

**DAILY OPERATIONS PARTNER REPORT**

**Event:** DEV DRILLING  
**Prim. Reason:** ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
USA

**Date:** 12/21/2014  
**Report No:** 1MOV

**Other Remarks:**

UNIVERSITY ST. ANDREWS UNIT # 1220DH

From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.

HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199

LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'

Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1'  
650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS

OXY DSM TRAILER: 281-833-2725

NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : XX/XX/XX SPOKE TO XXXXTRRC EMPLOYEE, JOB  
#XXXXX

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 9.625" INT CASINGX

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING :

Unsafe Acts:8

Safe Acts:1

Unsafe Equipment:0

SWA:1

Near Misses:0

Worksite JSA: 10

Safety Meetings:10

LO/TO:6

Permits to work: 4

Power Line Checklist: 12/19/2014

Pre Spud/Rig Inspections:

Hazard ID's:0

Ep2 Observations:0

BEST STOP CARD: OBSERVED EMPLOYEE ABOVE 4' WITHOUT FALL PROTECTION. STOPPED JOB AND EXPLAINED  
POLICIES AND REGULATIONS. EMPLOYEE AGREED TO COMPLY. PUT ON FALL PROTECTION. JOB CONTINUED  
WITHOUT INCIDENT.

OXY USA INC							
DAILY OPERATIONS PARTNER REPORT							
Event:		DEV DRILLING		ST ANDREWS UNIT 1220H		Date: 12/21/2014	
Prim. Reason:		ORIG DRILL HORIZ		USA		Report No: 1MOV	
OPERATIONS							
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	4:00	4.00	01MIRU	LOCMOV	RD	P	RIG DOWN H&P RIG 264 ON WELL SCR 2352SH.  NOTE: PICK UP H&P RIG 264 FROM WELL 2352SH TO WELL SAU 1220H AT 00:00 HOURS ON 12/21/14.
4:00	8:30	4.50	01MIRU	LOCMOV	RD	P	RIG DOWN AND CLEAN H&P RIG 264 ON WELL SCR 2352SH.
8:30	9:00	0.50	01MIRU	SAFE	PJSM	P	HELD SAFETY MEETING WITH STALLION,STW, NH ELECTRIC,H&P,OXY ON RIG MOVE PROCEDURES AND ROUTE.
9:00	13:30	4.50	01MIRU	LOCMOV	MOVE	P	MOVE H&P 264 FROM SCR 2352SH TO SAH 1220H 37.7 MILES PRESSURE WASH EVERY LOAD BEFORE DEPARTURE FROM LOCATION.  RIGGED DOWN: 90% RIG MOVED: 35% RIGGED UP: 0%  SAFETY BREAK: OVERHEAD POWERLINE AWARENESS
13:30	18:00	4.50	01MIRU	LOCMOV	RU	P	MOVE H&P 264 FROM SCR 2352SH TO SAH 1220H 37.7 MILES PRESSURE WASH EVERY LOAD BEFORE DEPARTURE FROM LOCATION.  MOVE AND SET MCC, GEN SET. REPLACED TOP DRIVE, TRAVELING BLOCK, AND CROWN SHEAVES WITH H&P MECHANICS AND ELECTRICIANS.  RIGGED DOWN: 100% RIG MOVED: 75% RIGGED UP: 10%  SAFETY BREAK: FORKLIFT BUFFER ZONES
18:00	20:00	2.00	01MIRU	LOCMOV	MOVE	P	REPLACED TOP DRIVE, TRAVELING BLOCK, AND CROWN SHEAVES WITH H&P MECHANICS AND ELECTRICIANS. RIG CREW HELPING H&P ELECTRICIANS WIRE IN TOP DRIVE.
20:00	0:00	4.00	01MIRU	LOCMOV	MOVE	P	REPLACED TOP DRIVE, TRAVELING BLOCK, AND CROWN SHEAVES WITH H&P MECHANICS AND ELECTRICIANS. RIG CREW HELPING H&P ELECTRICIANS WIRE IN TOP DRIVE.
Total Time		24.00					
Safety Incident?		N		Days since Last RI:		446.00	
Environ Incident?		N		Days since Last LTA:		446.00	
Incident Comments: No incidents reported last 24 hours.							

OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 12/21/2014

Prim. Reason: ORIG DRILL HORIZ

USA

Report No: 1MOV

Wellbore / Top MD: 00 @ 0 ft

Rig: H&P 264

Ref Datum: Original KB @3,056.10ft

DFS: 0.00

Today's MD: 60 ft

Progress: 0 ft

Ground Elev: 3,031.10 ft

Daily Cost: \$254,769

Prev MD:

Rot Hrs Today: 0.00 hr

AFE MD/Days: 19,800.0 / 35.8 days

Cum Cost: \$254,769

PBMD:

Avg ROP Today: 0.0 ft/hr

AFE Number: 1189079#0102

AFE Cost: \$4,017,074

Current Formation: @

Lithology:

Current Ops:

24-Hr Summary: RELEASE RIG FROM WELL SCR 2352SH 12/20/14 00:00. R/D PREPARE TO MOVE. MOVE MISCELLANEOUS RIG EQUIPMENT.

24-Hr Forecast: (EST RR 1/26/15)(ROL 1/29/15)MOVE H&P 264 FROM SCR 2352SH TO SAU 1220H

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg	Max
Last Casing:	28.000in @ 40ft	Str Wt Up/Dn:	/	Pump Rate:	0.0	Conn:	0		0
Next Casing:	11.750in @ 1,800ft	Str Wt Rot:		Pump Press:	0	Trip:	0		0
Last BOP Press Test:	12/01/2014	Torq Off Btm:				Backgr:	0		0
Form Test/EMW:		Torq On Btm:							

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	MORRIS HUFF	MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
Supervisor 2:	ROBERT SOTELLO									
Engineer:	KEVIN THREADGILL									
Geologist:	Sumiyah Ahmed									
Oxy Personnel:	2									
Contractor Personnel:	12									
Total on Site:	14									

BIT RECORD										
Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
									--	--

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI

MUD DATA -				LAST OR CURRENT BHA				
Engineer:	MBT:							
Sample From:	pH:							
Mud Type:	Pm / Pom:							
Time / MD: /	Pf / Mf: /			Component	OD	ID	Jts	Length
Density @ Temp: /	Chlorides:							
Rheology Temp:	Ca++ / K+: /							
Viscosity:	CaCl2:							
PV / YP: /	Cl- in water phase:							
Gels 10s/10m/30m: / /	Lime:							
API WL:	ES:							
HTHP WL:	ECD:							
Cake API / HTHP: /	n / K: /							
Solids / Sol Corr: /	Carbonate:							
Oil / Water: /	Bicarbonate:							
Oil / Water % for OWR: /	Form Loss / Cum Loss: 0.0 / 0.0							
Sand:	Fluid Disch: /							
Water Added:	Daily Mud Cost: \$949							
Oil Added:	Cum Mud Cost: \$949							
LGS: /								
VG Meter:								
Comments:								

MUD PRODUCTS			
Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	2.00
Mud Service - 24 Hr	1.00	day	1.00

3/12/2015

9:54:54AM

Page 1 of 3

OXY USA INC							
DAILY OPERATIONS PARTNER REPORT							
<b>Event:</b>		DEV DRILLING				<b>Date:</b>	
<b>Prim. Reason:</b>		ORIG DRILL HORIZ				<b>Report No:</b>	
				ST ANDREWS UNIT 1220H USA		12/22/2014 2MOV	
OPERATIONS							
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	4:00	4.00	01MIRU	WAIT	SDN	P	PLUG IN GENERATOR PACKAGE AND DRAW WORKS.  WAIT ON DAYLIGHT
4:00	8:00	4.00	01MIRU	WAIT	SDN	P	WAIT ON DAYLIGHT AND H&P TRUCKING.
8:00	8:30	0.50	01MIRU	SAFE	PJSM	P	HELD PJSM WITH H&P TRUCKING DEPARTMENT, H&P RIG CREW, STALLION, ON RIG MOVE OPERATIONS.
8:30	12:30	4.00	01MIRU	LOCMOV	MOVE	P	MOVE AND SET MUD PITS, MUD PUMPS, SET SUB BASES AND INSTALL CENTER STEEL.  NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB #21506
12:30	16:30	4.00	01MIRU	LOCMOV	RU	P	RAISE SUB BASES AND SHAKERS. PLUG IN MCC, MUD PUMPS, VFD, AND MUD PITS.
16:30	19:30	3.00	01MIRU	LOCMOV	MOVE	P	MOVE AND SET A-LEG SECTION AND CROWN SECTION OF MAST, DIESEL TANK.
19:30	0:00	4.50	01MIRU	LOCMOV	RU	P	RIG UP MAST, STRING UP BLOCKS AND CROWN.
Total Time		24.00					
<b>Safety Incident?</b>		N		<b>Days since Last RI:</b>		447.00	
<b>Environ Incident?</b>		N		<b>Days since Last LTA:</b>		447.00	
<b>Incident Comments:</b>				<b>Weather Comments:</b>			
No incidents reported last 24 hours.							
<b>Other Remarks:</b>							
<p>UNIVERSITY ST. ANDREWS UNIT # 1220DH</p> <p>From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.</p> <p>HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199 LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'</p> <p>Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1' 650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS</p> <p>OXY DSM TRAILER: 281-833-2725 NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB #21506 NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 9.625" INT CASINGX NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING : Unsafe Acts:8 Safe Acts:1 Unsafe Equipment:0 SWA:1 Near Misses:0</p> <p>Worksite JSA: 10 Safety Meetings:10 LO/TO:6 Permits to work: 4 Power Line Checklist: 12/19/2014 Pre Spud/Rig Inspections: Hazard ID's:0 Ep2 Observations:0</p> <p>BEST STOP CARD: OBSERVED EMPLOYEE GET OFF FORKLIFT WITHOUT PROPERLY STOWING FORKLIFT. FORKS WERE STILL RAISED, ALSO FORKLIFT WAS STILL RUNNING. STOPPED THE JOB AND EXPLAINED THE POLICIES AND DANGERS OF LEAVING THE FORKLIFT UNATTENDED. EMPLOYEE AGREED TO COMPLY. FORKS WERE LOWERED TO THE GROUND, AND FORKLIFT WAS TURNED OFF. JOB CONTINUED WITHOUT INCIDENT.</p>							

## DAILY OPERATIONS PARTNER REPORT

**Event:** DEV DRILLING  
**Prim. Reason:** ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
USA

**Date:** 12/22/2014  
**Report No:** 2MOV

<b>Wellbore / Top MD:</b>	00 @ 0 ft	<b>Rig:</b>	H&P 264	<b>Ref Datum:</b>	Original KB @3,056.10ft	<b>DFS:</b>	0.00
<b>Today's MD:</b>	60 ft	<b>Progress:</b>	0 ft	<b>Ground Elev:</b>	3,031.10 ft	<b>Daily Cost:</b>	\$52,682
<b>Prev MD:</b>	60 ft	<b>Rot Hrs Today:</b>	0.00 hr	<b>AFE MD/Days:</b>	19,800.0 / 35.8 days	<b>Cum Cost:</b>	\$307,451
<b>PBMD:</b>		<b>Avg ROP Today:</b>	0.0 ft/hr	<b>AFE Number:</b>	1189079#0102	<b>AFE Cost:</b>	\$4,017,074

**Current Formation:** @

**Lithology:**

**Current Ops:**

**24-Hr Summary:** MOVE H&P 264 FROM SCR 2352SH TO SAU 1220H

**24-Hr Forecast:** (EST RR 1/26/15)(ROL 1/29/15)

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS	Avg	Max
Last Casing:	28.00in @ 40ft	Str Wt Up/Dn:	/	Pump Rate:	0.0	Conn:	0	0
Next Casing:	11.75in @ 1,800ft	Str Wt Rot:		Pump Press:	0	Trip:	0	0
Last BOP Press Test:	12/01/2014	Torq Off Btm:				Backgr:	0	0
Form Test/EMW:		Torq On Btm:						

[illegible][illegible]

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI

MUD DATA -		LAST OR CURRENT BHA				
Engineer:	MBT:					
Sample From:	pH:					
Mud Type:	Pm / Pom:					
Time / MD: /	Pf / Mf: /					
Density @ Temp: /	Chlorides:					
Rheology Temp:	Ca++ / K+: /					
Viscosity:	CaCl2:					
PV / YP: /	Cl- in water phase:					
Gels 10s/10m/30m: / /	Lime:					
API WL:	ES:					
HTHP WL:	ECD:					
Cake API / HTHP: /	n / K: /					
Solids / Sol Corr: /	Carbonate:					
Oil / Water: /	Bicarbonate:					
Oil / Water % for OWR: /	Form Loss / Cum Loss: 0.0 / 0.0					
Sand:	Fluid Disch: /					
Water Added:	Daily Mud Cost: \$1,489					
Oil Added:	Cum Mud Cost: \$2,384					
LGS: /						

VG Meter:	
Comments:	

MUD PRODUCTS			
Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	2.00
Mud Service - 24 Hr	1.00	day	1.00
Pallet	1.00	each	5.00
Shrink Wrap	1.00	each	31.00

<div style="display: flex; justify-content: space-between; align-items: center;"> <div>OXY USA INC</div> <div><b>DAILY OPERATIONS PARTNER REPORT</b></div> <div> <b>Event:</b> DEV DRILLING  <b>Prim. Reason:</b> ORIG DRILL HORIZ </div> <div> <b>Date:</b> 12/23/2014  <b>Report No:</b> 3MOV </div> </div>							
OPERATIONS							
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	4:00	4.00	01MIRU	LOCMOV	RU	P	CONTINUE TO RIG UP MAST. BLEED, STROKED, AND PINNED MAST CYLINDERS. INSTALLED GROUND RODS.
4:00	6:00	2.00	01MIRU	WAIT	SDN	P	WAIT ON DAYLIGHTS AND H&P TRUCKING.
6:00	8:00	2.00	01MIRU	WAIT	SDN	P	WAIT ON DAYLIGHTS AND H&P TRUCKING.
8:00	8:30	0.50	01MIRU	SAFE	PJSM	P	HELD PJSM WITH H&P TRUCKING DEPARTMENT, H&P RIG CREW, STALLION, ON RIG MOVE OPERATIONS.
8:30	12:30	4.00	01MIRU	LOCMOV	RU	P	PREPARE DERRICK TO RAISE, BLEED MRC, REVIEW E-JSA, RAISE DERRICK TO FLOOR AND PIN. SPOT BOP HANDLER, DOGHOUSE, GAS BUSTER SKID, ACCUMALATOR SKID.  SAFETY BREAK: RAISING DERRICK
12:30	16:30	4.00	01MIRU	LOCMOV	RU	P	REPOSITION MRC'S, RAISE DERRICK AND PIN, RAISE DE FUB ARM AND PLUG IN. RAISE DOGHOUSE, AND PLUG IN ELECTRICAL. RAISE GAS BUSTER. INSTALL CUTTINGS TROUGH. SET CENTRIFUGE.  SAFETY BREAK: STAYING FOCUSED ON TASK AT HAND.
16:30	20:30	4.00	01MIRU	LOCMOV	RU	P	HOOK UP STANDPIPE, SPOT PDS AND PIN TOOL SLIDE. INSTALL FLOW LINE. SPOOL UP HOIST LINES.  CREW CHANGE AT 1800 HOURS
20:30	0:00	3.50	01MIRU	LOCMOV	RU	P	RIG UP ROTARY TOOLS. SPOOL UP DRAW WORKS. UNDOCK TOP DRIVE.  SAFETY BREAK: PERSONNEL HOISTING OPERATIONS.
Total Time		24.00					
Safety Incident?		N		Days since Last RI:		448.00	
Environ Incident?		N		Days since Last LTA:		448.00	
<b>Incident Comments:</b> No incidents reported last 24 hours.							
<b>Other Remarks:</b> <div>             UNIVERSITY ST. ANDREWS UNIT # 1220DH              From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road. </div> <div>             HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199              LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25' </div> <div>             Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1'              650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS </div> <div>             OXY DSM TRAILER: 281-833-2725              NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB #21506              NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 9.625" INT CASINGX              NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING :              Unsafe Acts:6              Safe Acts:1              Unsafe Equipment:0              SWA:1              Near Misses:0 </div> <div>             Worksite JSA: 10              Safety Meetings:4              LO/TO:6              Permits to work: 4              Power Line Checklist: 12/19/2014              Pre Spud/Rig Inspections:              Hazard ID's:0              Ep2 Observations:0 </div> <div>             BEST STOP CARD: OBSERVED 3RD PARTY EMPLOYEE ON TOP DRIVE WITH SAFETY BELT ON BUT NO SAFETY LANYARD. STOPPED THE JOB AND EXPLAINED THE POLICIES AND DANGERS OF NOT BEING TIED OFF PROPERLY. EMPLOYEE AGREED COMPLY AND SAID HE UNDERSTOOD. A SAFETY LANYARD WAS GIVEN TO THE EMPLOYEE. JOB CONTINUED WITHOUT INCIDENT. </div>							

## DAILY OPERATIONS PARTNER REPORT

Event:	DEV DRILLING
Prim. Reason:	ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
USA

**Date:** 12/23/2014  
**Report No:** 3MOV

Wellbore / Top MD:	00 @ 0 ft	Rig:	H&P 264	Ref Datum:	Original KB @3,056.10ft	DFS:	0.00
Today's MD:		Progress:		Ground Elev:	3,031.10 ft	Daily Cost:	\$38,224
Prev MD:	60 ft	Rot Hrs Today:	0.00 hr	AFE MD/Days:	19,800.0 / 35.8 days	Cum Cost:	\$345,675
PBMD:		Avg ROP Today:	0.0 ft/hr	AFE Number:	1189079#0102	AFE Cost:	\$4,017,074

Current Formation:	@	Lithology:
--------------------	---	------------

**Current Ops:**

**24-Hr Summary:** WAIT ON H&P TRUCKING, PJSM, CONTINUE SET IN RIG COMPONENTS, RAISE DERRICK, RIG UP MISCELLANEOUS RIG EQUIPMENT.

**24-Hr Forecast:** (EST RR 1/26/15)(ROL 1/29/15) TROUBLESHOOT TOPDRIVE, PERFORM PRE-SPUD INSPECTION, SPUD SAU 1220H.

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS	Avg	Max
Last Casing:	28.00in @ 40ft	Str Wt Up/Dn: /	Pump Rate: 0.0	Conn:	0		0	
Next Casing:	11.750in @ 1,800ft	Str Wt Rot:	Pump Press: 0	Trip:	0		0	
Last BOP Press Test:	12/01/2014	Torq Off Btm:		Backgr:	0		0	
Form Test/EMW:		Torq On Btm:						

[illegible]

## BIT RECORD

[illegible]

## BIT OPERATING PARAMETERS TODAY

Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI
--------	---------	-------------	------	----------	-----	---------	----------------	----------------	-----	------------	---------	-------

MUD DATA -				LAST OR CURRENT BHA					
Engineer:		MBT:							
Sample From:		pH:							
Mud Type:		Pm / Pom:		Component		OD	ID	Jts	Length
Time / MD: /		Pf / Mf: /							
Density @ Temp: /		Chlorides:							
Rheology Temp:		Ca++ / K+: /							
Viscosity:		CaCl2:							
PV / YP: /		Cl- in water phase:							
Gels 10s/10m/30m: / /		Lime:							
API WL:		ES:							
HTHP WL:		ECD:							
Cake API / HTHP: /		n / K: /							
Solids / Sol Corr: /		Carbonate:							
Oil / Water: /		Bicarbonate:							
Oil / Water % for OWR: /		Form Loss / Cum Loss: 0.0 / 0.0							
Sand:		Fluid Disch: /							
Water Added:		Daily Mud Cost: \$1,829							
Oil Added:		Cum Mud Cost: \$4,249							
LGS: /									

## MUD PRODUCTS

Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	2.00
Mud Service - 24 Hr	1.00	day	1.00
Pallet	1.00	each	6.00
Shrink Wrap	1.00	each	6.00
Transportation	1.00	each	700.00

**DAILY OPERATIONS PARTNER REPORT**

**Event:** DEV DRILLING  
**Prim. Reason:** ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
USA

**Date:** 12/24/2014  
**Report No:** 4MOV

**Other Remarks:**

UNIVERSITY ST. ANDREWS UNIT # 1220DH

From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.

HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199

LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'

Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1'  
650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS

OXY DSM TRAILER: 281-833-2725

NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB  
#21506

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 9.625" INT CASING

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING :

Unsafe Acts:6

Safe Acts:1

Unsafe Equipment:0

SWA:1

Near Misses:0

Worksite JSA: 16

Safety Meetings:4

LO/TO:6

Permits to work: 4

Power Line Checklist: 12/19/2014

Pre Spud/Rig Inspections:

Hazard ID's:0

Ep2 Observations:0

BEST STOP CARD: OBSERVED 3RD PARTY EMPLOYEE BEGIN WORK ON ST-80 BEFORE ENSURING THAT IT WAS  
LOCKED OUT. STOPPED THE JOB AND EXPLAINED TO THE EMPLOYEE THE IMPORTANCE OF LOCK OUT / TAG OUT  
ALSO THE POLICIES BEFORE WORKING ON EQUIPMENT. EMPLOYEE SAID HE UNDERSTOOD AND AGREED TO  
COMPLY. JOB CONTINUED WITHOUT ANY INCIDENTS.



OXY USA INC <b>DAILY OPERATIONS PARTNER REPORT</b>							
<b>Event:</b>		DEV DRILLING			<b>Date:</b>		12/24/2014
<b>Prim. Reason:</b>		ORIG DRILL HORIZ			<b>Report No:</b>		4MOV
OPERATIONS							
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	4:00	4.00	01MIRU	RIGMT	REP	PT	TROUBLE SHOOT TOP DRIVE ELECTRICAL PROBLEM.  TOP DRIVE WILL NOT RESPOND PROPERLY TO FUNCTION CONTROLS.
4:00	6:00	2.00	01MIRU	RIGMT	REP	PT	CONTINUE TO TROUBLE SHOOT TOP DRIVE ELECTRICAL PROBLEM.  TOP DRIVE WILL NOT RESPOND PROPERLY TO FUNCTION CONTROLS.
6:00	10:00	4.00	01MIRU	RIGMT	REP	PT	CONTINUE TO TROUBLE SHOOT TOP DRIVE ELECTRICAL PROBLEM.  TOP DRIVE WILL NOT RESPOND PROPERLY TO FUNCTION CONTROLS WHILE RIGGING UP MISCELLANEOUS EQUIPMENT.
10:00	13:30	3.50	01MIRU	RIGMT	REP	PT	CONTINUE TO TROUBLE SHOOT TOP DRIVE ELECTRICAL PROBLEM.  TOP DRIVE WILL NOT RESPOND PROPERLY TO FUNCTION CONTROLS WHILE RIGGING UP MISCELLANEOUS EQUIPMENT. PROBLEMS FIXED WITH TOP DRIVE
13:30	17:30	4.00	01MIRU	SRFEQ	RIGUP	P	***** MADE VISUAL INSPECTION OF FLEX RIG H&P-264 *****  * TESTED HYDRAULIC SYSTEM. OK. * TESTED LIFTING SYSTEM, TOP DRIVE. * SENSORS, PVT, SCREENS. OK * TESTED PIPE WRANGLER. OK * TESTED ADDITIONAL EQUIPMENT. OK * MUD PUMPS, OK * LOW & HIGH PRESSURE LINES. FAILED ( FIX AND REPAIRED)
17:30	18:30	1.00	06PRES	SAFE	INCINV	P	***** HELD PRE-SPUD MEETING WITH ALL PERSONNEL ON DRILLING OPERATIONS FOR WELL SAINT ANDREWS UNIT 1220 H *****  H&P RIG 264 ACCEPTED AS PER OXY STANDARD: DECEMBER 24th / 2014 AT 17:30 HRS. • MOVE DISTANCE: 37.7 MILES • TOTAL TIME MOBILIZATION H&P: 56 HRS • EFFECTIVE MOVE TIME H&P: 89.5 HRS • NPT: 13.5 HRS DO TO TOP DRIVE NOT FUNCTIONING • INCIDENTS REPORTED: NONE
18:30	19:30	1.00	06PRES	TRIP	BHA	P	GATHER & STRAP BHA FOR 14 3/4" SURFACE HOLE. PREPARE RIG FLOOR TO MAKE UP BHA.
19:30	22:30	3.00	14SUDR	TRIP	DRILL	P	M/U BHA #1 AS FOLLOWS: * 14 3/4" PDC BIT * 8" BAKER ULTRA XL MUD MOTOR (w/float) and 10 1/2" STABILIZER * 8" SHOCK SUB * CROSS OVER * 3 JNTS 4 1/2" HWDP  NOTE: MADE UP BHA WITH RIG TONGS DO TO ST-80 TORQUE CYLINDER HAVING SEVERE HYDRAULIC LEAK.
22:30	0:00	1.50	14SUDR	RIGMT	REP	PT	ATTEMPTED TO HOIST 4 1/2" HWDP FROM MOUSE HOLE WITH NO SUCESS DO TO DRAW WORKS ENCODER FAULT. TROUBLE SHOOT ENCODER FAULT WITH H&P ELECTRICIAN.
Total Time		24.00					
<b>Safety Incident?</b>		N	<b>Days since Last RI:</b>		449.00		<b>Weather Comments:</b>
<b>Environ Incident?</b>		N	<b>Days since Last LTA:</b>		449.00		
<b>Incident Comments:</b> No incidents reported last 24 hours.							

OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 12/24/2014

Prim. Reason: ORIG DRILL HORIZ

USA

Report No: 4MOV

Wellbore / Top MD: 00 @ 0 ft

Rig: H&P 264

Ref Datum: Original KB @3,056.10ft

DFS: 0.19

Today's MD: 60 ft

Progress:

Ground Elev: 3,031.10 ft

Daily Cost: \$37,264

Prev MD:

Rot Hrs Today: 0.00 hr

AFE MD/Days: 19,800.0 / 35.8 days

Cum Cost: \$382,939

PBMD:

Avg ROP Today: 0.0 ft/hr

AFE Number: 1189079#0102

AFE Cost: \$4,017,074

Current Formation: @

Lithology:

Current Ops:

24-Hr Summary: REPAIR TOP DRIVE ELECTRICAL ISSUE. HELD PRE-SPUD INSPECTION. MADE UP PDC BIT ON MUD MOTOR. TROUBLE SHOOT ENCODEI

24-Hr Forecast: (EST RR 1/26/15)(ROL 1/29/15) TROUBLESHOOT DRAW WORKS, REPAIR ST-80, PERFORM PRE-SPUD INSPECTION, SPUD SAU 1220H.

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg	Max
Last Casing:	28.000in @ 40ft	Str Wt Up/Dn:	/	Pump Rate:	0.0	Conn:			
Next Casing:	11.750in @ 1,800ft	Str Wt Rot:		Pump Press:	0	Trip:			
Last BOP Press Test:	12/01/2014	Torq Off Btm:				Backgr:			
Form Test/EMW:		Torq On Btm:							

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	MONFORD CRAFT	MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
Supervisor 2:	ROBERT SOTELLO									
Engineer:	KEVIN THREADGILL									
Geologist:	Sumiyyah Ahmed									
Oxy Personnel:	3									
Contractor Personnel:	12									
Total on Site:	15									

BIT RECORD										
Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
									--	--

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI

MUD DATA -

Engineer:

Sample From:

Mud Type:

Time / MD: /

Density @ Temp: /

Rheology Temp:

Viscosity:

PV / YP: /

Gels 10s/10m/30m: / /

API WL:

HTHP WL:

Cake API / HTHP: /

Solids / Sol Corr: /

Oil / Water: /

Oil / Water % for OWR: /

Sand:

Water Added:

Oil Added:

LGS: /

MBT:

pH:

Pm / Pom:

Pf / Mf: /

Chlorides:

Ca++ / K+: /

CaCl2:

Cl- in water phase:

Lime:

ES:

ECD:

n / K: /

Carbonate:

Bicarbonate:

Form Loss / Cum Loss: 0.0 / 0.0

Fluid Disch: /

Daily Mud Cost: \$949

Cum Mud Cost: \$5,216

LAST OR CURRENT BHA

Component	OD	ID	Jts	Length

VG Meter:

Comments:

MUD PRODUCTS			
Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	2.00
Mud Service - 24 Hr	1.00	day	1.00

3/12/2015

9:54:46AM

Page 1 of 3

<div style="display: flex; justify-content: space-between; align-items: center;"> <div>OXY USA INC</div> <div><b>DAILY OPERATIONS PARTNER REPORT</b></div> <div></div> </div>							
Event:		DEV DRILLING				ST ANDREWS UNIT 1220H	
Prim. Reason:		ORIG DRILL HORIZ				USA	
						Date:	12/25/2014
						Report No:	5DDR
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
17:30	19:00	1.50	14SUDR	DRILL	MTRVER	P	DRILL 14 3/4" SURFACE HOLE F/ 671' T/ 879' , AS FOLLOWS:  PROGRESS: 208 FT      ROP AVG: 138 FT/HR  WOB: 20-33 KLBS      RPM: 110      FLOW RATE: 750 GPM  PUMP PRESSURE: OFF / ON BOTTOM: 1750 / 2250 PSI DIFFERECIAL PRESSURE: 500 PSI  P/U WT: 111 KIPS   S/O WT: 106 KIPS   ROT WT: 106 KIPS  TORQUE ON / OFF BTM: 7-9 / 1-2 KLBS FT  DROPPING RAPID SWEEP & SOAP STICKS EVERY CONN. PUMPING HI-VIS SWEEPS EVERY 500' OR AS HOLE DICTATES CIRCULATING OUTER RESERVE PIT HAVING TROUBLE WITH RED BEDS FILLING CELLAR UP WITH BALLED UP CUTTINGS
19:00	19:30	0.50	14SUDR	CIRC	CNDHOL	P	PUMP SAPP SWEEP AROUND, CIRCULATE BU TO CLEAN HOLE  *****NOTE***** PULLING OUT OF HOLE TO TROUBLE SHOOT AND REPROGRAM MOTHERBOARD FOR TOP DRIVE TRACTION MOTORS.
19:30	22:00	2.50	14SUDR	TRIP	BHA	PT	POH BHA#1 FROM 879' TO SURFACE. CLEAN STABILIZERS AND BIT.
22:00	23:30	1.50	14SUDR	RIGMT	REP	P	REPROGRAM MOTHERBOARD FOR TOP DRIVE IN VFD WITH H&P ELECTRICIAN.  SAFETY BREAK: USING FALL PROTECTION.
23:30	0:00	0.50	14SUDR	TRIP	BHA	P	RIH BHA#1 FROM SURFACE TO 120'.
Total Time		24.00					
Safety Incident?		N		Days since Last RI:		450.00	
Environ Incident?		N		Days since Last LTA:		450.00	
<b>Incident Comments:</b> No incidents reported last 24 hours.							
<b>Other Remarks:</b> <div>             UNIVERSITY ST. ANDREWS UNIT # 1220DH              From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.               HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199              LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'               Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1'              650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS               OXY DSM TRAILER: 281-833-2725              NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB #21506              NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 9.625" INT CASING              NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING :              Unsafe Acts:6              Safe Acts:1              Unsafe Equipment:0              SWA:1              Near Misses:0               Worksite JSA: 12              Safety Meetings:2              LO/TO:6              Permits to work: 4              Power Line Checklist: 12/19/2014              Pre Spud/Rig Inspections:              Hazard ID's:0              Ep2 Observations:0               BEST STOP CARD: OBSERVED EMPLOYEE WALKING ACROSS FRAC TANKS WITHOUT HAND RAILS UP WITHOUT A SAFETY BELT ON. STOPPED THE JOB, HAD THE EMPLOYEE COME DOWN OFF THE FRAC TANKS. EXPLAINED TO THE EMPLOYEE THE DANGERS OF NOT USING FALL PROTECTION, ALSO THE POLICIES ON FALL PROTECTION, EMPLOYEE AGREED. JOB CONTINUED WITHOUT INCIDENT.           </div>							

