole for FIT
02:15	02:45	0.50		Radius Bend	73.00	CIR	Circulate clean mud for FIT test
02:45	03:00	0.25		Radius Bend	73.00	FIT	Conduct FIT. Leak back to ~90psi (86.93psi calculated) where it stabilized for two minutes, bleed back. EMW calculated at 15.38ppg
03:00	04:00	1.00		Radius Bend	73.00	TRI	Pull out of hole to make up directional tools
04:00	04:30	0.50		Radius Bend	73.00	BBH	Lay out BHA
04:30	08:30	4.00		Radius Bend	73.00	MBH	Make up directional tools with Pathfinder
08:30	09:30	1.00		Radius Bend	73.00	SFT	Create JSA for loading and makingup bit / directional tools
09:30	11:45	2.25		Radius Bend	73.00	MBH	Pick up and make up BHA
11:45	12:15	0.50		Radius Bend	73.00	SFT	Pre-spud safety meeting. Test ESD on rig
12:15	13:45	1.50		Radius Bend	73.00	TRI	Make up heavy weight drill pipe and run in to shoe
13:45	14:15	0.50		Radius Bend	73.00	BRM	Ream through shoe - 1.5 degree bend
14:15	18:30	4.25		Radius Bend	138.00	DRL	Drill ahead from 73m to 138m with surveys
18:30	00:00	5.50	Yes	Radius Bend	138.00	TRI	Mud pump failure. Pull to shoe with BHA to repair suction line welds. Run in and test to no avail. Pull back to 118m and repair

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	17:00	17.00		Radius Bend	408.00	DRL	Run back to bottom and continue drilling ahead to 408m

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)
	16:00		1.042	0
	21:00		1.042	0
	00:00		1.042	0

NPT

Activity	Start Date	End Date
Breakdown - Mud Pump	13/12/2012 18:30	14/12/2012 00:00

Comment
Suction line on mud pump weld failure

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
AusDex	sacks			1.0	-1.0	
KCL	sacks			10.0	-10.0	

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
WORKTIME	18.25	29.25
DRILL	4.25	4.25
SAFETY	1.50	1.50
MOVE	0.00	57.00
STANDBY	0.00	36.00

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Robert Craig	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
HAZOBS		Nitro Drilling	
JSA		Nitro Drilling	
SLAM		Nitro Drilling	
SOP		Nitro Drilling	

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	21	252.00	252.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)

P (bars)	Slow Spd	Strokes (s...	Eff (%)

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Report Printed: 24/01/2013

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 13/12/2012
Report #: 6.0
Days From Spud: 1.00

Well Name: PD120A

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
Soda Ash	sacks			1.0	-1.0	
XanBore	sacks			1.0	-1.0	

Liner Size (mm)		Vol/Stk OR (m³/stk)	
P (bars)	Slow Spd	Strokes (s…	Eff (%)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #1, Drill out

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
1	215.9	NOV	SKP616M	___	130909	0.30

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
		-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
75.61	4,092	8.6

String Components
NOV SKP616M, Bit Sub, Drill Collar, XO Sub, HWDP

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)
Original Hole	51.90	69.10	17.20	2.00	2.00	8.6	

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
	80						

BHA #2, Build

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
2	215.9	NOV	S516	___	E144207	0.22

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
		-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
41.69		55.5

String Components
NOV S516, XO Sub - Non Mag, 6-1/4" DC, XO Sub - Non Mag, NMDC, XO Sub - Non Mag, HDS1 MWD, Pony Collar, Float Sub, G2 Dynadrill HR

Drilling Parameters

138.00 67.32 20.70

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)
Original Hole	70.68	138.80	68.12	3.25	3.25	21.0	1.325

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
	34	86.2				4,200.0	

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

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Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 14/12/2012
Report #: 7.0
Days From Spud: 2.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101

Well Type	Well Configuration Type	Spud Date	Rig Release Date	Start Date
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90

Target Depth (mKB)	Total Depth (mKB)	End Depth (mKB)	Depth Progress (m)
1,562.00	1,546.63	408.00	269.20

Rig (Names)	Weather	Latitude (°)	Longitude (°)
Nitro Drilling NitroD1	clear	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Drilled ahead from 73m to 406m

Operations Next Report Period
Drill to casing point.

Operations at 6:00
Prestarts, drilling ahead from 454.64m

Remarks
Had problems with pump # 1 overheating. Mechanics from Dysart came to location and seem to have fixed the problem. Pump # 2 is just a paper weight on location

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	17:00	17.00		Radius Bend	408.00	DRL	Run back to bottom and continue drilling ahead to 408m
17:00	00:00	7.00	Yes	Radius Bend	408.00	STB	Mud pump failure, pull back to shoe

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	02:30	2.50	Yes	Radius Bend	405.00 408.00	STB	Repair mud pump #1. Run back to bottom.
02:30	06:00	3.50		Radius Bend	454.64	DRL	Drill ahead from 405 to 454.64m. 408.00 m

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

NPT

Activity	Start Date	End Date
Breakdown - Mud Pump	14/12/2012 17:00	15/12/2012 02:30

Comment
Mud pump failure

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #2, Build

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
2	215.9	NOV	S516	___	E144207	0.22

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
		-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
41.69		55.5

String Components
NOV S516, XO Sub - Non Mag, 6-1/4" DC, XO Sub - Non Mag, NMDC, XO Sub - Non Mag, HDS1 MWD, Pony Collar, Float Sub, G2 Dynadrill HR

Drilling Parameters 138.00

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Original Hole	138.80	408.00	337.32	8.00	11.25	33.7	1.363

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
	34	89.6				4,300.0	

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
DRILL	17.00	21.25
STANDBY	7.00	43.00
MOVE	0.00	57.00
SAFETY	0.00	1.50
WORKTIME	0.00	29.25

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Robert Craig	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
HAZOBS	2	Nitro Drilling	
JSA	1	Nitro Drilling	
SLAM	2	Nitro Drilling	
SOP	2	Nitro Drilling	

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)

P (bars)	Slow Spd	Strokes (s...	Eff (%)

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Report Printed: 24/01/2013

Liner Size (mm)		Vol/Stk OR (m^3/stk)	
P (bars)	Slow Spd	Strokes (s…	Eff (%)

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 15/12/2012
Report #: 8.0
Days From Spud: 3.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101
Well Type	**Well Configuration Type**	**Spud Date**	**Rig Release Date**	**Start Date**
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90
Target Depth (mKB)	**Total Depth (mKB)**	**End Depth (mKB)**	**Depth Progress (m)**
1,562.00	1,546.63	544.00	136.00
Rig (Names)	**Weather**	**Latitude (°)**	**Longitude (°)**
Nitro Drilling NitroD1	clear	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Drilled sidetrack #1 436m to 455m, drill ahead to 544m

Operations Next Report Period
Drill ahead to ICP, run casing

Operations at 6:00
Drilling ahead @ 615m

Remarks
15.92 deg dogleg, sidetrack, drill ahead

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Proble m?	Phase	End Depth (mKB)	Activity	Com
00:00	02:30	2.50	Yes	Radius Bend	405.00 408.00	STB	Repair mud pump #1. Run back to bottom.
02:30	06:00	3.50		Radius Bend	454.64	DRL	Drill ahead from 405 to 454.64m. 408.00 m
06:00	06:30	0.50		Radius Bend	454.64	SFT	Pre-tour safety meeting
06:30	08:45	2.25		Radius Bend	483.46	DRL	Drill ahead to ~~483.46~~ 478.48m.
08:45	09:30	0.75		Radius Bend	483.46	TRI	Trip to 436m.
09:30	16:30	7.00		Radius Bend	455.00	DRL	sidetrack from 436m to 455m, 3-6m/hr @ 350 GPM
16:30	18:00	1.50		Radius Bend	473.00	DRL	drill ahead from 455m to 473m
18:00	18:30	0.50		Radius Bend	473.00	SFT	Pre-tour safety meeting
18:30	00:00	5.50		Radius Bend	540.00	DRL	Drill ahead to 540m

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Proble m?	Phase	End Depth (mKB)	Activity	Com
00:00	15:15	15.25		Radius Bend	694.87	DRL	Drill ahead from 540m to 694.87TD

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

NPT

Activity	Start Date	End Date
Breakdown - Mud Pump	14/12/2012 17:00	15/12/2012 02:30

Comment
Mud pump failure

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #2, Build

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
2	215.9	NOV	S516	___	E144207	0.22

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
		-------
String Length (m)	**Weight of String in Air (daN)**	**BHA ROP (m/hr)**
41.69		55.5

String Components
NOV S516, XO Sub - Non Mag, 6-1/4" DC, XO Sub - Non Mag, NMDC, XO Sub - Non Mag, HDS1 MWD, Pony Collar, Float Sub, G2 Dynadrill HR

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
DRILL	19.75	41.00
STANDBY	2.50	45.50
SAFETY	1.00	2.50
WORKTIME	0.75	30.00
MOVE	0.00	57.00

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Robert Craig	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
HAZOBS	2	Nitro Drilling	
JSA	1	Nitro Drilling	
SLAM	2	Nitro Drilling	
SOP	2	Nitro Drilling	

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s...	Eff (%)

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Report Printed: 24/01/2013

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 15/12/2012
Report #: 8.0
Days From Spud: 3.00

Well Name: PD120A

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Sidetrack 2	408.00	544.00	473.32		11.25		1.325

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
	40	79.3				3,150.0	

Liner Size (mm)		Vol/Stk OR (m³/stk)	
114.3		0.005	
P (bars)	Slow Spd	Strokes (s...	Eff (%)

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

Report Printed: 24/01/2013

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 16/12/2012
Report #: 9.0
Days From Spud: 4.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101
Well Type	**Well Configuration Type**	**Spud Date**	**Rig Release Date**	**Start Date**
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90
Target Depth (mKB)	**Total Depth (mKB)**	**End Depth (mKB)**	**Depth Progress (m)**
1,562.00	1,546.63	694.89	150.89
Rig (Names)	**Weather**	**Latitude (°)**	**Longitude (°)**
Nitro Drilling NitroD1	clear	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Drilled to section TD. Wiiper trip, tight pulling out, reamed slides to bottom

Operations Next Report Period
Finish POOH, lay out DD tools, rig to and run casing, cement

Operations at 6:00
POOH to layout DD tools and run casing

Remarks

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	15:15	15.25		Radius Bend	694.87	DRL	Drill ahead from 540m to 694.87TD
15:15	16:30	1.25		Radius Bend	694.87	CIR	circulate hole clean
16:30	00:00	7.50		Radius Bend	694.87	TRI	Wiper trip

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00		Radius Bend	694.87	TRI	RIH wiper trip @ 638m

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #2, Build

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
2	215.9	NOV	S516	___	E144207	0.22

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
		-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
41.69		55.5

String Components
NOV S516, XO Sub - Non Mag, 6-1/4" DC, XO Sub - Non Mag, NMDC, XO Sub - Non Mag, HDS1 MWD, Pony Collar, Float Sub, G2 Dynadrill HR

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Sidetrack 2	544.00	694.89	624.21		11.25		1.325
WOB (daN)	**RPM (rpm)**	**SPP (bars)**	**Drill Str Wt (daN)**	**PU Str Wt (daN)**	**SO Str Wt (daN)**	**Drilling Torque**	**Off Btm Tq**
	40	79.3				3,150.0	

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
DRILL	15.25	56.25
WORKTIME	8.75	38.75
MOVE	0.00	57.00
SAFETY	0.00	2.50
STANDBY	0.00	45.50

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Robert Craig	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
HAZOBS	3	Nitro Drilling	
JSA	3	Nitro Drilling	
SLAM	2	Nitro Drilling	
SOP	2	Nitro Drilling	

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s...	Eff (%)

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Report Printed: 24/01/2013

Liner Size (mm)		Vol/Stk OR (m³/stk)	
114.3		0.005	
P (bars)	Slow Spd	Strokes (s…	Eff (%)

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 17/12/2012
Report #: 10.0
Days From Spud: 5.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101
Well Type	**Well Configuration Type**	**Spud Date**	**Rig Release Date**	**Start Date**
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan…	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90
Target Depth (mKB)	**Total Depth (mKB)**	**End Depth (mKB)**	**Depth Progress (m)**
1,562.00	1,546.63	694.89	0.00
Rig (Names)	**Weather**	**Latitude (°)**	**Longitude (°)**
Nitro Drilling NitroD1	clear	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary

Run back to bottom for wiper trip. Circulate and condition hole for casing run. Pull out and lay down directional tools. Rig to and run 58 joints of 7" 23ppf K55 casing. Set depth of 672m. Due to casing order being run wrong, shoe depth has been changed to 648.72m 648.67 m

Operations Next Report Period

Cement with Halliburton, bump plug 2bbl early. Wait on cement. Lift and remove BOP, nipple up B section. Pressure test

Operations at 6:00

Wait on cement

Remarks

Sumps full
Bumped plug 2bbl early which prompted us to do another check to see if there was any run discrepancy. It has been discovered that we are 2 joints out and that actual shoe depth is 648.67m instead of 672.0m.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00		Radius Bend	694.87	TRI	RIH wiper trip @ 638m
06:00	07:00	1.00		Radius Bend	694.87	TRI	Continue wiper trip
07:00	08:15	1.25		Radius Bend	694.87	CIR	Circulate and condition hole for casing
08:15	12:30	4.25		Radius Bend	694.87	TRI	Pull out of the hole
12:30	13:30	1.00		Radius Bend	694.87	SFT	Create JSA for laying down directional tools with Pathfinder
13:30	16:00	2.50		Radius Bend	694.87	BBH	Break out and lay down directional tools
16:00	23:30	7.50		Radius Bend	694.87	SEC	Rig to and run 58 joints of 23ppf K55 7" casing. Set depth of 672m (shoe depth has been changed due to run discrepancy to 648.67m)
23:30	00:00	0.50		Radius Bend	694.87	OTH	Rig to cement with Halliburton

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	03:00	3.00		Radius Bend	694.87	CMT	Rig to cement with Halliburton
03:00	05:30	2.50		Radius Bend	694.87	CMT	cement 7" casing w/halliburton
05:30	06:00	0.50		Radius Bend	694.87	CMW	WOC

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10 64.73
Intermediate	177.8	648.67