<div>OXY USA INC</div> <div>DAILY OPERATIONS PARTNER REPORT</div> <div> <div> <div>Event: DEV DRILLING</div> <div>Prim. Reason: ORIG DRILL HORIZ</div> </div> <div> <div>ST ANDREWS UNIT 1220H</div> <div>USA</div> </div> <div> <div>Date: 12/25/2014</div> <div>Report No: 5DDR</div> </div> </div>							
OPERATIONS							
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	2:30	2.50	14SUDR	RIGMT	REP	PT	TROUBLE SHOOT AND REPAIR DRAW WORKS ENCODER FAULT WITH H&P ELECTRICIAN.
2:30	6:00	3.50	14SUDR	RIGMT	REP	PT	REPAIR ST-80 WITH H&P MECHANICS.
6:00	8:00	2.00	14SUDR	RIGMT	REP	PT	REPAIR ST-80 WITH H&P MECHANICS. 9 1/2 HRS DOWNTIME
8:00	9:00	1.00	14SUDR	TRIP	DRILL	P	CONTINUE P/U 14 3/4" BHAAS FOLLOW: 14 3/4" PDC bit 8" Baker Ultra XL .22 Rev/gal (w/float) 8" Shock Sub 14 5/8" IBS 1 – UBHO Isys tool (INC/AZI from AIM Directional) 1 – NMDC 14 5/8" IBS 6 – 8" DC XO 6 - 6-1/2" DC 30 HWDP
9:00	13:00	4.00	14SUDR	DRILL	MTRVER	P	SPUD WELL SAINT ANDREWS UNIT 1220 H WITH H&P RIG 264 AT 0900 HOURS ON 12/25/2014. DRILL 14 3/4" SURFACE HOLE F/ 60' T/ 305', AS FOLLOWS:  PROGRESS: 245 FT      ROP AVG: 61.25 FT/HR  WOB: 20-33 KLBS      RPM: 40- 110      FLOW RATE: 450 - 750 GPM  PUMP PRESSURE: OFF / ON BOTTOM: 700 / 1400 PSI DIFFERECIAL PRESSURE: 700 PSI  P/U WT: 86 KIPS    S/O WT: 84 KIPS    ROT WT: 84 KIPS  TORQUE ON / OFF BTM: 7-9 / 1-2    KLBS FT  DROPPING RAPID SWEEP & SOAP STICKS EVERY CONN. PUMPING HI-VIS SWEEPS EVERY 500' OR AS HOLE DICTATES CIRCULATING OUTER RESERVE PIT SAFETY BREAK: MAKING CONN
13:00	15:30	2.50	14SUDR	DRILL	MTRVER	P	DRILL 14 3/4" SURFACE HOLE F/ 305' T/671 ', AS FOLLOWS:  PROGRESS: 366 FT      ROP AVG: 146 FT/HR  WOB: 20-33 KLBS      RPM: 110      FLOW RATE: 750 GPM  PUMP PRESSURE: OFF / ON BOTTOM: 1550 / 2250 PSI DIFFERECIAL PRESSURE: 700 PSI  P/U WT: 96 KIPS    S/O WT: 94 KIPS    ROT WT: 94 KIPS  TORQUE ON / OFF BTM: 7-9 / 1-2    KLBS FT  DROPPING RAPID SWEEP & SOAP STICKS EVERY CONN. PUMPING HI-VIS SWEEPS EVERY 500' OR AS HOLE DICTATES CIRCULATING OUTER RESERVE PIT HAVING TROUBLE WITH RED BEDS FILLING CELLAR UP WITH BALLS OF CLAY.
15:30	17:30	2.00	14SUDR	DRILL	MTRVER	PT	TROUBLE SHOOT ISYS TOOL, WHILE CLEANING OUT CELLAR OF RED BED CUTTING. CONTACTED KURT WITH AIM. PUMPED 6 POLYMER STICKS TO TRY AND CLEAN OUT TOOL TWICE. TOOL STARTED WORKING

OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

USA

Date: 12/25/2014

Report No: 5DDR

Wellbore / Top MD: 00 @ 0 ft

Rig: H&P 264

Ref Datum: Original KB @3,056.10ft

DFS: 1.19

Today's MD: 879 ft

Progress: 819 ft

Ground Elev: 3,031.10 ft

Daily Cost: \$50,552

Prev MD: 60 ft

Rot Hrs Today: 9.00 hr

AFE MD/Days: 19,800.0 / 35.8 days

Cum Cost: \$433,491

PBMD: 1189079#0102

Avg ROP Today: 91.0 ft/hr

AFE Number: 1189079#0102

AFE Cost: \$4,017,074

Current Formation: @

Lithology:

Current Ops:

24-Hr Summary: REPAIR ST-80. DRILL 14 3/4" TO 879'. POH TO REPROGRAM TOP DRIVE PARAMETERS IN VFD.

24-Hr Forecast: (EST RR 1/26/15)(ROL 1/29/15) DRILL 14 3/4" SURFACE HOLE TO 1838' (CASING DEPTH). RUN 11 1/2" CASING AND CEMENT.

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg	Max
Last Casing:	28.000in @ 40ft	Str Wt Up/Dn:	/	Pump Rate:	749.5	Conn:			
Next Casing:	11.750in @ 1,800ft	Str Wt Rot:		Pump Press:	2050	Trip:			
Last BOP Press Test:	12/01/2014	Torq Off Btm:				Backgr:			
Form Test/EMW:		Torq On Btm:							

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	MONFORD CRAFT	MD	Incl	Azi	TVD	N/-S	E/-W	VS	DLS	Build
Supervisor 2:	ROBERT SOTELLO	1,383.0	0.40	148.66	1,382.99	-3.8	3.2	4.5	0.21	0.16
Engineer:	KEVIN THREADGILL	1,199.0	0.10	226.66	1,198.99	-3.2	3.0	3.8	0.13	-0.05
Geologist:	Sumiyyah Ahmed	1,015.0	0.20	126.66	1,014.99	-2.9	2.9	3.4	0.23	-0.19
Oxy Personnel:	3	861.0	0.50	162.66	860.99	-2.1	2.5	2.6	0.28	0.28
Contractor Personnel:	12	680.0	0.00	70.96	679.99	-1.3	2.2	1.8	0.11	-0.11
Total on Site:	15	401.0	0.30	128.06	400.99	-0.9	1.7	1.2	0.07	-0.05

BIT RECORD										
Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
1	14.750	VAREL	VTD	4007310	M423	8x12	60	1838	1-1-NO-A	X-I-NO-TD

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI
1	9.00	9.00	819	819	91.0	91.0	20.0/33.0	80/110	0.884	564	272.3	1.4

MUD DATA - M-I LLC (Schlumberger)					LAST OR CURRENT BHA																																																																										
Engineer: Shane Burns	MBT:	BHA No: 1	Bit No: 1	MD In: 60 ft																																																																											
Sample From: In (Suction Pit)	pH:	Purpose: DRILL 14 3/4" SURFACE HOLE	MD Out: 1838 ft																																																																												
Mud Type: Spud Mud	Pm / Pom:	<table> <tr> <th>Component</th> <th>OD</th> <th>ID</th> <th>Jts</th> <th>Length</th> </tr> <tr> <td>PDC BIT</td> <td>14.750</td> <td>0.000</td> <td>1</td> <td>1.00</td> </tr> <tr> <td>POSITIVE DISPLACEMENT MOTOR</td> <td>8.000</td> <td>2.875</td> <td>1</td> <td>34.90</td> </tr> <tr> <td>SHOCK SUB</td> <td>8.000</td> <td>2.750</td> <td>1</td> <td>12.50</td> </tr> <tr> <td>INTEGRAL BLADE STABILIZER</td> <td>8.000</td> <td>3.000</td> <td>1</td> <td>7.94</td> </tr> <tr> <td>NON-MAG DRILL COLLAR</td> <td>8.000</td> <td>2.750</td> <td>1</td> <td>31.60</td> </tr> <tr> <td>INTEGRAL BLADE STABILIZER</td> <td>8.000</td> <td>3.000</td> <td>1</td> <td>6.49</td> </tr> <tr> <td>DRILL COLLAR</td> <td>8.000</td> <td>2.875</td> <td>6</td> <td>182.68</td> </tr> <tr> <td>CROSSOVER</td> <td>8.000</td> <td>2.875</td> <td>1</td> <td>3.11</td> </tr> <tr> <td>DRILL COLLAR</td> <td>6.500</td> <td>2.900</td> <td>6</td> <td>182.67</td> </tr> <tr> <td>HWDP</td> <td>4.500</td> <td>2.750</td> <td>30</td> <td>920.63</td> </tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> </table>			Component	OD	ID	Jts	Length	PDC BIT	14.750	0.000	1	1.00	POSITIVE DISPLACEMENT MOTOR	8.000	2.875	1	34.90	SHOCK SUB	8.000	2.750	1	12.50	INTEGRAL BLADE STABILIZER	8.000	3.000	1	7.94	NON-MAG DRILL COLLAR	8.000	2.750	1	31.60	INTEGRAL BLADE STABILIZER	8.000	3.000	1	6.49	DRILL COLLAR	8.000	2.875	6	182.68	CROSSOVER	8.000	2.875	1	3.11	DRILL COLLAR	6.500	2.900	6	182.67	HWDP	4.500	2.750	30	920.63																				
Component	OD	ID	Jts	Length																																																																											
PDC BIT	14.750	0.000	1	1.00																																																																											
POSITIVE DISPLACEMENT MOTOR	8.000	2.875	1	34.90																																																																											
SHOCK SUB	8.000	2.750	1	12.50																																																																											
INTEGRAL BLADE STABILIZER	8.000	3.000	1	7.94																																																																											
NON-MAG DRILL COLLAR	8.000	2.750	1	31.60																																																																											
INTEGRAL BLADE STABILIZER	8.000	3.000	1	6.49																																																																											
DRILL COLLAR	8.000	2.875	6	182.68																																																																											
CROSSOVER	8.000	2.875	1	3.11																																																																											
DRILL COLLAR	6.500	2.900	6	182.67																																																																											
HWDP	4.500	2.750	30	920.63																																																																											
Time / MD: 17:01 / 683.0	Pf / Mf: /																																																																														
Density @ Temp: 8.50 / 50	Chlorides:																																																																														
Rheology Temp: 120	Ca++ / K+: /																																																																														
Viscosity: 28.00	CaCl2:																																																																														
PV / YP: 1 /	Cl- in water phase:																																																																														
Gels 10s/10m/30m: 1 / 1 / 1	Lime:																																																																														
API WL:	ES:																																																																														
HTHP WL:	ECD: 8.70																																																																														
Cake API / HTHP: /	n / K: /																																																																														
Solids / Sol Corr: /	Carbonate:																																																																														
Oil / Water: / 100.0	Bicarbonate:																																																																														
Oil / Water % for OWR: /	Form Loss / Cum Loss: 0.0 / 0.0																																																																														
Sand:	Fluid Disch: /																																																																														
Water Added:	Daily Mud Cost: \$1,476																																																																														
Oil Added:	Cum Mud Cost: \$6,692																																																																														
LGS: /																																																																															
VG Meter: 1@300 / 2@600																																																																															
Comments:																																																																															

MUD PRODUCTS			
Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	2.00
D-D	1.00	each	2.00
Mud Service - 24 Hr	1.00	day	1.00
Rapid Sweep	1.00	each	1.00
Soap Stick	1.00	each	20.00

3/12/2015

9:54:42AM

Page 1 of 3

**DAILY OPERATIONS PARTNER REPORT**

**Event:** DEV DRILLING  
**Prim. Reason:** ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
 USA

**Date:** 12/26/2014  
**Report No:** 6DDR

**Safety Incident?** N **Days since Last RI:** 451.00  
**Environ Incident?** N **Days since Last LTA:** 451.00

**Incident Comments:**

No incidents reported last 24 hours.

**Weather Comments:****Other Remarks:**

UNIVERSITY ST. ANDREWS UNIT # 1220DH

From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.

HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199

LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'

Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1'  
 650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS

OXY DSM TRAILER: 281-833-2725

NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB #21506

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 9.625" INT CASING

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING :

Unsafe Acts:6

Safe Acts:1

Unsafe Equipment:0

SWA:1

Near Misses:0

Worksite JSA: 18

Safety Meetings:4

LO/TO:6

Permits to work: 4

Power Line Checklist: 12/19/2014

Pre Spud/Rig Inspections:

Hazard ID's:0

Ep2 Observations:0

BEST STOP CARD:OBSERVED 3RD PARTY EMPLOYEE NOT PAYING ATTENTION WHEN USING HIS TAIL ROPE TO CATCH CASING. STOPPED THE JOB, EXPLAINED TO THE EMPLOYEE THAT HE SHOULD ALWAYS PAY ATTENTION AND THE DANGERS OF NOT. HE SAID HE UNDERSTOOD. JOB CONTINUED WITHOUT INCIDENT.

OXY USA INC							
DAILY OPERATIONS PARTNER REPORT							
Event:		DEV DRILLING		ST ANDREWS UNIT 1220H		Date: 12/26/2014	
Prim. Reason:		ORIG DRILL HORIZ		USA		Report No: 6DDR	
OPERATIONS							
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	2:30	2.50	14SUDR	TRIP	BHA	PT	CONTINUED TO RIH FROM 120' TO 879'. PRECAUTIONARY REAM LAST 90'.  SAFETY BREAK: HOUSE CLEANING ON RIG FLOOR.
2:30	6:00	3.50	14SUDR	DRILL	MTRVER	P	DRILL 14 3/4" SURFACE HOLE F/ 879' T/ 1574 ', AS FOLLOWS:  PROGRESS: 695 FT      ROP AVG: 198 FT/HR  WOB: 20-33 KLBS      RPM: 110      FLOW RATE: 750 GPM  PUMP PRESSURE: OFF / ON BOTTOM: 1750 / 2250 PSI DIFFERECIAL PRESSURE: 500 PSI  P/U WT: 111 KIPS   S/O WT: 106 KIPS   ROT WT: 106 KIPS  TORQUE ON / OFF BTM: 7-9 / 1-2 KLBS FT  DROPPING RAPID SWEEP & SOAP STICKS EVERY CONN. PUMPING HI-VIS SWEEPS EVERY 500' OR AS HOLE DICTATES CIRCULATING OUTER RESERVE PIT
6:00	8:30	2.50	14SUDR	DRILL	MTRVER	P	DRILL 14 3/4" SURFACE HOLE F/ 1574' T/ 1838 ', AS FOLLOWS:  PROGRESS: 264 FT      ROP AVG: 105.5 FT/HR  WOB: 20-33 KLBS      RPM: 110      FLOW RATE: 750 GPM  PUMP PRESSURE: OFF / ON BOTTOM: 1750 / 2250 PSI DIFFERECIAL PRESSURE: 500 PSI  P/U WT: 140 KIPS   S/O WT: 110 KIPS   ROT WT: 137KIPS  TORQUE ON / OFF BTM: 7-9 / 1-2 KLBS FT  DROPPING RAPID SWEEP & SOAP STICKS EVERY CONN. PUMPING HI-VIS SWEEPS EVERY 500' OR AS HOLE DICTATES CIRCULATING OUTER RESERVE PIT
8:30	9:00	0.50	14SUDR	CIRC	CNDHOL	P	PUMP HI VIS SWEEP, AND CIRCULATE 2 X BOTTOMS UP. CHECK FLOW
9:00	14:00	5.00	14SUDR	TRIP	DRILL	P	PULL OUT OF HOLE ON ELEVATORS F/ 1838' T SURFACE. LAY DOWN 8" SHOCK SUB AND 14 3/4" STABILIZERS AND BIT. NO EXCESS DRAG, HOLE TOOK PROPER FILL.
14:00	16:00	2.00	14SUDR	CSG	RIGUP	P	HELD PJSM WITH RIG CREW, CASING CREW, RM, & DSM. RIG UP B&L CASING CREW & VALANT TOOL TO RUN 11 3/4" SURFACE CASING
16:00	20:30	4.50	14SUDR	CSG	RUNCSG	P	PICK UP AND RUN 11 3/4" 47 # J-55 BTC CASING AS FOLLOWS:  1- 11 3/4" DAVIS LYNCH GUIDE SHOE @ 1828' 1 JTS - 11 3/4" 47 # J-55 BTC 1- 11 3/4" DAVIS LYNCH PVTs FLOAT COLLAR 29 JTS- 11 3/4" 47 # J-55 BTC  CHECK FLOATS AFTER MAKE UP, (GOOD)  RUN CASING FROM 0 TO 1150'. ATTEMPTED TO MAKE UP JOINT # 30, NOTICED BAD THREADS. LAID DOWN JOINT # 30.
20:30	21:00	0.50	14SUDR	CIRC	CNDHOL	P	WASHED DOWN 11 1/4" CASING FROM 1150' TO 1192'. CIRCULATE HOLE CLEAN THROUGH CASING SHOE AT 1192'.
21:00	22:30	1.50	14SUDR	CSG	RUNCSG	P	CONTINUE TO RUN 11 1/4" CASING FROM 1192' TO 1828'. RAN 46 TOTAL JOINTS OF 11 1/4", 47#, J-55, BTC CASING.  WASH LAST JOINT DOWN T/ 1828'  RUN RIGID BOW SPRING CENTRALIZER, 2 ON THE THE FIRST TWO JOINTS AND THEN ON EVERY OTHER JOINT TO SURFACE.
22:30	23:00	0.50	14SUDR	CIRC	CNDHOL	P	CIRCULATE HOLE THROUGH 11 1/4" CASING SHOE AT 1828'.
23:00	23:30	0.50	14SUDR	CSG	RIGUP	P	RIG DOWN B&L CASING EQUIPMENT.
23:30	0:00	0.50	14SUDR	CMT	RIGUP	P	HELD SAFETY MEETING WITH ALL PERSONNEL ON CEMENTING OPERATIONS. RIG UP HALLIBURTON CEMENT EQUIPMENT.
Total Time		24.00					

## DAILY OPERATIONS PARTNER REPORT

Event:	DEV DRILLING
Prim. Reason:	ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
USA

**Date:** 12/26/2014  
**Report No:** 6DDR

<b>Wellbore / Top MD:</b>	00 @ 0 ft	<b>Rig:</b>	H&P 264	<b>Ref Datum:</b>	Original KB @3,056.10ft	<b>DFS:</b>	2.19
<b>Today's MD:</b>	1838 ft	<b>Progress:</b>	959 ft	<b>Ground Elev:</b>	3,031.10 ft	<b>Daily Cost:</b>	\$157,970
<b>Prev MD:</b>	879 ft	<b>Rot Hrs Today:</b>	6.00 hr	<b>AFE MD/Days:</b>	19,800.0 / 35.8 days	<b>Cum Cost:</b>	\$591,460
<b>PBMD:</b>		<b>Avg ROP Today:</b>	159.8 ft/hr	<b>AFE Number:</b>	1189079#0102	<b>AFE Cost:</b>	\$4,017,074

Current Formation:	@	Lithology:
--------------------	---	------------

**Current Ops:**

**24-Hr Summary:** DRILLED 14¾" FROM 879' TO 1838'. POH TO SURFACE. RUN 11¾" TO 1838'. CIRCULATE AT CONDITION HOLE.

**24-Hr Forecast:** (EST RR 1/26/15)(ROL 1/29/15) CEMENT 11<sup>3</sup>/<sub>4</sub>" CASING. INSTALL WELL HEAD. INSTALL AND TEST 13-3/8" BOPE.

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS	Avg	Max
Last Casing:	28.00in @ 40ft	Str Wt Up/Dn:	145.0/ 110.0 kip	Pump Rate:	749.5	Conn:		
Next Casing:	11.75in @ 1,828ft	Str Wt Rot:	137.0 kip	Pump Press:	2250	Trip:		
Last BOP Press Test:	12/01/2014	Torq Off Btm:				Backgr:		
Form Test/EMW:		Torq On Btm:						

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	MONFORD CRAFT	MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
Supervisor 2:	ROBERT SOTELLO	1,837.0	0.50	140.66	1,836.97	-7.3	5.4	8.3	0.46	0.00
Engineer:	KEVIN THREADGILL	1,753.0	0.50	186.46	1,752.97	-6.7	5.2	7.7	0.32	-0.11
Geologist:	Sumiyah Ahmed	1,574.0	0.70	131.66	1,573.98	-5.2	4.5	6.0	0.18	0.16
Oxy Personnel:	3	1,383.0	0.40	148.66	1,382.99	-3.8	3.2	4.5	0.21	0.16
Contractor Personnel:	12	1,199.0	0.10	226.66	1,198.99	-3.2	3.0	3.8	0.13	-0.05
Total on Site:	15	1,015.0	0.20	126.66	1,014.99	-2.9	2.9	3.4	0.23	-0.19

[illegible]

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI
1	6.00	21.00	959	2737	159.8	130.3	20.0/33.0	60/110	0.884	0	0.0	0.0
1	6.00	21.00	959	2737	159.8	130.3	20.0/30.0	80/110	0.884	152	136.1	0.4

MUD DATA - M-I LLC (Schlumberger)			LAST OR CURRENT BHA				
Engineer: SHANE BURNS	MBT:		BHA No: 1	Bit No: 1	MD In: 60 ft		
Sample From: In (Suction Pit)	pH:		Purpose: DRILL 14 3/4" SURFACE HOLE			MD Out: 1838 ft	
Mud Type: Spud Mud	Pm / Pom:		Component		OD	ID	Jts
Time / MD: 16:01 / 1,838.0	Pf / Mf: /						Length
Density @ Temp: 9.20 / 54	Chlorides:		PDC BIT	14.750	0.000	1	1.00
Rheology Temp: 120	Ca++ / K+: /		POSITIVE DISPLACEMENT MOTOR	8.000	2.875	1	34.90
Viscosity: 33.00	CaCl2:		SHOCK SUB	8.000	2.750	1	12.50
PV / YP: 1 / 1	Cl- in water phase:		INTEGRAL BLADE STABILIZER	8.000	3.000	1	7.94
Gels 10s/10m/30m: 1 / 1 / 1	Lime:		NON-MAG DRILL COLLAR	8.000	2.750	1	31.60
API WL: 16.00	ES:		INTEGRAL BLADE STABILIZER	8.000	3.000	1	6.49
HTHP WL:	ECD:		DRILL COLLAR	8.000	2.875	6	182.68
Cake API / HTHP: 2.0 /	n / K: /		CROSSOVER	8.000	2.875	1	3.11
Solids / Sol Corr: /	Carbonate:		DRILL COLLAR	6.500	2.900	6	182.67
Oil / Water: / 100.0	Bicarbonate:		HWDP	4.500	2.750	30	920.63
Oil / Water % for OWR: /	Form Loss / Cum Loss: 0.0 / 0.0						
Sand:	Fluid Disch: /						
Water Added:	Daily Mud Cost: \$5,492						
Oil Added:	Cum Mud Cost: \$12,184						
LGS: /							

VG Meter: 2@300 / 3@600	Total Length:	1,383.52 ft	Wt below Jars:
Comments:			

--	--

MUD PRODUCTS			
Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	2.00
D-D	1.00	each	1.00
Federal Bentonite	1.00	each	22.00
M-I Gel	1.00	ton (metric)	10.00
Mud Service - 24 Hr	1.00	day	1.00
Myacide GA25	1.00	each	1.00
My-Lo-Jel	1.00	each	25.00
Pallet	1.00	each	11.00
Rapid Sweep	1.00	each	1.00
SAPP	1.00	each	10.00



**DAILY OPERATIONS PARTNER REPORT**

**Event:** DEV DRILLING  
**Prim. Reason:** ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
USA

**Date:** 12/27/2014  
**Report No:** 7DDR

**Other Remarks:**

UNIVERSITY ST. ANDREWS UNIT # 1220DH

From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.

HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199

LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'

Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1'  
650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS

OXY DSM TRAILER: 281-833-2725

NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB  
#21506

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 9.625" INT CASING

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING :

Unsafe Acts:6

Safe Acts:1

Unsafe Equipment:0

SWA:1

Near Misses:0

Worksite JSA: 18

Safety Meetings:4

LO/TO:6

Permits to work: 4

Power Line Checklist: 12/19/2014

Pre Spud/Rig Inspections:

Hazard ID's:0

Ep2 Observations:0

BEST STOP CARD:OBSERVED FORKLIFT RUNNING WHILE UNATTENDED WITH FUEL TANK ON FORKS ELEVATED OFF  
THE GROUND. STOPPED JOB AND INFORMED EMPLOYEE OF FORKLIFT POLICY ALSO DANGERS OF LEAVING  
FORKLIFT UNATTENDED. HE SAID HE AGREED. JOB CONTINUED WITHOUT INCIDENT.

## DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING  
 Prim. Reason: ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
 USA

Date: 12/27/2014  
 Report No: 7DDR

## OPERATIONS

From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	3:00	3.00	14SUDR	CMT	PRIM	P	CEMENTED 11¾" SURFACE CASING AS FOLLOWS:  PUMPING SCHEDULE:  - PUMP 30 BBL GEL SPACER WITH RED DYE - 210 BBLS PREM + CLASS C CEMENT 670 SKS, 13.5 PPB, 1.759 YIELD, 9.37 GPS - 68 BBLS PREM + CLASS C CEMENT 280 SKS, 14.8 PPB, 1.357 YIELD, 6.53 GPS - DROPPED TOP PLUG AND DISPLACED WITH 210 BBL FRESH WATER - BUMPED PLUG AND PRESSURED TO 600 # OVER AT 1200 #, BLEED BACK 1½ BBLS - FLOATS HELD, RETURNED 34 BBLS 107 SKS OF CEMENT TO THE SURFACE  NOTES: * ICP= 173 PSI AT 8 BPM * FCP= 610 PSI AT 2 BPM FULL RETURNS THROUGHOUT CEMENT JOB, 25 BBLS / 141SXS CEMENT TO SURFACE.
3:00	3:30	0.50	14SUDR	CMT	RIGUP	P	RIG DOWN HALLIBURTON CEMENT EQUIPMENT.
3:30	6:00	2.50	14SUDR	WLHD	RWH	P	FLUSH KOSERCA CELLAR PUMPS AND EQUIPMENT, RIG DOWN SAME. REMOVE MOUSEHOLE.
6:00	10:00	4.00	14SUDR	BOP	RUBOP	P	CLEAN RED BED CLAY FROM CELLAR. AND SUCK OUT WATER CLEAN CONDUCTOR.
10:00	11:00	1.00	14SUDR	WLHD	RWH	P	CUT CASING AND CONDUCTOR AND LAY OUT.
11:00	15:00	4.00	14SUDR	WLHD	RWH	P	MAKE FINAL CUT ON CASING AND CONDUCTOR INSTALL CAMERON 13 5/8" X 11 3/4" SOW.
15:00	22:00	7.00	14SUDR	BOP	RUBOP	P	INSTALL 13 5/8" BOP'S  CREW CHANGE AT 1800 HOURS
22:00	23:00	1.00	14SUDR	BOP	RUBOP	P	INSTALL FLOWLINE, HOOK UP FILL UP LINE, INSTALL MOUSE HOLE, CALIBRATE DRAWWORKS.  SAFETY BREAK: HOUSE KEEPING
23:00	0:00	1.00	14SUDR	BOP	RUBOP	P	RIG UP TEST UNIT TO CHOKE MANIFOLD. FILL LINES WITH FLUID AND WORK AIR OUT OF SYSTEM.
Total Time		24.00					

Safety Incident?	N	Days since Last RI:	452.00	Weather Comments:
Environ Incident?	N	Days since Last LTA:	452.00	
Incident Comments: No incidents reported last 24 hours.				

OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

USA

Date: 12/27/2014

Report No: 7DDR

Wellbore / Top MD: 00 @ 0 ft

Rig: H&P 264

Ref Datum: Original KB @3,056.10ft

DFS: 3.19

Today's MD: 1838 ft

Progress:

Ground Elev: 3,031.10 ft

Daily Cost: \$129,106

Prev MD: 1838 ft

Rot Hrs Today: 0.00 hr

AFE MD/Days: 19,800.0 / 35.8 days

Cum Cost: \$720,566

PBMD:

Avg ROP Today: 0.0 ft/hr

AFE Number: 1189079#0102

AFE Cost: \$4,017,074

Current Formation: @

Lithology:

Current Ops:

24-Hr Summary: CEMENT 11 3/4" CASING PER PROGRAM. INSTALL CAMERON 13 5/8" X 11 3/4" SOW. INSTALL 13 5/8" BOP.

24-Hr Forecast: (EST RR 1/26/15)(ROL 1/29/15) TEST 13 5/8" BOPE. RIH WITH DIRECTIONAL ASSEMBLY. DRILL OUT SHOE TRACK. DRILL 10 5/8" HOLE.

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg	Max
Last Casing:	28.000in @ 40ft	Str Wt Up/Dn:	/	Pump Rate:	0.0	Conn:			
Next Casing:	11.750in @ 1,828ft	Str Wt Rot:		Pump Press:	0	Trip:			
Last BOP Press Test:	12/01/2014	Torq Off Btm:				Backgr:			
Form Test/EMW:		Torq On Btm:							

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	MONFORD CRAFT	MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
Supervisor 2:	ROBERT SOTELLO	1,837.0	0.50	140.66	1,836.97	-7.3	5.4	8.3	0.46	0.00
Engineer:	KEVIN THREADGILL	1,753.0	0.50	186.46	1,752.97	-6.7	5.2	7.7	0.32	-0.11
Geologist:	Sumiyah Ahmed	1,574.0	0.70	131.66	1,573.98	-5.2	4.5	6.0	0.18	0.16
Oxy Personnel:	3	1,383.0	0.40	148.66	1,382.99	-3.8	3.2	4.5	0.21	0.16
Contractor Personnel:	12	1,199.0	0.10	226.66	1,198.99	-3.2	3.0	3.8	0.13	-0.05
Total on Site:	15	1,015.0	0.20	126.66	1,014.99	-2.9	2.9	3.4	0.23	-0.19

BIT RECORD										
Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
1	14.750	VAREL	VTD	4007310	M423	8x12	60	1838	1-1-NO-A	X-I-NO-TD

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI

MUD DATA - M-I LLC (Schlumberger)					LAST OR CURRENT BHA																																																																															
Engineer: SHANE BURNS	MBT:	BHA No: 1	Bit No: 1	MD In: 60 ft																																																																																
Sample From: In (Suction Pit)	pH:	Purpose: DRILL 14 3/4" SURFACE HOLE	MD Out: 1838 ft																																																																																	
Mud Type: Clear Water	Pm / Pom:	<table> <tr> <th>Component</th> <th>OD</th> <th>ID</th> <th>Jts</th> <th>Length</th> </tr> <tr> <td>PDC BIT</td> <td>14.750</td> <td>0.000</td> <td>1</td> <td>1.00</td> </tr> <tr> <td>POSITIVE DISPLACEMENT MOTOR</td> <td>8.000</td> <td>2.875</td> <td>1</td> <td>34.90</td> </tr> <tr> <td>SHOCK SUB</td> <td>8.000</td> <td>2.750</td> <td>1</td> <td>12.50</td> </tr> <tr> <td>INTEGRAL BLADE STABILIZER</td> <td>8.000</td> <td>3.000</td> <td>1</td> <td>7.94</td> </tr> <tr> <td>NON-MAG DRILL COLLAR</td> <td>8.000</td> <td>2.750</td> <td>1</td> <td>31.60</td> </tr> <tr> <td>INTEGRAL BLADE STABILIZER</td> <td>8.000</td> <td>3.000</td> <td>1</td> <td>6.49</td> </tr> <tr> <td>DRILL COLLAR</td> <td>8.000</td> <td>2.875</td> <td>6</td> <td>182.68</td> </tr> <tr> <td>CROSSOVER</td> <td>8.000</td> <td>2.875</td> <td>1</td> <td>3.11</td> </tr> <tr> <td>DRILL COLLAR</td> <td>6.500</td> <td>2.900</td> <td>6</td> <td>182.67</td> </tr> <tr> <td>HWDP</td> <td>4.500</td> <td>2.750</td> <td>30</td> <td>920.63</td> </tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> </table>			Component	OD	ID	Jts	Length	PDC BIT	14.750	0.000	1	1.00	POSITIVE DISPLACEMENT MOTOR	8.000	2.875	1	34.90	SHOCK SUB	8.000	2.750	1	12.50	INTEGRAL BLADE STABILIZER	8.000	3.000	1	7.94	NON-MAG DRILL COLLAR	8.000	2.750	1	31.60	INTEGRAL BLADE STABILIZER	8.000	3.000	1	6.49	DRILL COLLAR	8.000	2.875	6	182.68	CROSSOVER	8.000	2.875	1	3.11	DRILL COLLAR	6.500	2.900	6	182.67	HWDP	4.500	2.750	30	920.63																									
Component	OD	ID	Jts	Length																																																																																
PDC BIT	14.750	0.000	1	1.00																																																																																
POSITIVE DISPLACEMENT MOTOR	8.000	2.875	1	34.90																																																																																
SHOCK SUB	8.000	2.750	1	12.50																																																																																
INTEGRAL BLADE STABILIZER	8.000	3.000	1	7.94																																																																																
NON-MAG DRILL COLLAR	8.000	2.750	1	31.60																																																																																
INTEGRAL BLADE STABILIZER	8.000	3.000	1	6.49																																																																																
DRILL COLLAR	8.000	2.875	6	182.68																																																																																
CROSSOVER	8.000	2.875	1	3.11																																																																																
DRILL COLLAR	6.500	2.900	6	182.67																																																																																
HWDP	4.500	2.750	30	920.63																																																																																
Time / MD: 16:01 / 1,838.0	Pf / Mf: /																																																																																			
Density @ Temp: 9.20 / 52	Chlorides:																																																																																			
Rheology Temp: 120	Ca++ / K+: /																																																																																			
Viscosity: 33.00	CaCl2:																																																																																			
PV / YP: 1 / 1	Cl- in water phase:																																																																																			
Gels 10s/10m/30m: 1 / 1 / 1	Lime:																																																																																			
API WL: 16.00	ES:																																																																																			
HTHP WL:	ECD:																																																																																			
Cake API / HTHP: 2.0 /	n / K: /																																																																																			
Solids / Sol Corr: /	Carbonate:																																																																																			
Oil / Water: / 100.0	Bicarbonate:																																																																																			
Oil / Water % for OWR: /	Form Loss / Cum Loss: 0.0 / 0.0																																																																																			
Sand: 0.15	Fluid Disch: /																																																																																			
Water Added:	Daily Mud Cost: \$1,115																																																																																			
Oil Added:	Cum Mud Cost: \$13,299																																																																																			
LGS: /																																																																																				
VG Meter: 2@300 / 3@600																																																																																				
Comments:																																																																																				

MUD PRODUCTS			
Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	2.00
Lime	1.00	each	1.00
Mud Service - 24 Hr	1.00	day	1.00
Myacide GA25	1.00	each	1.00
Soda Ash	1.00	each	2.00

3/12/2015

9:54:34AM

Page 1 of 3

**DAILY OPERATIONS PARTNER REPORT**

**Event:** DEV DRILLING  
**Prim. Reason:** ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
USA

**Date:** 12/28/2014  
**Report No:** 8DDR

**Other Remarks:**

UNIVERSITY ST. ANDREWS UNIT # 1220DH

From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.

HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199

LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'

Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1'  
650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS

OXY DSM TRAILER: 281-833-2725

NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB #21506

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 9.625" INT CASING

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING :

Unsafe Acts:6

Safe Acts:1

Unsafe Equipment:0

SWA:1

Near Misses:0

Worksite JSA: 21

Safety Meetings:5

LO/TO:6

Permits to work: 4

Power Line Checklist: 12/19/2014

Pre Spud/Rig Inspections:

Hazard ID's:0

Ep2 Observations:0

BEST STOP CARD:OBSERVED EMPLOYEE OPERATING FORKLIFT WITHOUT WEARING HIS SEATBELT. STOPPED THE JOB AND EXPLAINED TO HIM THE IMPORTANCE OF WEARING A SEATBELT WHILE OPERATING EQUIPMENT. HE AGREED, AND THE JOB CONTINUED WITHOUT INCIDENT.

OXY USA INC							
DAILY OPERATIONS PARTNER REPORT							
Event:		DEV DRILLING		ST ANDREWS UNIT 1220H		Date: 12/28/2014	
Prim. Reason:		ORIG DRILL HORIZ		USA		Report No: 8DDR	
OPERATIONS							
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	2:00	2.00	14SUDR	BOP	TSTBOP	P	TEST BOP AS FOLLOWS:  TEST #1: IBOP (FLOOR VALVE) 250 LOW, 5000 HIGH, 5 MINS OK  TEST #2: 4" VALVES ON CHOKE MANIFOLD 250 LOW, 5000 HIGH, 5 MINS OK  TEST #3: 3" VALVES ON CHOKE MANIFOLD 250 LOW, 5000 HIGH, 5 MINS OK  TEST #4: 2" VALVES ON CHOKE MANIFOLD 250 LOW, 5000 HIGH, 5 MINS OK  SAFETY BREAK: PRESSURE TESTING WITH 3RD PARTY
2:00	3:30	1.50	14SUDR	BOP	TSTBOP	P	RIG UP CAMERON TEST PLUG WITH 4½" DP JNT BELOW AND ABOVE TEST PLUG. TIGHTEN TURN BUCKLES AND CENTER STACK.
3:30	6:00	2.50	14SUDR	RIGMT	REP	PT	ATTEMPTED TO RIH WITH TEST PLUG. PLUG WILL NOT MAKE IT THROUGH ANNULAR DUE TO ELEMENT NOT FULLY OPENING. TROUBLE SHOOT ANNULAR ELEMENT.
6:00	9:00	3.00	14SUDR	BOP	CHRAMS	PT	POUR OIL ON HYDRIL ELEMENT WITH NO SUCCESS, HEATED WATER AND PUT ON THE ELEMENT. ATTEMPTED TO OPEN THE ANNULAR IN HIGH BY PASS WITH NO SUCCESS
9:00	14:30	5.50	14SUDR	BOP	CHRAMS	PT	REMOVE ROTATING HEAD, AND ANNULAR HYDRIL CAP. REMOVE HYDRIL ELEMENT. FOUND THAT THE ELEMENT WAS ONLY 12.875 ID NEW ELEMENT IS 13.875 ID
14:30	17:00	2.50	14SUDR	BOP	CHRAMS	PT	CLEAN OUT HYDRIL AND INSTALL NEW HYDRIL ELEMENT
17:00	18:00	1.00	14SUDR	BOP	TSTBOP	P	RIG UP CAMERON TEST PLUG WITH 4½" DP JNT BELOW AND ABOVE TEST PLUG.  CREW CHANGE AT 1800 HOURS
18:00	23:00	5.00	14SUDR	BOP	TSTBOP	P	CONTINUE TO TEST BOP AS FOLLOWS:  TEST #5: ANNULAR 250 LOW, 3500 HIGH  TEST #6: UPPER PIPE RAMS, 4" MUD PUMPS, 2" BLEED MUD PUMPS, OUTER KILL, 2" CHOKE 250 LOW, 5000 HIGH, 5 MINS OK  TEST #7: 4" STAND PIPE, 2" KILL, HCR 250 LOW, 5000 HIGH, 5 MINS OK  TEST #8: IBOP ON TOP DRIVE, 250 LOW, 5000 HIGH, 5 MINS FAILED  TEST #9: INSIDE KILL, INSIDE CHOKE 250 LOW, 5000 HIGH, 5 MINS OK  TEST #10: FOSV , CHECK VALVE 250 LOW, 5000 HIGH, 5 MINS OK  TEST #11: LOWER PIPE RAMS 250 LOW, 5000 HIGH, 5 MINS OK  TEST# 12: BLIND RAMS 250 LOW, 5000 HIGH, 5 MINS OK
23:00	0:00	1.00	14SUDR	BOP	RUBOP	PT	INSTALL ROTATING HEAD.  SAFETY BREAK: FORKLIFT SAFETY
Total Time		24.00					
Safety Incident?		N		Days since Last RI:		453.00	
Environ Incident?		N		Days since Last LTA:		453.00	
Incident Comments:		No incidents reported last 24 hours.					

OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 12/28/2014

Prim. Reason: ORIG DRILL HORIZ

USA

Report No: 8DDR

Wellbore / Top MD: 00 @ 0 ft

Rig: H&P 264

Ref Datum: Original KB @3,056.10ft

DFS: 4.19

Today's MD: 1838 ft

Progress:

Ground Elev: 3,031.10 ft

Daily Cost: \$45,063

Prev MD: 1838 ft

Rot Hrs Today: 0.00 hr

AFE MD/Days: 19,800.0 / 35.8 days

Cum Cost: \$765,629

PBMD:

Avg ROP Today: 0.0 ft/hr

AFE Number: 1189079#0102

AFE Cost: \$4,017,074

Current Formation: @

Lithology:

Current Ops:

24-Hr Summary: TEST CHOKE MANIFOLD. TROUBLE SHOOT ANNULAR. REPLACE ANNULAR ELEMENT. TEST BOP STACK.

24-Hr Forecast: (EST RR 1/26/15)(ROL 1/29/15) REPLACE MANUAL VALVE ON TOP DRIVE AND TEST. RIH WITH DIRECTIONAL ASSEMBLY. DRILL OUT SHO

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg	Max
Last Casing:	28.000in @ 40ft	Str Wt Up/Dn:	/	Pump Rate:	0.0	Conn:			
Next Casing:	11.750in @ 1,828ft	Str Wt Rot:		Pump Press:	0	Trip:			
Last BOP Press Test:	12/01/2014	Torq Off Btm:				Backgr:			
Form Test/EMW:		Torq On Btm:							

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	MONFORD CRAFT	MD	Incl	Azi	TVD	N/-S	E/-W	VS	DLS	Build
Supervisor 2:	ROBERT SOTELLO	1,837.0	0.50	140.66	1,836.97	-7.3	5.4	8.3	0.46	0.00
Engineer:	KEVIN THREADGILL	1,753.0	0.50	186.46	1,752.97	-6.7	5.2	7.7	0.32	-0.11
Geologist:	Sumiyah Ahmed	1,574.0	0.70	131.66	1,573.98	-5.2	4.5	6.0	0.18	0.16
Oxy Personnel:	3	1,383.0	0.40	148.66	1,382.99	-3.8	3.2	4.5	0.21	0.16
Contractor Personnel:	12	1,199.0	0.10	226.66	1,198.99	-3.2	3.0	3.8	0.13	-0.05
Total on Site:	15	1,015.0	0.20	126.66	1,014.99	-2.9	2.9	3.4	0.23	-0.19

BIT RECORD

Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
									--	--

BIT OPERATING PARAMETERS TODAY

Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI

MUD DATA - M-I LLC (Schlumberger)				LAST OR CURRENT BHA			
Engineer: Shane Burns	MBT:						
Sample From: In (Suction Pit)	pH:						
Mud Type: Clear Water	Pm / Pom:						
Time / MD: 16:01 / 1,838.0	Pf / Mf:	/					
Density @ Temp: 9.20 / 51	Chlorides:						
Rheology Temp: 120	Ca++ / K+:	/					
Viscosity: 32.00	CaCl2:						
PV / YP: 1 / 1	Cl- in water phase:						
Gels 10s/10m/30m: 1 / 1 / 1	Lime:						
API WL: 16.00	ES:						
HTHP WL:	ECD:						
Cake API / HTHP: 2.0 /	n / K:	/					
Solids / Sol Corr: /	Carbonate:						
Oil / Water: / 100.0	Bicarbonate:						
Oil / Water % for OWR: /	Form Loss / Cum Loss:	0.0 / 0.0					
Sand: 0.15	Fluid Disch:	/					
Water Added:	Daily Mud Cost:	\$2,424					
Oil Added:	Cum Mud Cost:	\$15,723					
LGS: /							
VG Meter: 2@300 / 3@600							
Comments:							

MUD PRODUCTS

Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	2.00
D-D	1.00	each	1.00
Lime	1.00	each	2.00
Mud Service - 24 Hr	1.00	day	1.00
Myacide GA25	1.00	each	10.00
Soda Ash	1.00	each	8.00

<div style="display: flex; justify-content: space-between; align-items: center;"> <div>OXY USA INC</div> <div><b>DAILY OPERATIONS PARTNER REPORT</b></div> <div></div> </div>							
Event:		DEV DRILLING				ST ANDREWS UNIT 1220H	
Prim. Reason:		ORIG DRILL HORIZ				USA	
Date:		12/29/2014				Report No:	
9DDR							
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
21:30	0:00	2.50	21INDR	DRILL	MTRVER	P	DRILL 10 5/8" INTERMEDIATE HOLE F/ 2375' T/ 2641' , AS FOLLOWS:  PROGRESS: 266 FT      ROP AVG: 106 FT/HR  WOB: 20-30 KLBS   SRPM: 20   MRPM: 80   BRPM: 80   FLOW RATE: 800 GPM PUMP PRESSURE: OFF / ON BOTTOM: 2850 / 3050 PSI DIFFERECIAL PRESSURE: 300 PSI P/U WT: 144 KIPS   S/O WT: 139 KIPS   ROT WT: 135 KIPS TORQUE ON / OFF BTM: 5-8 / 1-2 KLBS FT  MW IN / OUT: 9.3 PPG  DROPPING RAPID SWEEP & SOAP STICKS EVERY CONN. PUMPING HI-VIS SWEEPS EVERY 500' OR AS HOLE DICTATES CIRCULATING OUTER RESERVE PIT
Total Time		24.00					
Safety Incident?		N		Days since Last RI:		454.00	
Weather Comments:							
Environ Incident?		N		Days since Last LTA:		454.00	
Incident Comments:							
No incidents reported last 24 hours.							
<b>Other Remarks:</b> <p>UNIVERSITY ST. ANDREWS UNIT # 1220DH</p> <p>From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.</p> <p>HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199            LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'</p> <p>Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1'            650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS</p> <p>OXY DSM TRAILER: 281-833-2725            NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB #21506            NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 9.625" INT CASING            NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING :            Unsafe Acts:6            Safe Acts:1            Unsafe Equipment:0            SWA:1            Near Misses:0</p> <p>Worksite JSA: 21            Safety Meetings:5            LO/TO:6            Permits to work: 4            Power Line Checklist: 12/19/2014            Pre Spud/Rig Inspections:            Hazard ID's:0            Ep2 Observations:0</p> <p>BEST STOP CARD: OBSERVED EMPLOYEE USING PRESSURE WASHER WITH A LEAKING FITTING. STOPPED THE JOB, AND EXPLAINED TO THE EMPLOYEE ABOUT FIXING THE FITTING. EMPLOYEE AGREED, PERFORMED LOTO ON THE PRESSURE WASHER AND REPLACED THE FITTING. JOB CONTINUED WITHOUT INCIDENT.</p>							

## DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING  
Prim. Reason: ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
USA

Date: 12/29/2014  
Report No: 9DDR

## OPERATIONS

From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	2:00	2.00	14SUDR	BOP	RUBOP	PT	CONTINUE TO INSTALL ROTATING HEAD AND TORQUE. RIG UP FLOWLINE, FILL UP LINE, AND TURN BUCKLES.  SAFETY BREAK: HAND AND BODY PLACEMENT
2:00	6:00	4.00	14SUDR	RIGMT	REP	PT	CHANGE OUT MANUAL IBOP VALVE ON TOP DRIVE. REPLACE GRABBER DIES ON TOP DRIVE.
6:00	6:30	0.50	14SUDR	RIGMT	REP	PT	FINISH INSTALLING MANUAL IBOP, (TORQUE UP BOLTS ON COMPRESSION RING AND TIE WIRE
6:30	8:00	1.50	14SUDR	BOP	TSTBOP	P	TEST MANUAL IBOP (GOOD)
8:00	9:00	1.00	14SUDR	BOP	RPWB	P	INSTALL WEAR BUSHING, AND RUN IN LOCK DOWN PINS.
9:00	13:00	4.00	14SUDR	TRIP	BHA	P	PICK UP AND RUN IN THE HOLE WITH 10 5/8" BHA #2 AS FOLLOWS:  10 5/8" PDC bit (VAREL RS616XH) 8" Baker Ultra XL .22 Rev/gal (w/float) W/10.375 10 1/2" IBS 1 – UBHO Isys tool (INC/AZI from AIM Directional) 1 – NMDC 10 1/2" IBS 6 – 8" DC XO 6 - 6-1/2" DC 30 HWD
13:00	14:00	1.00	14SUDR	TRIP	BHA	P	CONTINUE TRIPPING IN HOLE F/650' T/1761' TAG CMT @ 1761'.
14:00	14:30	0.50	14SUDR	CIRC	CNDFLD	P	CIRCULATE BU @ 600 GPM 1500 PSI
14:30	15:30	1.00	14SUDR	CSG	PIPE	P	PRESSURE TEST CASING TO 1600 PSI FOR 30 MIUNUTES ON CHART PERFORM CHOKE DRILL WITH RIG CREWS RIG MANAGER AND DSM
15:30	16:00	0.50	14SUDR	BOP	BOPDRILL	P	PERFORM CHOKE DRILL WITH RIG CREWS RIG MANAGER AND DSM
16:00	17:00	1.00	14SUDR	DRLOUT	DOCMT	P	DRILL CMT FLOAT, SHOE AND 10' OF NEW FORMATION F/1761' T/1848' 500 GPM, 1050 PSI, 50 RPM
17:00	17:30	0.50	21INDR	DRLOUT	DOCMT	P	CIRCULATE BOTTOMS UP & PERFORM FIT 9.3PPG MW PUMP .75 BBLS PRESSURE UP TO 425 PSI 1 MIN 392 PSI 2 MIN 392 PSI 3 MIN 392 PSI 4 MIN 391 PSI 5 MIN 390 PSI BLED BACK .75 BBLS 390 PSI EMW 13.3 PPG
17:30	21:30	4.00	21INDR	DRILL	MTRVER	P	DRILL 10 5/8" INTERMEDIATE HOLE F/ 1848' T/ 2375 ', AS FOLLOWS:  PROGRESS: 527 FT      ROP AVG: 132 FT/HR  WOB: 20-30 KLBS   SRPM: 20 MRPM: 80 BRPM   FLOW RATE: 800 GPM PUMP PRESSURE: OFF / ON BOTTOM: 2850 / 3050 PSI DIFFERECIAL PRESSURE: 300 PSI P/U WT: 144 KIPS   S/O WT: 139 KIPS   ROT WT: 135 KIPS TORQUE ON / OFF BTM: 5-8 / 1-2 KLBS FT  MW IN / OUT: 9.3 PPG  DROPPING RAPID SWEEP & SOAP STICKS EVERY CONN. PUMPING HI-VIS SWEEPS EVERY 500' OR AS HOLE DICTATES CIRCULATING OUTER RESERVE PIT



OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

USA

Date: 12/29/2014

Report No: 9DDR

Wellbore / Top MD: 00 @ 0 ft

Rig: H&P 264

Ref Datum: Original KB @3,056.10ft

DFS: 5.19

Today's MD: 2641 ft

Progress: 803 ft

Ground Elev: 3,031.10 ft

Daily Cost: \$77,215

Prev MD: 1838 ft

Rot Hrs Today: 6.50 hr

AFE MD/Days: 19,800.0 / 35.8 days

Cum Cost: \$842,844

PBMD: 123.5 ft/hr

Avg ROP Today: 123.5 ft/hr

AFE Number: 1189079#0102

AFE Cost: \$4,017,074

Current Formation: @

Lithology:

Current Ops:

24-Hr Summary: CHANGE OUT MANUAL VALVE ON TOP DRIVE. RIH W/ 10-5/8" PDC BIT & DIRECTIONAL TOOLS. DRILL OUT SHOE TRACK. DRILL 10-5/8" HC

24-Hr Forecast: (EST RR 1/26/15)(ROL 1/29/15) DRILL 10-5/8" HOLE.

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg	Max
Last Casing:	28.000in @ 40ft	Str Wt Up/Dn:	144.0/ 139.0 kip	Pump Rate:	749.5	Conn:			
Next Casing:	11.750in @ 1,828ft	Str Wt Rot:	135.0 kip	Pump Press:	3050	Trip:			
Last BOP Press Test:	12/29/2014	Torq Off Btm:				Backgr:			
Form Test/EMW:	FIT / 13.38 ppg	Torq On Btm:							

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	MONFORD CRAFT	MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
Supervisor 2:	ROBERT SOTELLO	2,604.0	1.10	99.16	2,603.92	-10.5	12.5	12.9	0.16	0.16
Engineer:	KEVIN THREADGILL	2,414.0	0.80	93.66	2,413.94	-10.1	9.4	11.9	0.23	0.16
Geologist:	Sumiyah Ahmed	2,224.0	0.50	121.66	2,223.95	-9.6	7.4	10.9	0.11	0.05
Oxy Personnel:	3	2,035.0	0.40	146.36	2,034.96	-8.6	6.3	9.7	0.06	-0.05
Contractor Personnel:	12	1,837.0	0.50	140.66	1,836.97	-7.3	5.4	8.3	0.46	0.00
Total on Site:	15	1,753.0	0.50	186.46	1,752.97	-6.7	5.2	7.7	0.32	-0.11

BIT RECORD										
Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
2	10.625	VAREL	RS616XH	4007783	PDC	9x12	1838	2888	0-0-NO-G	X-I-NO-DTF

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI
2	6.50	6.50	803	803	123.5	123.5	20.0/33.0	20/80	0.994	482	241.9	2.4

MUD DATA - M-I LLC (Schlumberger)					LAST OR CURRENT BHA				
Engineer: Shane Burns	MBT:	BHA No: 2	Bit No: 2	MD In: 1838 ft					
Sample From: In (Suction Pit)	pH:	MD Out: 2888 ft							
Mud Type: Clear Water	Pm / Pom:	Purpose:							
Time / MD: 16:01 / 1,849.0	Pf / Mf:	Component	OD	ID					
Density @ Temp: 9.20 / 57	Chlorides:	PDC BIT	10.625	2.875					
Rheology Temp: 120	Ca++ / K+:	POSITIVE DISPLACEMENT MOTOR	8.000	2.875					
Viscosity: 32.00	CaCl2:	CROSSOVER	8.000	2.875					
PV / YP: 1 / 1	Cl- in water phase:	UNDERGAUGE INTEGRAL BLADE STABILIZ	10.500	2.500					
Gels 10s/10m/30m: 1 / 1 / 1	Lime:	MWD TOOL	8.000	2.875					
API WL:	ES:	UNDERGAUGE INTEGRAL BLADE STABILIZ	10.500	2.750					
HTHP WL:	ECD:	DRILL COLLAR	8.000	3.000					
Cake API / HTHP: .0 /	n / K:	CROSSOVER	6.500	3.000					
Solids / Sol Corr: /	Carbonate:	DRILL COLLAR	6.500	3.000					
Oil / Water: / 100.0	Bicarbonate:	HWDP	4.500	2.750					
Oil / Water % for OWR: /	Form Loss / Cum Loss: 0.0 / 0.0	DRILL PIPE	4.500						
Sand:	Fluid Disch: /								
Water Added:	Daily Mud Cost: \$5,466								
Oil Added:	Cum Mud Cost: \$21,189								
LGS: /									
VG Meter: 2@300 / 3@600		Total Length: 1,370.14 ft	Wt below Jars:						
Comments:									

MUD PRODUCTS			
Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	2.00
Federal Bentonite	1.00	each	13.00
Megadril System	1.00	bbl	1,000.00
M-I Gel	1.00	ton (metric)	11.00
Mud Service - 24 Hr	1.00	day	1.00

3/12/2015

9:54:23AM

Page 1 of 3

OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 12/9/2014

Prim. Reason: ORIG DRILL HORIZ

USA

Report No: 10DR

Safety Incident?	N	Days since Last RI:	4M400	Weather Comments:
Environ Incident?	N	Days since Last LTA:	4M400	
Incident Comments: Nw gbs#xgfy ,xpw,fx# rdyf 24 r wmy-				

Other Remarks:

UNIVERSITY ST- ANDREWS UNIT 7 1220DH  
8,we fr x lgfx,yxbfswg w6Hs r c da / PMdg# Hs r c da 1h& g Ag#,xc y@xody@,srx 2-1 e sxy Edyf wg Hs r c da 1h& fw gfx,yxbfswg w6  
Hs r c da 1h& dg# Hs r c da 11M Tmg rxf Bnw,fr xdyfKwg Hs r c da 11M 8,we gfx,yxbfswg w6Hs r c da 11Mdg# Hs r c da 1h&@,srx  
&-hMe sxy Nw,fr xdyf wg Hs r c da 11M Af gfx,yxbfswg w6Hs r c da 11Mdg# 8' 1hPP@wgfgmx yf,d s r f Bnw,fr xdyfK1-P  
e sxy...-fr xg fmg ,s r f Bswrfr Kwgfwrxdyx ,wd#- D,srx 1-&Me sxy dg# fmg rxf EedyfKwgfwrxdyx ,wd#- D,srx 0-& e sxy dg# ,wd#  
c sme dx d yns r f ugx# fwfr x ,s r f Bswrfr K Af ugx# g ,wd#@wgfgmx Edyf 6v, dgwfr x, 0-4 e sxy Bwd# c snfmg rxf w, Nw,fr dfx,  
0-2 e sxyKdg# d.,srx df Ug srx,yfa Sf- Ag#,xc y Ug s 71220DH wg Wxyf y s#x w6,wd#-  
  
HELICOPTER: BPPK&24t/ Mh1 9BP00K&2ht2/ h& 9BP00K242t&1((  
L18E 8LIGHT COORDINATES: X: 4(2@22-1/ ' Y: 2(M@P/-2M  
  
Ldf: / 2° 22' M -0M-N Lwgi : 102° 2/ ' 0&-&0-W NAD 2h ELEVATION / @ 1-1.  
&M. 8NL X P / ' 8EL@SECTION 12@ LOCI / @ANDREWS COUNTY@TEXAS  
  
OXY DS' TRAILER: 2P1tp/ / t2h2M  
NOT18Y TRRC O8 INTENT TO S5UD AND RUN SUR8ACE CASING : 12@2914 S5OI E TO CINDY TRRC E' 5LOYEE@OF  
721M&  
NOT18IED TRRC O8 INTENT TO RUN AND CE' ENT ( -&2MQINT CASING  
NOT18IED TRRC O8 INTENT TO RUN AND CE' ENT MMQINT CASING :  
Ugyd& Abfy:&  
Sd& Abfy:1  
Ugyd& Eqmpe xgf:0  
SWA:1  
Nxd, ' gyxy:0  
  
Ww,kysx JSA: 21  
Sd&fa' xxfgi y:M  
LOGRO:&  
5x,e sy fwcw,k: 4  
5wc x, Lgx Crxbkryf: 129( 2014  
5,x Spn#R s Igypxbfswgy:  
Hdzd,# ID'y:0  
Ep2 Ouyx,vdfswgy:0  
  
FEST STO5 CARD: OFSERVED WATER HOSE IN 8RONT O8 STAIRS- E' 5LOYEE STO55ED WHAT HE WAS DOING AND  
ROLLED THE WATER HOSE U5- HE EX5ALINED TO OTHER E' 5LOYEE AFOUT I EE5ING WALI WAYS CLEAR  
ES5ECIALY IN ICY CONDITIONS- JOF CONTINUED WITHOUT INCIDENT-

OXY USA INC											
DAILY OPERATIONS PARTNER REPORT											
Event:		DEV DRILLING				ST ANDREWS UNIT 1220H		Date:		129 092014	
Prim. Reason:		ORIG DRILL HORIZ				USA		Report No:		10DR	
OPERATIONS											
8,we	Tw	H,y	Op 5r dyx	Op Cw#x	Op Snu	Op Tapx	Opx,dfsng Dxfdsy				
0:00	2:00	2-00	21INDR	DRILL	' TRVER	5	DRILL 10 MPQINTER' EDIATE HOLE 892&41. T92PPP. @AS 8OLLOWS:  5ROGRESS: 24h 8T RO5 AVG: 124 8T9HR  WOF: 20t/ 0 I LFS SR5' : 20 ' R5' : P0 FR5' 8LOW RATE: P00 G5' 5U' 5 5RESSURE: O88 9ON FOTTO' : 2PM0 9/ 0M0 5SI DI88ERENTIAL 5RESSURE: / 00 5SI 5UJ WT: 144 I I5S S9D WT: 1/ ( I I5S ROT WT: 1/ MI I5S TOR" UE ON 9O88 FT' : MP 91t2 I LFS 8T  ' W IN 9OUT: (-/ 55G  DRO55ING RA5ID SWEE5 3 SOA5 STICI S EVERY CONN- 5U' 5ING HITVIS SWEE5S EVERY M00. OR AS HOLE DICTATES CIRCULATING OUTER RESERVE 5IT  NOTE: ISYS ' WD TOOL LOST CO' ' UNICATION				
2:00	/ :00	1-00	21INDR	CIRC	CNDHOL	5T	TROUFLE SHOOT ISYS ' WD TOOL WITH ISYS TECHNICIAN-				
/ :00	/ :/ 0	0-M0	21INDR	CIRC	CNDHOL	5T	CIRCULATE AND CONDITION HOLE AT 2PPP- G5' : P00 S55: 2P00 5SI				
/ :/ 0	&:00	2-M0	21INDR	TRI5	DRILL	5T	5OH 8RO' 2PPP. TO 1/ 00. DO TO ' WD TOOL 8AILURE- NO EXCESS DRAG HOLE TAI ING 5RO5ER 8ILL				
&:00	h:00	1-00	21INDR	TRI5	DRILL	5T	RE' OVE ROTATING HEAD-				
h:00	11:00	4-00	21INDR	TRI5	DRILL	5T	5ULL OUT O8 HOLE 891/ h0. T9SUR8ACE- HOLE TAI ING 5RO5ER 8ILL				
11:00	12:/ 0	1-M0	21INDR	TRI5	FHA	5T	5ULL U5 TO FIT AND INS5ECT B5OODK@D 3 5UJ NEW ISYS TOOL				
12:/ 0	1/ :00	0-M0	21INDR	TRI5	FHA	5T	ATTE' 5T TO TEST NEW ISYS TOOL- WITH NO SUCCESS-				
1/ :00	1M00	2-00	21INDR	WAIT	WOE"	5T	WAIT ON ALL NEW AI' @SYS E" UI5' ENT 3 TOOLS				
1M00	1M/ 0	0-M0	21INDR	TRI5	FHA	5T	CHANGE OUT ALL O8 AI' 3 ISYS SUR8ACE E" UI5' ENT- INSTALL NEW TOOL AND TEST- B5OODK				
1M/ 0	1P:00	2-M0	21INDR	TRI5	FHA	5T	5ICI U5 10 MP. FHA 7/ AS 8OLLOWS:  10 MP-5DC usf B/AREL RS&1&XHK P-Fdkx, Urf,d XL -22 Rxv9 dnB: 9wdfKW910-/ hM 10 19-IFS 1 " UFHO lyay fwwBNC9AZI 6we AI' DsxbfsgdrK 1 " N' DC 10 19-IFS & " P-DC XO & t &19-DC / 0 HWD5  89SUR8ACE T91/ h0. INSTALL ROTATING HEAD				
1P:00	20:00	2-00	21INDR	TRI5	DRILL	5T	CONTINUE TRI55ING IN HOLE 891/ h0. fw2PPP.@WITH NO HOLE ISSUES- 5RECAUTIONARY REA' LAST 100.-				
20:00	0:00	4-00	21INDR	DRILL	' TRVER	5	DRILL 10 MPQINTER' EDIATE HOLE 892PPP. T9/ 440. @AS 8OLLOWS:  5ROGRESS: M2 8T RO5 AVG: 1/ P 8T9HR  WOF: 20t/ 0 I LFS SR5' : 20 ' R5' : P0 FR5' 8LOW RATE: h00 G5' 5U' 5 5RESSURE: O88 9ON FOTTO' : 2&M0 9/ 1M0 5SI DI88ERENTIAL 5RESSURE: M00 5SI 5UJ WT: 1&2 I I5S S9D WT: 144 I I5S ROT WT: 1MMI I5S TOR" UE ON 9O88 FT' : MP 91t2 I LFS 8T  ' W IN 9OUT: (-/ 55G  DRO55ING RA5ID SWEE5 3 SOA5 STICI S EVERY CONN- 5U' 5ING HITVIS SWEE5S EVERY M00. OR AS HOLE DICTATES CIRCULATING OUTER RESERVE 5IT				
TwfdnT& x		24-00									