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
WORKTIME	23.00	61.75
SAFETY	1.00	3.50
DRILL	0.00	56.25
MOVE	0.00	57.00
STANDBY	0.00	45.50

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Robert Craig	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
HAZOBS		Nitro Drilling	
JSA		Nitro Drilling	
SLAM		Nitro Drilling	
SOP		Nitro Drilling	

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s…	Eff (%)

Report Printed: 24/01/2013

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 17/12/2012
Report #: 10.0
Days From Spud: 5.00

Well Name: PD120A

DRILL STRING AND BIT INFORMATION

BHA #<stringno>, <des>

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

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)

String Components

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

MUD PUMP

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

P (bars)	Slow Spd	Strokes (s…	Eff (%)

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 18/12/2012
Report #: 11.0
Days From Spud: 6.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101
Well Type	**Well Configuration Type**	**Spud Date**	**Rig Release Date**	**Start Date**
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan…	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90
Target Depth (mKB)	**Total Depth (mKB)**	**End Depth (mKB)**	**Depth Progress (m)**
1,562.00	1,546.63	694.89	0.00
Rig (Names)	**Weather**	**Latitude (°)**	**Longitude (°)**
Nitro Drilling NitroD1	clear	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Cemented, discovered casing discrepancy and adjusted shoe depth, WOC, nipple down BOP and nipple up B section, Ptest, nipple up

Operations Next Report Period
drill out cement, POOH for directional BHA, RIH, drill ahead

Operations at 6:00
RIH to tag / drill out cement

Remarks
shoe depth changed to 648.67m, 71.53 inc, 117.10 azm, 577.29m TVD

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	03:00	3.00		Radius Bend	694.87	CMT	Rig to cement with Halliburton
03:00	05:30	2.50		Radius Bend	694.87	CMT	cement 7" casing w/halliburton
05:30	06:00	0.50		Radius Bend	694.87	CMW	WOC
06:00	12:00	6.00		Radius Bend	694.87	CMW	wait on cement
12:00	18:00	6.00		Radius Bend	694.87	NUD	Back off landing joint, nipple down BOP and flow nipple, raise BOP and cut casing 18" above 11" flange, remove loadsafe, layout BOP, install slips and H plate seal, cut casing at 6" and dress, install B section
18:00	19:00	1.00		Radius Bend	694.87	FPT	pressure test wellhead, 2000PSI for 10mins
19:00	00:00	5.00		Radius Bend	694.87	NUD	install adapter flange, nipple up BOP, modify flowline to new BOP height

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	02:45	2.75		Radius Bend	694.87	RUU	Spot loadsafe, rig up flowline
02:45	04:15	1.50		Radius Bend	694.87	FPT	Pressure test BOP
04:15	05:00	0.75		In Seam	694.87	MBH	Make up "drill out" BHA
05:00	06:00	1.00		In Seam	694.87	TRI	RIH

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #<stringno>, <des>

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

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
String Length (m)	**Weight of String in Air (daN)**	**BHA ROP (m/hr)**

String Components

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
WORKTIME	24.00	85.75
STANDBY	0.00	45.50
DRILL	0.00	56.25
MOVE	0.00	57.00
SAFETY	0.00	3.50

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
HAZOBS	2	Nitro Drilling	
JSA	3	Nitro Drilling	
SLAM	3	Nitro Drilling	
SOP	4	Nitro Drilling	

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3
Liner Size (mm)	**Vol/Stk OR (m³/stk)**	
127.0	0.007	
P (bars)	**Slow Spd**	**Strokes (s…**	**Eff (%)**

Report Printed: 24/01/2013

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 18/12/2012
Report #: 11.0
Days From Spud: 6.00

Well Name: PD120A

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)
WOB (daN)	**RPM (rpm)**	**SPP (bars)**	**Drill Str Wt (daN)**	**PU Str Wt (daN)**	**SO Str Wt (daN)**	**Drilling Torque**	**Off Btm Tq**

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

MUD PUMP

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

P (bars)	Slow Spd	Strokes (s…	Eff (%)

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 19/12/2012
Report #: 12.0
Days From Spud: 7.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101
Well Type	**Well Configuration Type**	**Spud Date**	**Rig Release Date**	**Start Date**
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90
Target Depth (mKB)	**Total Depth (mKB)**	**End Depth (mKB)**	**Depth Progress (m)**
1,562.00	1,546.63	694.89	0.00
Rig (Names)	**Weather**	**Latitude (°)**	**Longitude (°)**
Nitro Drilling NitroD1	clear	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Ptest BOP, RIH to DOC, POOH to change to directional BHA

Operations Next Report Period
Drill ahead in coal

Operations at 6:00
Drilling ahead in coal, rotated last 5 singles, gamma real low, currently @ 800m

Remarks
Very little PIt room. Dumped and cleaned tanks, vac truck from Savannah rig sucked 5 loads from our pits, transfered to another pit off location, no more room there. Crews are improving with trip times.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	02:45	2.75		Radius Bend	694.87	RUU	Spot loadsafe, rig up flowline
02:45	04:15	1.50		Radius Bend	694.87	FPT	Pressure test BOP
04:15	05:00	0.75		In Seam	694.87	MBH	Make up "drill out" BHA
05:00	06:00	1.00		In Seam	694.87	TRI	RIH
06:00	08:45	2.75		In Seam	694.87	TRI	Continue to RIH. Tag cement @ 634m.
08:45	10:00	1.25		In Seam	694.87	DCM	DOC from 634m to 662.90m
10:00	10:45	0.75		In Seam	694.87	CIR	After rilling out the shoe, the bit was in open hole, reamed down 2 singles to confirm this, then circulated. Did flow check.
10:45	12:00	1.25		In Seam	694.87	TRI	POOH from 662m to 441m
12:00	14:00	2.00		In Seam	694.87	TRI	Continue to POOH.
14:00	17:30	3.50		In Seam	694.87	BBH	lay out directional BHA.Make up new directional BHA.
17:30	21:00	3.50		In Seam	694.87	TRI	RIH to 661m
21:00	21:30	0.50		In Seam	694.87	TRI	Install Washington rubber.
21:30	23:00	1.50		In Seam	694.87	DDS	Trip/ re-survey from 661 to 694.9m (bottom) 694.87 m
23:00	00:00	1.00		In Seam	716.67	DRL	Drill ahead to 716.67 m

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00		In Seam	832.00	DRL	drill ahead from 703.67m to 832m

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #3, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
3	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------
String Length (m)	**Weight of String in Air (daN)**	**BHA ROP (m/hr)**
1,232.52	27,696	20.0

String Components
Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10 64.73
Intermediate	177.8	648.67

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
WORKTIME	20.25	106.00
MOVE	2.75	59.75
DRILL	1.00	57.25
SAFETY	0.00	3.50
STANDBY	0.00	45.50

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3
Liner Size (mm)	**Vol/Stk OR (m³/stk)**	
127.0	0.007	
P (bars)	**Slow Spd**	**Strokes (s...** **Eff (%)**

2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4
Liner Size (mm)	**Vol/Stk OR (m³/stk)**	
114.3	0.005	
P (bars)	**Slow Spd**	**Strokes (s...** **Eff (%)**

Report Printed: 24/01/2013

Well Name: PD120A

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Original Hole	120.00	600.00	480.00	7.00	7.00	68.6	350.000

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						

BHA #4, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
4	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components

Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Original Hole	120.00	600.00	480.00	7.00	7.00	68.6	350.000

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 20/12/2012
Report #: 13.0
Days From Spud: 8.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101

Well Type	Well Configuration Type	Spud Date	Rig Release Date	Start Date
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90

Target Depth (mKB)	Total Depth (mKB)	End Depth (mKB)	Depth Progress (m)
1,562.00	1,546.63	694.89	0.00

Rig (Names)	Weather	Latitude (°)	Longitude (°)
Nitro Drilling NitroD1	clear	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Drilled ahead to 927.44, POOH for rig repair, RIH and continue to drill ahead

Operations Next Report Period
Drilling ahead

Operations at 6:00
Drilling ahead @ 1145m Inc 91.19, AZM 119.02, TVD 598.61m

Remarks

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Proble m?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00		In Seam	832.00	DRL	drill ahead from 703.67m to 832m
06:00	12:00	6.00		In Seam	917.67	DRL	Drill ahead to 917.67m.
12:00	16:00	4.00	Yes	In Seam	917.67 1071.00 m	STB	POOH to replace hydraulic motor on rig, test, then RIH to resume drilling
16:00	00:00	8.00		In Seam	694.87	DRL	drill ahead from 927.44m to 1071m 917.67 m

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Proble m?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00		In Seam	1,160.00	DRL	Drill ahead in seam from 1071m to 1160m

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)
Potassium Base	18:00	905.00	1.031	0
Potassium Base	23:30		1.031	0

NPT

Activity	Start Date	End Date
Breakdown - Hydraulics	20/12/2012 12:00	20/12/2012 16:00

Comment
hydraulic motor replacement

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #3, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
3	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components
Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Original Hole	120.00	600.00	480.00	7.00	7.00	68.6	350.000

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
DRILL	20.00	77.25
STANDBY	4.00	49.50
MOVE	0.00	59.75
SAFETY	0.00	3.50
WORKTIME	0.00	106.00

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s...	Eff (%)

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

P (bars)	Slow Spd	Strokes (s...	Eff (%)

Report Printed: 24/01/2013

Well Name: PD120A

DRILL STRING AND BIT INFORMATION

BHA #4, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
4	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components

Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Original Hole	120.00	600.00	480.00	7.00	7.00	68.6	350.000

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 21/12/2012
Report #: 14.0
Days From Spud: 9.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101

Well Type	Well Configuration Type	Spud Date	Rig Release Date	Start Date
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90

Target Depth (mKB)	Total Depth (mKB)	End Depth (mKB)	Depth Progress (m)
1,562.00	1,546.63	694.89	0.00

Rig (Names)	Weather	Latitude (°)	Longitude (°)
Nitro Drilling NitroD1	clear	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Drilled ahead to 1230.97m in dirty coal/shale, decision made to pull back to 1035m and sidetrack due to a fault or anomally

Operations Next Report Period
Drill ahead on sidetrack

Operations at 6:00
Drilling ahead on Branch # 3, current depth 1067m

Remarks
Rig changed heads and liners to 5" while waiting on hole decision.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00		In Seam	1,160.00	DRL	Drill ahead in seam from 1071m to 1160m
06:00	12:00	6.00		In Seam	1,211.78	DRL	Drill ahead to 1211.78m
12:00	16:30	4.50	Yes	In Seam	1,211.78	TRI	Waiting on sidetrack orders so rig POOH to shoe to change heads and liners on pump to 5"
16:30	18:30	2.00	Yes	In Seam	1,211.78	TRI	RIH to 1211m
18:30	22:00	3.50		In Seam	1,230.79	DRL	Drill ahead from 1211m to ~~1230.79m~~ 1234.70m
22:00	00:00	2.00		In Seam	1,029.00	TRI	POOH to 1029m to sidetrack well

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00		In Seam	1,123.00	DRL	drill ahead fom 1115m to 1123m

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)
Potassium Base	00:00	1,235.00	1.078	1

NPT

Activity	Start Date	End Date
Waiting on - programme / decisions	21/12/2012 12:00	21/12/2012 18:30

Comment
Wait on decision regarding side track

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #3, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
3	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components
Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Original Hole	120.00	600.00	480.00	7.00	7.00	68.6	350.000

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
DRILL	15.50	92.75
WORKTIME	8.50	114.50
MOVE	0.00	59.75
SAFETY	0.00	3.50
STANDBY	0.00	49.50

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s...	Eff (%)

2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

P (bars)	Slow Spd	Strokes (s...	Eff (%)

Report Printed: 24/01/2013

DRILL STRING AND BIT INFORMATION

BHA #4, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
4	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components

Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Original Hole	120.00	600.00	480.00	7.00	7.00	68.6	350.000

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 22/12/2012
Report #: 15.0
Days From Spud: 10.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101
Well Type	**Well Configuration Type**	**Spud Date**	**Rig Release Date**	**Start Date**
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan…	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90
Target Depth (mKB)	**Total Depth (mKB)**	**End Depth (mKB)**	**Depth Progress (m)**
1,562.00	1,546.63	600.00	0.00
Rig (Names)	**Weather**	**Latitude (°)**	**Longitude (°)**
Nitro Drilling NitroD1	overcast	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Pulled back an sidetracked at 1030m, drilled ahead to 1165m in shale and shale/coal, observed 150psi pressure loss, checked surface equipment, pump#1 blown swab, put pump#2 on hole, drilled ahead until gradual pressure loss of 300psi observed, checked all surface equipment, seems OK, POOH to look for possible washed DP

Operations Next Report Period
Find source of pressure loss, RIH, drill ahead

Operations at 6:00
POOH to look for possible washed pipe. Last survey @ 1141.50m 82.22deg, 115.25Azm

Remarks
Rig has no critical spares for its pumps and poor maintenance. Held a crew change meeting with both crews to discuss this.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00		In Seam	1,123.00	DRL	drill ahead fom 1115m to 1123m
06:00	21:00	15.00		In Seam	1,165.00	DRL	Drill ahead to 1165m.
21:00	22:00	1.00	Yes	In Seam	1,165.00	OTH	pressure loss of 150psi observed, check surface equipment, blown swab pump#1, put pump#2 on hole, drill ahead
22:00	00:00	2.00		In Seam	1,167.83	DRL	drill ahead from 1165m to 1167.83m

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	00:45	0.75	Yes	In Seam	694.87	OTH	Inspect surface equipment to find pressure loss
00:45	07:00	6.25	Yes	In Seam	694.87	TRI	POOH to look for washed pipe / inspect DD tools

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

NPT

Activity	Start Date	End Date
Breakdown - Mud Pump	22/12/2012 21:00	22/12/2012 22:00
Comment		
blown swab		
Activity	**Start Date**	**End Date**
Breakdown - Other	23/12/2012 00:00	23/12/2012 08:30
Comment		
pressure loss, washed pipe or surface equipment		

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #3, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
3	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------
String Length (m)	**Weight of String in Air (daN)**	**BHA ROP (m/hr)**
1,232.52	27,696	20.0

String Components
Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
DRILL	23.00	115.75
WORKTIME	1.00	115.50
MOVE	0.00	59.75
SAFETY	0.00	3.50
STANDBY	0.00	49.50

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3
Liner Size (mm)	**Vol/Stk OR (m³/stk)**	
127.0	0.007	
P (bars)	**Slow Spd**	**Strokes (s…** / **Eff (%)**

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4
Liner Size (mm)	**Vol/Stk OR (m³/stk)**	
114.3	0.005	
P (bars)	**Slow Spd**	**Strokes (s…** / **Eff (%)**

Report Printed: 24/01/2013

Well Name: PD120A

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Branch 3	600.00	1,055.00	935.00		7.00		350.000

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						

BHA #4, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
4	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components

Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Branch 3	600.00	1,055.00	935.00		7.00		350.000

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 23/12/2012
Report #: 16.0
Days From Spud: 11.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101
Well Type	**Well Configuration Type**	**Spud Date**	**Rig Release Date**	**Start Date**
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90
Target Depth (mKB)	**Total Depth (mKB)**	**End Depth (mKB)**	**Depth Progress (m)**
1,562.00	1,546.63	600.00	0.00
Rig (Names)	**Weather**	**Latitude (°)**	**Longitude (°)**
Nitro Drilling NitroD1	light rain	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
POOH to inspect drill string, check and test directional tools, rih to shoe, completely inspect all surface equipment, valves, everything, for possible bleed off point or washed part.