## DAILY OPERATIONS PARTNER REPORT

**Date:** 129 092014  
**Report No:** 10DR

<b>Current Formation:</b> YATES) / @-0	<b>Lithology:</b>
--	-------------------

**24-Hr Summary:** DRILLED 10tMP.. HOLE TO 2PPP- 50H 80R ' WD TOOL 8AILURE- RE5LACE ' WD TOOL- RIH TO 2PPP- DRILL 10tMP.. HOLE TO / 440.-

24-Hr Forecast: EST RR 12&91MROL 12(91M DRILL 10tMP.. HOLE-

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	' ON8ORD CRA8T	MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
Supervisor 2:	ROFERT SOTELLO	/ @&P-0	1-40	1P-1&	/ @&h-hh	tP(-	2M&	14-2	1-42	0- / 2
Engineer:	I EVIN THREADGILL	/ @h/ -0	1-10	P2-/ &	/ @h2-h(-	t10-1	24-4	1M1	0-01	0-00
Geologist:	Sme eadr Are e x#	2@P/ -0	1-10	P1-&&	2@P2-P/	t10-&	20-h	14-P	0-1(	t0-1&
Oxy Personnel:	/	2@/ 4-0	1-40	( 1-4&	2@/ -Ph	t10-P	1&-&	14-2	0-1P	0-1&
Contractor Personnel:	12	2@4-0	1-10	(( -1&	2@0/ -/ 2	t10-M	12-M	12(-	0-1&	0-1&
Total on Site:	1M	2@14-0	0-P0	( / -&&	2@1/ -/ 4	t10-1	( -4	11(-	0-2/	0-1&

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB e.g. 9000	RPM e.g. 90	TFA	P Drop Bit	Noz Vel	HHPSI
RR2	4:00	4:00	M2	M2	1/P-0	1/P-0	20-09 0-0	20980	0- ( 4	482	22P-M	2-2

--

VG Meter: 2) / 00 9/ ) 800	Total Length: 1@10-14 f	Wt below Jars:
Comments:		

MUD PRODUCTS			
Product	Number of Units	Units	Qty Used
Fmc x, Rxgfdn	1-00	xdb	1-00
Fmk Tdgk Rxgfdn	1-00	xdb	2-00
Cwfwgyxx# Hmny	1-00	xdb	10-00
8x# 8mb	1-00	xdb	2-00
8x#x, dnFxgfwgdx	1-00	xdb	4-00
' n# Sx,vbx t 24 H,	1-00	#da	1-00
5xbdg Nnf 5mi ' x#sre	1-00	xdb	h-00

/ 4X USA INY			
DAILY OPERATIONS PARTNER REPORT			
Event:	DEV DRILLING	ST ANDREWS UNIT 1220H	Date: 123M1301O
Prim. Reason:	/ RIG DRILL H/ RIC	USA	Report No: 11DR

Other Remarks:

UNIVERSITX ST6ANDREWS UNIT \$ 1220DH

. rcx ,ho ls,ordov,æs cKHåyhk 7# M&Z 7s8 Håyhk 7# 1f P æ As8rok d- Tow7d- 8ræpø 2ðl x áod E7d, cs Håyhk 7# 1f P ,c æ,ordov,æs cK Håyhk 7# 1f P 7s8 Håyhk 7# 11Z6 Ters ioK )Ncr,ho7d,9cs Håyhk 7# 11Z6 . rcx æ,ordov,æs cKHåyhk 7# 11Z 7s8 Håyhk 7# 1f P- 8ræpø Pð Z x áod Ncr,ho7d, cs Håyhk 7# 11Z6 A, æ,ordov,æs cKHåyhk 7# 11Z 7s8 . ( 1f &&- vcs,æeo d,r7åh, )Ncr,ho7d,91ð x áod...ðhos ,ers r7åh, )Sce,h9cs,c io7do rc786 Dræpø 1ðZ x áod 7s8 ,ers ioK )E7d,9cs,c io7do rc786 Dræpø 0ð x áod 7s8 rc78 k äi x 7uo 7 di7h, mðs8 ,c ,ho r7åh, )Sce,h9s A, mðs8 æ rc78- vcs,æeo E7d, kcr 7sc,hor 0ðx áod )rc78 k äi ,ers ioK cr Ncr,h 7Kor 0ð x áod97s8 7rræpø 7, Usæpordæ# S,6As8rok d Usa \$1220DH cs Wod, dæo cKrc786

HELIY/ 5TER: )&&89P2QIMZf 1 3)&009P2f J2M P 3)&0092Q2JP1BB

LI. E . LIGHT Y/ / RDINATES: 4: CB2-Q22ðl M X: 2BZ-0&M&Z'

L7,: M2° 22' ZMðZ' N Lcsy: 102° 2M 0PðP0" W NAD 2f ELEVATI/ N M0MlðlQ

P20Q NL 4 &MM. EL-SEYTI/ N 12- nL/ Yg M ANDREWS Y/ UNTX- TE4AS

/ 4X DS( TRAILER: 2&1J&MMðf 2Z

N/ TI. X TRRY / . INTENT T/ S5UD AND RUN SUR. AYE YASING : 12&23ðIOS5/ gE T/ YINDX TRRY E( 5L/ XEE-"/ n \$21Z0P

N/ TI. IED TRRY / . INTENT T/ RUN AND YE( ENT BðP22bINT YASING

N/ TI. IED TRRY / . INTENT T/ RUN AND YE( ENT ZðbINT YASING :

Usd7H6 Av,d:P

S7H6 Av,d:1

Usd7H6 Eqeá x os,:0

SWA:1

No7r ( æddod:0

Wcrudæo "SA: 21

S7H6,# ( oo,æyd:Z

L/ 3T/ :P

5orx æd,c k cru: O

5ck or Læo Yhovuiæ,: 123lB3201O

5ro Sl e83Ræy lsdl ov,æsd:

H7z7r8 ID'd:0

El 2 / ndorp7,æsd:0

nEST ST/ 5 YARD: / nSERVED E( 5L/ XEE N/ T USING M5/ INT Y/ NTAYT WHILE G/ ING D/ WN STAIRS6ST/ 55ED

E( 5L/ XEE AND E45LAINED T/ HI( THE DANGERS / . N/ T USING M5/ INT Y/ NTAYT ES5EYIALX IN IYX

Y/ NDITl/ NS- HE AGREED6"/ n Y/ NTINUED WITH/ UT INYIDENT6

Event:DEV DRILLING

Prim. Reason: / RIG DRILL H/ RIC

ST ANDREWS UNIT 1220H

USA

Date:12/31/2010

Report No:11DR

DAILY OPERATIONS PARTNER REPORT

rcx

Tc

Hrd

/ I  
5h7do

/ I  
Yc8o

/ I  
Sem

/ I  
T# o

1P:00

18:00

200

21INDR

DRILL

( TRVER

5

or7,as Do,7ad

DRILL 10 Z3bINTER( EDIATE H/ LE . 3Z021QT3 Z10PQAS . / LL/ WS:

5R/ GRESS: 8Z . T R/ 5 AVG: Q2 . T3HR

W/ n: 20JZ gLnS SR5( : P0J80 ( R5( : 1Zf nR5( : 21f . L/ W RATE: f 1Z G5( 5U( 5 5RESSURE: / . . 3/ N n/ TT/ ( : 2P00 3M00 5SI

DI. . ERENTIAL 5RESSURE: Q00 5SI

53J WT: 18MgI5S S3 WT: 1f & gI5S R/ T WT: 180 gI5S

T/ R' UE / N3/ . . nT( : f J8 31J2 gLnS . T

( W IN 3/ UT: 88M388 55G VIS Q&

DR/ 55ING RA5ID SWEE5 @S/ A5 STIYgS EVERX Y/ NN6

5U( 5ING HIJVIS SWEE5S EVERX Z00Q RAS H/ LE DIYTATES

YIRYULATING / UTER RESERVE 5IT

rcx

Tc

Hrd

/ I  
5h7do

/ I  
Yc8o

/ I  
Sem

/ I  
T# o

18:00

22:00

Q00

21INDR

DRILL

( TRVER

5

or7,as Do,7ad

DRILL 10 Z3bINTER( EDIATE H/ LE . 3Z10PQT3 ZMCPQAS . / LL/ WS:

5R/ GRESS: 2Q0 . T R/ 5 AVG: P0 . T3HR

W/ n: 20JZ gLnS SR5( : P0J80 ( R5( : 11B nR5( : 22B . L/ W RATE: QP0 G5( 5U( 5 5RESSURE: / . . 3/ N n/ TT/ ( : 2P00 3M00 5SI

DI. . ERENTIAL 5RESSURE: Q00 5SI

53J WT: 1B1 gI5S S3 WT: 1f Z gI5S R/ T WT: 182 gI5S

T/ R' UE / N3/ . . nT( : f J12 31J2 gLnS . T

( W IN 3/ UT: 88M388 55G VIS Q&

DR/ 55ING RA5ID SWEE5 @S/ A5 STIYgS EVERX Y/ NN6

5U( 5ING HIJVIS SWEE5S EVERX Z00Q RAS H/ LE DIYTATES

YIRYULATING / UTER RESERVE 5IT

N/ TE: ( UD 5U( 5 \$1 WENT D/ WN F 1B00 HRS D/ T/ SWAn AND LINER6

rcx

Tc

Hrd

/ I  
5h7do

/ I  
Yc8o

/ I  
Sem

/ I  
T# o

22:00

0:00

200

21INDR

DRILL

( TRVER

5

or7,as Do,7ad

DRILL 10 Z3bINTER( EDIATE H/ LE . 3ZMCP T3 ZZ&PQAS . / LL/ WS:

5R/ GRESS: 2Q0 . T R/ 5 AVG: P0 . T3HR

W/ n: 20JZ gLnS SR5( : P0J80 ( R5( : 11B nR5( : 22B . L/ W RATE: QP0 G5( 5U( 5 5RESSURE: / . . 3/ N n/ TT/ ( : 1QZ0 31&Z0 5SI

DI. . ERENTIAL 5RESSURE: Q00 5SI

53J WT: 1B1 gI5S S3 WT: 1f Z gI5S R/ T WT: 182 gI5S

T/ R' UE / N3/ . . nT( : f J12 31J2 gLnS . T

( W IN 3/ UT: 88 3B82 55G VIS Q&

DR/ 55ING RA5ID SWEE5 @S/ A5 STIYgS EVERX Y/ NN6

5U( 5ING HIJVIS SWEE5S EVERX Z00Q RAS H/ LE DIYTATES

YIRYULATING / UTER RESERVE 5IT

Tc,7i Tax o

2000

Safety Incident?N

Days since Last RI:QZP00

Weather Comments:

Environ Incident?N

Days since Last LTA:QZP00

Incident Comments:

Nc asvaos,d rol cr,o8 i7d, 2Ohcerd6

M812301Z

B:ZQ10A(

57yo McKO

<div> / 4X USA INY </div> <div> DAILY OPERATIONS PARTNER REPORT </div> <div> Event: DEV DRILLING  Prim. Reason: / RIG DRILL H/ RIC </div> <div> ST ANDREWS UNIT 1220H  USA </div> <div> Date: 12/31/2010  Report No: 11DR </div>							
OPERATIONS							
. rcx	Tc	Hrd	/ I 5h7do	/ I Yc8o	/ I Sem	/ I T# o	/ I or7,as Do,7ad
0:00	Q00	000	21INDR	DRILL	( TRVER	5	DRILL 10 Z3bINTER( EDIATE H/ LE . 3M00Q3 MB10QAS . / LL/ WS:  5R/ GRESS: 00 . T     R/ 5 AVG: 11& . T3HR  W/ n: 20JM gLnS SR5( : 20 ( R5( : 80 nR5( . L/ W RATE: f 00 G5( 5U( 5 5RESSURE: / . . 3/ N n/ TT/ ( : 2PZ0 3MZ0 5SI DI. . ERENTIAL 5RESSURE: Z00 5SI 53J WT: 1POgl5S S3 WT: 1OPgl5S R/ T WT: 1Z&gl5S T/ R' UE/ N 3/ . . nT( : Z&31J2 gLnS . T  ( W IN 3/ UT: B0B 55G  DR/ 55ING RA5ID SWEE5 @S/ A5 STIYgS EVERX Y/ NN6 5U( 5ING HIJVIS SWEE5S EVERX Z00Q RAS H/ LE DIYTATES YIRYULATING / UTER RESERVE 5IT
Q00	P:00	200	21INDR	DRILL	( TRVER	5	DRILL 10 Z3bINTER( EDIATE H/ LE . 3MB10Q3 OI20QAS . / LL/ WS:  5R/ GRESS: 210 . T     R/ 5 AVG: 10Z . T3HR  W/ n: 20JM gLnS SR5( : 20 ( R5( : 80 nR5( . L/ W RATE: f 00 G5( 5U( 5 5RESSURE: / . . 3/ N n/ TT/ ( : 2PZ0 3MZ0 5SI DI. . ERENTIAL 5RESSURE: Z00 5SI 53J WT: 1POgl5S S3 WT: 1OPgl5S R/ T WT: 1Z&gl5S T/ R' UE/ N 3/ . . nT( : Z&31J2 gLnS . T  ( W IN 3/ UT: 10P 55G  DR/ 55ING RA5ID SWEE5 @S/ A5 STIYgS EVERX Y/ NN6 5U( 5ING HIJVIS SWEE5S EVERX Z00Q RAS H/ LE DIYTATES YIRYULATING / UTER RESERVE 5IT
P:00	10:00	000	21INDR	DRILL	( TRVER	5	DRILL 10 Z3bINTER( EDIATE H/ LE . 3OI20Q3 OP1ZQAS . / LL/ WS:  5R/ GRESS: 0BZ . T     R/ 5 AVG: 120. T3HR  W/ n: M0 gLnS SR5( : 00Jf 0 ( R5( : 1P0 nR5( . L/ W RATE: f 2Z G5( 5U( 5 5RESSURE: / . . 3/ N n/ TT/ ( : 2Z00 3M200 5SI DI. . ERENTIAL 5RESSURE: f 00 5SI 53J WT: 1PBgl5S S3 WT: 1PPgl5S R/ T WT: 1&Mgl5S T/ R' UE/ N 3/ . . nT( : &J10 31J2 gLnS . T  ( W IN 3/ UT: 100 3B0 55G  DR/ 55ING RA5ID SWEE5 @S/ A5 STIYgS EVERX Y/ NN6 5U( 5ING HIJVIS SWEE5S EVERX Z00Q RAS H/ LE DIYTATES YIRYULATING / UTER RESERVE 5IT
10:00	11:00	100	21INDR	RIG( T	RE5	5T	2bnLED / . . VALVE RIG . L / R WASHED / UT6YHANGE / UT WHILE W/ RgING 5I5E6
11:00	11:M0	00Z0	21INDR	RIG( T	SRVRIG	5	SERVIYE RIG
11:M0	1Z:M0	000	21INDR	DRILL	( TRVER	5	DRILL 10 Z3bINTER( EDIATE H/ LE . 3OP1ZQ3 Z021QAS . / LL/ WS:  5R/ GRESS: 00P . T     R/ 5 AVG: 102 . T3HR  W/ n: M0JM2 gLnS SR5( : P0J&0 ( R5( : 1Zf nR5( : 21f . L/ W RATE: f 1Z G5( 5U( 5 5RESSURE: / . . 3/ N n/ TT/ ( : 2P00 3M200 5SI DI. . ERENTIAL 5RESSURE: P00 5SI 53J WT: 1fZgl5S S3 WT: 1fMgl5S R/ T WT: 1fOgl5S T/ R' UE/ N 3/ . . nT( : Z&31J2 gLnS . T  ( W IN 3/ UT: B0 3B0 55G OP VIS  DR/ 55ING RA5ID SWEE5 @S/ A5 STIYgS EVERX Y/ NN6 5U( 5ING HIJVIS SWEE5S EVERX Z00Q RAS H/ LE DIYTATES YIRYULATING / UTER RESERVE 5IT
1Z:M0	1P:00	00Z0	21INDR	YIRY	YH/ VR	5	DIS5LAYE &P 55G GEL ( UD F Z000QDIS5LAYE( ENT WAS SL/ W DUE T/ ( UD LINES nEING . R/ CE AND N/ T gEE5ING U5 WITH ( UD 5U( 5S6

## DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING  
Prim. Reason: / RIG DRILL H/ RIC

ST ANDREWS UNIT 1220H  
USA

**Date:** 12/31/2010  
**Report No:** 11DR

<b>Wellbore / Top MD:</b>	00 F 0 K	<b>Rig:</b>	H@ 2PO	<b>Ref Datum:</b>	/ r@ 7i gn F M0ZP@ 0K	<b>DFS:</b>	f @ B
<b>Today's MD:</b>	ZZ&P K	<b>Progress:</b>	21CP K	<b>Ground Elev:</b>	M0M@ 0 K	<b>Daily Cost:</b>	t 00ZZ&
<b>Prev MD:</b>	M000 K	<b>Rot Hrs Today:</b>	22@0 hr	<b>AFE MD/Days:</b>	1B-@000 3MZ& 87#d	<b>Cum Cost:</b>	t BMM220
<b>PBMD:</b>		<b>Avg ROP Today:</b>	Bf @ K3hr	<b>AFE Number:</b>	11&B0f B\$0102	<b>AFE Cost:</b>	t 001f -0f 0

<b>Current Formation:</b>	F Z-20Z@	<b>Lithology:</b>	SAN ANDRES
---------------------------	----------	-------------------	------------

**Current Ops:**

**24-Hr Summary:** DRILL 10.73QH/ LE . R/ ( M00 T/ Z0216DIS5LAYE H/ LE WITH &P GEL ( UD6Y5NTINUE T/ DRILL 10.73QH/ LE T/ ZZ&P0

24-Hr Forecast: )EST RR 12P31Z9R/ L 13B31Z9DRILL 10J30H/ LE6

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS	Avg	Max
Last Casing:	8P2Z3 F B-MZK	Str Wt Up/Dn:	1B103 1f Z0 u4	Pump Rate:	0Z80	Conn:		
Next Casing:	Z6Z00A F 1B-800K	Str Wt Rot:	1820 u4	Pump Press:	18Z0	Trip:		
Last BOP Press Test:	123012010	Torq Off Btm:	f-0000 KJnt			Backgr:		
Form Test/EMW:	IT 31M8111y	Torq On Btm:	12-0000 KJnt					

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	( / N. / RD YRA. T	MD	Incl	Azi	TVD	N/-S	E/-W	VS	DLS	Build
Supervisor 2:	R/ nERT S/ TELL/	Z-B2100	100	f 000	Z-B1B0P0	1P0	B200	00	000	000
Engineer:	gEVIN THREADGILL	Z-f M00	100	0000	Z-f 2B0 2	120	B00M	00	00P	000
Geologist:	Sex #7h Ahx o8	Z-ZO100	100	f P00	Z-ZMB00	100	000	0P	001	000
Oxy Personnel:	M	Z-M2100	100	f f 00	Z-MCB0B	120	f B0M	00	001	001
Contractor Personnel:	12	Z-Z2P00	1P0	f P00	Z-Z2CBM	120	f P0P	00	000	000
Total on Site:	12	Z-1P100	1P0	f Z00	Z-1ZBBP	110	f 00	00	00P	00P

## BIT RECORD

Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
RR2	10.625	VAREL	RS616XH	4007783	S432	Bw12	2888	7975	2.2hTJA	4JhTJR
2	10.625	VAREL	RS616XH	4007783	PDC	Bw12	1838	2888	0.0JN/ JG	4JN/ JDT

## BIT OPERATING PARAMETERS TODAY

Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB x 33.7w	RPM x 33.7w	TFA	P Drop Bit	Noz Vel	HHPSI
RR2	2260	2P60	210P	2PB8	Bf 67	10M8	2003.20	203110	06B0	20f	10f 8	0P

MUD DATA - M-I LLC (Schlumberger)			LAST OR CURRENT BHA					
Engineer: Sh7so nersd		MBT:	nHA Nc: M	na Nc:	RR2	( D Is:	2&&K	
Sample From: ls )Sev,as 5a9		pH:	5er cdo:				( D / e,:	f Bf Z K
Mud Type: Yio7r W7,or		Pm / Pom:	Component		OD	ID	Jts	Length
Time / MD: 1P.01 3Z-0ZP0	3	Pf / Mf:	5DY nIT	106P2Z	26f Z	1	1600	
Density @ Temp: 106P0 3f 2		Chlorides:	5/ SITIVE DIS5LAYE( ENT ( / T/ R	8600	26f Z	1	MOB0	
Rheology Temp: 120	3	Ca++ / K+:	YR/ SS/ VER	8600	26f Z	1	26P0	
Viscosity: M200		CaCl2:	UNDERGAUGE INTEGRAL nLADE STAnLIK	106Z00	26Z00	1	Z6I1	
PV / YP: 1 31		Cl- in water phase:	( WD T/ / L	8600	26f Z	1	Mi6P0	
Gels 10s/10m/30m: 1 31 31		Lime:	UNDERGAUGE INTEGRAL nLADE STAnLIK	106Z00	26 Z0	1	Z6P&	
API WL:		ES:	DRILL Y/ LLAR	8600	M600	P	1&26P&	
HTHP WL:		ECD:	YR/ SS/ VER	P6Z00	M600	1	M6I1	
Cake API / HTHP: 3		n / K:	DRILL Y/ LLAR	P6Z00	M600	P	1&26Pf	
Solids / Sol Corr: 3		Carbonate:	HWd5	06Z00	26 Z0	MD	B206 I 0	
Oil / Water: 31000		Bicarbonate:	DRILL 515E	06Z00			P-PO0&P	
Oil / Water % for OWR: 3		Form Loss / Cum Loss: 00 3 00						
Sand:		Fluid Disch: 3						
Water Added:		Daily Mud Cost: t BCB						
Oil Added:		Cum Mud Cost: t 2MPO&						
LGS: 3								

## MUD PRODUCTS

[illegible]



## DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING  
 Prim. Reason: ORIG DRILL HORIY

ST ANDREWS UNIT 1220H  
 USA

Date: 01301301M  
 Report No: 12DR

## Other Remarks:

UNIVERSIT4 ST5ANDREWS UNIT 7 1220DH

. \$x K o lgl6\$yovkcg cPHs t k da f , Mdg# Hs t k da 1CZ g Ag# \$ok y@owdy@ \$po 25l x soy EdyKcg Hs t k da 1CZ K gl6\$yovkcg cP  
 Hs t k da 1CZ dg# Hs t k da 11M5 Te\$g rPK)Nc\$K odyKcg Hs t k da 11M5 . \$x gl6\$yovkcg cPHs t k da 11Mdg# Hs t k da 1CZ@ \$po  
 Z5Mx soy Nc\$K odyKcg Hs t k da 11M5 AKgl6\$yovkcg cPHs t k da 11Mdg# . Q 1C , , @cgkgeo yHs t K)Nc\$K odyK15  
 x soy... \$K og K\$ \$ t K)SceK 9cgK rdyo \$d#5 D\$po 15Mx soy dg# K\$g rPK)EdyKcgK rdyo \$d#5 D\$po 05Z x soy dg# \$d#  
 k smx dno d yrs t Kbog# K K o \$ t K)SceK 95 AKbog# g \$cd#@cgkgeo EdyKc\$dgck o\$03 x soy )\$cd# k smK\$g rPKc\$Nc\$K dR6\$  
 05Z x soy9dg# d\$po dKugpo\$y46 SKAg#\$ok y UgsK71220DH cg WoyKys#o cP\$d#5

HELIXOr TER: ) , , 9Z28B MC1 3), 009Z2CBf CZ 3), 009282B166

LI. E . LIGHT XOORDINATES: / : 862@225f'4: 26M@ f 5M

LdK f 2° 22' M 50M N Lcgi : 102° 2f ' 0Z5Z0" W NAD 2CELEVATION f @f 15l(  
 ZM(. NL / , ff' . EL@EXTION 12@ LOXF f @ANDREWS XOUNT4@E/ AS

O/ 4 DSQ TRAILER: 2, 1B f f B2CM

NOTI. 4 TRRX O. INTENT TO Sr UD AND RUN SUR. AXE XASING : 123231& Sr OFE TO XIND4 TRRX EQr LO4EE@OI  
 721M2

NOTI. IED TRRX O. INTENT TO RUN AND XEQENT 65Z2M INT XASING

NOTI. IED TRRX O. INTENT TO RUN AND XEQENT MM INT XASING :

UgydR AvK:12

SdR AvK: Z

UgydR Egeaux ogK0

SWA:0

Nod\$Qsyoy:0

Wc\$ny6 "SA: 1Z

SdR K Qoolgi y:M

LO3O:Z

r o\$K \$y K c \$m &amp;

r ck o\$Lgo Xt ovmyK 12316301&amp;

r \$o Sue#R\$ lgyuovKgy:

Hdzd\$ IDy:0

Eu2 Obyo\$pdKgy:0

I EST STOr XARD: EQr LO4EE XHlr r r ING IXE . ROQ HAND RAIL WITH OUT A . AXESHILED5TOLD EQr LO4EE TO GET  
 A . AXE SHIELD5EQr LO4EE XOQr LIED AND XONTINUED WITH OUT INXIDENT5

## DAILY OPERATIONS PARTNER REPORT

**Event:** DEV DRILLING  
**Prim. Reason:** ORIG DRILL HORIY

ST ANDREWS UNIT 1220H  
USA

**Date:** 013013201M  
**Report No:** 12DR

Time	Time	Hour	Unit	Unit	Unit	Unit	Unit
12:00	12:00	8:00	21INDR	DRILL	QTRVER	r	DRILL 10 M J INTERQEDATE HOLE . 3ZCZ T3C1MM @AS . OLLOWS:  r ROGRESS: 806 . T ROr AVG: 120 . T3HR  WOI : f 0B M FLI S SRr Q: Z0B 0 QRr Q: 1f 2 I Rr Q: 162 . LOW RATE: Z00 Gr Q r UQr r RESSURE: O. . 3ON I OTTOQ: 28M 32M 0 r SI DI. . ERENTIAL r RESSURE: f 00 r SI r 3J WT: 21Z Flr S S3D WT: 20, Flr S ROT WT: 210 Flr S TOR' UE ON 30. . I TQ: 6B1 3f B FLI S . T  QW IN 3OUT: 65 365 r r G VIS &2  DROr r ING RAr ID SWEEr h SOAr STIXFS EVER4 XONN5 r UQr ING HIB/IS SWEEr S EVER4 M0(OR AS HOLE DIXTATES XIRXULATING OUTER RESERVE r IT
12:00	1C:00	1:00	21INDR	XIRX	XND. LD	r	XIRXULATE WHILE ADDING GEL QUD TO XUT QUD WEIGHT I AXF TRANS. ER r UQr S XOULDNT FEEr Ur DUE TO I E IXED Ur @WHILE DUQr ING QUD5
1C:00	1, :00	1:00	21INDR	DRILL	QTRVER	r	DRILL 10 M J INTERQEDATE HOLE . 3C1MMT3C16& @AS . OLLOWS:  r ROGRESS: f 6 . T ROr AVG: f 6 . T3HR  WOI : f 0B M FLI S SRr Q: Z0B 0 QRr Q: 116 I Rr Q: . LOW RATE: Z2MGr Q r UQr r RESSURE: O. . 3ON I OTTOQ: 28M 32, M 0 r SI DI. . ERENTIAL r RESSURE: M00 r SI r 3J WT: 21C Flr S S3D WT: 206 Flr S ROT WT: 211 Flr S TOR' UE ON 30. . I TQ: 6B1 3f B FLI S . T  QW IN 3OUT: 65 365 r r G VIS &2  DROr r ING RAr ID SWEEr h SOAr STIXFS EVER4 XONN5 r UQr ING HIB/IS SWEEr S EVER4 M0(OR AS HOLE DIXTATES XIRXULATING OUTER RESERVE r IT
1, :00	22:00	8:00	21INDR	DRILL	QTRVER	r	DRILL 10 M J INTERQEDATE HOLE . 3C16& T3C&0 @AS . OLLOWS:  r ROGRESS: 2CZ . T ROr AVG: Z6 . T3HR  WOI : f 0B M FLI S SRr Q: Z0 QRr Q: 116 I Rr Q: 16C . LOW RATE: Z2MGr Q r UQr r RESSURE: O. . 3ON I OTTOQ: 2ZM 3f 2M 0 r SI DI. . ERENTIAL r RESSURE: Z00 r SI r 3J WT: 222 Flr S S3D WT: 21f Flr S ROT WT: 21Z Flr S TOR' UE ON 30. . I TQ: 6B1 3f B FLI S . T  QW IN 3OUT: 65 365 r r G VIS &2  DROr r ING RAr ID SWEEr h SOAr STIXFS EVER4 XONN5 r UQr ING HIB/IS SWEEr S EVER4 M0(OR AS HOLE DIXTATES XIRXULATING OUTER RESERVE r IT
22:00	0:00	2:00	21INDR	DRILL	QTRVER	r	DRILL 10 M J INTERQEDATE HOLE . 3C&0 T3C22& @AS . OLLOWS:  r ROGRESS: 1M& . T ROr AVG: CC. T3HR  WOI : f 0B M FLI S SRr Q: Z0 QRr Q: 116 I Rr Q: 16C . LOW RATE: Z2MGr Q r UQr r RESSURE: O. . 3ON I OTTOQ: 2Z00 3f 0M 0 r SI DI. . ERENTIAL r RESSURE: &M 0 r SI r 3J WT: 22M Flr S S3D WT: 216 Flr S ROT WT: 221 Flr S TOR' UE ON 30. . I TQ: 6B1 3f B FLI S . T  QW IN 3OUT: 65 365 r r G VIS &2  DROr r ING RAr ID SWEEr h SOAr STIXFS EVER4 XONN5 r UQr ING HIB/IS SWEEr S EVER4 M0(OR AS HOLE DIXTATES XIRXULATING OUTER RESERVE r IT

TCKnTsx o	2850		
Safety Incident?	N	Days since Last RI:	&MC500
Environ Incident?	N	Days since Last LTA:	&MC500
Incident Comments:		Weather Comments:	
No svs#ogky \$ouc\$0# rdyK2&t ce\$y5			

O/ 4 USA INX							
Event: DEV DRILLING				ST ANDREWS UNIT 1220H			
Prim. Reason: ORIG DRILL HORIY				USA			
Date: 01301301M				Report No: 12DR			
OPERATIONS							
. \$cx	Tc	H\$y	Ou r t dyo	Ou Xc#o	Ou Seb	Ou Tauo	Ouo\$1kg Dok\$y
0:00	&:00	800	21INDR	DRILL	QTRVER	r	DRILL 10 M JINTERQEDIATE HOLE . 3MM Z T3M 6Z @AS . OLLOWS:  r ROGRESS: f 10 . T      ROr AVG: C , . T3HR  WOI : f 0 B M FLI S   SRr Q: 110 QRr Q: 116 I Rr Q: 2&C . LOW RATE: Z2MGr Q r UQr r RESSURE: O . . 3ON I OTTOQ: 2&M 32, M0 r SI DI . . ERENTIAL r RESSURE: 800 r SI r 3J WT: 161 Flr S   S3D WT: 10MFlr S   ROT WT: 1, 2 Flr S TOR' UE ON 3O . . I TQ: C312 31B FLI S . T  QW IN 3OUT: , 3C362 r r G VIS &  DROr r ING RAr ID SWEEr h SOAr STIXFS EVER4 XONN5 r UQr ING HIB/IS SWEEr S EVER4 M0(OR AS HOLE DIXTATES XIRXULATING OUTER RESERVE r IT NOTE: QUD r UQr 71 I AXF ON LINE AT 0f 00 HRS5
&:00	Z:00	200	21INDR	DRILL	QTRVER	r	DRILL 10 M JINTERQEDIATE HOLE . 3M 6Z T3Z10& @AS . OLLOWS:  r ROGRESS: 20, . T      ROr AVG: 10& . T3HR  WOI : f 0 B M FLI S   SRr Q: Z0B 0 QRr Q: 116 I Rr Q: . LOW RATE: Z2MGr Q r UQr r RESSURE: O . . 3ON I OTTOQ: 2&M 32, M0 r SI DI . . ERENTIAL r RESSURE: M00 r SI r 3J WT: 16f Flr S   S3D WT: 10CFlr S   ROT WT: 1, & Flr S TOR' UE ON 3O . . I TQ: 6B1 3f B FLI S . T  QW IN 3OUT: 6& 36& r r G VIS &2  DROr r ING RAr ID SWEEr h SOAr STIXFS EVER4 XONN5 r UQr ING HIB/IS SWEEr S EVER4 M0(OR AS HOLE DIXTATES XIRXULATING OUTER RESERVE r IT NOTE: QUD r UQr 71 I AXF ON LINE AT 0f 00 HRS5
Z:00	, :f 0	250	21INDR	DRILL	QTRVER	r	DRILL 10 M JINTERQEDIATE HOLE . 3Z10& T3Z& 1 @AS . OLLOWS:  r ROGRESS: f 2C . T      ROr AVG: 1f 1 . T3HR  WOI : f 0 FLI S   SRr Q: Z0B 0 QRr Q: 116 I Rr Q: . LOW RATE: Z2MGr Q r UQr r RESSURE: O . . 3ON I OTTOQ: 2C00 3f &00 r SI DI . . ERENTIAL r RESSURE: 00Z r SI r 3J WT: 20, Flr S   S3D WT: 16Z Flr S   ROT WT: 20, Flr S TOR' UE ON 3O . . I TQ: 6B1 3f B FLI S . T  QW IN 3OUT: 6& 365 r r G VIS &2  DROr r ING RAr ID SWEEr h SOAr STIXFS EVER4 XONN5 r UQr ING HIB/IS SWEEr S EVER4 M0(OR AS HOLE DIXTATES XIRXULATING OUTER RESERVE r IT
, :f 0	6:00	050	21INDR	XIRX	XND. LD	r	XIRXULATE AT REDUXED RATE WHILE UN. REEYING . LOW LINE VALVES5 WAS LOSING A SUI STANTUAL AQOUNT O. QUD OVER SHAFERS DUE TO NO I EING AI LE TO DIVERT QUD TO OTHER SHAFERS5
6:00	11:f 0	250	21INDR	DRILL	QTRVER	r	DRILL 10 M JINTERQEDIATE HOLE . 3Z& 1 T3ZZC @AS . OLLOWS:  r ROGRESS: 2&M . T      ROr AVG: 6, . T3HR  WOI : f 0 B M FLI S   SRr Q: Z0B 0 QRr Q: 116 I Rr Q: . LOW RATE: Z2MGr Q r UQr r RESSURE: O . . 3ON I OTTOQ: 2M0 3f &0Z r SI DI . . ERENTIAL r RESSURE: 600 r SI r 3J WT: 21f Flr S   S3D WT: 201 Flr S   ROT WT: 211 Flr S TOR' UE ON 3O . . I TQ: 6B1 3f B FLI S . T  QW IN 3OUT: 6& 36& r r G VIS &M  DROr r ING RAr ID SWEEr h SOAr STIXFS EVER4 XONN5 r UQr ING HIB/IS SWEEr S EVER4 M0(OR AS HOLE DIXTATES XIRXULATING OUTER RESERVE r IT
11:f 0	12:00	090	21INDR	RIGQT	SRVRIG	r	SERVIXE RIG

O/ 4 USA INX

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

Prim. Reason: ORIG DRILL HORIY

ST ANDREWS UNIT 1220H

USA

Date: 01301301M

Report No: 12DR

Wellbore / Top MD: 00 - 0 RK

Rig: Hhr 2Z&

Ref Datum: O\$ gdnFI - f @M230RK

DFS: , 516

Today's MD: CZC&RK

Progress: 20, , RK

Ground Elev: f @f 1510 RK

Daily Cost: 8&&@f C

Prev MD: MM Z RK

Rot Hrs Today: 2f 50 t \$

AFE MD/Days: 16@005 3f M\$ #day

Cum Cost: 8600@21

PBMD: 605 fR\$

Avg ROP Today: 605 fR\$

AFE Number: 11, 60C670102

AFE Cost: 8&@1C@C&

Current Formation: XLEAR. ORF- Q@MM0

Lithology:

Current Ops:

24-Hr Summary: DRILL 10 M8 J INTERQEDiate HOLE . 3M Z(T306M5

24-Hr Forecast: )EST RR 13231M)ROL 13631M8DRILL 10M8 ((HOLE5

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg		Max	
Last Casing:	, 52Mg - 6@f MK	Str Wt Up/Dn:	22f 503 21250 n\$	Pump Rate:	f 2&5	Conn:					
Next Casing:	MM00g - 16@00RK	Str Wt Rot:	22050 n\$	Pump Press:	f 000	Trip:					
Last BOP Press Test:	12301301&	Torq Off Btm:				Backgr:					
Form Test/EMW:	. IT 31f 5 , uui	Torq On Btm:									

PERSONNEL		SURVEY DATA (LAST 6)									
Supervisor 1:	QON. ORD XRA. T	MD	Incl	Azi	TVD	N/-S	E/-W	VS	DLS	Build	
Supervisor 2:	XAr OLIVAREY	C@805	15 0	12&50	C@f , 52Z	205Z	12C5M	C&	05 ,	0521	
Engineer:	FEVIN THREADGILL	C@M15	050	625 0	C@86526	215	12&5	MM	050M	050M	
Geologist:	Sex sadt At x o#	C@M65	05 0	6050	C@M3 1	225	1215&	&5	0510	050M	
Oxy Personnel:	2	Z@Z, 5	050	0650	Z@Z75 &	215C	11, 5Z	&5M	0511	0510	
Contractor Personnel:	12	Z@CM0	1510	, f 520	Z@Cf 5 Z	215Z	11M5	&5Z	052&	0522	
Total on Site:	1&	Z@6f 5	1510	CM&0	Z@615&1	205&	1115Z	&51	050M	050M	

BIT RECORD

Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
RR2	10.625	VAREL	RS616XH	4007783	S432	6w12	2888	7975	252B TBA	/ BB TB R

BIT OPERATING PARAMETERS TODAY

Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB	RPM	TFA	P Drop Bit	Noz Vel	HHPSI
RR2	2f 500	86500	20f ,	&Cf Z	, , 5Z	6Z5	x g3k dw	x g3k dw	056&	f C&	2065Z	15Z

MUD DATA - M-I LLC (Schlumberger)						LAST OR CURRENT BHA						
Engineer:	St dgo l e\$gy	MBT:		I HA Nc:	f	I \$Nc:	RR2	QD Ig:	2, , , RK			
Sample From:	Ig )Sevt&g r \$9	pH:		r e\$ucyo:		QD OeK		C6CMRK				
Mud Type:	Xrod\$Wd16\$	Pm / Pom:				Component	OD	ID	Jts	Length		
Time / MD:	1Z:01 3C@M 5	Pf / Mf:	3			r DX I IT	105Z2M	25 CM	1	1500		
Density @ Temp:	65M0 3MZ	Chlorides:				r OSITIVE DISr LAxEQENT QOTOR	, 5000	25 CM	1	f 8&60		
Rheology Temp:	120	Ca++ / K+:	3			XROSSOVER	, 5000	25 CM	1	2526		
Viscosity:	82500	CaCl2:				UNDERGAUGE INTEGRAL I LADE STAI ILIY	105M00	25M00	1	M811		
PV / YP:	M31M	Cl- in water phase:				QWD TOOL	, 5000	25 CM	1	f 1520		
Gels 10s/10m/30m:	10 312 31f	Lime:				UNDERGAUGE INTEGRAL I LADE STAI ILIY	105M00	25CM0	1	MZ,		
API WL:	20500	ES:				DRILL XOLLAR	, 5000	f 5000	Z	1, 25Z,		
HTHP WL:		ECD:	650f			XROSSOVER	Z5M00	f 5000	1	f 511		
Cake API / HTHP:	250 3	n / K:	3			DRILL XOLLAR	Z5M00	f 5000	Z	1, 25ZC		
Solids / Sol Corr:	3	Carbonate:				HWDr	85M00	25CM0	f 0	620500		
Oil / Water:	310050	Bicarbonate:				DRILL r Ir E	85M00			Z@0&5 Z		
Oil / Water % for OWR:	3	Form Loss / Cum Loss:	050 3 050									
Sand:	1500	Fluid Disch:	3									
Water Added:		Daily Mud Cost:	81@2&									
Oil Added:		Cum Mud Cost:	82&@C1									
LGS:	3											
VG Meter:	20- f 00 32M Z00					Total Length:	1@C051 & RK	Wt below Jars:				
Comments:												

MUD PRODUCTS

Product	Number of Units	Units	Qty Used
I rck o\$RogkIn	1500	odvt	1500
I emTdgMROgkIn	1500	odvt	2500
Lsx o	1500	odvt	10500
Qe# So\$po B2&H\$	1500	#da	1500

f 312301M

6:M:06AQ

r di o 1 cP&

OXY USA INC											
DAILY OPERATIONS PARTNER REPORT											
Event:		DEV DRILLING				Date:		01/02/2014			
Prim. Reason:		ORIG DRILL HORIZ				USA		Report No:		19DR	
57m	Tw	H7	Op	Op	Op	Op	Ope7y1gW Del7y1gF				
1P:00	1f:90	1r40	21INDR	TRIK	( HA	KT	KIC3 UK 10 4/P& ( HA d9 AS 5OLLOWS: SUR5ACE TEST ISYS TOOL AND - OTOR )GOOD@  10 4/P-KDC QM( A3ER ' 0' ' 1P&@ P-( yke7U17y XL r22 Rev/nyFc /t7y10@V/10r964 10 1/2-I( S 1 " U( HO li si MwF)INC/AZI t7m AI- Dgebl7y1gF@ 1 " N- DC 10 1/2-I( S ' " P-DC XO ' x' x1/2-DC 90 HWDK  5/SUR5ACE T/1960& INSTALL ROTATING HEAD				
1f:90	20:00	0r40	21INDR	RIG- T	SRVRIG	KT	SERVICE RIG AND TOKDRIVE				
20:00	20:90	0r40	21INDR	TRIK	( HA	KT	TRIK IN HOLE 5/ P1&T/ 400&				
20:90	21:90	1r00	21INDR	RIG- T	REK	KT	WOR3 ON STxP08REKLACED 9 HYDRAULIC HOSES AND 5ITTING& 8DUE TO LEA3ING				
21:90	0:00	2r40	21INDR	TRIK	DRILL	KT	TRIK IN HOLE 5/ 400&T/ 2&60085ILLING KIKE EVERY 20 STDS8  HOLE GIVING KROKER DISKLACE- ENT				
Tw7y1gFt7y1gF		2Br00									
Safety Incident?		N		Days since Last RI:		B4Pr00		Weather Comments:			
Environ Incident?		N		Days since Last LTA:		B4Pr00					
Incident Comments:											
Nw7y1gFt7y1gF M 7epw7da fyi M2B \$wu7r											
Other Remarks:											
UNIVERSITY STR ANDREWS UNIT d 1220DH 57m 19e 11 M7 ebl7y1gF wt Hgn\$cy s 9P4 yl a Hgn\$cy s 16' 7 Al a7ec i 8Teoyi 8a7ye 2r1 m7gei Eyi Mw Hgn\$cy s 16' M7 d M7 ebl7y1gF wt Hgn\$cy s 16' yl a Hgn\$cy s 114r Tu7 f7etM7Nw7y1gF M7 Hgn\$cy s 114r 57m 7 d M7 ebl7y1gF wt Hgn\$cy s 114 yl a Hgn\$cy s 16' 8a7ye ' r64 m7gei Nw7y1gF Mw Hgn\$cy s 114r AM7 M7 ebl7y1gF wt Hgn\$cy s 114 yl a 5- 16PP8bw M7 ue i M7ygn\$M7Nw7y1gF M7 rP m7gei ...m7gei M7 7gn\$MSwu7y1gF M7 r7eyi e 7wyar D7ye 1r 4 m7gei yl a M7 f7etMEyi M7 M7 r7eyi e 7wyar D7ye 0r m7gei yl a 7wa c7Fmyke y i f7gn\$M7el a M7 19e 7gn\$MSwu7y1gF @ AM7el a 7 7wa8bw M7 ue Eyi Mw7yl w7ge70rB m7gei )7wa c7F M7 f7etM7Nw7y1gF ytl7 0r2 m7gei @l a y77ye yM7l gre7 7d SMAl a7ec i Ul 7d M71220DH w Wei M7ge wt 7wyar  HELICOKTER: )PPP@ 2Bx9461 / )P00@ 26x296' / )P00@ 2B2x 1ff L15E 5LIGHT COORDINATES: X: Bf 2B22r19' Y: 2f 4B0P9r24'  LyM 92° 22' 49r04--N Lw n: 102° 29' 0' r' 0--W NAD 26 ELEVATION 9B091r1& ' 40&5NL X P99' 5EL8SECTION 128( LOC3 98 ANDREWS COUNTY8TEXAS  OXY DS- TRAILER: 2P1xP99x2624 NOTI5Y TRRC O5 INTENT TO SKUD AND RUN SUR5ACE CASING : 12/22/1B SKO3E TO CINDY TRRC E- KLOYEE8JO( d2140' NOTI5IED TRRC O5 INTENT TO RUN AND CE- ENT f r' 24. INT CASING NOTI5IED TRRC O5 INTENT TO RUN AND CE- ENT 4r4. INT CASING : Ul i yte AbM:9 Syte AbM: ' Ul i yte Equ7mel M0 SWA:0 Ney7- 7i ei :0  Ww7ki 7d JSA: 12 Syte7d - eeM7 ni :f LO/TO:2 Ke7m7d M7c w7k: 2 Kwc e7L7e C7Seb7k7 M12/1f /201B K7e Spua/Rgn 1l i pebl7y1gF i : Hyzy7a ID'i :0 Ep2 OQ e7y7y1gF i :0  ( EST STOK CARD: O( SERVED E- KLOYEE WAL3ING DOWN STAIRWAY NOT USING 9 KOINT CONTACT WHILE STAIRWAY 5ROZEN8STOKKED HI- EXKLAINED AND SHOWED HI- DANGERS HE CO- KLIED JO( CONTINUED SA5ELY											

OXY USA INC											
DAILY OPERATIONS PARTNER REPORT											
Event:		DEV DRILLING				ST ANDREWS UNIT 1220H		Date:		01/02/2014	
Prim. Reason:		ORIG DRILL HORIZ				USA		Report No:		19DR	
OPERATIONS											
57m	Tw	H7	Op K\$yi e	Op Cwae	Op SuQ	Op Tspe	Ope7y1n Del7y7				
0:00	B:00	Br00	21INDR	DRILL	- TRVER	K	DRILL 10 4/P. INTER- EDIATE HOLE 5/ 6' 2B T/ 6PP28AS 5OLLOWS:  KROGRESS: 24P 5T      ROK AVG: ' Br4 5T/HR  WO( : 90x94 3L( S SRK- : ' 0 - RK- : 11f ( RK- : 1f 6 5LOW RATE: ' 24 GK- KU- K KRESSURE: O55 / ON ( OTTO- : 2' 00 / 9200 KSI DI55ERENTIAL KRESSURE:' 00 KSI K/U WT: 22' 3IKS S/O WT: 216 3IKS ROT WT: 221 3IKS TOR" UE ON / O55 ( T- : f x11 / 9xB 3L( S 5T  - W IN / OUT: f r9 / f r2 KKG VIS B2  DROKING RAKID SWECK , SOAK STIC3S EVERY CONNr KU- KING HIXVIS SWECKS EVERY 400&OR AS HOLE DICTATES CIRCULATING OUTER RESERVE KIT				
B:00	' :00	2r00	21INDR	DRILL	- TRVER	K	DRILL 10 4/P. INTER- EDIATE HOLE 5/ 6PP2 T/ 6f 448AS 5OLLOWS:  KROGRESS: 69 5T      ROK AVG: 9' 5T/HR  WO( : 90x94 3L( S SRK- : ' 0 - RK- : 11f ( RK- : 1f 6 5LOW RATE: ' 24 GK- KU- K KRESSURE: O55 / ON ( OTTO- : 2' 00 / 9100 KSI DI55ERENTIAL KRESSURE: 400 KSI K/U WT: 292 3IKS S/O WT: 22' 3IKS ROT WT: 22f 3IKS TOR" UE ON / O55 ( T- : f x11 / 9xB 3L( S 5T  - W IN / OUT: f r9 / f r2 KKG VIS B2  DROKING RAKID SWECK , SOAK STIC3S EVERY CONNr KU- KING HIXVIS SWECKS EVERY 400&OR AS HOLE DICTATES CIRCULATING OUTER RESERVE KIT				
' :00	P:00	2r00	21INDR	DRILL	- TRVER	K	DRILL 10 4/P. INTER- EDIATE HOLE 5/ 6f 44 T/ 6f 648AS 5OLLOWS:  KROGRESS: 20 5T      ROK AVG: 10 5T/HR  WO( : B0 3L( S SRK- : ' 0 - RK- : 1B9 ( RK- : 209 5LOW RATE: ' 40 GK- KU- K KRESSURE: O55 / ON ( OTTO- : 2' 00 / 2f 40 KSI DI55ERENTIAL KRESSURE: 940 KSI K/U WT: 299 3IKS S/O WT: 22' 3IKS ROT WT: 22f 3IKS TOR" UE ON / O55 ( T- : f x11 / 9xB 3L( S 5T  - W IN / OUT: f r9 / f r2 KKG VIS 9'  DROKING RAKID SWECK , SOAK STIC3S EVERY CONNr KU- KING HIXVIS SWECKS EVERY 400&OR AS HOLE DICTATES CIRCULATING OUTER RESERVE KIT				
P:00	f :00	1r00	21INDR	CIRC	CNDHOL	K	CIRCULATE ( U h ' 40 GK- 2' 00 KSI RK- 100r CHEC3 5LOW8KU- K SLUG8( LOW DOWN STAND KIKE ( AC3 TO - UD KU- KS  SA5ETY ( REA3: WEATHER CONDITIONS				
f :00	10:00	1r00	21INDR	RIG- T	REK	KT	WOR3 ON STxP0 WHILE WOR3ING KIKE				
10:00	1B:00	Br00	21INDR	TRIK	DRILL	KT	KULL OUT O5 HOLE 5/6f 64&T/19' 0& NO EXCESS DRAG HOLE TA3ING KROKER 5ILL  SA5ETY ( REA3: SLIK TRIKS AND 5ALLS				
1B:00	1P:00	Br00	21INDR	TRIK	DRILL	KT	KULL OUT O5 HOLE 5/19' 0&T/ SUR5ACEr LAY DOWN - UD - OTOR AND ( ITr				
9/12/2014      f :4B:0' A-      Kyne 2 wt 9											

## DAILY OPERATIONS PARTNER REPORT

**Event:** DEV DRILLING  
**Prim. Reason:** ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
USA

**Date:** 01/02/2014  
**Report No:** 19DR

<b>Wellbore / Top MD:</b>	00 h 0 tM	<b>Rig:</b>	H, K 2' B	<b>Ref Datum:</b>	07nd yF3( h 98d r10tM	<b>DFS:</b>	f r1f
<b>Today's MD:</b>	6f 64 tM	<b>Progress:</b>	901 tM	<b>Ground Elev:</b>	98d91r10 tM	<b>Daily Cost:</b>	#' ' 8 B6
<b>Prev MD:</b>	6' B tM	<b>Rot Hrs Today:</b>	Pr00 \$7	<b>AFE MD/Days:</b>	1f 8P00r / 94rP aysi	<b>Cum Cost:</b>	#18B9f 0P
<b>PBMD:</b>		<b>Avg ROP Today:</b>	96r' tM\$7	<b>AFE Number:</b>	11Pf 06f d0102	<b>AFE Cost:</b>	#B80168d6B

Current Formation:	CLEAR5OR3h 68200r0
--------------------	--------------------

**Lithology:**

**Current Ops:**

**24-Hr Summary:** DRILLED 10 4/P. INTER- EDIATE HOLE 5/68' B&T/ 68 6488TRIK 5OR ( IT AND - OTOR DUE TO SLOW ROK8TRIK IN T/ 2800&

**24-Hr Forecast:** )EST RR 1/2' /14@ROL 1/2f /14@DRILL 10 4/P. INTER- EDIATE HOLE AS KER KROGRA-

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS	Avg	Max
Last Casing:	P <sub>r</sub> 24g h f 8994tM	Str Wt Up/Dn:	299r0/ 22' r0 kg	Pump Rate:	4B1r9	Conn:		
Next Casing:	4r400g h 1f 8P00tM	Str Wt Rot:	22f r0 kg	Pump Press:	2640	Trip:		
Last BOP Press Test:	12/01/201B	Torq Off Btm:				Backgr:		
Form Test/EMW:	5IT / 19r9P ppn	Torq On Btm:						

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	- ON5ORD CRA5T	MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
Supervisor 2:	CAK OLIVAREZ	P8PPt0	2r90	121f 0	P8P4r64	4rB	149r	2P0	0r2f	0r04
Engineer:	3EVIN THREADGILL	P8lf Br0	2r20	106rP0	P8lf 1rf 0	Pt	1B r6	29r9	0rBB	0rB9
Geologist:	Sum\$y\$A\$mea	P80f r0	1rB0	109r 0	P80r ff f	10r2	1B1r1	20r	0r4P	x0r96
Oxy Personnel:	9	68P1f r0	2r10	192r40	68P16r0P	19r1	19r r9	1r r6	0r1r	0r1r
Contractor Personnel:	12	68 2f r0	1rP0	191rP0	68 26r1f	16r4	191r4	11rB	0r2f	0r2r
Total on Site:	14	68BB0r0	1r90	12Br00	68B9Pr2'	20r	126r4	6rB	0r9P	0r21

## BIT RECORD

Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
3	10.625	BAKER	RS616XH	7155014	S432	' o14	7975	8895	1x1xCTxG	XxCTx C
RR2	10.625	VAREL	RS616XH	4007783	S432	f o12	2888	7975	2x2x TxA	XxTx T xKR

## BIT OPERATING PARAMETERS TODAY

Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB mg /myo	RPM mg /myo	TFA	P Drop Bit	Noz Vel	HHPSI
RR2	Pr00	46r00	901	4096	96r	PPR	20r0/90r0	B0/ 0	0rf f B	960	20f rP	1r9

## MUD DATA - M-I LLC (Schlumberger)

Engineer:	S Syle (u7 i
Sample From:	Il )SubM K100
Mud Type:	Cley7Wym7
Time / MD:	:01 / 68 64r0
Density @ Temp:	f rB0 / f 4
Rheology Temp:	120
Viscosity:	94r00
PV / YP:	9 / 14
Gels 10s/10m/30m:	11 / 12 / 12
API WL:	20r00
HTHP WL:	
Cake API / HTHP:	2r0 /
Solids / Sol Corr:	/
Oil / Water:	/ 100r0
Oil / Water % for OWR:	/
Sand:	0r40
Water Added:	
Oil Added:	
LGS:	/

MBT:	
pH:	
Pm / Pom:	
Pf / Mf:	/
Chlorides:	
Ca++ / K+:	/
CaCl2:	
Cl- in water phase:	
Lime:	
ES:	
ECD:	
n / K:	/
Carbonate:	
Bicarbonate:	
Form Loss / Cum Loss:	0r0 / 0r0
Fluid Disch:	/
Daily Mud Cost:	#2816
Cum Mud Cost:	#2681Pf

## LAST OR CURRENT BHA

( HA Nw. B	( dNw. 9	- D II :	6f 64 tM
------------	----------	----------	----------

Ku7bw e: DRILL 10 4/P. INTER- EDIATE HOLE SECTION- D OuM Ppf 4 tM

Component	OD	ID	Jts	Length
KDC ( IT	10r 24	2rP64	1	1r00
KOSITIVE DISKLACE- ENT - OTOR	Pr000	2rP64	1	9Brf P
CROSSOVER	Pr000	2rP64	1	2r f
UNDERGAUGE INTEGRAL ( LADE STA( ILI2	10r400	2r400	1	4r11
- WD TOOL	Pr000	2rP64	1	91r 0
UNDERGAUGE INTEGRAL ( LADE STA( ILI2	10r400	2r640	1	4r P
DRILL COLLAR	Pr000	9r000	'	1P2r' P
CROSSOVER	' r400	9r000	1	9r11
DRILL COLLAR	' r400	9r000	'	1P2r' 6
HWDK	Br400	2r640	90	f 20r60
DRILL KIKE	Br400			6842Br6P

Total Length:	18960r22 tM
---------------	-------------

Wt below Jars:

Comments:

## MUD PRODUCTS

Product	Number of Units	Units	Qty Used
( Fw e7Rel MF	1r00	eyb\$	1r00
( uR Tyl k Rel MF	1r00	eyb\$	2r00
Lgne	1r00	eyb\$	10r00
- x GeF	1r00	Ml )meMp@	6r00
- ua Se7rpe x2B H7	1r00	ays	1r00



XYC USA INZ

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 010/ 0014

Prim. Reason: XRIG DRILL HXRIG

USA

Report No: 1MDR

) #x	Tk	H#	Xm 58yi o	Xm Zkao	Xm S- %	Xm Tsmo	Xmo#3kl Do3yG		
22.00	0.00	200	21NDR	DRILL	( TRVER	5	DRILL 10 40QINTER( EDIATE HXLE ) Q f 19/ TQ f 17 t 0AS ) XLLXWSJ  5RXGRESSJt / ) T RX5 AVGJ/ 1 ) T0IR  WX: J/ 0 BL: S SR5( Jf 4 ( R5( J12/ : R5( J20f 44f G5( 5U( 5 5RESSUREJX)) OKN : XTTX( J2440 Q200 5SI DI)) ERENTIAL 5RESSUREJ/ 40 5SI 50 WTJ2/ / BI5S SOX WTJ22t BI5S RXT WTJ22&BI5S TXR...UE XN OX)) : T( J&M1 O WM BL: S ) T  ( W IN OXUTJ&S O&S 55G VIS / 9 5H 100  DRX55ING RA5ID SWEE5 7 SXA5 STIZBS EVERC ZXNN\$ 5U( 5ING HIWIS SWEE5S EVERC 4000XR AS HXLE DIZTATES ZIRZULATING STEEL 5IT0		
Tk3/KTg o		2M00							
Safety Incident?		N		Days since Last RI:		M4&00		Weather Comments:	
Environ Incident?		N		Days since Last LTA:		M4&00			
Incident Comments:									
Nk g pgaol 3 #bnk#ba ki 32M8k-# \$									
Other Remarks:		UNIVERSITC ST\$ANDREWS UNIT . 1220DH ) #x 3o ll 3o# op3kl kFHgn8vys / f 4 yl a Hgn8vys 19t g Al a#bv i PTocyi Pa#bo 2\$1 x 00i Eyi 3kl Hgn8vys 19t 3k g 3o# op3kl kF Hgn8vys 19t yl a Hgn8vys 114\$ T- # 16BtHk#8Boyi 3 kl Hgn8vys 114\$ ) #x g 3o# op3kl kFHgn8vys 114 yl a Hgn8vys 19t Pa#bo t 04 x 00i Nk#8Boyi 3kl Hgn8vys 114\$ A3g 3o# op3kl kFHgn8vys 114 yl a ) ( 19f f Ppkl 3j - o i 3ygn83tHk#8Boyi 3 1\$ x 00i ' \$3ol 3 # #gn83tSk- 3r kl 3k 10yi o #kya\$ D#bo 1\$ 4 x 00i yl a 3 # 16BtEyi 3 kl 3k 10yi o #kya\$ D#bo 0\$ x 00i yl a #kya v 00x yeo y i 1gn83%ol a 3k 3o #gn83tSk- 3r\$ A3%ol a g #kyaPpkl 3j - o Eyi 3fk#yl k3o#0\$Mx 00i h#kya v 00G # 16Bk#Nk#8B yRb# 002 x 00i r yl a y#bo y3UI 0o# 0S S3Al a#bv i Ul 0. 1220DH kl Woi 3i 0o kF#kya\$  HELIX5TERJHf f f r t 2M# 491 Qf 00r t 29v2/ 9t Qf 00r 2M2w 1&& LI) E ) LIGHT ZXXRDINATESJYJ M&2R22\$1/ °CJ 2&4Rf / \$24°  Ly3J / 2" 22°4/ 04' N Lkl nJ102" 2/ °Ot \$ 0' W NAD 29 ELEVATIXN / R/ 1\$1@ t 40@NL Y f / / °) ELPSEZTIXN 12P: LXZB / P ANDREWS ZXUNTCPT EYAS  XYC DS( TRAILERJ2f 1w / / v2924 NXTI) C TRRZ X) INTENT TX S5UD AND RUN SUR) AZE ZASING J12Q20MS5XBE TX ZINDC TRRZ E( 5LXCEEP"X: . 2140t NXTI) IED TRRZ X) INTENT TX RUN AND ZE( ENT &\$ 24QINT ZASING NXTI) IED TRRZ X) INTENT TX RUN AND ZE( ENT 4\$QINT ZASING J Ul i yf0 Ap3 J2 Syf0 Ap3 JM Ul i yf0 Eq- gnx ol 3D SWA.D Noy#( g i oi .D  Wk#ei 0 "SAJ10 Syf03 ( oo3j ni Jf LX0XJ 5o#k g 3k v k#BJM 5kv o#Lg o Z8opelg 3J120&201M 5#o Sm a0gn ll i n0p3kl i J Hyzy# ID1 J2 En2 X% o#by3kl i .D  : EST STX5 ZARDJX: SERVED E( 5LXCEE IN LINE X ) ) IRE WHILE ( ABING U5 MUNIXN XN 5U( 5PSTX55ED "X: EY5LAINED DANGERSPHE ZX( 5LIED GXT TX SA) E DISTANZE X) SWINGING HA( ( ER "X: ZXNTINUED SA) ELC							