Operations Next Report Period
Wait on lease to dry up , RIH to drill ahead

Operations at 6:00
Stand-by due to weather

Remarks
Found washed 2" 3000PSI valve that goes from standpipe to kill line.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	00:45	0.75	Yes	In Seam	694.87	OTH	Inspect surface equipment to find pressure loss
00:45	07:00	6.25	Yes	In Seam	694.87	TRI	POOH to look for washed pipe / inspect DD tools
07:00	08:30	1.50	Yes	In Seam	694.87	TRI	Continue to POOH.
08:30	11:30	3.00	Yes	In Seam	694.87	STB	breakdown motor, inspect, test
11:30	12:00	0.50	Yes	In Seam	694.87	TRI	change slip dies and RIH to shoe
12:00	18:00	6.00	Yes	In Seam	694.87	TRI	RIH checking pipe for damage or washouts, test mud motor just outside of shoe, pressure loss still present. Complete, yet again, a thorough inspection of all surface equipment and related hoses, valves, fittings. Found a washed 2" valve between standpipe and kill line
18:00	00:00	6.00	Yes	In Seam	694.87	STB	Standby due to rain / wet lease conditions

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	00:00	24.00	Yes	In Seam	694.87	STB	Stand-by due to wet weather

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

NPT

Activity	Start Date	End Date
Breakdown - Other	23/12/2012 00:00	23/12/2012 08:30
Comment		
pressure loss, washed pipe or surface equipment		
Activity	**Start Date**	**End Date**
Breakdown - Rig Engine	23/12/2012 08:30	23/12/2012 11:30
Comment		
Breakdown motor		
Activity	**Start Date**	**End Date**
Breakdown - Other	23/12/2012 11:30	23/12/2012 18:00
Comment		
pressure loss, check pipe while run back in hole		
Activity	**Start Date**	**End Date**
Waiting on - weather	23/12/2012 18:00	26/12/2012 00:00
Comment		

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
WORKTIME	15.00	130.50
STANDBY	9.00	58.50
DRILL	0.00	115.75
MOVE	0.00	59.75
SAFETY	0.00	3.50

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3
Liner Size (mm)	**Vol/Stk OR (m³/stk)**	
127.0	0.007	
P (bars)	**Slow Spd**	**Strokes (s...** / **Eff (%)**

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4
Liner Size (mm)	**Vol/Stk OR (m³/stk)**	
114.3	0.005	
P (bars)	**Slow Spd**	**Strokes (s...** / **Eff (%)**

Report Printed: 24/01/2013

DRILL STRING AND BIT INFORMATION

BHA #3, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
3	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components
Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Branch 3	600.00	1,055.00	935.00		7.00		350.000

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						

BHA #4, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
4	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components
Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Branch 3	600.00	1,055.00	935.00		7.00		350.000

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 24/12/2012
Report #: 17.0
Days From Spud: 12.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101

Well Type	Well Configuration Type	Spud Date	Rig Release Date	Start Date
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90

Target Depth (mKB)	Total Depth (mKB)	End Depth (mKB)	Depth Progress (m)
1,562.00	1,546.63	600.00	0.00

Rig (Names)	Weather	Latitude (°)	Longitude (°)
Nitro Drilling NitroD1	foggy	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
De-mobbed crew to Dysart camp due to weather conditions and camp septic being full

Operations Next Report Period
Wait on lease to dry out. Resume operations??

Operations at 6:00
Standby due to wet weather

Remarks
We had a heavy downpour last night again. I would hope to resume ops today, but I cannot confirm this right now

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	00:00	24.00	Yes	In Seam	694.87	STB	Stand-by due to wet weather

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	00:00	24.00	Yes	In Seam	694.87	STB	standbye due to weather

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

NPT

Activity	Start Date	End Date
Waiting on - weather	23/12/2012 18:00	26/12/2012 00:00

Comment

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #3, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
3	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components
Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Branch 3	600.00	1,055.00	935.00		7.00		350.000

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						

BHA #4, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
4	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components
Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Branch 3	600.00	1,055.00	935.00		7.00		350.000

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
STANDBY	24.00	82.50
WORKTIME	0.00	130.50
DRILL	0.00	115.75
MOVE	0.00	59.75
SAFETY	0.00	3.50

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s...	Eff (%)

2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

P (bars)	Slow Spd	Strokes (s...	Eff (%)

Report Printed: 24/01/2013

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 25/12/2012
Report #: 18.0
Days From Spud: 13.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101

Well Type	Well Configuration Type	Spud Date	Rig Release Date	Start Date
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90

Target Depth (mKB)	Total Depth (mKB)	End Depth (mKB)	Depth Progress (m)
1,562.00	1,546.63	600.00	0.00

Rig (Names)	Weather	Latitude (°)	Longitude (°)
Nitro Drilling NitroD1	clear	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Waiting on muddy conditions to improve

Operations Next Report Period
drilling ahead

Operations at 6:00
Drilling ahead at 1173.95m Inc-80.72, Azm-115.60, TVD 606.89m

Remarks
We will be resuming operations at midnight

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Proble m?	Phase	End Depth (mKB)	Activity	Com
00:00	00:00	24.00	Yes	In Seam	694.87	STB	standbye due to weather

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Proble m?	Phase	End Depth (mKB)	Activity	Com
00:00	00:15	0.25		In Seam	646.41	SFT	Pre start rig and PJSM with crews
00:15	03:30	3.25		In Seam	1,168.86 1167.83 m	TRI	R.I.H fr 646.41 m RKB to 1168.86m RKB 1167.83 m
03:30	09:30	6.00		In Seam	1,211.78	DRL	Drill ahead 6 1/8" hole fr 1168.86 to 1211.78m RKB , found coal

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

NPT

Activity	Start Date	End Date
Waiting on - weather	23/12/2012 18:00	26/12/2012 00:00

Comment

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #3, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
3	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components
Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Branch 3	600.00	1,055.00	935.00		7.00		350.000

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						

BHA #4, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
4	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components
Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10 64.73
Intermediate	177.8	648.67

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
STANDBY	24.00	106.50
WORKTIME	0.00	130.50
DRILL	0.00	115.75
MOVE	0.00	59.75
SAFETY	0.00	3.50

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s...	Eff (%)

2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

P (bars)	Slow Spd	Strokes (s...	Eff (%)

Report Printed: 24/01/2013

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 25/12/2012
Report #: 18.0
Days From Spud: 13.00

Well Name: PD120A

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Branch 3	600.00	1,055.00	935.00		7.00		350.000

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

Report Printed: 24/01/2013

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 26/12/2012
Report #: 19.0
Days From Spud: 14.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101

Well Type	Well Configuration Type	Spud Date	Rig Release Date	Start Date
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90

Target Depth (mKB)	Total Depth (mKB)	End Depth (mKB)	Depth Progress (m)
1,562.00	1,546.63	600.00	0.00

Rig (Names)	Weather	Latitude (°)	Longitude (°)
Nitro Drilling NitroD1	stormy,clear	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Prestart rig , r.i.h fr shoe to 1168.86m rkb , drill to 1211.78m rkb (found coal) , cut lip fr 1038m to 1048.55m rkb, attempt side track branch #4 . Slide unsuccesful, Rotate lowside fr 1048m to 1055m RKB

Operations Next Report Period
Continue to attempt to sidetrack branch #4 roatating as per directional programme

Operations at 6:00
Drilling ahead per dd revised plan, aprox 4m above programme, @ 1062m MD RKB

Remarks
Storm cell very close, load up on fuel , water etc

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Proble m?	Phase	End Depth (mKB)	Activity	Com
00:00	00:15	0.25		In Seam	646.41	SFT	Pre start rig and PJSM with crews
00:15	03:30	3.25		In Seam	1,168.86	TRI	R.I.H fr 646.41 m RKB to 1168.86m RKB
03:30	09:30	6.00		In Seam	1,211.78	DRL	Drill ahead 6 1/8" hole fr 1168.86 to 1211.78m RKB , found coal
09:30	10:30	1.00		In Seam	1,038.93	TRI	p.o.o.h fr 1211.78 to 1038.93m RKB
10:30	12:00	1.50		In Seam	1,048.55	DRL	lip cut fr 1038.93m to 1048.55m rkb
12:00	15:30	3.50		In Seam	1,048.55	DRL	Low side side track @ 1038mRKB unsuccessful
15:30	18:00	2.50		In Seam	1,048.55	DRL	attempt rotate side track @ 1040m RKB
18:00	18:45	0.75	Yes	In Seam	1,048.55	STB	Lightning close , pick up off bottom , corculate slowly , wait to pass. monitor well fr pason and prep to shut in if reqd.
18:45	00:00	5.25		In Seam	1,055.00	DRL	Drill ahead 6 1/8" assy rotate lowside side track fr 1048m to 1055m RKB

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Proble m?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00		In Seam	1,062.69	DRL	Low side side track 6 1/8 assy fr 1048m rkb to 1062.69m rkb

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)
Polymer	01:00		9.200	38
Polymer	12:00		9.200	36
Polymer	17:00		9.200	35
Polymer	18:00		9.300	40
Polymer	21:00		9.200	42

NPT

Activity	Start Date	End Date
Waiting on - weather	26/12/2012 18:00	26/12/2012 18:45

Comment
Lightning strikes close to rig area , shut down as precaution , slow circulate monitor well pre to shut in if reqd.

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
AusDex	sacks		120.0	2.0	117.0	
KCL	sacks			15.0	-25.0	

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
DRILL	18.75	134.50
WORKTIME	4.25	134.75
STANDBY	0.75	107.25
SAFETY	0.25	3.75
MOVE	0.00	59.75

DAILY CONTACTS

Job Contact	Title
Adrian Nygaard	Drilling Supervisor
Robert Craig	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox		
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
SLAM	Contractor	Nitro	24

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s...	Eff (%)

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

Report Printed: 24/01/2013

DRILL STRING AND BIT INFORMATION

BHA #3, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
3	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components

Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)
Branch 3	600.00	1,055.00	935.00		7.00		350.000

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						

BHA #4, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
4	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components

Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)
Branch 3	600.00	1,055.00	935.00		7.00		350.000

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

P (bars)	Slow Spd	Strokes (s…	Eff (%)

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 27/12/2012
Report #: 20.0
Days From Spud: 15.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101
Well Type	**Well Configuration Type**	**Spud Date**	**Rig Release Date**	**Start Date**
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90
Target Depth (mKB)	**Total Depth (mKB)**	**End Depth (mKB)**	**Depth Progress (m)**
1,562.00	1,546.63	1,096.64	212.66
Rig (Names)	**Weather**	**Latitude (°)**	**Longitude (°)**
Nitro Drilling NitroD1	Fine	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Drill from 1,048m rkb to1062.69m rkb low side side track. POOH to 1000.61mrkb. Wait on decision from town. Side track from 1,005m rkb to 1,010.05m rkb. Drill directional hole from 1,010m rkb to 1,096.64m rkb

Operations Next Report Period
Continue to drill to TD.

Operations at 6:00
Cont to drill 6 1/8 hole per d,d programme, @ 1109m RKB

Remarks
Having problems trying to slide.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00		In Seam	1,062.69	DRL	Low side side track 6 1/8 assy fr 1048m rkb to 1062.69m rkb
06:00	06:30	0.50		In Seam	1,000.61	TRI	P.O.O.H fr 1062.69 to 1000.61m rkb
06:30	07:15	0.75	Yes	In Seam	1,000.61	STB	Wait on client decision
07:15	09:30	2.25		In Seam	1,010.05	DRL	Side track fr 1005 to 1010.05m RKB
09:30	00:00	14.50		In Seam	1,096.64	DRL	Dill ahead with 6 1/8 assy fr 1010.05m to 1096.64m rkb

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	02:30	2.50		In Seam	1,106.82	DRL	Drill 6 1/8" directional hole. Unable to get any penetration while trying to slide.
02:30	03:30	1.00		In Seam	1,106.82	TRI	Flow check and pull out and lay out 9 singles of drill pipe and pick up 9 jts of heavy weight drill pipe
03:30	16:00	12.50		In Seam	1,208.00	DRL	Continue drilling 6 1/8" directional hole 1,106m rkb to 1208.mrkb

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)
Potassium Base	06:00	1,062.00	9.200	41
Potassium Base	11:00	1,031.00	9.200	41
Potassium Base	18:00	1,077.00	9.500	42
Potassium Base	23:30	1,096.00	9.400	40

NPT

Activity	Start Date	End Date
Waiting on - programme / decisions	27/12/2012 06:30	27/12/2012 07:15

Comment
Wait on decesion from town.