/ 020014

&4MD/ A(

5yno / kF/



<div> <div>XYC USA INZ</div> <div> <div>DAILY OPERATIONS PARTNER REPORT</div> <div> <div>Event: DEV DRILLING</div> <div>ST ANDREWS UNIT 1220H</div> <div>USA</div> </div> <div> <div>Date: 010/ 0014</div> <div>Report No: 1MDR</div> </div> </div> </div>									
OPERATIONS									
) #kx	Tk	H#	Xm 58yi o	Xm Zkao	Xm S- %	Xm Tsmo	Xmo#3kl Do3yG		
0.00	/ J 0	/ 040	21INDR	TRI5	DRILL	5T	TRI5 IN HXLE ) Q2P00@Q 12&M@TAGGED TIGHT S5XT , t 12&M@		
/ J 0	4.00	1040	21INDR	TRI5	DRILL	5T	WASH AND REA( ) Q 2&M@C0040		
4.00	t .00	1000	21INDR	TRI5	DRILL	5T	TRI5 IN HXLE ) Q040@C0f 00@		
t .00	10.00	M00	21INDR	DRILL	( TRVER	5	DRILL 10 40QINTER( EDIATE HXLE ) Q004 TQ 140@AS ) XLLXWSJ  5RXGRESSJ194 ) T RX5 AVGJM 04 ) T0IR  WX: J24w4 BL: S SR5( Jt 0 ( R5( J1/ 2 : R5( J1&2 ) LXW RATEJ t 00 G5( 5U( 5 5RESSUREJX)) OKN : XTTX( J2t 1f Q2&00 5SI DI)) ERENTIAL 5RESSUREJ/ 00 5SI 50 WTJ2/ / BI5S SOX WTJ22t BI5S RXT WTJ22&BI5S TXR...UE XN OX)) : T( J9w& O wM BL: S ) T  ( W IN OXUTJ&S O&2 55G VIS / t 5H 100  DRX55ING RA5ID SWEE5 7 SXA5 STIZBS EVERC ZXNN\$ 5U( 5ING HIWIS SWEE5S EVERC 400@R AS HXLE DIZTATES ZIRZULATING XUTER RESERVE 5IT		
10.00	1MD0	M00	21INDR	DRILL	( TRVER	5	DRILL 10 40QINTER( EDIATE HXLE ) Q 140 TQ // 0@AS ) XLLXWSJ  5RXGRESSJ1f 0 ) T RX5 AVGJM ) T0IR  WX: J24w4 BL: S SR5( Jt 0 ( R5( J&& : R5( J14& ) LXW RATEJ M#0 G5( 5U( 5 5RESSUREJX)) OKN : XTTX( J211f Q2M#0 5SI DI)) ERENTIAL 5RESSUREJ/ 40 5SI 50 WTJ2M BI5S SOX WTJ2/ 0 BI5S RXT WTJ2/ 9 BI5S TXR...UE XN OX)) : T( J9w& O wM BL: S ) T  ( W IN OXUTJ&S O&2 55G VIS / t 5H 100  DRX55ING RA5ID SWEE5 7 SXA5 STIZBS EVERC ZXNN\$ 5U( 5ING HIWIS SWEE5S EVERC 400@R AS HXLE DIZTATES ZIRZULATING XUTER RESERVE 5IT . 1 ( UD 5U( 5 DXWN		
1MD0	1f .00	M00	21INDR	DRILL	( TRVER	5	DRILL 10 40QINTER( EDIATE HXLE ) Q / / 0 TQ 494@AS ) XLLXWSJ  5RXGRESSJ2M ) T RX5 AVGJt 104 ) T0IR  WX: J24w4 BL: S SR5( Jt 0 ( R5( J12/ : R5( J1f / ) LXW RATEJ YYY G5( 5U( 5 5RESSUREJX)) OKN : XTTX( J2/ 00 Q2940 5SI DI)) ERENTIAL 5RESSUREJM#0 5SI 50 WTJ2M BI5S SOX WTJ2/ 4 BI5S RXT WTJ2/ f BI5S TXR...UE XN OX)) : T( J&w1 O wM BL: S ) T  ( W IN OXUTJ&S O&2 55G VIS / t 5H 100  DRX55ING RA5ID SWEE5 7 SXA5 STIZBS EVERC ZXNN\$ 5U( 5ING HIWIS SWEE5S EVERC 400@R AS HXLE DIZTATES ZIRZULATING XUTER RESERVE 5IT		
1f .00	22.00	M00	21INDR	DRILL	( TRVER	5	DRILL 10 40QINTER( EDIATE HXLE ) Q 494 TQ 099/ @S ) XLLXWSJ  5RXGRESSJ1&f ) T RX5 AVGJM ) T0IR  WX: J24w0 BL: S SR5( J40 ( R5( J12/ : R5( J44f G5( J44f 5U( 5 5RESSUREJX)) OKN : XTTX( J2240 Q2440 5SI DI)) ERENTIAL 5RESSUREJ/ 00 5SI 50 WTJ2/ / BI5S SOX WTJ22t BI5S RXT WTJ22&BI5S TXR...UE XN OX)) : T( J&w1 O wM BL: S ) T  ( W IN OXUTJ&S O&2 55G VIS / t 5H 100  DRX55ING RA5ID SWEE5 7 SXA5 STIZBS EVERC ZXNN\$ 5U( 5ING HIWIS SWEE5S EVERC 400@R AS HXLE DIZTATES ZIRZULATING STEEL 5IT@		

XYC USA INZ

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

Prim. Reason: XRIG DRILL HXRIG

ST ANDREWS UNIT 1220H

USA

Date: 01/01/2014

Report No: 1MDR

Wellbore / Top MD: 00 , 0 B

Rig: H75 2t M

Ref Datum: X#ng ykB: , / R04t \$10 B

DFS: 10\$1 &

Today's MD: ff / t B

Progress: ft 1 B

Ground Elev: / R0 / 1\$10 B

Daily Cost: d90RMM

Prev MD: 9894 B

Rot Hrs Today: 1f \$00 8#

AFE MD/Days: 1&P 00\$0 0 4\$ aysi

Cum Cost: d1P1MM#2

PBMD:

Avg ROP Today: M0\$ B3B#

AFE Number: 11f &09& 0102

AFE Cost: dM019R09M

Current Formation: S5RA: ERRC, f R400\$

Lithology: SHALE t0u PLI( ESTXNE M0u

Current Ops:

24-Hr Summary: TRI55ED IN HXLE WITH : HA . MPDRILL 10 40QINTER( EDIATE HXLE ) O9R94@Q P / t @

24-Hr Forecast: TEST RR 1Qt 04trXL 1Q&04r DRILL 10 40QINTER( EDIATE HXLE AS 5ER 5RXGRA(

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg		Max	
Last Casing:	f \$ 24g , &P / 4B	Str Wt Up/Dn:	2M \$0 0 2/ 2\$0 egr	Pump Rate:	449\$	Conn:					
Next Casing:	4\$400g , 1&P 00B	Str Wt Rot:	229\$0 egr	Pump Press:	2400	Trip:					
Last BOP Press Test:	1201Q01M	Torq Off Btm:				Backgr:					
Form Test/EMW:	) IT OI/ \$ f mm	Torq On Btm:									

PERSONNEL		SURVEY DATA (LAST 6)									
Supervisor 1:	( XN) XRD ZRA) T	MD	Incl	Azi	TVD	N/-S	E/-W	VS	DLS	Build	
Supervisor 2:	ZA5 XLIVARE6	f R4/ 1\$0	1\$M0	10/ \$ 0	f R42f \$ f	/ \$4	149\$0	/ 0\$0	0\$04	v0\$ /	
Engineer:	BEVIN THREADGILL	f P f f \$0	2\$ 0	121\$00	f P f 4\$04	4\$M	14/ \$	2f \$0	0\$2&	0\$04	
Geologist:	S- x \$sy8 A8x oa	f P1&M\$0	2\$20	109\$ 0	f P1&1\$00	f \$	1M \$0	2/ \$	0\$MM	0\$M	
Oxy Personnel:	/	f R00&\$0	1\$M0	10/ \$ 0	f R00t \$0&	10\$2	1M\$1	20\$	0\$4f	v0\$ 9	
Contractor Personnel:	22	9P 1&\$0	2\$10	1/ 2\$40	9P 19\$0f	1/ \$1	1/ t \$	1t \$0	0\$1t	0\$1t	
Total on Site:	24	9R 2&\$0	1\$ 0	1/ 1\$ 0	9R 29\$1&	19\$4	1/ 1\$4	11\$M	0\$2&	0\$2t	

BIT RECORD

Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
3	10.625	BAKER	RS616XH	7155014	S432	t c14	7975	8895	1v1vZ TvG	YvwZ Tw Z
RR2	10.625	VAREL	RS616XH	4007783	S432	&c12	2888	7975	2v2w TwA	Yvw Tw6R

BIT OPERATING PARAMETERS TODAY

Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB	RPM	TFA	P Drop Bit	Noz Vel	HHPSI
/	1f \$00	1f \$00	ft 1	ft 1	M0\$	M0\$	x g Q yc 20\$004\$0	x g Q yc 40000	1\$0 / 4	24g	192\$	0\$

MUD DATA -					LAST OR CURRENT BHA																																																																
Engineer:	MBT:				: HA NkJ M : gNkJ / ( D I I J 9&94 B																																																																
Sample From:	pH:				5- #rki oJ DRILL 10 40QINTER( EDIATE HXLE SEZTIXI( D X- 3) ff &4 B																																																																
Mud Type:	Pm / Pom:				<table><thead><tr><th>Component</th><th>OD</th><th>ID</th><th>Jts</th><th>Length</th></tr></thead><tbody><tr><td>5DZ : IT</td><td>10\$ 24</td><td>2\$ 94</td><td>1</td><td>1\$00</td></tr><tr><td>5XSITIVE DIS5LAZE( ENT ( XTXR</td><td>f \$000</td><td>2\$ 94</td><td>1</td><td>/ M\$ f</td></tr><tr><td>ZRXSSXVER</td><td>f \$000</td><td>2\$ 94</td><td>1</td><td>2\$ &amp;</td></tr><tr><td>UNDERGAUGE INTEGRAL : LADE STA: IliE</td><td>10\$400</td><td>2\$400</td><td>1</td><td>4\$11</td></tr><tr><td>( WD TXXL</td><td>f \$000</td><td>2\$ 94</td><td>1</td><td>/ 1\$ 0</td></tr><tr><td>UNDERGAUGE INTEGRAL : LADE STA: IliE</td><td>10\$400</td><td>2\$400</td><td>1</td><td>4\$ f</td></tr><tr><td>DRILL ZXLLAR</td><td>f \$000</td><td>/ \$000</td><td>t</td><td>1f 2\$ f</td></tr><tr><td>ZRXSSXVER</td><td>t \$400</td><td>/ \$000</td><td>1</td><td>/ \$11</td></tr><tr><td>DRILL ZXLLAR</td><td>t \$400</td><td>/ \$000</td><td>t</td><td>1f 2\$ 9</td></tr><tr><td>HWD5</td><td>M\$400</td><td>2\$400</td><td>/ 0</td><td>820\$00</td></tr><tr><td>DRILL 515E</td><td>M\$400</td><td></td><td></td><td>9R42M0f</td></tr></tbody></table>					Component	OD	ID	Jts	Length	5DZ : IT	10\$ 24	2\$ 94	1	1\$00	5XSITIVE DIS5LAZE( ENT ( XTXR	f \$000	2\$ 94	1	/ M\$ f	ZRXSSXVER	f \$000	2\$ 94	1	2\$ &	UNDERGAUGE INTEGRAL : LADE STA: IliE	10\$400	2\$400	1	4\$11	( WD TXXL	f \$000	2\$ 94	1	/ 1\$ 0	UNDERGAUGE INTEGRAL : LADE STA: IliE	10\$400	2\$400	1	4\$ f	DRILL ZXLLAR	f \$000	/ \$000	t	1f 2\$ f	ZRXSSXVER	t \$400	/ \$000	1	/ \$11	DRILL ZXLLAR	t \$400	/ \$000	t	1f 2\$ 9	HWD5	M\$400	2\$400	/ 0	820\$00	DRILL 515E	M\$400			9R42M0f
Component	OD	ID	Jts	Length																																																																	
5DZ : IT	10\$ 24	2\$ 94	1	1\$00																																																																	
5XSITIVE DIS5LAZE( ENT ( XTXR	f \$000	2\$ 94	1	/ M\$ f																																																																	
ZRXSSXVER	f \$000	2\$ 94	1	2\$ &																																																																	
UNDERGAUGE INTEGRAL : LADE STA: IliE	10\$400	2\$400	1	4\$11																																																																	
( WD TXXL	f \$000	2\$ 94	1	/ 1\$ 0																																																																	
UNDERGAUGE INTEGRAL : LADE STA: IliE	10\$400	2\$400	1	4\$ f																																																																	
DRILL ZXLLAR	f \$000	/ \$000	t	1f 2\$ f																																																																	
ZRXSSXVER	t \$400	/ \$000	1	/ \$11																																																																	
DRILL ZXLLAR	t \$400	/ \$000	t	1f 2\$ 9																																																																	
HWD5	M\$400	2\$400	/ 0	820\$00																																																																	
DRILL 515E	M\$400			9R42M0f																																																																	
Time / MD: O	Chlorides:																																																																				
Density @ Temp: O	Ca++ / K+:																																																																				
Rheology Temp:	CaCl2:																																																																				
Viscosity:	Cl- in water phase:																																																																				
PV / YP: O	Lime:																																																																				
Gels 10s/10m/30m: OO	ES:																																																																				
API WL:	ECD:																																																																				
HTHP WL:	n / K:																																																																				
Cake API / HTHP: O	Carbonate:																																																																				
Solids / Sol Corr: O	Bicarbonate:																																																																				
Oil / Water: O	Form Loss / Cum Loss: 0\$0 00\$0																																																																				
Oil / Water % for OWR: O	Fluid Disch: O																																																																				
Sand:	Daily Mud Cost: d1R / 1																																																																				
Water Added:	Cum Mud Cost: d2f P 1&																																																																				
Oil Added:																																																																					
LGS: O																																																																					
VG Meter:					Total Length: 1P 90\$22 B Wt below Jars:																																																																
Comments:																																																																					

MUD PRODUCTS

Product	Number of Units	Units	Qty Used
: Kv o#Rol 3/K	1\$00	oyp8	1\$00
: - le Tyl e Rol 3/K	1\$00	oyp8	2\$00
) oao#K ol 3kl g	1\$00	oyp8	/ t \$00
Lg o	1\$00	oyp8	8\$00
( - a So#go w2MH#	1\$00	ays	1\$00
Skay Ai 8	1\$00	oyp8	11\$00

/ 02Q2014

&4MD/ A(

5yno 1 kF/

OXY USA INC <b>DAILY OPERATIONS PARTNER REPORT</b>							
Event:		DEV DRILLING				ST ANDREWS UNIT 1220H	
Prim. Reason:		ORIG DRILL HORIZ				USA	
						Date:	01/04/2015
						Report No:	15DR
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
21:00	0:00	3.00	21INDR	DRILL	MTRVER	P	DRILL 10 5/8" INTERMEDIATE HOLE F/ 8,895' T/ 8,920'  PROGRESS 25 FT ROP AVG: 8 FT/HR WOB: 25-30 KLBS SRPM: 100 MRPM: 154 BRPM: 254 FLOW RATE: 700 GPM PUMP PRESSURE ON BOTTOM: 3350 PSI PUMP PRESSURE OFF BOTTOM: 3000 PSI DIFF PRESSURE: 350 PSI  P/U WT: 257 KIPS S/O WT: 241 KIPS ROT WT: 253 KIPS TORQUE ON BTM: 6-14 KLB.FT TORQUE OFF BTM: 3 KLB.FT  MW IN 9.6 PPG VIS/ 37 -; OUT 9.6 PPG VIS/ 37, PH 10 DROP SOAP STICKS EVERY CONNECTION. PUMP SWEEPS AS NEEDED  CIRCULATING STEEL PIT'S  SURVEY: 8,768, ' 2.2 INC , 126.2 AZI
Total Time		24.00					
Safety Incident?		N		Days since Last RI:		460.00	
Environ Incident?		N		Days since Last LTA:		460.00	
Incident Comments:		No incidents reported last 24 hours.					
Other Remarks:		UNIVERSITY ST. ANDREWS UNIT # 1220DH From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.  HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199 LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'  Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1' 650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS  OXY DSM TRAILER: 281-833-2725 NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB #21506 NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 9.625" INT CASING NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING : Unsafe Acts:2 Safe Acts: 4 Unsafe Equipment:2 SWA:2 Near Misses:0  Worksite JSA: 11 Safety Meetings: 10 LO/TO:3 Permits to work: 5 Power Line Checklist: 12/19/2014 Pre Spud/Rig Inspections: Hazard ID's:3 Ep2 Observations:0  BEST STOP CARD: OBSERVED EMPLOYEE WALKING DOWN STAIRWAY WITH ICE ON STEPS AND NOT USIN THREE POINT CONTACT EXPLAINED DANGERS, HE COMPLIED AND KNOCKED ICE OFF STAIRWAY, JOB CONTINUED WITHOUT INCIDENT					

<div>OXY USA INC</div> <div>DAILY OPERATIONS PARTNER REPORT</div> <div> <div>Event: DEV DRILLING</div> <div>ST ANDREWS UNIT 1220H</div> <div>Date: 01/04/2015</div> </div> <div> <div>Prim. Reason: ORIG DRILL HORIZ</div> <div>USA</div> <div>Report No: 15DR</div> </div>							
OPERATIONS							
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	3:00	3.00	21INDR	DRILL	MTRVER	P	DRILL 10 5/8" INTERMEDIATE HOLE F/ 8,836' T/ 8895'  PROGRESS 59 FT ROP AVG: 19 FT/HR WOB: 25-30 KLBS SRPM: 80-90 MRPM: 123 BRPM: 203 FLOW RATE: 558 GPM PUMP PRESSURE ON BOTTOM: 2500 PSI PUMP PRESSURE OFF BOTTOM: 2150 PSI DIFF PRESSURE: 350 PSI  P/U WT: 257 KIPS S/O WT: 241 KIPS ROT WT: 253 KIPS TORQUE ON BTM: 6-14 KLB.FT TORQUE OFF BTM: 3 KLB.FT  MW IN 9.6 PPG VIS/ 37 -; OUT 9.6 PPG VIS/ 37, PH 10 DROP SOAP STICKS EVERY CONNECTION. PUMP SWEEPS AS NEEDED  CIRCULATING STEEL PIT'S  SURVEY: 8,768, ' 2.2 INC , 126.2 AZI
3:00	4:00	1.00	21INDR	CIRC	CNDHOL	PT	CIRCULATE AND CONDITION HOLE FOR BIT TRIP, DUE TO SLOW ROP
4:00	4:30	0.50	21INDR	TRIP	DRILL	PT	PJSM, FLOW CHECK TRIP OUT OF HOLE FOR BIT DUE TO SLOW ROP, TRIP OUT WITH 4 STANDS ST-80 HYDRAULIC LINE/S LEAKING
4:30	5:00	0.50	21INDR	RIGMT	SRVRIG	PT	SERVICE RIG AND TOPDRIVE, WORK ON HYDRAULIC LINES ON ST-80
5:00	6:00	1.00	21INDR	RIGMT	REP	PT	REPAIR ST-80 HYDRAULIC LINE'S , CIRCULATING 400 GPM AND ROTATING WHILE DOING REPAIR'S
6:00	6:30	0.50	21INDR	TRIP	DRILL	PT	TRIP OUT OF HOLE F/8575' T/ 8390'. CHECK FLOW PUMP SLUG
6:30	7:00	0.50	21INDR	TRIP	DRILL	PT	BLOW DOWN LINES.
7:00	11:00	4.00	21INDR	TRIP	DRILL	PT	TRIP OUT OF HOLE F/8390' T/449' NO EXCESS DRAG HOLE TAKING PROPER FILL. SAFETY BREAK: PUSHING BACK PIPE
11:00	13:30	2.50	21INDR	TRIP	DRILL	PT	TRIP OUT OF HOLE F/449' T/ SURFACE. HOLE TAKING PROPER FILL. BREAK BIT AND LAY SAFETY BREAK: FORKLIFT OPERATIONS
13:30	18:00	4.50	21INDR	TRIP	DRILL	PT	PICK UP 10 5/8" BHA #4 AS FOLLOWS: SURFACE TEST ISYS TOOL AND MOTOR (GOOD)  10 5/8" PDC bit (SECURITY MM65DC 6 18's) 8" Baker Ultra XL .22 Rev/gal (w/float) W/10.375 10 1/2" IBS 1 – UBHO Isys tool (INC/AZI from AIM Directional) 1 – NMDC 10 1/2" IBS 6 – 8" DC XO 6 - 6-1/2" DC 30 HWDP  TRIP IN HOLE F/SURFACE T/6397' HOLE GIVING PROPER DISPLACEMENT. INSTALL ROTATING HEAD
18:00	19:00	1.00	21INDR	TRIP	DRILL	PT	TRIP IN HOLE F/6397' T/ 6,627" , HIT TIGHT SPOT
19:00	19:30	0.50	21INDR	TRIP	DRILL	PT	WASH AND REAM F/ 6,627' T/ 7,100'
19:30	21:00	1.50	21INDR	TRIP	DRILL	PT	TRIP IN HOLE F/ 7,100' T/ 8,863' , WASH LAST STAND TO BOTTOM

OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

USA

Date: 01/04/2015

Report No: 15DR

Wellbore / Top MD: 00 @ 0 ft

Rig: H&P 264

Ref Datum: Original KB @3,056.10ft

DFS: 11.19

Today's MD: 8920 ft

Progress: 84 ft

Ground Elev: 3,031.10 ft

Daily Cost: \$85,855

Prev MD: 8836 ft

Rot Hrs Today: 6.00 hr

AFE MD/Days: 19,800.0 / 35.8 days

Cum Cost: \$1,200,307

PBMD:

Avg ROP Today: 14.0 ft/hr

AFE Number: 1189079#0102

AFE Cost: \$4,017,074

Current Formation: SPRABERRY@8,600.0

Lithology: 90% SHALE , 10% LIMESTONE

Current Ops:

24-Hr Summary: DRILL 10 5/8" HOLE F/ 8.836' T/ 8,895' , TRIP FOR NEW BIT DUE TO SLOW ROP, DRILL 10 5/8" HOLE F/ 8,895' T/ 8,920'

24-Hr Forecast: (EST RR 1/26/15)(ROL 1/29/15) DRILL 10 5/8" INTERMEDIATE HOLE SECTION AS PER PROGRAM

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg	Max
Last Casing:	8.625in @ 9,335ft	Str Wt Up/Dn:	254.0/ 240.0 kip	Pump Rate:	699.5	Conn:			
Next Casing:	5.500in @ 19,800ft	Str Wt Rot:	243.0 kip	Pump Press:	3350	Trip:			
Last BOP Press Test:	12/01/2014	Torq Off Btm:				Backgr:			
Form Test/EMW:	FIT / 13.38 ppg	Torq On Btm:							

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	MONFORD CRAFT	MD	Incl	Azi	TVD	N/-S	E/-W	VS	DLS	Build
Supervisor 2:	CAP OLIVAREZ	8,768.0	2.20	126.20	8,765.56	0.1	164.2	35.4	0.45	0.34
Engineer:	KEVIN THREADGILL	8,531.0	1.40	103.60	8,528.68	3.5	157.7	30.7	0.75	-0.63
Geologist:	Sumiyyah Ahmed	8,388.0	2.30	121.90	8,385.75	5.4	153.6	28.0	0.29	0.05
Oxy Personnel:	3	8,194.0	2.20	107.80	8,191.90	8.6	146.7	23.3	0.44	0.43
Contractor Personnel:	17	8,009.0	1.40	103.60	8,006.99	10.2	141.1	20.6	0.58	-0.37
Total on Site:	20	7,819.0	2.10	132.50	7,817.08	13.1	136.3	16.7	0.16	0.16

BIT RECORD

Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
4	10.625	HALLIBURTON	MM65DC	12492231	M423	6x18	8895	9335	1-1-CT-S	X-I-BT-TD
3	10.625	BAKER	RS616XH	7155014	S432	6x15	7975	8895	1-1-CT-G	X-I-CT-BC

BIT OPERATING PARAMETERS TODAY

Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI
4	6.00	6.00	84	84	14.0	14.0	20.0/30.0	50/100	1.491	193	150.5	0.9

MUD DATA - M-I LLC (Schlumberger)				LAST OR CURRENT BHA			
Engineer: SHANE BURNS	MBT:	BHA No: 5	Bit No: 4	MD In: 8895 ft			
Sample From: In (Suction Pit)	pH:	Purpose: DRILL 10 5/8" INTERMEDIATE HOLE SECTION	MD Out: 9335 ft				
Mud Type: Clear Water	Pm / Pom:						
Time / MD: 0:01 / 8,528.0	Pf / Mf:						
Density @ Temp: 9.50 / 95	Chlorides:						
Rheology Temp: 120	Ca++ / K+:						
Viscosity: 38.00	CaCl2:						
PV / YP: 4 / 19	Cl- in water phase:						
Gels 10s/10m/30m: 12 / 13 / 14	Lime:						
API WL: 20.00	ES:						
HTHP WL:	ECD: 9.88						
Cake API / HTHP: 2.0 /	n / K:						
Solids / Sol Corr: /	Carbonate:						
Oil / Water: / 100.0	Bicarbonate:						
Oil / Water % for OWR: /	Form Loss / Cum Loss: 0.0 / 0.0						
Sand:	Fluid Disch: /						
Water Added:	Daily Mud Cost: \$3,306						
Oil Added:	Cum Mud Cost: \$32,125						
LGS: /							
VG Meter: 23@300 / 27@600							
Comments:							

MUD PRODUCTS

Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	2.00
Federal Bentonite	1.00	each	100.00
Lime	1.00	each	20.00
M-I Bar	1.00	each	40.00
Mud Service - 24 Hr	1.00	day	1.00
Pallet	1.00	each	12.00
Shrink Wrap	1.00	each	8.00

**DAILY OPERATIONS PARTNER REPORT**

**Event:** DEV DRILLING  
**Prim. Reason:** ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
USA

**Date:** 01/05/2015  
**Report No:** 16DR

**Other Remarks:**

UNIVERSITY ST. ANDREWS UNIT # 1220DH

From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.

HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199

LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'

Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1'  
650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS

OXY DSM TRAILER: 281-833-2725

NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB #21506

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 8.625" INT CASING:

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING :

Unsafe Acts:1

Safe Acts: 2

Unsafe Equipment: 0

SWA:1

Near Misses:0

Worksite JSA: 12

Safety Meetings: 10

LO/TO:2

Permits to work: 6

Power Line Checklist: 12/19/2014

Pre Spud/Rig Inspections:

Hazard ID's:2

Ep2 Observations:0

BEST STOP CARD: OBSERVED EMPLOYEE ATTEMPTING TO LATCH ELEVATORS WITH ST-80 IN STRIKE ZONE,  
STOPPED JOB EXPLAINED DANGERS, HE COMPLIED MOVED ST-80, JOB CONTINUED WITHOUT INCIDENT

OXY USA INC								
DAILY OPERATIONS PARTNER REPORT								
Event:		DEV DRILLING				Date:		01/05/2015
Prim. Reason:		ORIG DRILL HORIZ				Report No:		16DR
		ST ANDREWS UNIT 1220H						
		USA						
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details	
15:30	17:00	1.50	21INDR	DRILL	MTRVER	P	DRILL 10 5/8" INTERMEDIATE HOLE F/ 9161' T/ 9239'  PROGRESS 78 FT ROP AVG: 52 FT/HR WOB: 25-30 KLBS SRPM: 100 MRPM: 100 BRPM: 200 FLOW RATE: 600 GPM PUMP PRESSURE ON BOTTOM: 3000 PSI PUMP PRESSURE OFF BOTTOM: 2400 PSI DIFF PRESSURE: 600 PSI  P/U WT: 252 KIPS S/O WT: 239 KIPS ROT WT: 244 KIPS TORQUE ON BTM: 11 KLB.FT TORQUE OFF BTM: 3 KLB.FT  MW IN 9.4 PPG VIS/ 41 -; OUT 9.5 PPG VIS/ 37, PH 10 DROP SOAP STICKS EVERY CONNECTION. PUMP SWEEPS AS NEEDED CIRCULATING STEEL PIT	
17:00	17:30	0.50	21INDR	RIGMT	SRVRIG	P	RIG SERVICE	
17:30	18:00	0.50	21INDR	DRILL	MTRVER	P	DRILL 10 5/8" INTERMEDIATE HOLE F/ 9239' T/ 9271'  PROGRESS 32 FT ROP AVG: 62 FT/HR WOB: 25-30 KLBS SRPM: 100 MRPM: 100 BRPM: 200 FLOW RATE: 600 GPM PUMP PRESSURE ON BOTTOM: 3000 PSI PUMP PRESSURE OFF BOTTOM: 2400 PSI DIFF PRESSURE: 600 PSI  P/U WT: 252 KIPS S/O WT: 239 KIPS ROT WT: 244 KIPS TORQUE ON BTM: 11 KLB.FT TORQUE OFF BTM: 3 KLB.FT  MW IN 9.4 PPG VIS/ 41 -; OUT 9.5 PPG VIS/ 37, PH 10 DROP SOAP STICKS EVERY CONNECTION. PUMP SWEEPS AS NEEDED CIRCULATING STEEL PIT	
18:00	19:30	1.50	21INDR	DRILL	MTRVER	P	DRILL 10 5/8" INTERMEDIATE HOLE F/ 9271' T/ 9335' T.D.  PROGRESS 64 FT ROP AVG: 41 FT/HR WOB: 25-30 KLBS SRPM: 100 MRPM: 100 BRPM: 200 FLOW RATE: 600 GPM PUMP PRESSURE ON BOTTOM: 3100 PSI PUMP PRESSURE OFF BOTTOM: 2600 PSI DIFF PRESSURE: 500 PSI  P/U WT: 252 KIPS S/O WT: 239 KIPS ROT WT: 244 KIPS TORQUE ON BTM: 11 KLB.FT TORQUE OFF BTM: 3 KLB.FT  MW IN 9.4 PPG VIS/ 41 -; OUT 9.5 PPG VIS/ 37, PH 10 DROP SOAP STICKS EVERY CONNECTION. PUMP SWEEPS AS NEEDED CIRCULATING STEEL PIT	
19:30	21:30	2.00	21INDR	CIRC	CNDHOL	P	CIRCULATE AND CONDITION HOLE FOR CASING RUN , PUMP HIGH VIS SWEEP AND CIRCULATE 2 X BOTTOMS UP, SHAKERS CLEAN  600 GPM 100 SRPM	
21:30	0:00	2.50	21INDR	TRIP	DRILL	P	PJSM, CHECK FOR FLOW WELL STATIC, TRIP OUT OF HOLE F/ 9,335' T/ 6,675'  HOLE TAKING PROPER FILL	
Total Time		24.00						
Safety Incident?		N		Days since Last RI:		461.00		
Environ Incident?		N		Days since Last LTA:		461.00		
Incident Comments:								
No incidents reported last 24 hours.								
Weather Comments:								

**DAILY OPERATIONS PARTNER REPORT**

**Event:** DEV DRILLING  
**Prim. Reason:** ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
 USA

**Date:** 01/05/2015  
**Report No:** 16DR

**OPERATIONS**

From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	4:00	4.00	21INDR	DRILL	MTRVER	P	DRILL 10 5/8" INTERMEDIATE HOLE F/ 8,920' T/ 8,969'  PROGRESS 47 FT ROP AVG: 12 FT/HR WOB: 25-30 KLBS SRPM: 100 MRPM: 154 BRPM: 254 FLOW RATE: 700 GPM PUMP PRESSURE ON BOTTOM: 3350 PSI PUMP PRESSURE OFF BOTTOM: 3000 PSI DIFF PRESSURE: 350 PSI  P/U WT: 257 KIPS S/O WT: 241 KIPS ROT WT: 253 KIPS TORQUE ON BTM: 6-20 KLB.FT TORQUE OFF BTM: 3 KLB.FT  MW IN 9.4 PPG VIS/ 37 -; OUT 9.5 PPG VIS/ 37, PH 10 DROP SOAP STICKS EVERY CONNECTION. PUMP SWEEPS AS NEEDED  CIRCULATING STEEL PIT'S  SURVEY: 8,768, ' 2.2 INC , 126.2 AZI
4:00	6:00	2.00	21INDR	RIGMT	REP	PT	RIG BLACKOUT , RIG BACK ONLINE CIRCULATE AND RECIPROCATATE PIPE WHILE TROUBLE SHOOT GENERATOR POWER, AND CHANGE OUT FILTERS ON GEN #1
6:00	7:30	1.50	21INDR	RIGMT	REP	PT	RIG BLACKOUT , RIG BACK ONLINE CIRCULATE AND RECIPROCATATE PIPE WHILE TROUBLE SHOOT GENERATOR POWER, AND CHANGE OUT FILTERS ON GEN #1
7:30	11:30	4.00	21INDR	DRILL	MTRVER	P	DRILL 10 5/8" INTERMEDIATE HOLE F/ 8969' T/ 9042'  PROGRESS 73 FT ROP AVG: 18 FT/HR WOB: 25-30 KLBS SRPM: 60 MRPM: 100 BRPM: 160 FLOW RATE: 450 GPM PUMP PRESSURE ON BOTTOM: 1900 PSI PUMP PRESSURE OFF BOTTOM: 1300 PSI DIFF PRESSURE: 600 PSI  P/U WT: 252 KIPS S/O WT: 239 KIPS ROT WT: 244 KIPS TORQUE ON BTM: 6-20 KLB.FT TORQUE OFF BTM: 3 KLB.FT  MW IN 9.4 PPG VIS/ 37 -; OUT 9.5 PPG VIS/ 37, PH 10 DROP SOAP STICKS EVERY CONNECTION. PUMP SWEEPS AS NEEDED CIRCULATING STEEL PIT'S  SURVEY: 8,768, ' 2.2 INC , 126.2 AZI
11:30	15:30	4.00	21INDR	DRILL	MTRVER	P	DRILL 10 5/8" INTERMEDIATE HOLE F/ 9042' T/ 9161'  PROGRESS 119 FT ROP AVG: 30 FT/HR WOB: 25-30 KLBS SRPM: 60 MRPM: 100 BRPM: 160 FLOW RATE: 450 GPM PUMP PRESSURE ON BOTTOM: 1900 PSI PUMP PRESSURE OFF BOTTOM: 1300 PSI DIFF PRESSURE: 600 PSI  P/U WT: 252 KIPS S/O WT: 239 KIPS ROT WT: 244 KIPS TORQUE ON BTM: 6-20 KLB.FT TORQUE OFF BTM: 3 KLB.FT  MW IN 9.4 PPG VIS/ 37 -; OUT 9.5 PPG VIS/ 37, PH 10 DROP SOAP STICKS EVERY CONNECTION. PUMP SWEEPS AS NEEDED CIRCULATING STEEL PIT



OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

Prim. Reason: ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H

USA

Date: 01/05/2015

Report No: 16DR

Wellbore / Top MD: 00 @ 0 ft

Rig: H&P 264

Ref Datum: Original KB @3,056.10ft

DFS: 12.19

Today's MD: 9335 ft

Progress: 415 ft

Ground Elev: 3,031.10 ft

Daily Cost: \$54,416

Prev MD: 8920 ft

Rot Hrs Today: 15.50 hr

AFE MD/Days: 19,800.0 / 35.8 days

Cum Cost: \$1,254,724

PBMD:

Avg ROP Today: 26.8 ft/hr

AFE Number: 1189079#0102

AFE Cost: \$4,017,074

Current Formation: SPRABERRY@8,600.0

Lithology:

Current Ops:

24-Hr Summary: DRILL 10 5/8" HOLE F/ 8,920' T/ 9,335', CIRCULATE 2X BOTTOMS UP , TRIP OUT FOR CASING RUN TO 6,675'

24-Hr Forecast: (EST RR 1/26/15)(ROL 1/29/15) DRILL 10 5/8" INTERMEDIATE HOLE SECTION AS PER PROGRAM

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg	Max
Last Casing:	8.625in @ 9,335ft	Str Wt Up/Dn:	256.0/ 241.0 kip	Pump Rate:	599.6	Conn:			
Next Casing:	5.500in @ 19,800ft	Str Wt Rot:	244.0 kip	Pump Press:	3350	Trip:			
Last BOP Press Test:	12/01/2014	Torq Off Btm:				Backgr:			
Form Test/EMW:	FIT / 13.38 ppg	Torq On Btm:							

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	MONFORD CRAFT	MD	Incl	Azi	TVD	N/-S	E/-W	VS	DLS	Build
Supervisor 2:	CAP OLIVAREZ	9,335.0	1.20	114.20	9,332.27	-9.7	179.4	48.3	0.34	-0.32
Engineer:	KEVIN THREADGILL	9,145.0	1.80	122.60	9,142.33	-7.2	175.1	45.0	0.11	-0.11
Geologist:	Sumiyah Ahmed	8,958.0	2.00	123.30	8,955.43	-3.9	169.9	40.5	0.12	-0.11
Oxy Personnel:	3	8,768.0	2.20	126.20	8,765.56	0.1	164.2	35.4	0.45	0.34
Contractor Personnel:	16	8,531.0	1.40	103.60	8,528.68	3.5	157.7	30.7	0.75	-0.63
Total on Site:	19	8,388.0	2.30	121.90	8,385.75	5.4	153.6	28.0	0.29	0.05

BIT RECORD

Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
4	10.625	HALLIBURTON	MM65DC	12492231	M423	6x18	8895	9335	1-1-CT-S	X-I-BT-TD
3	10.625	BAKER	RS616XH	7155014	S432	6x15	7975	8895	1-1-CT-G	X-I-CT-BC

BIT OPERATING PARAMETERS TODAY

Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI
4	15.50	21.50	415	499	26.8	23.2	20.0/30.0	50/100	1.491	140	129.0	0.6

MUD DATA - M-I LLC (Schlumberger)				LAST OR CURRENT BHA																																																														
Engineer: SHANE BURNS	MBT:	BHA No: 5	Bit No: 4	MD In: 8895 ft																																																														
Sample From: In (Suction Pit)	pH:	Purpose: DRILL 10 5/8" INTERMEDIATE HOLE SECTION	MD Out: 9335 ft																																																															
Mud Type: Clear Water	Pm / Pom:	<table> <tr> <th>Component</th> <th>OD</th> <th>ID</th> <th>Jts</th> <th>Length</th> </tr> <tr> <td>PDC BIT</td> <td>10.625</td> <td>2.875</td> <td>1</td> <td>1.00</td> </tr> <tr> <td>POSITIVE DISPLACEMENT MOTOR</td> <td>8.000</td> <td>2.875</td> <td>1</td> <td>34.98</td> </tr> <tr> <td>CROSSOVER</td> <td>8.000</td> <td>2.875</td> <td>1</td> <td>2.69</td> </tr> <tr> <td>UNDERGAUGE INTEGRAL BLADE STABILIZ</td> <td>10.500</td> <td>2.500</td> <td>1</td> <td>5.11</td> </tr> <tr> <td>MWD TOOL</td> <td>8.000</td> <td>2.875</td> <td>1</td> <td>31.60</td> </tr> <tr> <td>UNDERGAUGE INTEGRAL BLADE STABILIZ</td> <td>10.500</td> <td>2.750</td> <td>1</td> <td>5.68</td> </tr> <tr> <td>DRILL COLLAR</td> <td>8.000</td> <td>3.000</td> <td>6</td> <td>182.68</td> </tr> <tr> <td>CROSSOVER</td> <td>6.500</td> <td>3.000</td> <td>1</td> <td>3.11</td> </tr> <tr> <td>DRILL COLLAR</td> <td>6.500</td> <td>3.000</td> <td>6</td> <td>182.67</td> </tr> <tr> <td>HWDP</td> <td>4.500</td> <td>2.750</td> <td>30</td> <td>920.70</td> </tr> <tr> <td>DRILL PIPE</td> <td>4.500</td> <td></td> <td></td> <td>7,964.78</td> </tr> </table>					Component	OD	ID	Jts	Length	PDC BIT	10.625	2.875	1	1.00	POSITIVE DISPLACEMENT MOTOR	8.000	2.875	1	34.98	CROSSOVER	8.000	2.875	1	2.69	UNDERGAUGE INTEGRAL BLADE STABILIZ	10.500	2.500	1	5.11	MWD TOOL	8.000	2.875	1	31.60	UNDERGAUGE INTEGRAL BLADE STABILIZ	10.500	2.750	1	5.68	DRILL COLLAR	8.000	3.000	6	182.68	CROSSOVER	6.500	3.000	1	3.11	DRILL COLLAR	6.500	3.000	6	182.67	HWDP	4.500	2.750	30	920.70	DRILL PIPE	4.500			7,964.78
Component	OD	ID	Jts	Length																																																														
PDC BIT	10.625	2.875	1	1.00																																																														
POSITIVE DISPLACEMENT MOTOR	8.000	2.875	1	34.98																																																														
CROSSOVER	8.000	2.875	1	2.69																																																														
UNDERGAUGE INTEGRAL BLADE STABILIZ	10.500	2.500	1	5.11																																																														
MWD TOOL	8.000	2.875	1	31.60																																																														
UNDERGAUGE INTEGRAL BLADE STABILIZ	10.500	2.750	1	5.68																																																														
DRILL COLLAR	8.000	3.000	6	182.68																																																														
CROSSOVER	6.500	3.000	1	3.11																																																														
DRILL COLLAR	6.500	3.000	6	182.67																																																														
HWDP	4.500	2.750	30	920.70																																																														
DRILL PIPE	4.500			7,964.78																																																														
Time / MD: 16:01 / 9,214.0	Pf / Mf: /																																																																	
Density @ Temp: 9.40 / 98	Chlorides:																																																																	
Rheology Temp: 120	Ca++ / K+: /																																																																	
Viscosity: 35.00	CaCl2:																																																																	
PV / YP: 4 / 13	Cl- in water phase:																																																																	
Gels 10s/10m/30m: 11 / 12 / 13	Lime:																																																																	
API WL: 20.00	ES:																																																																	
HTHP WL:	ECD: 9.69																																																																	
Cake API / HTHP: 2.0 /	n / K: /																																																																	
Solids / Sol Corr: /	Carbonate:																																																																	
Oil / Water: / 100.0	Bicarbonate:																																																																	
Oil / Water % for OWR: /	Form Loss / Cum Loss: 0.0 / 0.0																																																																	
Sand: 0.50	Fluid Disch: /																																																																	
Water Added:	Daily Mud Cost: \$4,624																																																																	
Oil Added:	Cum Mud Cost: \$36,749																																																																	
LGS: /																																																																		
VG Meter: 17@300 / 21@600																																																																		
Comments:																																																																		

MUD PRODUCTS

Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	2.00
D-D	1.00	each	5.00
Fresh Water (Piped)		bbl	5,000.00
M-I Gel	1.00	ton (metric)	8.25
Mud Service - 24 Hr	1.00	day	1.00
Rapid Sweep	1.00	each	2.00
Soap Stick	1.00	each	131.00
Soda Ash	1.00	each	9.00

Total Length: 1,370.22 ft

Wt below Jars:

3/12/2015

9:53:54AM

Page 1 of 4

**DAILY OPERATIONS PARTNER REPORT**

**Event:** DEV DRILLING  
**Prim. Reason:** ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
USA

**Date:** 01/06/2015  
**Report No:** 17DR

**Other Remarks:**

UNIVERSITY ST. ANDREWS UNIT # 1220DH

From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.

HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199

LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'

Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1'  
650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS

OXY DSM TRAILER: 281-833-2725

NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB  
#21506

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 8.625" INT CASING: 1/5/15 CINDY OP #4

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING :

Unsafe Acts:1

Safe Acts: 2

Unsafe Equipment: 0

SWA:1

Near Misses:0

Worksite JSA: 12

Safety Meetings: 10

LO/TO:2

Permits to work: 6

Power Line Checklist: 12/19/2014

Pre Spud/Rig Inspections:

Hazard ID's:2

Ep2 Observations:0

BEST STOP CARD: OBSERVED THIRD PARTY NOT USING SPOTTER STOPPED JOB, EXPLAINED POLICY AND  
DANGERS, HE COMPLIED JOB CONTINUED SAFELY

OXY USA INC							
DAILY OPERATIONS PARTNER REPORT							
Event:		DEV DRILLING		ST ANDREWS UNIT 1220H		Date:	
Prim. Reason:		ORIG DRILL HORIZ		USA		Report No:	
						01/06/2015 17DR	
OPERATIONS							
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	4:00	4.00	21INDR	TRIP	DRILL	P	TRIP OUT OF HOLE F/ 6,675' T/ 449'
							HOLE TAKING PROPER FILL
4:00	5:00	1.00	21INDR	TRIP	BHA	P	PJSM, EJSJA , LAY DOWN INTERMEDIATE BHA
5:00	6:00	1.00	21INDR	RIGMT	REP	PT	WORK ON PIPE WRANGLER , HYDRAULIC MANIFOLD WASHED OUT, WAIT ON PARTS AND MECHANIC
6:00	8:00	2.00	21INDR	TRIP	DRILL	P	RACK BACK 6 1/2" DC.
8:00	11:00	3.00	21INDR	TRIP	DRILL	P	LAY DOWN 8" DRILL COLLARS, 8" NMDC, 2- 10 1/2" IBS, BAKER MUD MOTOR, & SECURITY BIT.
11:00	11:30	0.50	21INDR	BOP	RPWB	P	PULL WEAR BUSHING.
11:30	12:00	0.50	21INDR	CSG	RIGUP	P	HELD PJSM WITH RIG CREW, CASING CREW, RIG MANAGER & DSM.\
							MADE DRY RUN WITH MANDREL
12:00	13:30	1.50	21INDR	CSG	RIGUP	P	RIG UP CASING SPECIALTIES CASING EQUIPMENT.
13:30	14:30	1.00	21INDR	CSG	RUNCSG	P	PICK UP AND MAKE UP 8 5/8" SHOE TRACK AND INSTALL CASING SPEACIALTIES VALANT TOOL
							CASING SWEDGE AND LO-TORQUE ON FLOOR AND FUCTIONED
14:30	18:30	4.00	21INDR	CSG	RUNCSG	P	RUN 8 5/8 32# CASING AS FOLLOWED: DAVIS LYNCH 8-5/8" 32# J-55 BTC FLOAT SHOE @ 9325' 2 JOINTS- 8-5/8" 32# J-55 BTC DAVIS LYNCH 8-5/8" 32# J55 BTC FLOAT COLLAR 8-5/8" 32# J-55 BTC F/ 9325' T/ 6350' 8-5/8" 32# L-80 BTC F/6350' T/ SURFACE  DAVUS LYNCH SEMI- RIGISD BOW SPRING CENTRILIZERS 2 PER JOINT FOR FIRST TWO JOINT 1 PER EVERY FOUR JOINTS 4 INSIDE SURFACE CASING TOTAL OF 50
18:30	0:00	5.50	21INDR	CSG	RUNCSG	P	CONTINUE RUNING CASING FILLING PIPE EVERY 20 JTS
							HOLE GIVING PROPER DISPLACEMENT
Total Time		24.00					
Safety Incident?		N		Days since Last RI:		462.00	
Environ Incident?		N		Days since Last LTA:		462.00	
Incident Comments:							
No incidents reported last 24 hours.							

OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

Prim. Reason: ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H

USA

Date: 01/06/2015

Report No: 17DR

Wellbore / Top MD: 00 @ 0 ft

Rig: H&P 264

Ref Datum: Original KB @3,056.10ft

DFS: 13.19

Today's MD: 9335 ft

Progress:

Ground Elev: 3,031.10 ft

Daily Cost: \$411,831

Prev MD: 9335 ft

Rot Hrs Today:

AFE MD/Days: 19,800.0 / 35.8 days

Cum Cost: \$1,666,555

PBMD:

Avg ROP Today: 0.0 ft/hr

AFE Number: 1189079#0102

AFE Cost: \$4,017,074

Current Formation: SPRABERRY@8,600.0

Lithology:

Current Ops:

24-Hr Summary: TRIPPED OUT OF HOLE LAY DOWN 10 5/8" BHA, RIG UP AND RUN 8 5/8" CASING T/ 7,600'

24-Hr Forecast: (EST RR 1/26/15)(ROL 1/29/15) RUN AND LAND 8 5/8" CASING, CEMENT SAME PICK UP DIRECTIONAL TOOLS

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg	Max
Last Casing:	8.625in @ 9,335ft	Str Wt Up/Dn:	/	Pump Rate:	0.0	Conn:			
Next Casing:	5.500in @ 19,800ft	Str Wt Rot:		Pump Press:	0	Trip:			
Last BOP Press Test:	12/01/2014	Torq Off Btm:				Backgr:			
Form Test/EMW:	FIT / 13.38 ppg	Torq On Btm:							

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	RON MORSE	MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
Supervisor 2:	CAP OLIVAREZ	9,335.0	1.20	114.20	9,332.27	-9.7	179.4	48.3	0.34	-0.32
Engineer:	KEVIN THREADGILL	9,145.0	1.80	122.60	9,142.33	-7.2	175.1	45.0	0.11	-0.11
Geologist:	Sumiyah Ahmed	8,958.0	2.00	123.30	8,955.43	-3.9	169.9	40.5	0.12	-0.11
Oxy Personnel:	3	8,768.0	2.20	126.20	8,765.56	0.1	164.2	35.4	0.45	0.34
Contractor Personnel:	12	8,531.0	1.40	103.60	8,528.68	3.5	157.7	30.7	0.75	-0.63
Total on Site:	15	8,388.0	2.30	121.90	8,385.75	5.4	153.6	28.0	0.29	0.05

BIT RECORD

Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
5	7.875	HALLIBURTON	MMD54DM	12609219	M434	5x15	9335	15,102	1-2-CT-S	X-I-WT-BHA
4	10.625	HALLIBURTON	MM65DC	12492231	M423	6x18	8895	9335	1-1-CT-S	X-I-BT-TD

BIT OPERATING PARAMETERS TODAY

Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI
--------	---------	-------------	------	----------	-----	---------	-------------	-------------	-----	------------	---------	-------

MUD DATA - M-I LLC (Schlumberger)				LAST OR CURRENT BHA																																																																														
Engineer: Chris Johnson	MBT:			BHA No: 6	Bit No: 5	MD In: 9335 ft																																																																												
Sample From: In (Suction Pit)	pH: 9.4			Purpose: DRILL PRODUCTION HOLE CURVE SECTION	MD Out: 15,102 ft																																																																													
Mud Type: Low-Solids Non-Dispersed (LS)	Pm / Pom:			<table> <tr> <th>Component</th> <th>OD</th> <th>ID</th> <th>Jts</th> <th>Length</th> </tr> <tr> <td>PDC BIT</td> <td>7.875</td> <td>2.250</td> <td>1</td> <td>1.00</td> </tr> <tr> <td>CURVE DRILLING MOTOR</td> <td>6.500</td> <td>2.250</td> <td>1</td> <td>29.46</td> </tr> <tr> <td>UBHO SUB</td> <td>6.500</td> <td>2.500</td> <td>1</td> <td>2.97</td> </tr> <tr> <td>NON-MAG DRILL COLLAR</td> <td>6.500</td> <td>2.250</td> <td>1</td> <td>29.06</td> </tr> <tr> <td>NON-MAG FLEX DRILL COLLAR</td> <td>6.500</td> <td>2.250</td> <td>1</td> <td>30.68</td> </tr> <tr> <td>DRILL PIPE</td> <td>4.500</td> <td>3.826</td> <td>21</td> <td>665.30</td> </tr> <tr> <td>AGITATOR</td> <td>6.500</td> <td>2.250</td> <td>1</td> <td>18.37</td> </tr> <tr> <td>SHOCK SUB</td> <td>6.500</td> <td>2.250</td> <td>1</td> <td>12.38</td> </tr> <tr> <td>DRILL PIPE</td> <td>4.500</td> <td>3.826</td> <td>120</td> <td>3,791.48</td> </tr> <tr> <td>HWDP</td> <td>4.500</td> <td>2.750</td> <td>30</td> <td>920.63</td> </tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> </table>				Component	OD	ID	Jts	Length	PDC BIT	7.875	2.250	1	1.00	CURVE DRILLING MOTOR	6.500	2.250	1	29.46	UBHO SUB	6.500	2.500	1	2.97	NON-MAG DRILL COLLAR	6.500	2.250	1	29.06	NON-MAG FLEX DRILL COLLAR	6.500	2.250	1	30.68	DRILL PIPE	4.500	3.826	21	665.30	AGITATOR	6.500	2.250	1	18.37	SHOCK SUB	6.500	2.250	1	12.38	DRILL PIPE	4.500	3.826	120	3,791.48	HWDP	4.500	2.750	30	920.63																				
Component	OD	ID	Jts	Length																																																																														
PDC BIT	7.875	2.250	1	1.00																																																																														
CURVE DRILLING MOTOR	6.500	2.250	1	29.46																																																																														
UBHO SUB	6.500	2.500	1	2.97																																																																														
NON-MAG DRILL COLLAR	6.500	2.250	1	29.06																																																																														
NON-MAG FLEX DRILL COLLAR	6.500	2.250	1	30.68																																																																														
DRILL PIPE	4.500	3.826	21	665.30																																																																														
AGITATOR	6.500	2.250	1	18.37																																																																														
SHOCK SUB	6.500	2.250	1	12.38																																																																														
DRILL PIPE	4.500	3.826	120	3,791.48																																																																														
HWDP	4.500	2.750	30	920.63																																																																														
Time / MD: 16:00 / 9,335.0	Pf / Mf: 0.1 / 0.2			Total Length: 5,501.33 ft	Wt below Jars:																																																																													
Density @ Temp: 9.50 / 0	Chlorides: 48,000																																																																																	
Rheology Temp: 150	Ca++ / K+: /																																																																																	
Viscosity: 34.00	CaCl2:																																																																																	
PV / YP: 5 / 10	Cl- in water phase:																																																																																	
Gels 10s/10m/30m: 5 / 7 / 10	Lime:																																																																																	
API WL: 24.00	ES:																																																																																	
HTHP WL:	ECD: 9.50																																																																																	
Cake API / HTHP: 2.0 /	n / K: /																																																																																	
Solids / Sol Corr: 10.00 / 8.50	Carbonate:																																																																																	
Oil / Water: / 90.0	Bicarbonate:																																																																																	
Oil / Water % for OWR: /	Form Loss / Cum Loss: 0.0 / 0.0																																																																																	
Sand: 0.50	Fluid Disch: /																																																																																	
Water Added:	Daily Mud Cost: \$1,865																																																																																	
Oil Added:	Cum Mud Cost: \$38,615																																																																																	
LGS: 4.80 /																																																																																		
VG Meter: 15@300 / 20@600																																																																																		
Comments:																																																																																		

MUD PRODUCTS

Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	2.00
Megadril System	1.00	bbl	300.00
M-I Bar	1.00	each	20.00
Mud Service - 24 Hr	1.00	day	1.00

3/12/2015

9:53:52AM

Page 1 of 3

## DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING  
 Prim. Reason: 4 RIG DRILL H4 RIZ

ST ANDREWS UNIT 1220H  
 USA

Date: 01/01/2017  
 Report No: 13DR

## Other Remarks:

UNIVERSITY ST ANDREWS UNIT 7 1220DH

J\$um ,t e lg,e\$yek,svg wK\$H\$ t c da P3/ dg# H\$ t c da 1CB \$g Ag#\$ec y. Teody. #\$\$ e 2h1 m\$ey Edy, wg H\$ t c da 1CB ,w\$g,e\$yek,svg wK\$H\$ t c da 1CB dg# H\$ t c da 11/ h Tu\$g reK \$Nw\$ t edy,Fwg H\$ t c da 11/ h J\$um \$g,e\$yek,svg wK\$H\$ t c da 11/ dg# H\$ t c da 1CB. #\$\$ e B1O' m\$ey Nw\$ t edy, wg H\$ t c da 11/ h A, \$g,e\$yek,svg wK\$H\$ t c da 11/ dg# J( 1CB3. kwg,\$ue y,\$d\$ t , \$Nw\$ t edy,F118 m\$ey' lht eg ,u\$g \$s t , \$Swu,t Fwg,wredye \$vd#h D\$\$ e 1fB/ m\$ey dg# ,u\$g reK \$Edy,Fwg,wredye \$vd#h D\$\$ e 0fB m\$ey dg# \$vd# c smdve d yns t , peg# ,w,t e \$s t , \$Swu,t fh A, peg# \$g \$vd#. kwg,\$ue Edy, K\$dgw,t e\$0f m\$ey \$vd# c sm,u\$g reK w\$Nw\$ t dKe\$ 0f2 m\$ey Fdg# d\$\$ e d, Ugs e\$y\$sa S,hAg#\$ec y Ugs 71220DH wg Wey, y\$e wK\$vd#h

HELIC4 5TER' \$B33FB2f xP/ O1 M\$00FB2Q2POB M\$00F2f 2xB1&&  
 LIJE JLIGHT C4 4 RDINATES' X' f &2.f 22h1P"Y' 2& .03P12/ °

Ld,' P2" 22"/ P10/ " N Lwgi ' 102" 2P"0BfB0" W NAD 2OELEVATI4 N P.0P1h1...  
 B' 0.JNL X 3PP°JEL. SECTI4 N 12. 6L4 C) P. ANDREWS C4 UNTY. TEXAS

4 XY DS( TRAILER' 231x3PPx2Q2/

N4 TIJY TRRC 4 J INTENT T4 S5UD AND RUN SURJACE CASING' 12M2Mf S54 ) E T4 CINDY TRRC E( 5L4 YEE. b4 6  
 721/ 0B

N4 TIJIED TRRC 4 J INTENT T4 RUN AND CE( ENT 3fB2/ QINT CASING' 1MM/ CINDY 4 5 7f

N4 TIJIED TRRC 4 J INTENT T4 RUN AND CE( ENT / h QINT CASING'

Ugyd16 Ak,y' 1

Sd16 Ak,y' 1

Ugyd16 Equ\$ meg,' 0

SWA'2

Ned\$( \$yey'0

Ww\$y\$e bSA' 10

Sd16,a ( ee,\$gi y' &amp;

L4 M4 'P

5e\$nsy ,wc w\$' f

5wc e\$L\$ge Ct ekvny,' 12M&amp;M201f

5\$e SI u#M\$ \$lgy l ek,\$vgy'

Hdzd\$# ID'y'P

EI 2 4 pye\$ d,\$vgy'0

6EST ST4 5 CARD' 4 6SERVED E( 5L4 YEE bU( 5ING 4 JJ 5I5E HANDLER ADVISED HI( 4 J 54 LICY AND 5R4 CEDURE  
 HE C4 ( 5LIED. b4 6 C4 NTINUED WITH4 UT INCIDENT

4 XY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

USA

Date: 01/01/2017

Report No: 13DR

OPERATIONS

J\$wm	Tw	H\$y	4l 5t dye	4l Cw#e	4l Sup	4l Tal e	4l e\$y,sg De,dsy
0'00	2'P0	2H 0	21INRC	CSG	RUNCSG	5	C4 NTINUE RUNNING 3 / MQCASING L4 ST RETURNS @ Q000...C4 NTINUE T4 64 TT4 ( . JILL 5I5E ATTE( 5T T4 ESTA6LISH RETURNS N4 SUCCESS N4 TIJIED JDS. DE . DECSI4 N ( ADE T4 5U( 5 2066Lx10556 LC( 5ILL J4 LL4 WED 6Y 10066LS JRESH WATERh
2'P0	/ '00	2H 0	21INRC	C( T	RIGU5	5	5bS( . WITH HALLI6URT4 N RIG U5 HALLI6URT4 N. ( IX 2066LS LC( 5ILL.
/ '00	B'00	1H00	21INRC	C( T	5RI(	5	5ERJ4R( CE( ENT b4 6 4 N 3 / MQINTER( EDIATE AS J4 LL4 WS'  TEST LINES T4 2./ 00 5SI  5U( 5 20 66LS 4 J 3IP 55G WATER S5ACER
B'00	10'00	f H00	21INRC	C( T	5RI(	5	5ERJ4R( CE( ENT b4 6 4 N 3 / MQINTER( EDIATE AS J4 LL4 WS'  TEST LINES T4 2./ 00 5SI  5U( 5 20 66LS 4 J 3IP 55G WATER S5ACER  5U( 5 LEAD. P1/ 66LS 4 J TUNED LITE 9 30 SAC) SF4 J CLASS C CE( ENT. 10H2 55G. P1H0/ YIELD. 1/ HB/ GALH5)  5U( 5 TAIL. 1P066LS 4 J VARSACE( CLASS 9HFCE( ENT 9 / 0 SAC) SF4 J CLASS H CE( ENT. 1P 55G. 1H011 YIELD. 8H11 GALH5)  5U( 5 DIS5LACE( ENT. / BP 66LS 4 J 3IP 55G WATER 5U( 5 RATE WAS / 65( AND 2 65( LAST 10 66LS 5U( 5ED  6U( 5ED 5LUG @ 08:// HRS. WITH // 0 5SI 4 VER. 5U( 5 5RESSURE WAS 1f 00 5SI AND 5RESSURED U5 T4 18/ 05SI WHEN 6U( 5EDhHELD J4 R / ( INUTES 9G4 4 DF6LED 6AC) P1H 66LSH9N4 RETURNS WHILE CE( ENTING F
10'00	12'00	2H00	21INRC	C( T	RIGU5	5	JLUSH THRU LINES .RIG D4 WN CE( ENT E- UI5( ENTh
12'00	1f '00	2H00	21INRC	CSG	RIGU5	5	6AC) 4 UT LANDING b4 INT. LAYD4 WN AND SET 5AC) 4 JJh
1f '00	1O00	P100	21INRC	WLHD	RWH	5	5bS( . TEST 5AC) 4 JJ T4 / 000 5SI J4 R 1/ ( IN.G4 4 D TEST VERIJIED 6Y DS(
1O00	13'P0	1H 0	21INRC	64 5	R5W6	5	( A) E U5 AND INSTALL WEAR6USHING. LAYD4 WN T4 4 LSh
13'P0	18'00	0H 0	21INRC	RIG( T	SRVRIG	5	SERVICE RIG AND T4 5DRIVE
18'00	22'00	P100	21INRC	G5	RUDSE-	5	INSTALL ) ATCH x) AN C4 NTAIN( ENT
22'00	0'00	2H00	21INRC	TRI5	6HA	5	LAY D4 WN BQDRILL C4 LLARS JR4 ( DERRIC)
Tw,dnT\$me		2f H00					

Safety Incident? N

Days since Last RI: f BP100

Weather Comments:

Environ Incident? N

Days since Last LTA: f BP100

Incident Comments:

Nw\$gk\$eg,y \$el w\$e# rdy, 2f t wu\$yh

PM12/01/

8/ P/ 0A(

5di e 2 wKP

4 XY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

Prim. Reason: 4 RIG DRILL H4 RIZ

Date: 01M01/13DR

ST ANDREWS UNIT 1220H USA

Wellbore / Top MD: 00 @ 0 K

Today's MD: &PP/ K

Prev MD: &PP/ K

PBMD: Avg ROP Today: 0f0 K/M\$

Rig: Hr 5 2Bf

Progress: Rot Hrs Today: 0f0 K/M\$

Avg ROP Today: 0f0 K/M\$

Ref Datum: 4 \$ gdn) 6 @P.0/ Bf0K

Ground Elev: P.0P1Hf0 K

AFE MD/Days: 1&.300f0 MP/ f8 #day

AFE Number: 113&0C&70102

DFS: 1f Hf&

Daily Cost: 81P0.PP1

Cum Cost: 81.0&B.33B

AFE Cost: 8f .01Q0Cf

Current Formation: S5RA6ERRY@3.B00f0

Lithology:

Current Ops:

24-Hr Summary: JINISHED RUNNING 3 / MQCASING . LANDED SA( E. CE( ENT WITH HALLI6URT4 N.SET 5AC) 4 J.J.INSTALL ) ATCH ) AN. LAY D4 WN C4 LL.