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
AusDex	sacks			1.0	116.0	
Biocide	L		19.0		19.0	
Calcium Chloride			1.0		1.0	
Cement			48.0	13.0	35.0	
Citirc Acid			9.0		9.0	
Claymaster			5.0	1.0	4.0	
Defoamer	L		6.0	2.0	4.0	
Ezee PAC R			24.0	8.0	16.0	
Frac seal coarse			10.0	1.0	9.0	
Frac seal Fine			9.0		9.0	
FS 2000 Liquid Polymer			4.0		4.0	
Inhibiseam			5.0		5.0	
KCL	sacks		569.0	10.0	534.0	

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
DRILL	22.75	157.25
STANDBY	0.75	108.00
WORKTIME	0.50	135.25
MOVE	0.00	59.75
SAFETY	0.00	3.75

DAILY CONTACTS

Job Contact	Title
Robert Craig	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer
John Davidson	Drilling Supervisor

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox	27/12/2012	2
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
SLAM	Contractor	Nitro Drilling	26

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date
Toolbox	27/12/2012
Toolbox	27/12/2012

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s...	Eff (%)
20.7	Yes	30	95

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Report Printed: 24/01/2013

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
M.O.P			48.0		48.0	
Quick gel Gold			1.0		1.0	
Residrill	sacks		159.0		159.0	
Residrill	sacks			3.0	156.0	
Soda Ash	sacks		30.0		29.0	
Sodium Acid Pyrophosate			5.0		5.0	
Solumop			192.0		192.0	
XanBore	sacks		67.0	5.0	61.0	

Liner Size (mm)		Vol/Stk OR (m³/stk)	
114.3		0.005	
P (bars)	Slow Spd	Strokes (s…	Eff (%)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #3, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
3	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components
Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)
Sidetrack 2	1,048.00	1,062.69	949.69	6.00	13.00	2.4	350.000
WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						
Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)
Sidetrack 2	1,005.00	1,010.05	954.74	2.25	15.25	2.2	350.000
WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						
Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)
Original Hole	1,010.05	1,096.64	1,041.33	14.50	29.75	6.0	350.000
WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
3,559	45						

BHA #4, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
4	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components
Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)
Sidetrack 2	1,048.00	1,062.69	949.69	6.00	13.00	2.4	350.000
WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						
Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)
Sidetrack 2	1,005.00	1,010.05	954.74	2.25	15.25	2.2	350.000
WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
8	120						
Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)
Original Hole	1,010.05	1,096.64	1,041.33	14.50	29.75	6.0	350.000
WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
3,559	45						

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
27/12/2012 12:00	1,064.60	80.28	117.43	
27/12/2012 21:00	1,074.20	80.37	117.38	
27/12/2012 23:45	1,083.50	80.55	117.28	
27/12/2012 23:45	1,090.60	80.72	117.42	
27/12/2012 23:45	1,099.90	81.25	117.85	
27/12/2012 23:45	1,109.40	82.57	117.88	
27/12/2012 23:45	1,119.10	84.06	117.52	
27/12/2012 23:45	1,128.70	85.91	117.96	
27/12/2012 23:45	1,138.40	87.41	118.00	
27/12/2012 23:45	1,148.00	88.99	118.43	
27/12/2012 23:45	1,157.70	89.52	118.59	

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
27/12/2012 23:45	1,167.20	88.81	117.65	
27/12/2012 23:45	1,176.70	88.72	116.83	
27/12/2012 23:45	1,186.20	89.25	117.27	

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

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Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 28/12/2012
Report #: 21.0
Days From Spud: 16.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101
Well Type	**Well Configuration Type**	**Spud Date**	**Rig Release Date**	**Start Date**
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan…	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90
Target Depth (mKB)	**Total Depth (mKB)**	**End Depth (mKB)**	**Depth Progress (m)**
1,562.00	1,546.63	1,220.00	246.72
Rig (Names)	**Weather**	**Latitude (°)**	**Longitude (°)**
Nitro Drilling NitroD1	Storms	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Drill 6 1/8" directional hole to 1106.82m,problems trying to slide unable to get weight to bit.Lay out 9 singles of drill dipe.Pick up 9 joints of heavy weight drill pipe. Continue to drill 6 1/8" directional hole to 1208m. Wait on decision from town on coordinates. Continue to drill 6 1/8" directional hole to 1220m rkb.

Operations Next Report Period
Continue to drill to TD.

Operations at 6:00
Drilling 6 1/8" directional hole @ 1221.5m Sliding

Remarks
Having problems trying to slide move HWDP back to surface.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	02:30	2.50		In Seam	1,106.82	DRL	Drill 6 1/8" directional hole. Unable to get any penetration while trying to slide.
02:30	03:30	1.00		In Seam	1,106.82	TRI	Flow check and pull out and lay out 9 singles of drill pipe and pick up 9 jts of heavy weight drill pipe
03:30	16:00	12.50		In Seam	1,208.00	DRL	Continue drilling 6 1/8" directional hole 1,106m rkb to 1208.mrkb
16:00	17:30	1.50	Yes	In Seam	1,208.00	STB	Flow check break out and lay out single and wait on instructions from town about wrong hole coordinates .
17:30	00:00	6.50		In Seam	1,220.00	DRL	Continue to drill 6 1/8" directional hole from 1208m kb to 1220m rkb

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	00:45	0.75		In Seam	1,220.00	TRI	Having trouble trying to slide unable to get weight to bit because can not push with the drill pipe as it is bowing in derrick. Flow check and pull out of hole with 6 drill pipe and 14 HWDP. Run in hole with 9 singles of drill pipe and 11 HWDP and keep 3 singles of HWDP on surface for sliding.
00:45	01:00	0.25		In Seam	1,220.00	RSV	Rig service.
01:00	01:30	0.50	Yes	In Seam	1,220.00	RMR	Rig repairs. Repair hydrulic ram on pipe arm.
01:30	04:00	2.50		In Seam	1,220.00	TRI	Continue to change out drill pipe and HWDP
04:00	04:30	0.50		In Seam	1,220.00	CIR	Fill pipe and circulate. Get tool face for sliding.
04:30	12:00	7.50		In Seam	1,232.52	DRL	Continue to drill 6 1/8" directional hole from 1220m kb to 1232.52 m rkb, Having problems sliding and building angle.

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)
Potassium Base	07:30	1,110.00	1.102	0
Potassium Base	14:00	1,170.00	1.102	0
Potassium Base	22:00	1,218.00	1.114	0
Potassium Base	23:45	1,219.70	1.114	0

NPT

Activity	Start Date	End Date
Waiting on - programme / decisions	28/12/2012 16:00	28/12/2012 17:30

Comment
Wait on decesion from town about hole coordinates..

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
AusDex	sacks			1.0	115.0	
KCL	sacks			5.0	529.0	

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
DRILL	21.50	178.75
STANDBY	1.50	109.50
WORKTIME	1.00	136.25
MOVE	0.00	59.75
SAFETY	0.00	3.75

DAILY CONTACTS

Job Contact	Title
Robert Craig	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer
John Davidson	Drilling Supervisor

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill		
Toolbox	28/12/2012	4
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
HAZOBS	Contractor	Nitro Drilling	3
SLAM	Contractor	Nitro Drilling	10

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	23	276.00	276.00

SAFETY CHECKS TODAY

Type	Date
Toolbox	28/12/2012
Toolbox	28/12/2012

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3
Liner Size (mm)	**Vol/Stk OR (m³/stk)**	
127.0	0.007	
P (bars)	**Slow Spd**	**Strokes (s…** / **Eff (%)**

Report Printed: 24/01/2013

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
Residrill	sacks			1.0	155.0	
XanBore	sacks			1.0	60.0	

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

MUD PUMP

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

P (bars)	Slow Spd	Strokes (s…	Eff (%)

DRILL STRING AND BIT INFORMATION

BHA #3, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
3	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components
Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)
Original Hole	1,096.64	1,220.00	1,164.69	21.50	51.25	5.7	

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
3,559	45	76.5					

BHA #4, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
4	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components
Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)
Sidetrack 2	1,096.64	1,220.00	1,164.69	21.50	51.25	5.7	

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
3,559	45	76.5					

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
28/12/2012 23:45	1,195.70	89.52	117.95	
28/12/2012 23:45	1,205.20	89.69	116.85	

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

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Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 29/12/2012
Report #: 22.0
Days From Spud: 17.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101

Well Type	Well Configuration Type	Spud Date	Rig Release Date	Start Date
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90

Target Depth (mKB)	Total Depth (mKB)	End Depth (mKB)	Depth Progress (m)
1,562.00	1,546.63	1,232.52	25.04

Rig (Names)	Weather	Latitude (°)	Longitude (°)
Nitro Drilling NitroD1	Scatterd Clouds.	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Unable to slide move heavy weight drill pipe around in string. Rig service.Rig repairs. Continue changing HWDP around in string. Circulate get tool face. Slide. Unable to build angle@ 1232.52m..Circulate flow check POOH to casing shoe. Perform BOP drill. Flow check and continue to POOH to 175m.

Operations Next Report Period
Side track and continue to drill directional hole to TD

Operations at 6:00
Makeing up 6 1/8" directional BHA and running in hole.

Remarks
Unable to slide and build angle.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	00:45	0.75		In Seam	1,220.00	TRI	Having trouble trying to slide unable to get weight to bit because can not push with the drill pipe as it is bowing in derrick. Flow check and pull out of hole with 6 drill pipe and 14 HWDP. Run in hole with 9 singles of drill pipe and 11 HWDP and keep 3 singles of HWDP on surface for sliding.
00:45	01:00	0.25		In Seam	1,220.00	RSV	Rig service.
01:00	01:30	0.50	Yes	In Seam	1,220.00	RMR	Rig repairs. Repair hydrulic ram on pipe arm.
01:30	04:00	2.50		In Seam	1,220.00	TRI	Continue to change out drill pipe and HWDP
04:00	04:30	0.50		In Seam	1,220.00	CIR	Fill pipe and circulate. Get tool face for sliding.
04:30	12:00	7.50		In Seam	1,232.52	DRL	Continue to drill 6 1/8" directional hole from 1220m kb to 1232.52 m rkb, Having problems sliding and building angle.
12:00	13:30	1.50		In Seam	1,232.52	CIR	Circulate well clean for tripout of hole to change out tools.Fill trip tank.
13:30	20:00	6.50		In Seam	1,232.52	TRI	Flow check and POOH to shoe.Ream tight sections 980m back to 972m. 710m back to 708m.
20:00	20:15	0.25		In Seam	1,232.52	SFT	Perform BOP drill at shoe.
20:15	00:00	3.75		In Seam	1,232.52	TRI	Flow check and continue to POOH to175m

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	01:30	1.50		In Seam	1,232.52	TRI	POOH from 175m to BHA
01:30	03:30	2.00		In Seam	1,232.52	BBH	Break out and lay out BHA.
03:30	04:30	1.00		In Seam	1,232.52	BBH	Break out bit and change out LXM tool.Make up bit. Unable to break out bit and LXM tool with rig take to side of lease and break out and make up with power jaw.
04:30	07:00	2.50		In Seam	1,232.52	BBH	Service directional BHA. Change out mud motor and make up directional BHA, oreint tools

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)
Potassium Base	06:00	1,221.50	1.102	0
Potassium Base	12:00	1,232.00	1.114	0

NPT

Activity	Start Date	End Date
Breakdown - Pipe Handling Equipment	29/12/2012 01:00	29/12/2012 01:30

Comment
Repairs on Hydraulic ram on pipe handler. Done tempery fix.

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
WORKTIME	15.50	151.75
DRILL	7.50	186.25
MAINTENANCE	0.75	0.75
SAFETY	0.25	4.00
MOVE	0.00	59.75
STANDBY	0.00	109.50

DAILY CONTACTS

Job Contact	Title
Robert Craig	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer
John Davidson	Drilling Supervisor

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill	29/12/2012	1
Toolbox	29/12/2012	6
Weekly safety Meeting both crews		
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
SLAM	Contractor	Nitro Drilling	26

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	23	276.00	276.00

SAFETY CHECKS TODAY

Type	Date
Toolbox	29/12/2012
BOP Drill	29/12/2012
Toolbox	29/12/2012

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

Report Printed: 24/01/2013

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
AusDex	sacks			2.0	113.0	

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #3, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
3	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components
Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Original Hole	1,220.00	1,232.52	1,177.21	7.50	58.75	1.7	

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
3,559	0	76.5					

BHA #4, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
4	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
12.0/12.0/12.0/12.0/12.0	565	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,232.52	27,696	20.0

String Components
Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Sidetrack 2	1,220.00	1,232.52	1,177.21	7.50	58.75	1.7	

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
3,559	0	76.5					

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
29/12/2012 23:45	1,210.10	90.13	116.74	

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

P (bars)	Slow Spd	Strokes (s...	Eff (%)

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

P (bars)	Slow Spd	Strokes (s...	Eff (%)

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 30/12/2012
Report #: 23.0
Days From Spud: 18.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101
Well Type	**Well Configuration Type**	**Spud Date**	**Rig Release Date**	**Start Date**
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90
Target Depth (mKB)	**Total Depth (mKB)**	**End Depth (mKB)**	**Depth Progress (m)**
1,562.00	1,546.63	1,021.00	38.00
Rig (Names)	**Weather**	**Latitude (°)**	**Longitude (°)**
Nitro Drilling NitroD1	Scatterd Showers	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Continue to POOH. Service BHA.Change out mud motor. RIH to 98m.Perform BOP drill. Continue to run in hole to shoe. Test mud motor. Weekly safety meeting with both crews.Rig service. Continue to RIH to kick of point 983m. Slide from 983m to 1021.20m rkb

Operations Next Report Period
Continue to drill directional hole to td.

Operations at 6:00
Drilling 6 1/8" directional hole @ 1051m rkb.

Remarks
SAFETY CONCERNS REQUIRING URGENT RECTIFICATION .Fit for purpose trip tank , Poor boy degasser , Solids control sytem , Fit for purpose mud system , Beaver shute for rig floor , B.O.P hanging points.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	01:30	1.50		In Seam	1,232.52	TRI	POOH from 175m to BHA
01:30	03:30	2.00		In Seam	1,232.52	BBH	Break out and lay out BHA.
03:30	04:30	1.00		In Seam	1,232.52	BBH	Break out bit and change out LXM tool.Make up bit. Unable to break out bit and LXM tool with rig take to side of lease and break out and make up with power jaw.
04:30	07:00	2.50		In Seam	1,232.52	BBH	Service directional BHA. Change out mud motor and make up directional BHA, oreint tools
07:00	07:30	0.50		In Seam	1,232.52	TRI	Trip in to 98m.
07:30	08:00	0.50		In Seam	1,232.52	SFT	Perform BOP drill.
08:00	12:00	4.00		In Seam	1,232.52	TRI	Continue to RIH with BHA No # 5 to shoe @ 648.60m. Flow check and test mud motor.
12:00	12:45	0.75		In Seam	1,232.52	SFT	Weekly safety meeting with both crews.
12:45	13:15	0.50		In Seam	1,232.52	RSV	Rig Service.
13:15	15:00	1.75		In Seam	983.00	TRI	Continue to RIH with BHA No# 5 to Kick of point.~~983~~ 997.97m
15:00	00:00	9.00		In Seam	1,021.20	DRL	Kick of @ ~~983~~997.97m Slide to 1021.20m rkb

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	00:30	0.50		In Seam	1,026.00	DRL	Continue to drill 6 1/8" directional hole from 1021.20m rkb.to 1026m rkb
00:30	00:45	0.25		In Seam	1,026.00	SFT	Do pre start before connection.
00:45	07:00	6.25		In Seam	1,052.00	DRL	Continue to drill 6 1/8" directional hole from 1026.20m rkb.to 1052m rkb

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)
Potassium Base	16:00	983.00	1.126	0
Potassium Base	20:00	988.00	1.114	0
Potassium Base	23:45	1,021.00	1.114	0

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
AusDex	sacks			1.0	112.0	
KCL	sacks			1.0	528.0	
Residrill	sacks			1.0	154.0	

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
WORKTIME	13.25	165.00
DRILL	9.00	195.25
SAFETY	1.25	5.25
MAINTENANCE	0.50	1.25
MOVE	0.00	59.75
STANDBY	0.00	109.50

DAILY CONTACTS

Job Contact	Title
Robert Craig	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer
John Davidson	Drilling Supervisor

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill	30/12/2012	2
Toolbox	29/12/2012	6
Weekly safety Meeting both crews	30/12/2012	1
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
SLAM	Contractor	Nitro Drilling	34

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	18	216.00	216.00

SAFETY CHECKS TODAY

Type	Date
BOP Drill	30/12/2012
Weekly safety Meeting both crews	30/12/2012

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

Report Printed: 24/01/2013

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #5, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
5	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
9.5/9.5/9.5/9.5/9.5/10.3	440	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,223.34	27,437	5.8

String Components

Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, Agitator, Shock Sub, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Branch 5	983.00	1,021.00	38.00	9.00	9.00	4.2	

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
2,224	0	101.4	22,686	26,689	18,238		

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
30/12/2012 23:45	984.10	85.56	117.18	
30/12/2012 23:45	993.50	83.27	114.87	
30/12/2012 23:45	1,003.20	82.66	112.86	
30/12/2012 23:45	1,012.70	84.42	112.12	

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

P (bars)	Slow Spd	Strokes (s...	Eff (%)

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

P (bars)	Slow Spd	Strokes (s...	Eff (%)

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 31/12/2012
Report #: 24.0
Days From Spud: 19.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101

Well Type	Well Configuration Type	Spud Date	Rig Release Date	Start Date
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90

Target Depth (mKB)	Total Depth (mKB)	End Depth (mKB)	Depth Progress (m)
1,562.00	1,546.63	1,156.30	135.30

Rig (Names)	Weather	Latitude (°)	Longitude (°)
Nitro Drilling NitroD1	Overcast	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Drill 6 1/8" directional hole to 1026m.Pre start. Continue drilling 6 1/8" directional hole to 1052m. Rig repairs mud pump valve. Continue to drill 6 1/8" directional hole to 1156.30m. Trip out HWDP and shuffle them around.

Operations Next Report Period
Continue to drill directional hole to td.

Operations at 6:00
Drill 6 1/8" directional hole @ 1179m

Remarks
ONGOING SAFETY ISSUES PER REPORT 30/12/12 .

USE OF AGITATOR AND EP BIT LUBE IMPROVING SLIDING PERFORMANCE.

TRIP REQUIRED IN NEXT 24 HRS TO CHANGE IPZIG TOOL

VERTICAL WELL WELL HEAD REQUIRES RECTIFICATION PRIOR TO INTERSECTION

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	00:30	0.50		In Seam	1,026.00	DRL	Continue to drill 6 1/8" directional hole from 1021.20m rkb.to 1026m rkb
00:30	00:45	0.25		In Seam	1,026.00	SFT	Do pre start before connection.
00:45	07:00	6.25		In Seam	1,052.00	DRL	Continue to drill 6 1/8" directional hole from 1026.20m rkb.to 1052m rkb
07:00	07:15	0.25		In Seam	1,052.00	RMR	Change out washed valve rubber on mud pump # 2
07:15	23:00	15.75		In Seam	1,156.30	DRL	Continue to drill 6 1/8" directional hole from 1052m rkb.to 1156.30m rkb
23:00	00:00	1.00		In Seam	1,156.30	TRI	Flow check and pull 14 jts of HWDP out of hole. Run in 7jts of drill pipe and 7 jts of HWDP.

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	00:15	0.25		In Seam	1,156.30	SFT	Pre Start and shift change.
00:15	01:15	1.00		In Seam	1,156.30	TRI	Continue to shuffle around HWDP.
01:15	11:00	9.75		In Seam	1,223.34	DRL	Continue to drill 6 1/8" directional hole from 1156.30m rkb.to 1223.34m rkb

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)
Potassium Base	06:00	1,052.00	1.114	0
Potassium Base	12:00	1,085.00	1.114	0
Potassium Base	18:00	1,125.00	1.126	0
Potassium Base	23:45	1,156.00	1.126	1

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
AusDex	sacks			8.0	104.0	
KCL	sacks			25.0	503.0	
Residrill	sacks			15.0	139.0	
Soda Ash	sacks			4.0	25.0	

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
DRILL	22.50	217.75
WORKTIME	1.00	166.00
SAFETY	0.25	5.50
MAINTENANCE	0.25	1.50
MOVE	0.00	59.75
STANDBY	0.00	109.50

DAILY CONTACTS

Job Contact	Title
Robert Craig	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer
John Davidson	Drilling Supervisor

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill	30/12/2012	2
Toolbox	31/12/2012	9
Weekly safety Meeting both crews	30/12/2012	1
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
SLAM	Contractor	Nitro Drilling	36

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	18	216.00	216.00

SAFETY CHECKS TODAY

Type	Date
Toolbox	31/12/2012
Toolbox	31/12/2012
Toolbox	31/12/2012

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

Well Name: PD120A

DRILL STRING AND BIT INFORMATION

BHA #5, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
5	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
9.5/9.5/9.5/9.5/9.5/10.3	440	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,223.34	27,437	5.8

String Components

Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, Agitator, Shock Sub, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Branch 5	1,021.00	1,156.30	173.30	22.50	31.50	6.0	

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
5,338	40	115.1	26,689	30,248	23,131		

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

P (bars)	Slow Spd	Strokes (s...	Eff (%)

2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

P (bars)	Slow Spd	Strokes (s...	Eff (%)

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 1/01/2013
Report #: 25.0
Days From Spud: 20.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101

Well Type	Well Configuration Type	Spud Date	Rig Release Date	Start Date
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90

Target Depth (mKB)	Total Depth (mKB)	End Depth (mKB)	Depth Progress (m)
1,562.00	1,546.63	1,223.34	67.04

Rig (Names)	Weather	Latitude (°)	Longitude (°)
Nitro Drilling NitroD1	Scatterd Showers	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary

Shift change and pre start.Continue to shuffle HWDP around in string.Drill 6 1/8" directional hole 1156.30m rkb to 1223.34m rkb.Circulate and clean hole. Flow check and POOH to 1102m rkb. Flow check well taking 6bbls a hour. RIH to bottom. Circulate and condition mud drop mud weight to 8.9ppg. Flow check. Well stable. POOH to 560m rkb.

Operations Next Report Period

POOH. Service BHA. Change out tools.Trip in hole and continue to drill 6 1/8" directional hole to TD.

Operations at 6:00

Servicing and making up BHA No # 6

Remarks

ON GOING SAFETY ISSUES PER REPORT 30/12/12

SLOW TRIP DUE TO TIGHT SPOTS, WET TRIP AND INCORRECT TRIP TANK SET UP.

POOR TANK SET UP CAUSING MUD /HOLE PROBLEMS.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	00:15	0.25		In Seam	1,156.30	SFT	Pre Start and shift change.
00:15	01:15	1.00		In Seam	1,156.30	TRI	Continue to shuffle around HWDP.
01:15	11:00	9.75		In Seam	1,223.34	DRL	Continue to drill 6 1/8" directional hole from 1156.30m rkb.to 1223.34m rkb
11:00	12:00	1.00	Yes	In Seam	1,223.34	CIR	Circulate well clean for trip out of hole to change out failed directional tool.
12:00	12:45	0.75	Yes	In Seam	1,223.34	TRI	Flow check and POOH to 1102m rkb.
12:45	13:15	0.50	Yes	In Seam	1,223.34	FCW	Fow check well taking 6bbls a hour.
13:15	14:00	0.75	Yes	In Seam	1,223.34	TRI	Run back in hole to bottom
14:00	18:00	4.00	Yes	In Seam	1,223.34	CIR	Circulate and condition mud.Bring mud weight down to 8.9ppg, because of losses.
18:00	18:15	0.25	Yes	In Seam	1,223.34	FCW	Flow check well stable.
18:15	00:00	5.75	Yes	In Seam	1,223.34	TRI	Pull out of hole to 560m. Reamed and worked tight hole at 939mrkb to 930m rkb. Pulling 7k to 15k over pull from 1185m to 890m

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	03:30	3.50	Yes	In Seam	1,223.34	TRI	Continue to POOH from 560m to BHA
03:30	04:30	1.00	Yes	In Seam	1,223.34	BBH	Flow check and break out and lay out directional BHA.
04:30	07:00	2.50	Yes	In Seam	1,223.34	BBH	Break out bit and change out LXM x UXM x DPM tools.Make up bit. Service directional BHA.Make up directional BHA.

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)
Potassium Base	06:00	1,183.00	1.102	0
Potassium Base	12:00	1,223.00	1.102	0
Potassium Base	18:00	1,223.00	1.066	0

NPT

Activity	Start Date	End Date
Breakdown - Bottom Hole Assemply	1/01/2013 11:00	3/01/2013 09:30

Comment

Down hole tool failure Pathfinder.

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
WORKTIME	14.00	180.00
DRILL	9.75	227.50
SAFETY	0.25	5.75
MAINTENANCE	0.00	1.50
MOVE	0.00	59.75
STANDBY	0.00	109.50

DAILY CONTACTS

Job Contact	Title
Robert Craig	Drilling Supervisor
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer
John Davidson	Drilling Supervisor

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill	30/12/2012	2
Toolbox	1/01/2013	11
Weekly safety Meeting both crews	30/12/2012	1
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
SLAM	Contractor	Nitro Drilling	43

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	18	216.00	216.00

SAFETY CHECKS TODAY

Type	Date
Toolbox	1/01/2013
Toolbox	1/01/2013

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s...	Eff (%)

Report Printed: 24/01/2013

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 1/01/2013
Report #: 25.0
Days From Spud: 20.00

Well Name: PD120A

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
AusDex	sacks			4.0	100.0	
ET Bit Lube	L		14.0	8.0	6.0	
KCL	sacks			12.0	491.0	
Residrill	sacks			9.0	130.0	
Soda Ash	sacks		13.0	1.0	37.0	
XanBore	sacks			2.0	58.0	

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #5, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
5	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
9.5/9.5/9.5/9.5/9.5/10.3	440	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,223.34	27,437	5.8

String Components

Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, Agitator, Shock Sub, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Branch 5	1,156.30	1,223.34	240.34	9.75	41.25	6.9	

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
5,338	40	117.2	28,024	31,138	24,020		

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

MUD PUMP

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

P (bars)	Slow Spd	Strokes (s...	Eff (%)

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 2/01/2013
Report #: 26.0
Days From Spud: 21.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101

Well Type	Well Configuration Type	Spud Date	Rig Release Date	Start Date
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90

Target Depth (mKB)	Total Depth (mKB)	End Depth (mKB)	Depth Progress (m)
1,562.00	1,546.63	1,223.34	0.00

Rig (Names)	Weather	Latitude (°)	Longitude (°)
Nitro Drilling NitroD1	Sl. Overcast	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Continue to POOH from 560m. Break out and lay out BHA. Change out LXM x UXM x DPM tools.
Make up BHA No # 6 and RIH to 690m. Test directional tools. Failed.POOH. Break out and lay out BHA. Change out LXM x UXM x DPM tools. Make up BHA No # 7 and RIH to 387m rkb.

Operations Next Report Period
Continue to RIH. Re-log GR from 1165 to 1223.34 m. Drill 6 1/8" directional hole ahead from 1223.34mKB.

Operations at 6:00
Reaming and washing tight hole @ 983m rkb

Remarks

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	03:30	3.50	Yes	In Seam	1,223.34	TRI	Continue to POOH from 560m to BHA
03:30	04:30	1.00	Yes	In Seam	1,223.34	BBH	Flow check and break out and lay out directional BHA.
04:30	07:00	2.50	Yes	In Seam	1,223.34	BBH	Break out bit and change out LXM x UXM x DPM tools.Make up bit. Service directional BHA.Make up directional BHA.
07:00	13:00	6.00	Yes	In Seam	1,223.34	TRI	Run in hole with BHA No # 6 to 690m
13:00	14:00	1.00	Yes	In Seam	1,223.34	OTH	Test directional tools Below shoe.directional tools failed.
14:00	19:00	5.00	Yes	In Seam	1,223.34	TRI	Flow check and POOH to BHA.
19:00	20:45	1.75	Yes	In Seam	1,223.34	BBH	Flow check and break out and lay out directional BHA. Break out bit and change out LXM x UXM x DPM tools.Make up bit. Service directional BHA.
20:45	22:00	1.25	Yes	In Seam	1,223.34	BBH	Make up directional BHA and RIH..
22:00	22:15	0.25	Yes	In Seam	1,223.34	SFT	Shift change and pre start.
22:15	00:00	1.75	Yes	In Seam	1,223.34	TRI	Trip in hole with BHA No # 7 to 387m rkb

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	03:00	3.00	Yes	In Seam	1,223.34	TRI	Continue to RIH from 387m to 680m
03:00	03:15	0.25	Yes	In Seam	1,223.34	CIR	Test directional tools.
03:15	04:30	1.25	Yes	In Seam	1,223.34	TRI	Continue to RIH from 680m to 872.59m
04:30	08:00	3.50	Yes	In Seam	1,223.34	BRM	Ream and wash tight hole from 872.59m rkb to 996m rkb.

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)
Potassium Base	06:00	1,223.34	1.042	0
Potassium Base	16:00	1,223.34	1.042	0
Potassium Base	23:45	1,223.34	1.042	0

NPT

Activity	Start Date	End Date
Breakdown - Bottom Hole Assemply	1/01/2013 11:00	3/01/2013 09:30

Comment
Down hole tool failure Pathfinder.

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
Biocide	L		1.0	3.0	17.0	

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
WORKTIME	23.75	203.75
SAFETY	0.25	6.00
DRILL	0.00	227.50
STANDBY	0.00	109.50
MAINTENANCE	0.00	1.50
MOVE	0.00	59.75

DAILY CONTACTS

Job Contact	Title
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer
Vince Krawchuk	Drilling Supervisor
John Davidson	Drilling Supervisor

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill	30/12/2012	2
Toolbox	2/01/2013	13
Weekly safety Meeting both crews	30/12/2012	1
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
SLAM	Contractor	Nitro Drilling	21

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	18	216.00	216.00

SAFETY CHECKS TODAY

Type	Date
Toolbox	2/01/2013
Toolbox	2/01/2013

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s...	Eff (%)

Report Printed: 24/01/2013

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 2/01/2013
Report #: 26.0
Days From Spud: 21.00

Well Name: PD120A

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #<stringno>, <des>

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

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)

String Components

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

MUD PUMP

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

P (bars)	Slow Spd	Strokes (s…	Eff (%)

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 3/01/2013
Report #: 27.0
Days From Spud: 22.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101

Well Type	Well Configuration Type	Spud Date	Rig Release Date	Start Date
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90

Target Depth (mKB)	Total Depth (mKB)	End Depth (mKB)	Depth Progress (m)
1,562.00	1,546.63	1,072.60	89.60

Rig (Names)	Weather	Latitude (°)	Longitude (°)
Nitro Drilling NitroD1	Good	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
RIH to 680m.Test directional tools, Ok. Continue to RIH to 872m. Ream and wash tight hole to 996m. RIH to 1025m Take survey. Unable to get back in to branch 5. Start branch 6 @ 983m rkb. Drill to 1072.60m rkb. Shift change and pre start.

Operations Next Report Period
Drill 6 1/8" directional hole ahead from 1072.60mKB.

Operations at 6:00
Drilling 61/8" directional hole @ 1110 mrkb

Remarks
3 attempts made to get back into branch #5. Then attempted to time drill back into branch #5, unsuccessful. Branch #5 aborted and began to drill branch #6.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	03:00	3.00	Yes	In Seam	1,223.34	TRI	Continue to RIH from 387m to 680m
03:00	03:15	0.25	Yes	In Seam	1,223.34	CIR	Test directional tools.
03:15	04:30	1.25	Yes	In Seam	1,223.34	TRI	Continue to RIH from 680m to 872.59m
04:30	08:00	3.50	Yes	In Seam	1,223.34	BRM	Ream and wash tight hole from 872.59m rkb to 996m rkb.
08:00	09:00	1.00	Yes	In Seam	1,223.34	TRI	Continue to RIH 996m rkb to 1025m rkb.
09:00	09:30	0.50	Yes	In Seam	1,223.34	TRI	Take survey. Not in branch 5. Pull back to ~~983~~997.97m rkb and attempt to get into branch 5. Unable to get in to branck 5 .
09:30	23:45	14.25		In Seam	1,072.60	DRL	Unable to get in to branck 5 . Kick of branch 6 at ~~983~~997.97mrkb and drill 61/8" directional hole to 1072.60m rkb.
23:45	00:00	0.25		In Seam	1,072.60	SFT	Shift change and pre start

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00		In Seam	1,095.00	DRL	Continue to drill 6 1/8" directional hole as per Pathfinders instructions. 1072.60m to 1095m rkb.

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)
Potassium Base	09:00	983.00	1.054	0
Potassium Base	14:00	989.00	1.054	0
Potassium Base	19:00	1,039.00	1.054	0
Potassium Base	23:45	1,072.00	1.066	0

NPT

Activity	Start Date	End Date
Breakdown - Bottom Hole Assemply	1/01/2013 11:00	3/01/2013 09:30

Comment
Down hole tool failure Pathfinder.

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
KCL	sacks			5.0	486.0	

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
DRILL	14.25	241.75
WORKTIME	9.50	213.25
SAFETY	0.25	6.25
MAINTENANCE	0.00	1.50
MOVE	0.00	59.75
STANDBY	0.00	109.50

DAILY CONTACTS

Job Contact	Title
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer
Vince Krawchuk	Drilling Supervisor
John Davidson	Drilling Supervisor

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill	30/12/2012	2
Toolbox	3/01/2013	16
Weekly safety Meeting both crews	30/12/2012	1
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
SLAM	Contractor	Nitro Drilling	30

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	24	288.00	288.00

SAFETY CHECKS TODAY

Type	Date
Toolbox	3/01/2013
Toolbox	3/01/2013
Toolbox	3/01/2013

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s...	Eff (%)

Report Printed: 24/01/2013

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 3/01/2013
Report #: 27.0
Days From Spud: 22.00

Well Name: PD120A

DRILL STRING AND BIT INFORMATION

BHA #7, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
7	Bit Run 155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm) 6	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
9.5/9.5/9.5/9.5/9.5/10.3	440	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,546.63	36,616	8.9

String Components

Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, Agitator, Shock Sub, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Branch 6	983.00	1,072.60	89.60	14.25	14.25	6.3	0.757

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
5,338	37	91.0	25,355	28,024	22,241		

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
3/01/2013 23:45	993.70	82.48	113.78	
3/01/2013 23:45	1,003.30	82.39	113.22	
3/01/2013 23:45	1,012.90	84.15	112.88	
3/01/2013 23:45	1,022.60	86.44	113.30	
3/01/2013 23:45	1,031.90	88.55	113.73	
3/01/2013 23:45	1,041.20	88.37	116.98	
3/01/2013 23:45	1,050.60	88.37	116.27	
3/01/2013 23:45	1,060.00	88.11	116.35	
3/01/2013 23:45	1,069.20	87.93	116.54	

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

MUD PUMP

2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

P (bars)	Slow Spd	Strokes (s...	Eff (%)
22.4	Yes	52	95

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 4/01/2013
Report #: 28.0
Days From Spud: 23.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101

Well Type	Well Configuration Type	Spud Date	Rig Release Date	Start Date
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90

Target Depth (mKB)	Total Depth (mKB)	End Depth (mKB)	Depth Progress (m)
1,562.00	1,546.63	1,205.30	132.70

Rig (Names)	Weather	Latitude (°)	Longitude (°)
Nitro Drilling NitroD1	Fine	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Drill 6 1/8" directional (branch #6) to 1095m rkb.Rig service. Drill 6 1/8" directional hole to1175m rkb. Circulated bottoms up. Rig repairs. Trip to shuffle HWDP around 14 singles. Drill 6 1/8" directional hole to 1205.30m rkb. Shift change and pre start.

Operations Next Report Period
Drill 6 1/8" directional hole ahead from 1205.30mKB.

Operations at 6:00
Drilling 6 1/8" directional hole @ 1280 mrKB.

Remarks
Dumped & diluted 30 bbl of drilling fluid to maintain mud density.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	06:00	6.00		In Seam	1,095.00	DRL	Continue to drill 6 1/8" directional hole as per Pathfinders instructions. 1072.60m to 1095m rkb.
06:00	06:15	0.25		In Seam	1,095.00	RSV	Rig service and change out broken springs on shaker.
06:15	16:00	9.75		In Seam	1,175.00	DRL	Continue to drill 6 1/8" directional hole as per Pathfinders instructions. 1095m to 1175m rkb.
16:00	16:15	0.25		In Seam	1,175.00	RMR	Circulate bottoms up.
16:15	16:30	0.25	Yes	In Seam	1,175.00	RSV	Rig Service.
16:30	17:15	0.75	Yes	In Seam	1,175.00	RMR	Repair whip check clamp in derrick.
17:15	19:15	2.00		In Seam	1,175.00	TRI	Flow check and pull out of hole with 14jts of HWDP. RIH with 8 joints of 3 1/2" drill pipe and 7jts of HWDP.
19:15	23:45	4.50		In Seam	1,205.30	DRL	Continue to drill and survey 6 1/8" directional hole as per Pathfinders instructions. 1175m to 1205.30m rkb.
23:45	00:00	0.25		In Seam	1,205.30	SFT	Shift change and pre start.

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	12:00	12.00		In Seam	1,357.00	DRL	Continue to drill and survey 6 1/8" directional hole as per Pathfinders instructions.1205.30 to1357.00mrKB.

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)
Potassium Base	04:00	1,101.00	1.054	0
Potassium Base	12:00	1,155.00	1.090	0
Potassium Base	18:00	1,175.00	1.114	0
Potassium Base	23:45	1,205.00	1.114	0

NPT

Activity	Start Date	End Date
Breakdown - Derrick/Mask	4/01/2013 16:15	4/01/2013 17:15

Comment
Repair broken clamp on whip check in derrick

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
AusDex	sacks			1.0	99.0	
Defoamer	L		5.0	2.0	7.0	
KCL	sacks			5.0	481.0	
Residrill	sacks			1.0	129.0	

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
DRILL	20.25	262.00
WORKTIME	2.00	215.25
MAINTENANCE	1.50	3.00
SAFETY	0.25	6.50
MOVE	0.00	59.75
STANDBY	0.00	109.50

DAILY CONTACTS

Job Contact	Title
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer
Vince Krawchuk	Drilling Supervisor
John Davidson	Drilling Supervisor

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill	30/12/2012	2
Toolbox	4/01/2013	18
Weekly safety Meeting both crews	30/12/2012	1
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
SLAM	Contractor	Nitro Drilling	17

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date
Toolbox	4/01/2013
Toolbox	4/01/2013

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s...	Eff (%)

Report Printed: 24/01/2013

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 4/01/2013
Report #: 28.0
Days From Spud: 23.00

Well Name: PD120A

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #7, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
7	Bit Run 155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm) 6	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
9.5/9.5/9.5/9.5/9.5/10.3	440	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,546.63	36,616	8.9

String Components

Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, Agitator, Shock Sub, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Branch 6	1,072.60	1,205.30	222.30	20.25	34.50	6.6	0.757

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
5,338	37	106.5	28,024	30,248	25,355		

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
4/01/2013 23:45	1,078.50	87.49	115.76	
4/01/2013 23:45	1,096.90	89.16	115.53	
4/01/2013 23:45	1,106.30	88.55	114.92	
4/01/2013 23:45	1,115.60	88.29	114.93	
4/01/2013 23:45	1,124.90	88.20	115.48	
4/01/2013 23:45	1,134.30	88.46	116.10	
4/01/2013 23:45	1,143.70	88.46	116.31	
4/01/2013 23:45	1,155.20	88.81	116.31	
4/01/2013 23:45	1,164.30	89.08	116.53	
4/01/2013 23:45	1,173.60	89.16	116.33	
4/01/2013 23:45	1,183.00	89.08	116.23	
4/01/2013 23:45	1,192.30	88.90	116.62	
4/01/2013 23:45	1,201.60	88.81	116.47	

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

MUD PUMP

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

P (bars)	Slow Spd	Strokes (s...	Eff (%)

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 5/01/2013
Report #: 29.0
Days From Spud: 24.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101

Well Type	Well Configuration Type	Spud Date	Rig Release Date	Start Date
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90

Target Depth (mKB)	Total Depth (mKB)	End Depth (mKB)	Depth Progress (m)
1,562.00	1,546.63	1,462.90	257.60

Rig (Names)	Weather	Latitude (°)	Longitude (°)
Nitro Drilling NitroD1	Fine	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Drill 6 1/8" directional (branch #6) to 1357m rkb. Shift change and pre start.Continue to drill 6 1/8" directional to 1366m rkb. BOP drill. Continue to drill 6 1/8" directional to 1462.90m rkb.Circulate. POOH to 1251m rkb. Rig repairs. Continue to POOH to 1233m rkb.

Operations Next Report Period
Continue to POOH. Change BHA. Run back in hole. Drill 6 1/8 " directional hole ahead from 1462.90m rkb.

Operations at 6:00
Tripping out of hole for BHA change @ 349mKB.

Remarks
Problems tripping breaking out drill pipe with iron rough neck because of the placement of hard banding on some of the drill pipe.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	12:00	12.00		In Seam	1,357.00	DRL	Continue to drill and survey 6 1/8" directional hole as per Pathfinders instructions.1205.30 to1357.00mrKB.
12:00	12:15	0.25		In Seam	1,357.00	SFT	Shift change and pre start.
12:15	12:30	0.25		In Seam	1,366.00	DRL	Continue to drill and survey 6 1/8" directional hole as per Pathfinders instructions.1357 .00m to1366.00mrKB.
12:30	12:45	0.25		In Seam	1,366.00	SFT	Perform BOP drill well secured in 86sec.
12:45	18:30	5.75		In Seam	1,462.90	DRL	Continue to drill and survey 6 1/8" directional hole as per Pathfinders instructions.1366 .00m to1462.90mrKB.
18:30	20:30	2.00		In Seam	1,462.90	CIR	Circulate well clean for trip out of hole for BHA change.
20:30	23:00	2.50		In Seam	1,462.90	TRI	Flow check and POOH to 1251m.
23:00	23:30	0.50	Yes	In Seam	1,462.90	RMR	Problems breaking out pipes change out dies in iron rough neck.
23:30	00:00	0.50		In Seam	1,462.90	TRI	Continue to POOH to 1233m rkb.

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	01:15	1.25		In Seam	1,462.90	TRI	Continue to POOH from 1233m to 985mKB.
01:15	02:15	1.00		In Seam	1,462.90	CIR	Work string up and down through kick of point for branch 6 @ 983m Run back in hole to 1115m and take survey to confirm we are back in the right branch. Survey ok.
02:15	08:45	6.50		In Seam	1,462.90	TRI	Flow check and continue to POOH from 1115m to 349 m. Pulled tight from 848 to 800m, 748 to casing shoe (648.8m)..

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)
Potassium Base	04:00	1,244.00	1.126	0
Potassium Base	08:00	1,316.00	1.114	0
Potassium Base	12:00	1,357.00	1.114	0
Potassium Base	15:00	1,405.00	1.114	0
Potassium Base	18:00	1,453.00	1.114	0
Potassium Base	22:30	1,462.00	1.114	0

NPT

Activity	Start Date	End Date
Breakdown - Pipe Handling Equipment	5/01/2013 23:00	5/01/2013 23:30

Comment

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
DRILL	18.00	280.00
WORKTIME	5.00	220.25
SAFETY	0.50	7.00
MAINTENANCE	0.50	3.50
MOVE	0.00	59.75
STANDBY	0.00	109.50

DAILY CONTACTS

Job Contact	Title
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer
Vince Krawchuk	Drilling Supervisor
John Davidson	Drilling Supervisor

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill	5/01/2013	3
Toolbox	5/01/2013	20
Weekly safety Meeting both crews	30/12/2012	1
Weekly safety meeting both crews.		

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
SLAM	Contractor	Nitro Drilling	25

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	18	216.00	216.00

SAFETY CHECKS TODAY

Type	Date
BOP Drill	5/01/2013
Toolbox	5/01/2013
Toolbox	5/01/2013

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s...	Eff (%)

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 5/01/2013
Report #: 29.0
Days From Spud: 24.00

Well Name: PD120A

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
AusDex	sacks			1.0	98.0	
KCL	sacks			5.0	476.0	
XanBore	sacks			2.0	56.0	

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

MUD PUMP

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

P (bars)	Slow Spd	Strokes (s…	Eff (%)
22.0	Yes	48	95

DRILL STRING AND BIT INFORMATION

BHA #7, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
7	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
9.5/9.5/9.5/9.5/9.5/10.3	440	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,546.63	36,616	8.9

String Components

Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, Agitator, Shock Sub, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)
Branch 6	1,205.30	1,462.90	479.90	17.75	52.25	14.5	0.757

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
5,338	37	109.8	35,586	39,589	30,248		

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
5/01/2013 23:45	1,211.00	88.64	116.20	
5/01/2013 23:45	1,220.40	88.37	116.53	
5/01/2013 23:45	1,229.70	88.37	116.36	
5/01/2013 23:45	1,239.40	88.64	116.33	
5/01/2013 23:45	1,248.90	88.55	116.66	
5/01/2013 23:45	1,258.60	88.55	116.52	
5/01/2013 23:45	1,268.30	88.46	115.72	
5/01/2013 23:45	1,277.90	88.81	115.50	
5/01/2013 23:45	1,287.50	88.99	114.80	
5/01/2013 23:45	1,297.20	88.90	113.77	
5/01/2013 23:45	1,306.70	88.81	113.40	
5/01/2013 23:45	1,316.20	87.85	114.36	
5/01/2013 23:45	1,325.70	87.05	115.18	
5/01/2013 23:45	1,335.30	86.26	115.72	
5/01/2013 23:45	1,344.70	86.26	115.68	
5/01/2013 23:45	1,354.30	86.88	116.02	
5/01/2013 23:45	1,363.90	86.97	115.97	
5/01/2013 23:45	1,373.60	87.49	116.57	
5/01/2013 23:45	1,383.30	87.67	116.98	
5/01/2013 23:45	1,392.70	87.49	117.19	
5/01/2013 23:45	1,402.30	87.32	117.26	
5/01/2013 23:45	1,411.90	87.41	117.39	
5/01/2013 23:45	1,421.50	88.11	116.59	
5/01/2013 23:45	1,431.20	87.93	117.03	
5/01/2013 23:45	1,440.80	89.78	116.83	

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 6/01/2013
Report #: 30.0
Days From Spud: 25.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101
Well Type	**Well Configuration Type**	**Spud Date**	**Rig Release Date**	**Start Date**
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan…	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90
Target Depth (mKB)	**Total Depth (mKB)**	**End Depth (mKB)**	**Depth Progress (m)**
1,562.00	1,546.63	1,502.00	39.10
Rig (Names)	**Weather**	**Latitude (°)**	**Longitude (°)**
Nitro Drilling NitroD1	Clear	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
POOH. Lay down LXM tool & make-up RMRS directional assembly w/ 6-1/8" bit. RIH. Circulate bottoms up. Drill branch #6 from 1462 to 1502mKB.

Operations Next Report Period
Drill ahead to branch #6 TD. Circulate & condition hole. Wiper trip.

Operations at 6:00
Drilling branch #6 @ 1539mMD.

Remarks
Wellpath ranged to PD120V with ranging magnet.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	01:15	1.25		In Seam	1,462.90	TRI	Continue to POOH from 1233m to 985mKB.
01:15	02:15	1.00		In Seam	1,462.90	CIR	Work string up and down through kick of point for branch 6 @ 983m Run back in hole to 1115m and take survey to confirm we are back in the right branch. Survey ok.
02:15	08:45	6.50		In Seam	1,462.90	TRI	Flow check and continue to POOH from 1115m to 349 m. Pulled tight from 848 to 800m, 748 to casing shoe (648.8m)..
08:45	11:00	2.25		In Seam	1,462.90	MBH	Lay out directional BHA. Change out LXM for RMRS surveying tool.
11:00	11:30	0.50	Yes	In Seam	1,462.90	RMR	Rig repair - replace iron roughneck dies.
11:30	12:30	1.00		In Seam	1,462.90	SFT	Weekly safety meeting. Discussed having good JSAs, reporting incidents, Wellsite Permit to Work, driving conditions, rain & lightning awareness, & reviewed Dropped Objects safety alerts.
12:30	21:15	8.75		In Seam	1,462.90	TRI	RIH, wash last 2 singles down.
21:15	23:45	2.50		In Seam	1,462.90	DRL	Drill 6-1/8" branch #6 ahead from 1462 to 1502mKB. 1462.90 m
23:45	00:00	0.25		In Seam	1,462.90	SFT	Crew change meeting.

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	08:30	8.50		In Seam	1,546.63	DRL	Continue to drill 6 1/8" directional hole 1502m rkb to 1546.63m rkb TD as per directional drillers instructions.Had 200 psi pressure loss and a 2bbl loss when entering target well at TD

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)
Potassium Base	21:00	1,462.00	1.102	0

NPT

Activity	Start Date	End Date
Breakdown - Pipe Handling Equipment	6/01/2013 11:00	6/01/2013 11:30

Comment
Repair iron roughneck dies. Add chain to backplate to prevent dies from falling out.

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
AusDex	sacks		61.0	1.0	158.0	
KCL	sacks		133.0	5.0	604.0	
Residrill	sacks		9.0	1.0	137.0	
XanBore	sacks			1.0	55.0	

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
WORKTIME	19.75	240.00
DRILL	2.50	282.50
SAFETY	1.25	8.25
MAINTENANCE	0.50	4.00
MOVE	0.00	59.75
STANDBY	0.00	109.50

DAILY CONTACTS

Job Contact	Title
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer
Vince Krawchuk	Drilling Supervisor
John Davidson	Drilling Supervisor

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill	5/01/2013	3
Toolbox	5/01/2013	20
Weekly safety Meeting both crews	30/12/2012	1
Weekly safety meeting both crews.	6/01/2013	1

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
SLAM	Contractor	Nitro Drilling	17

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date
Weekly safety meeting both crews.	6/01/2013

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s…	Eff (%)

Report Printed: 24/01/2013

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 6/01/2013
Report #: 30.0
Days From Spud: 25.00

Well Name: PD120A

DRILL STRING AND BIT INFORMATION

BHA #7, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
7	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
9.5/9.5/9.5/9.5/9.5/10.3	440	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,546.63	36,616	8.9

String Components

Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, Agitator, Shock Sub, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Branch 6	1,462.90	1,502.00	519.00	2.50	54.75	15.6	0.757

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
5,338	37	110.3	35,586	39,589	30,248		

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

MUD PUMP

2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

P (bars)	Slow Spd	Strokes (s...	Eff (%)

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 7/01/2013
Report #: 31.0
Days From Spud: 26.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101
Well Type	**Well Configuration Type**	**Spud Date**	**Rig Release Date**	**Start Date**
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90
Target Depth (mKB)	**Total Depth (mKB)**	**End Depth (mKB)**	**Depth Progress (m)**
1,562.00	1,546.63	1,546.63	44.63
Rig (Names)	**Weather**	**Latitude (°)**	**Longitude (°)**
Nitro Drilling NitroD1	Clear	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary

Drill 6 1/8" directional hole to 1546.63m rkb TD.Intercepted target. Circulate well clean. POOH to 976m rkb. Ream and work pipe through kick of point at 983m rkb. Run in to 1115m take survey to confirm we are in branch #6. POOH to 957m. Ream and work pipe through tight spots back to 810m rkb. Circulate bottoms up. Continue to POOH to 660m rkb. Work tight hole 654m rkb to 648m rkb.POOH to BHA. Break out and lay out directional BHA.

Operations Next Report Period

RIH hole with mule shoe to TD. Run 45mm quick run poly pipe as per programe.

Operations at 6:00

Rig service.

Remarks

Verified intercept of well (branch #6) with PD120V by 200 psi decrease and loss of 2bbls, 200 psi pressure increase on PD120V well. Had 5 bbls of losses (4 bbl/ hr) that healed while circulating & conditioning hole.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	08:30	8.50		In Seam	1,546.63	DRL	Continue to drill 6 1/8" directional hole 1502m rkb to 1546.63m rkb TD as per directional drillers instructions.Had 200 psi pressure loss and a 2bbl loss when entering target well at TD
08:30	10:15	1.75		In Seam	1,546.63	CIR	Circulate well clean for trip.
10:15	13:30	3.25		In Seam	1,546.63	TRI	Flow check and POOH to976m rkb.
13:30	14:00	0.50		In Seam	1,546.63	CIR	Ream and work pipe through kick of point at 983m rkb. Run back in to 1115m rkb and survey to corfirm we are in branch # 6.
14:00	14:30	0.50		In Seam	1,546.63	TRI	Flow check and continue to POOH to 957m rkb.
14:30	16:00	1.50		In Seam	1,546.63	OTH	Ream and work tight spots 957m to 947m. 928m to 909m. 900m to 810m.
16:00	16:30	0.50		In Seam	1,546.63	CIR	Circulate bottoms up and do a flow check.
16:30	17:30	1.00		In Seam	1,546.63	TRI	Continue to POOH 810m to 660m
17:30	18:00	0.50		In Seam	1,546.63	OTH	Ream and work tight hole @ 654m to 648m.
18:00	22:00	4.00		In Seam	1,546.63	TRI	Flow check and continue to POOH to BHA.
22:00	00:00	2.00		In Seam	1,546.63	BBH	Break out and lay out directional BHA.

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	00:30	0.50		In Seam	1,546.63	SFT	Shift change and pre start.
00:30	05:30	5.00		In Seam	1,546.63	TRI	RIH with mule shoe on 3 1/2" drill pipe to 576m rkb Drift and strap each joint on pipe rack 25jts at a time..
05:30	06:45	1.25		In Seam	1,546.63	RSV	Change oil and filters on rig engine.

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)
Potassium Base	08:00	1,546.63	1.114	0
Potassium Base	08:00	1,546.63	1.114	0
Potassium Base	23:45	1,546.63	1.114	0

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
XanBore	sacks		20.0	2.0	73.0	

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
WORKTIME	15.50	255.50
DRILL	8.50	291.00
MAINTENANCE	0.00	4.00
STANDBY	0.00	109.50
MOVE	0.00	59.75
SAFETY	0.00	8.25

DAILY CONTACTS

Job Contact	Title
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer
Vince Krawchuk	Drilling Supervisor
John Davidson	Drilling Supervisor

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill	5/01/2013	3
Toolbox	7/01/2013	22
Weekly safety Meeting both crews	30/12/2012	1
Weekly safety meeting both crews.	6/01/2013	1

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
SLAM	Contractor	Nitro Drilling	18

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date
Toolbox	7/01/2013
Toolbox	7/01/2013

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s...	Eff (%)

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 7/01/2013
Report #: 31.0
Days From Spud: 26.00

Well Name: PD120A

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

Liner Size (mm)		Vol/Stk OR (m³/stk)	
114.3		0.005	
P (bars)	Slow Spd	Strokes (s…	Eff (%)

DRILL STRING AND BIT INFORMATION

BHA #7, Lateral

Bit Run	Size (mm)	Make	Model	IADC Codes	Serial Number	Length (m)
7	155.6	Varel	VM613R	M424	4001684	0.20

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
9.5/9.5/9.5/9.5/9.5/10.3	440	-------

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)
1,546.63	36,616	8.9

String Components

Varel VM613R, LXM, G2 Dynadrill, Float Sub, UXM, DPM, Xover, HDS1, HDS2 Xover, HDS2, NMDC, HWDP, Drill Pipe, Agitator, Shock Sub, Drill Pipe, HWDP, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)
Branch 6	1,502.00	1,546.63	563.63	8.50	63.25	5.3	0.757

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq
5,338	37	115.6	37,810	40,034	32,917		

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 8/01/2013
Report #: 32.0
Days From Spud: 27.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101
Well Type	**Well Configuration Type**	**Spud Date**	**Rig Release Date**	**Start Date**
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90
Target Depth (mKB)	**Total Depth (mKB)**	**End Depth (mKB)**	**Depth Progress (m)**
1,562.00	1,546.63	1,546.63	0.00
Rig (Names)	**Weather**	**Latitude (°)**	**Longitude (°)**
Nitro Drilling NitroD1	Clear	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
RIH w/ mule shoe on DP to 1546.6 mKB. Rig to & run 465 m of 45 mm slotted poly (HDPE) liner with anchor in branch #6.

Operations Next Report Period
Continue to run 45mm poly pipe. Displace poly pipe and land with anchor. POOH with open ended drill pipe. Nipple down BOP. Nipple up c section.Land tbg and donut.Install BPV. Rig release.

Operations at 6:00
Continue to run 45mm poly pipe. Hanging up @ 465 m.

Remarks
Poly liner hanging up @ 465 m.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Proble m?	Phase	End Depth (mKB)	Activity	Com
00:00	00:30	0.50		In Seam	1,546.63	SFT	Shift change and pre start.
00:30	05:30	5.00		In Seam	1,546.63	TRI	RIH with mule shoe on 3 1/2" drill pipe to 576m rkb Drift and strap each joint on pipe rack 25jts at a time..
05:30	06:45	1.25		In Seam	1,546.63	RSV	Change oil and filters on rig engine.
06:45	15:30	8.75		In Seam	1,546.63	TRI	Continue to RIH to 959m rkb. Break circulation every 12 joints from 959m rkb to 1546.63m rkb tag bottom.All drill pipe drifted and measured on racks.
15:30	16:00	0.50		In Seam	1,546.63	SFT	Review JSA on running quickrun 45mm poly pipe.
16:00	17:00	1.00		In Seam	1,546.63	NUD	Rig up poly running equipment and make up head.
17:00	00:00	7.00		In Seam	1,546.63	SEC	Run 45mm poly pipe. Problems running it in hole hung up at 200m and 465m. Work pipe and try to get it moving down.Depths taken from spool.

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Proble m?	Phase	End Depth (mKB)	Activity	Com
00:00	07:00	7.00		In Seam	1,546.63	RPC	Continue to work quick run 45mm poly pipe unable to get past 465m.

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #8, 8 Open Ended drill pipe.

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

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull
		-------
String Length (m)	**Weight of String in Air (daN)**	**BHA ROP (m/hr)**
1,546.63	35,430	

String Components
Mule Shoe, Drill Pipe

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)
Original Hole	1,546.63	1,546.63					
WOB (daN)	**RPM (rpm)**	**SPP (bars)**	**Drill Str Wt (daN)**	**PU Str Wt (daN)**	**SO Str Wt (daN)**	**Drilling Torque**	**Off Btm Tq**
			36,475				

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
WORKTIME	21.75	277.25
MAINTENANCE	1.25	5.25
SAFETY	1.00	9.25
DRILL	0.00	291.00
MOVE	0.00	59.75
STANDBY	0.00	109.50

DAILY CONTACTS

Job Contact	Title
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer
Vince Krawchuk	Drilling Supervisor
John Davidson	Drilling Supervisor

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill	5/01/2013	3
Toolbox	8/01/2013	25
Weekly safety Meeting both crews	30/12/2012	1
Weekly safety meeting both crews.	6/01/2013	1

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
JSA	Contractor	Nitro Drilling	1
SLAM	Contractor	Nitro Drilling	17

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date
Toolbox	8/01/2013
Toolbox	8/01/2013
Toolbox	8/01/2013

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3
Liner Size (mm)	**Vol/Stk OR (m³/stk)**	
127.0	0.007	

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 8/01/2013
Report #: 32.0
Days From Spud: 27.00

Well Name: PD120A

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

P (bars)	Slow Spd	Strokes (s…	Eff (%)

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Liner Size (mm)	Vol/Stk OR (m³/stk)
114.3	0.005

P (bars)	Slow Spd	Strokes (s…	Eff (%)

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 9/01/2013
Report #: 33.0
Days From Spud: 28.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101
Well Type	**Well Configuration Type**	**Spud Date**	**Rig Release Date**	**Start Date**
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90
Target Depth (mKB)	**Total Depth (mKB)**	**End Depth (mKB)**	**Depth Progress (m)**
1,562.00	1,546.63	1,546.63	0.00
Rig (Names)	**Weather**	**Latitude (°)**	**Longitude (°)**
Nitro Drilling NitroD1	Clear	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Unable to get more than 465 m of 45 mm poly liner in drill pipe. Cut & pump 461.5 m of poly liner, landed @ 1546.6mKB, top @ 1085.1mKB. Circulate bottoms up, trip to 1084.65 mKB. Rig to & run 451 m of poly liner. Cut & pump, landed 2nd section of poly liner @ 1085.1mKB, top @ 634.1mKB.POOH. Shift change and pre start. POOH. Rig repairs. POOH.Rig repairs.

Operations Next Report Period
Continue to POOH. Install tbg hanger and BPV in B section. pressure test same. Nipple down bop. Install well head. Rig release. Rig move.

Operations at 6:00
Nippling down BOPs

Remarks
Wellsite Handover for PD130A required.

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	07:00	7.00		In Seam	1,546.63	RPC	Continue to work quick run 45mm poly pipe unable to get past 465m.
07:00	08:00	1.00		In Seam	1,546.63	RPC	Recieved go ahead from town to cut poly pipe @ 461.5m rkb . Cut poly liner, lay out poly feeder and pump 45mm poly liner to 1546.6m rkb. Top of poly liner @1085.10m rkb.
08:00	08:30	0.50		In Seam	1,546.63	CIR	Circulate bottoms up and flow check.
08:30	11:30	3.00		In Seam	1,546.63	TRI	POOH from 1546.63m rkb to 1085m rkb.
11:30	12:00	0.50		In Seam	1,546.63	CIR	Circulate well clean.
12:00	12:15	0.25		In Seam	1,546.63	PST	Shift change and pre start.
12:15	13:15	1.00		In Seam	1,546.63	RPC	Rig up poly feeder and attach dart to poly..
13:15	16:00	2.75		In Seam	1,546.63	RPC	Run 451m rkb of 45mm quick run poly pipe, cut and pump to 1085m rkb. Top of poly liner @ 634.10m rkb.
16:00	22:15	6.25		In Seam	1,546.63	TRI	Flow check and POOH from 1085m rkb to surface. Flow check again at shoe.
22:15	23:30	1.25	Yes	In Seam	1,546.63	RMR	Rig repairs control lever broken of on drillers consul.Get mechanic down to repair it.
23:30	23:45	0.25		In Seam	1,546.63	TRI	Continiue to POOH with mule shoe.
23:45	00:00	0.25	Yes	In Seam	1,546.63	RMR	Rig repairs. Make up new dies for iron rough neck.

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	00:30	0.50	Yes	In Seam	1,546.63	RMR	Rig repairs. Make up new dies for iron rough neck.
00:30	01:30	1.00		In Seam	1,546.63	TRI	Continue to POOH with mule shoe.
01:30	03:30	2.00		In Seam	1,546.63	FPT	Pick up joint of 2 7/8" tbg make up tbg hanger with BPV installed. ,land same. Tighten hold down bolts. Rig up test pump and pressure test tbg hanger 200psi low for 5 minutes 2,000 psi high for 10 minutes. Tested ok. Back out landing joint. Rig down test pump
03:30	09:00	5.50		In Seam	1,546.63	NDB	Nipple down BOPs.Remove flow line and bell nipple. Nipple down BOPs. Clean mud tanks.

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
WORKTIME	22.25	299.50
MAINTENANCE	1.50	6.75
SAFETY	0.25	9.50
DRILL	0.00	291.00
MOVE	0.00	59.75
STANDBY	0.00	109.50

DAILY CONTACTS

Job Contact	Title
Jeff Wilkinson	Drilling Superintdnt
Mohammad Rahman	Well Engineer
Vince Krawchuk	Drilling Supervisor
John Davidson	Drilling Supervisor

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill	5/01/2013	3
Toolbox	9/01/2013	27
Weekly safety Meeting both crews	30/12/2012	1
Weekly safety meeting both crews.	6/01/2013	1

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts
SLAM	Contractor	Nitro Drilling	15

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	17	204.00	204.00

SAFETY CHECKS TODAY

Type	Date
Toolbox	9/01/2013
Toolbox	9/01/2013

MUD PUMP

 # 1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s...	Eff (%)

 # 2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Report Printed: 24/01/2013

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 9/01/2013
Report #: 33.0
Days From Spud: 28.00

Well Name: PD120A

NPT

Activity	Start Date	End Date
Breakdown - Drillers console	9/01/2013 22:15	9/01/2013 23:30

Comment: Repairs to handle on drillers consul.

Activity	Start Date	End Date
Breakdown - Pipe Handling Equipment	9/01/2013 23:45	10/01/2013 00:30

Comment: Make up new dies for iron rough neck.

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)
NIF. 20			2.0		2.0	

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #<stringno>, <des>

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

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)

String Components

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (…	Int ROP (m/hr)	Q Flow (m³/min)

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

Liner Size (mm)		Vol/Stk OR (m³/stk)	
114.3		0.005	
P (bars)	Slow Spd	Strokes (s…	Eff (%)

Report Printed: 24/01/2013

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 10/01/2013
Report #: 34.0
Days From Spud: 29.00

Well Name: PD120A

API/UWI	Field Name	State/Province	Country	WBS Code
BPD12001	Peak Downs	Queensland	Australia	C.A5.BPD.AD.12.001.12101

Well Type	Well Configuration Type	Spud Date	Rig Release Date	Start Date
SIS Lateral		13/12/2012 00:00	10/01/2013 09:00	8/12/2012 16:00

DAILY OPERATIONS

Most Likely Duration (no plan chan...	Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)
12.17	227.67	223.77	3.90

Target Depth (mKB)	Total Depth (mKB)	End Depth (mKB)	Depth Progress (m)
1,562.00	1,546.63	1,546.63	0.00

Rig (Names)	Weather	Latitude (°)	Longitude (°)
Nitro Drilling NitroD1	Clear	22° 13' 6.832" S	148° 15' 55.608" E

Operations Summary
Rig repairs. Continue to POOH with mule shoe. Run tbg hanger with BPV. Pressure test tbg hanger 200psi low for 5 minutes. 2000psi high for 10 minutes tested ok. Nipple down BOP. Clean mud tanks. Rig released @ 09:00 hrs

Operations Next Report Period
Rig move to PD130A. Weatherford to install bonnet on wellhead.

Operations at 6:00

Remarks

HOURLY OPERATIONS SUMMARY 00:00 TO 24:00 OF THE REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com
00:00	00:30	0.50	Yes	In Seam	1,546.63	RMR	Rig repairs. Make up new dies for iron rough neck.
00:30	01:30	1.00		In Seam	1,546.63	TRI	Continue to POOH with mule shoe.
01:30	03:30	2.00		In Seam	1,546.63	FPT	Pick up joint of 2 7/8" tbg make up tbg hanger with BPV installed. ,land same. Tighten hold down bolts. Rig up test pump and pressure test tbg hanger 200psi low for 5 minutes 2,000 psi high for 10 minutes. Tested ok. Back out landing joint. Rig down test pump
03:30	09:00	5.50		In Seam	1,546.63	NDB	Nipple down BOPs.Remove flow line and bell nipple. Nipple down BOPs. Clean mud tanks.

HOURLY OPERATIONS SUMMARY 00:00 TO 6:00 OF THE NEXT REPORTING DAY

Start Time	End Time	Dur (hr)	Problem?	Phase	End Depth (mKB)	Activity	Com

MUD PROPERTIES

Type	Time	Depth (mKB)	Dens (sg(h2o))	Vis (days/m³)

NPT

Activity	Start Date	End Date
Breakdown - Pipe Handling Equipment	9/01/2013 23:45	10/01/2013 00:30

Comment
Make up new dies for iron rough neck.

MUD USED

Des	Units	Vendor	Rec	Consumed	On Loc	Daily Field Est (Cost)

Job Supplies

Supply Item Des	Unit Label	Vendor	Received	Consumed	Cum On Loc

DRILL STRING AND BIT INFORMATION

BHA #<stringno>, <des>

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

Nozzles (mm)	Bit Total Fluid Area (nozzles) (mm²)	IADC Bit Dull

String Length (m)	Weight of String in Air (daN)	BHA ROP (m/hr)

String Components

Drilling Parameters

Wellbore	Start Depth (mKB)	End Depth (mKB)	Cum Depth (m)	Drilling Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q Flow (m³/min)

WOB (daN)	RPM (rpm)	SPP (bars)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drilling Torque	Off Btm Tq

CASING STRINGS

Csg Des	OD (mm)	Set Depth (mKB)
Surface	244.5	69.10
Intermediate	177.8	648.67

64.73

CUM TIMELOG by OPERATIONS

Code 1	Dur (hr)	Cum Dur (hr)
WORKTIME	8.50	308.00
MAINTENANCE	0.50	7.25
DRILL	0.00	291.00
STANDBY	0.00	109.50
MOVE	0.00	59.75
SAFETY	0.00	9.50

DAILY CONTACTS

Job Contact	Title
Jason Ogilvie	Drilling Superintdnt
Mohammad Rahman	Well Engineer
Vince Krawchuk	Drilling Supervisor
John Davidson	Drilling Supervisor

SAFETY CHECK SUMMARY

Type	Last Date	# Occur
BOP Drill	5/01/2013	3
Toolbox	10/01/2013	28
Weekly safety Meeting both crews	30/12/2012	1
Weekly safety meeting both crews.	6/01/2013	1

SAFETY OBSERVATIONS

Safety Stats	Company Type	Company	# Rpts

PERSONNEL LOG SUMMARY

Type	Count	Reg Work Hrs (hr)	Tot Work Hrs (hr)
	18	216.00	216.00

SAFETY CHECKS TODAY

Type	Date
Toolbox	10/01/2013

MUD PUMP

1 , Shandong Qingneng Power Co ,

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	187.3

Liner Size (mm)	Vol/Stk OR (m³/stk)
127.0	0.007

P (bars)	Slow Spd	Strokes (s...	Eff (%)

2 , Dezhou L&A Petroleum Machin

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
372.8	50.8	152.4

Report Printed: 24/01/2013

arrow energy

Daily Drilling Report

ALL DEPTHS REFERENCE MD KB

Report Start Date: 10/01/2013
Report #: 34.0
Days From Spud: 29.00

Well Name: PD120A

SURVEY DATA

Date	MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Underreaming Intervals

Top (mKB)	Btm (mKB)	OD (mm)	Com

Liner Size (mm)		Vol/Stk OR (m³/stk)	
114.3		0.005	
P (bars)	Slow Spd	Strokes (s…	Eff (%)

Report Printed: 24/01/2013