24-Hr Forecast: 9EST RR 1M&M/ f&R4 L 1M&M/ F5IC) 00MQCURVE ASSE( 6LY . TRI5 IN H4 LE DRILL4 UT CE( ENT JL4 AT E- UI5( ENT. JIT TEST. DIS5LACI

CASING/WELL CONTROL

HOOKLOAD & TORQUE

HYDRAULICS

MUD GAS

Avg

Max

Last Casing: 3f&2/ g @ &PP/ K

Next Casing: / H 00g @ 1&.000K

Last BOP Press Test: 12M1M01f

Form Test/EMW: JIT MfP3 f f i

Str Wt Up/Dn: M

Str Wt Rot:

Torq Off Btm:

Torq On Btm:

Pump Rate: 0f0

Pump Press: 0

Conn:

Trip:

Backgr:

PERSONNEL

SURVEY DATA (LAST 6)

Supervisor 1: R4 N ( 4 RSE

Supervisor 2: CA5 4 LIVAREZ

Engineer: ) EVIN THREADGILL

Geologist: Sum&adt At me#

Oxy Personnel: P

Contractor Personnel: 13

Total on Site: 21

MD

Incl

Azi

TVD

N/-S

E/-W

VS

DLS

Build

&.PP/ f0

1f20

11f f20

&.PP2f20

x&f0

1C&f

f 3fP

0fPf

x0fP2

&.1f / f0

1f80

122fB0

&.1f 2fPP

x02

1C f1

f / f0

0f11

x0f11

3.&/ 3f0

2f00

12PfP0

3.&/ / f P

xPf&

1B&f&

f 0f

0f12

x0f11

3.CB3f0

2f20

12Bf20

3.CB/ H B

0f1

1Bf f2

P/ f

0f /

0fPf

3./ P1f0

1f 0

10PB0

3./ 23fB3

Pf

1/ 00

P0f0

0f0

x0fBP

3.P33f0

2fP0

121f&0

3.P3/ f0

/ f

1/ PB

23f0

0f2&

0f0/

BIT RECORD

Bit No

Size

Manufacturer

Model

Serial No

IADC Code

Nozzles

MD In

MD Out

I-O-D-L

B-G-O-R

5

7.875

HALLIBURTON

MMD54DM

12609219

M434

/ o1/

9335

15,102

1x2xCTxS

Xx&WTx6HA

4

10.625

HALLIBURTON

MM65DC

12492231

M423

Bo13

8895

9335

1x1xCTxS

Xx&6TfTD

BIT OPERATING PARAMETERS TODAY

Bit No

Rot Hrs

Cum Rot Hrs

Prog

Cum Prog

ROP

Cum ROP

WOB msf/Mdo

RPM msf/Mdo

TFA

P Drop Bit

Noz Vel

HHPSI

MUD DATA - M-I LLC (Schlumberger)

Engineer: CHRIS b4 HNS4 N

Sample From: lg 9Suk,sg 5sf

Mud Type: Lvc xSw&fy NvgxDyl e\$ye# 9L.S

Time / MD: 1B'00 M&PP/ f0

Density @ Temp: 3fB0 MD

Rheology Temp: 1/ 0

Viscosity: 2&f00

PV / YP: 1 M2

Gels 10s/10m/30m: 1 Mf MP

API WL: P2f00

HTHP WL:

Cake API / HTHP: 2f0 M

Solids / Sol Corr: C0f0 MBf00

Oil / Water: M&Pf0

Oil / Water % for OWR: M

Sand: 0f0/

Water Added:

Oil Added:

LGS: 0f10 M

MBT:

pH: &H

Pm / Pom:

Pf / Mf:

Chlorides: P3.000

Ca++ / K+: M

CaCl2:

Cl- in water phase:

Lime:

ES:

ECD:

n / K: M

Carbonate:

Bicarbonate:

Form Loss / Cum Loss: 0f0 M0f0

Fluid Disch: M

Daily Mud Cost: 81.f B&

Cum Mud Cost: 8f 0.03f

6HA Nw B

6s Nw /

( D lg' &PP/ K

5u\$ we' DRILL 5R4 DUCTI4 N H4 LE CURVE SECTI4 N( D 4 u.' 1/ .102 K

Component

OD

ID

Jts

Length

5DC 6IT

C80

2f2/ 0

1

1f00

CURVE DRILLING ( 4 T4 R

Bf 00

2f2/ 0

1

2&f B

U6H4 SU6

Bf 00

2f2/ 0

1

2f&0

N4 Nx AG DRILL C4 LLAR

Bf 00

2f2/ 0

1

2&f0B

N4 Nx AG JLEX DRILL C4 LLAR

Bf 00

2f2/ 0

1

P0fB3

DRILL 515E

f H 00

Pf82B

21

BB/ fP0

AGITAT4 R

Bf 00

2f2/ 0

1

13fP0

SH4 C) SU6

Bf 00

2f2/ 0

1

12fP3

DRILL 515E

f H 00

Pf82B

120

P.C&1f 3

HWD5

f H 00

2f2/ 0

P0

&20fBP

Total Length: / .01fPP K

Wt below Jars:

VG Meter: P@P00 M @B00

Comments:

MUD PRODUCTS

Product

Number of Units

Units

Qty Used

6mc e\$Reg,dn

1f00

edkt

1f00

6uv Tdgv Reg,dn

1f00

edkt

2f00

Ce#d\$Jpe\$Ct \$ Sedn

1f00

edkt

/ f00

Cw,wgyee# Humy

1f00

edkt

f f00

( ei d#&nSay,em

1f00

ppn

20C00

( u# Se\$ &e x2f H\$

1f00

#da

1f00

PM2M01/ &/ P/ 0A(

5di e 1 wKP

**DAILY OPERATIONS PARTNER REPORT**

**Event:** DEV DRILLING  
**Prim. Reason:** ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
USA

**Date:** 01/08/2015  
**Report No:** 19DR

**Other Remarks:**

UNIVERSITY ST. ANDREWS UNIT # 1220DH

From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.

HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199

LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'

Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1'  
650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS

OXY DSM TRAILER: 281-833-2725

NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB  
#21506

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 8.625" INT CASING: 1/5/15 CINDY OP #4

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING :

Unsafe Acts:1

Safe Acts: 3

Unsafe Equipment: 0

SWA:1

Near Misses:0

Worksite JSA: 9

Safety Meetings: 9

LO/TO:2

Permits to work: 3

Power Line Checklist: 12/19/2014

Pre Spud/Rig Inspections:

Hazard ID's:4

Ep2 Observations:0

BEST STOP CARD: OBSERVED EMPLOYEE BACKING UP WITH FORKLIFT WITHOUT SPOTTER STOPPED JOB  
EXPLAINED DANGERS AND POLICY, HE COMPLIED AQUIRED SPOTTER JOB CONTINUED SAFELY



OXY USA INC							
DAILY OPERATIONS PARTNER REPORT							
Event:		DEV DRILLING		ST ANDREWS UNIT 1220H		Date: 01/08/2015	
Prim. Reason:		ORIG DRILL HORIZ		USA		Report No: 19DR	
OPERATIONS							
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	2:30	2.50	21INRC	TRIP	BHA	P	CONTINUE LAYING DOWN 6" DRILL COLLARS OVER TORQUED
2:30	4:30	2.00	21INRC	TRIP	BHA	P	PICK UP AND MAKE UP 7 7/8" CURVE ASSEMBLY, SCRIBE MOTOR, INSTALL MWD, TEST SAME AS FOLLOWS  7 7/8" PDC Bit (MMD54DM 6" Gauge) 6-1/2" BAKER 5/6 6.0 1.9° ADJ .33 REV/GAL SLICK, 4.42 BIT TO BEND(ULTRA XL) 1- UBHO 1-NMDC (MWD/Gamma) 1- NM FLEX COLLAR 21 jts 4-1/2" DP 1-TTS XRV PLUS AGGITATOR 1- XRV SAFETY LATCH 1- COUGAR SHOCK PDC Setting on Shock Sub 9 jts 4-1/2" DP 30 jts 4-1/2" HWDP
4:30	6:00	1.50	21INRC	TRIP	BHA	P	MAKE UP 7 7/8" MMD54DM CURVE PDC BIT,
6:00	11:30	5.50	21INRC	TRIP	DRILL	P	RUN IN HOLE WITH 7-7/8' CURVE ASSEMBLY TO 5452', FILL PIPE AND CLEAR STAND PIPE.
11:30	12:00	0.50	21INRC	RIGMT	SRVRIG	P	SERVICE RIG 4 HR SAFETY MEETING ABOUT HAND PLACEMENT.
12:00	14:30	2.50	21INRC	RIGMT	REP	PT	REPAIR TOP DRIVE LINK TILT,CHANGE OUT ST-80 MAIN FEED HOSES.
14:30	17:30	3.00	21INRC	TRIP	DRILL	P	CONTINUE TO RUN IN HOLE WITH 7-7/8" CURVE ASSEMBLY AND TAG @ 9211'.
17:30	21:00	3.50	21INRC	DRILL	CUTDLIN	P	PJSM, JSA ,SLIP AND CUT DRILL LINE
21:00	21:30	0.50	21INRC	CIRC	CNDFLD	P	CIRCULATE AND TAG TOP OF CEMENT @ 9,220'
21:30	22:30	1.00	21INRC	CIRC	CNDFLD	P	PJSM, WITH H&P, OXY CONDUCT CHOKE DRILLS
22:30	23:00	0.50	21INRC	DRLOUT	DOCMT	P	TEST 8 5/8" CASING TO 2,500# FOR 30MIN GOOD TEST
23:00	0:00	1.00	21INRC	DRLOUT	DOCMT	P	DRILL CEMENT FLOAT EQUIPMENT  300 GPM 15 SRPM 5-10 WOB
Total Time		24.00					
Safety Incident?		N		Days since Last RI:		464.00	
Environ Incident?		N		Days since Last LTA:		464.00	
Incident Comments:		No incidents reported last 24 hours.					

OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

USA

Date: 01/08/2015

Report No: 19DR

Wellbore / Top MD: 00 @ 0 ft

Rig: H&P 264

Ref Datum: Original KB @3,056.10ft

DFS: 15.19

Today's MD: 9335 ft

Progress:

Ground Elev: 3,031.10 ft

Daily Cost: \$73,956

Prev MD: 9335 ft

Rot Hrs Today:

AFE MD/Days: 19,800.0 / 35.8 days

Cum Cost: \$1,870,842

PBMD:

Avg ROP Today: 0.0 ft/hr

AFE Number: 1189079#0102

AFE Cost: \$4,017,074

Current Formation: SPRABERRY@8,600.0

Lithology:

Current Ops:

24-Hr Summary: MAKE UP 7 7/8" CURVE ASSEMBLY BHA, TRIP IN HOLE , DRILL OUT CEMENT FLOAT EQUIPMENT

24-Hr Forecast: (EST RR 1/26/15)(ROL 1/29/15) DRILL 20' NEW HOLE ,PERFORM FIT TEST 12PPG EQUIVALENT, DRILL 7 7/8" PRODUCTION CURVE

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg	Max
Last Casing:	8.625in @ 9,335ft	Str Wt Up/Dn:	/	Pump Rate:	0.0	Conn:			
Next Casing:	5.500in @ 19,700ft	Str Wt Rot:		Pump Press:	0	Trip:			
Last BOP Press Test:	12/01/2014	Torq Off Btm:				Backgr:			
Form Test/EMW:	FIT / 12.00 ppg	Torq On Btm:							

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	RON MORSE	MD	Incl	Azi	TVD	N/-S	E/-W	VS	DLS	Build
Supervisor 2:	CAP OLIVAREZ	9,335.0	1.20	114.20	9,332.27	-9.7	179.4	48.3	0.34	-0.32
Engineer:	KEVIN THREADGILL	9,145.0	1.80	122.60	9,142.33	-7.2	175.1	45.0	0.11	-0.11
Geologist:	Sumiyah Ahmed	8,958.0	2.00	123.30	8,955.43	-3.9	169.9	40.5	0.12	-0.11
Oxy Personnel:	3	8,768.0	2.20	126.20	8,765.56	0.1	164.2	35.4	0.45	0.34
Contractor Personnel:	12	8,531.0	1.40	103.60	8,528.68	3.5	157.7	30.7	0.75	-0.63
Total on Site:	15	8,388.0	2.30	121.90	8,385.75	5.4	153.6	28.0	0.29	0.05

BIT RECORD										
Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
5	7.875	HALLIBURTON	MMD54DM	12609219	M434	5x15	9335	15,102	1-2-CT-S	X-I-WT-BHA

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI

MUD DATA - M-I LLC (Schlumberger)					LAST OR CURRENT BHA					
Engineer:	Chris Johnson	MBT:			BHA No:	6	Bit No:	5	MD In:	9335 ft
Sample From:	In (Suction Pit)	pH:	9.5		Purpose:	DRILL PRODUCTION HOLE CURVE SECTIONMD Out:				15,102 ft
Mud Type:	Low-Solids Non-Dispersed (LS)	Pm / Pom:				Component	OD	ID	Jts	Length
Time / MD:	16:00 / 9,335.0	Pf / Mf:	0.4 / 1.3		PDC BIT	7.875	2.250	1	1.00	
Density @ Temp:	8.50 / 0	Chlorides:	30,000		CURVE DRILLING MOTOR	6.500	2.250	1	29.46	
Rheology Temp:	150	Ca++ / K+:	/		UBHO SUB	6.500	2.500	1	2.97	
Viscosity:	32.00	CaCl2:			NON-MAG DRILL COLLAR	6.500	2.250	1	29.06	
PV / YP:	2 / 3	Cl- in water phase:			NON-MAG FLEX DRILL COLLAR	6.500	2.250	1	30.68	
Gels 10s/10m/30m:	1 / 2 / 3	Lime:			DRILL PIPE	4.500	3.826	21	665.30	
API WL:	29.00	ES:			AGITATOR	6.500	2.250	1	18.37	
HTHP WL:		ECD:			SHOCK SUB	6.500	2.250	1	12.38	
Cake API / HTHP:	2.0 /	n / K:	/		DRILL PIPE	4.500	3.826	120	3,791.48	
Solids / Sol Corr:	4.00 / 3.00	Carbonate:			HWDP	4.500	2.750	30	920.63	
Oil / Water:	0.0 / 96.0	Bicarbonate:								
Oil / Water % for OWR:	/	Form Loss / Cum Loss:	0.0 / 0.0							
Sand:	0.05	Fluid Disch:	/							
Water Added:		Daily Mud Cost:	\$1,589							
Oil Added:		Cum Mud Cost:	\$41,673							
LGS:	0.60 /									
VG Meter:	5@300 / 7@600				Total Length:	5,501.33 ft	Wt below Jars:			
Comments:										

MUD PRODUCTS			
Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	2.00
M-I Gel	1.00	ton (metric)	3.00
Mud Service - 24 Hr	1.00	day	1.00

3/12/2015

9:53:45AM

Page 1 of 3

/ 4X USA INY

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 0130M2010

Prim. Reason: / RIG DRILL H/ RIC

USA

Report No: 20DR

OPERATIONS

6\$ce	Tc	H\$y	/ u ( t dyx	/ u Yc#x	/ u Sm..	/ u Taux	/ ux\$dr\$g DxR\$y
0'00	1'00	1)00	21INRY	DRL/ UT	D/ Y5 T	(	DRILL 20KNEW H/ LE 6/ R 6IT TEST
1'00	1'Z0	0)00	21INRY	YIRY	YIRYGE/	(	YIRYULATE 6/ R 6/ R5 AT/ N VERI6IYAT/ N BX 5 UDL/ G GERS
1'Z0	2'00	0)00	21INRY	DRL/ UT	6ST	(	( ER6/ R5 6))T T/ 12( ( G E9 UIVALENT G/ / D TEST
2'00	- '00	f )00	Z1( RDR	YIRY	YH/ VR	(	YLEAN 5 UD ( ITS AND ( RE( 6/ R/ IL BASE 5 UD. S( / T AND RIG U( S/ LID Y/ NTR/ L E9 UI( 5 ENT
- '00	10'00	f )00	Z1( RDR	YIRY	YH/ VR	(	Y/ NTINUE T/ YLEAN 5 UD ( ITS AND ( RE( 6/ R/ IL BASE 5 UD. S( / T AND RIG U( S/ LID Y/ NTR/ L E9 UI( 5 ENT) HELD f HR SA6ETX 5 EETING)
10'00	1f '00	f )00	Z1( RDR	YIRY	YH/ VR	(	INSTALL S/ LIDS E9 UI( 5 ENT. / ( EN TANI . YUTTING DRXER)
1f '00	1J'00	f )00	Z1( RDR	YIRY	YH/ VR	(	RIG U( / IL SHI( ( ING LINES. INSTALL AUGER. YUTTTING SLIDES T/ ( ITS)
1J'00	2Z'Z0	0)00	Z1( RDR	YIRY	YH/ VR	(	RIG U( SHAI ER SLIDE# RIG U( DIESEL LINE# RIG U( DISYHARGE LINE 6R/ 5 SAND TRA( 6/ R DIS( LAYE5 ENT. TRANS6ER/ B5 6R/ 5 6RAY# T/ 5 UD TANI S.
2Z'Z0	0'00	0)00	Z1( RDR	YIRY	YH/ VR	(	DIS( LAYE H/ LE WITH / B5 .

TcRnT\$ x

2f )00

Safety Incident? N

Days since Last RI: f - 0)00

Weather Comments:

Environ Incident? N

Days since Last LTA: f - 0)00

Incident Comments:

Nc gvs#xgRy \$kuc\$R# rdyP2f t cn\$y)

Other Remarks:

UNIVERSITX ST) ANDREWS UNIT 7 1220DH  
6\$ce R x lgr\$yxvR\$g c&H\$ t k da ZJOdg# H\$ t k da 1, - g Ag#\$kky. Txwdy. #\$\$ x 2)1 e sxy EdyPcg H\$ t k da 1, - gR\$yxvR\$g c&H\$ t k da 1, - dg# H\$ t k da 11O) Tn\$g n&PNC\$R xdyR\$g H\$ t k da 11O) 6\$ce gR\$yxvR\$g c&H\$ t k da 11Odg# H\$ t k da 1, - . #\$\$ x -, Oe sxy Nc\$R xdyPcg H\$ t k da 11O) AP\$gR\$yxvR\$g c&H\$ t k da 11Odg# 65 1, JJ. vcgR\$gmx yR\$ t PNC\$R xdyR\$g J) e sxy' )R xg R\$g \$ t PFScnR @gR nxdyx \$cd#) D\$ x 1)- Oe sxy dg# R\$g n&P EdyR\$gR nxdyx \$cd#) D\$ x 0)- e sxy dg# \$cd# k sne dpx d yns t P.xg# R R x \$ t PFScnR @AP.xg# g \$cd#. vcgR\$gmx EdyP\$cd\$dgR x\$0)f e sxy R\$cd# k snR\$g n&Pc\$Nc\$R d\$R\$ 0)2 e sxy@g# d\$S x dPUgs x\$y\$R SR Ag#\$kky Ug\$P71220DH cg WxyPy\$#x c&\$cd#)  
  
HELIY/ ( TER' FJJJ@2f qZQ 1 3FJ00@2, qZ, - 3FJ00@2f 2o 1MM  
LI6E 6LIGHT Y/ / RDINATES' 4' f M2.f 22)1Z'X' 2M00JZ)2O'  
  
LdP 22" 22°00'00" N Lcgi ' 102" 2Z°0- )- 0" W NAD 2, ELEVATI/ N Z.0Z1)1K  
-00K6NL 4 JZZ'6EL. SEYTI/ N 12. BL/ YI Z. ANDREWS Y/ UNTX. TE4AS  
  
/ 4X DS5 TRAILER' 2J1oJZZq, 2O  
N/ TI6X TRRY / 6 INTENT T/ S( UD AND RUN SUR6AYE YASING' 12323f S( / I E T/ YINDX TRRY E5 ( L/ XEE. b/ B 72100-  
N/ TI6IED TRRY / 6 INTENT T/ RUN AND YE5 ENT J)- 20QINT YASING' 1303OYINDX / ( 7f  
N/ TI6IED TRRY / 6 INTENT T/ RUN AND YE5 ENT 0)QINT YASING'  
Ugyd& AvRy'1  
Sd& AvRy' Z  
Ugyd& Eqm\$ue xgP 0  
SWA'1  
Nxd\$5 gyxy'0  
  
Wc\$py\$R bSA' M  
Sd&R 5 xxR\$gi y' M  
L/ 3f/ '2  
( x\$e \$y R k c\$P' Z  
( ck x\$L\$gx Yt xvp\$yP 1231M201f  
( \$k Sun#3Rs lgyuxvR\$gy'  
Hdzd\$ ID'y'f  
Eu2 / .yx\$ dR\$gy'0  
  
BEST ST/ ( YARD' / BSERVED E5 ( L/ XEE BAYI ING U( WITH 6/ RI LI6T WITH/ UT S( / TTER ST/ ( ( ED b/ B E4( LAINED DANGERS AND ( / LIYX. HE Y/ 5 ( LIED A9 UIRED S( / TTER b/ B Y/ NTINUED SA6ELX

Z3123010

MCQ'f ZA5

( di x 2 c&2

## DAILY OPERATIONS PARTNER REPORT

**Event:** DEV DRILLING  
**Prim. Reason:** / RIG DRILL H/ RIC

ST ANDREWS UNIT 1220H  
USA

**Date:** 0130M2010  
**Report No:** 20DR

Wellbore / Top MD:	00 h 0 &	Rig:	Hr ( 2-f	Ref Datum:	/ \$ \$gdnl B h Z.00 )10&	DFS:	1- )1M
Today's MD:	MZZO&	Progress:		Ground Elev:	Z.0Z1)10 &	Daily Cost:	8O .f - 0
Prev MD:	MZZO&	Rot Hrs Today:		AFE MD/Days:	1MJ00)0 3ZQJ #day	Cum Cost:	81.MZ .Z02
PBMD:		Avg ROP Today:	0)0 & \$	AFE Number:	11JM0, M70102	AFE Cost:	8f .01, .0, f
Current Formation:	S( RABERRxh J.- 00)0			Lithology:			

<b>Current Ops:</b>	
<b>24-Hr Summary:</b>	DRILL 20K , 3QNEW H/ LE. ( ER6/ R5 6))T/ 12( ( G E9 UIVALENT.RIG U( S/ LIDS Y/ NTR/ L E9 UI( 5 ENT.DIS( LAYE H/ LE WITH/ IL B
<b>24-Hr Forecast:</b>	FEST RR 12- 31 @ L 13 M @ DRILL , 3Q R/ DUYTI/ N YURVE AND LATERAL AS ( ER DIREYTI/ NAL ( LAN

CASING/WELL CONTROL	HOOKLOAD & TORQUE	HYDRAULICS	MUD GAS	Avg	Max
Last Casing: J)-20q h MZZO&	Str Wt Up/Dn: 3	Pump Rate: 0)0	Conn:		
Next Casing: OQOOg h 1M, 00&	Str Wt Rot:	Pump Press: 0	Trip:		
Last BOP Press Test: 1231201f	Torq Off Btm:		Backgr:		
Form Test/EMW: 6IT 312)00 uui	Torq On Btm:				

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	R/ N 5 / RSE	MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
Supervisor 2:	YA( / LIVAREC	MZZM0	1)00	120Z0	MZZ- 1)1J	o )M	1, , 1)	f Q1	0), 0	d)f -
Engineer:	I EVIN THREADGILL	MZZO0	1)20	11f )20	MZZ2)2,	d),	1, Mf	f J)Z	0)Zf	d)Z2
Geologist:	Sre aadt At e x#	M1f Q0	1)10	122)- 0	M1f 2)ZZ	q )2	1, Q1	f Q0	0)11	d)11
Oxy Personnel:	Z	J.MQ)0	2)00	12Z)Z0	J.MQ)f Z	QZ)	1-MM	f 0)0	0)12	d)11
Contractor Personnel:	12	J., - J)0	2)20	12- )20	J., - Q)0	0)1	1-f )2	ZQf	0)f 0	0)Zf
Total on Site:	10	J.QZ1)0	1)f 0	10Z)- 0	J.QZJ)- J	Z)0	1Q ),	Z0),	0), 0	d)- Z

[illegible]

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB e.g. 3 dw	RPM e.g. 3 dw	TFA	P Drop Bit	Noz Vel	HHPSI

MUD DATA - M-I LLC (Schlumberger)		LAST OR CURRENT BHA				
Engineer: YHRIS b/ HNS/ N	MBT:	BHA Nc' -	B#Nc' O	5 D Ig'	MZZO &	
Sample From: Tdgp	pH:	( n#ucyx' DRILL ( R/ DUYTI/ N H/ LE YURVE SEYTI/ N5 D / mP			1Q102 &	
Mud Type: DsxyπBdyx#	Pm / Pom:	Component				
Time / MD: 1-'00 3MZZZ)0	Pf / Mf:	OD	ID	Jts	Length	
Density @ Temp: Jf 0 3	Chlorides:	( DY BIT	, J, C	2)200	1	1)00
Rheology Temp: 100	Ca++ / K+:	YURVE DRILLING 5 / T/ R	- )000	2)200	1	2Mf -
Viscosity: - J)00	CaCl2:	UBH/ SUB	- )000	2)000	1	2)M
PV / YP: 1f 311	Cl- in water phase:	N/ N05 AG DRILL Y/ LLAR	- )000	2)200	1	2M0-
Gels 10s/10m/30m: - 3J 311	Lime:	N/ N05 AG 6LE4 DRILL Y/ LLAR	- )000	2)200	1	Z0)- J
API WL:	ES:	DRILL ( I( E	f )000	Z)J2-	21	-- 0)Z0
HTHP WL: M20	ECD:	AGITAT/ R	- )000	2)200	1	1J)Z,
Cake API / HTHP: 32)0	n / K:	SH/ YI SUB	- )000	2)200	1	12)ZJ
Solids / Sol Corr: - )00 30)1f	Carbonate:	DRILL ( I( E	f )000	Z)J2-	120	Z., M)f J
Oil / Water: J0)0 31f )0	Bicarbonate:	HWD(	f )000	2), 00	Z0	M0)- Z
Oil / Water % for OWR: J0)00 310)00	Form Loss / Cum Loss:					
Sand:	Fluid Disch:					
Water Added:	Daily Mud Cost:					
Oil Added:	Cum Mud Cost:					
LGS:						
VG Meter: 2Ch Z00 3ZMh -00		Total Length: 0001)ZZ & Wt below Jars:				

Comments:	
-----------	--

[illegible]

/ 4 X USA INY

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 01M0M010

Prim. Reason: / RIG DRILL H/ RIC

USA

Report No: 21DR

Other Remarks:

UNIVERSITX SThANDREWS UNIT # 1220DH

. 7kx fSo InF7sopfkN kt Hig\$V ay f 3Oand Hig\$V ay 16) in And7ov sPTocasPd7Jo 2Hl x ilos EasFkn Hig\$V ay 16) fK inf7sopfkN kt Hig\$V ay 16) and Hig\$V ay 11Ch T- 7h lotF(Nk7\$soasf9kn Hig\$V ay 11Ch . 7kx inf7sopfkN kt Hig\$V ay 11Oand Hig\$V ay 16)Pd7Jo )t6Ox ilos Nk7\$soasFkn Hig\$V ay 11Ch AFinF7sopfkN kt Hig\$V ay 11Oand . & 1633Ppknfin- o sFraig\$(Nk7\$soasf91f8 x ilos° Hf\$on F 7h 7g\$(Sk- f\$9knfK loaso 7kadh D7Jo 1h) Ox ilos and F 7h lotF(Easf9knfK loaso 7kadh D7Jo 0h) x ilos and 7kad v ill x aeo a slig\$fbond fK f\$o 7g\$(Sk- f\$9h AFbond in 7kadPpknfin- o EasFtk7ankf\$o70h x ilos (7kad v ill F 7h lotFk7Nk7\$ atf7 0f2 x ilos9and a77Jo aFUniJo7sifY SfhAnd7ov s UniF#1220DH kn WosFsido kt 7kadh

HELIIY/ : TER.(3339) 2, v C61 M3009) 26v2f 6) M30092, 2w 1ZZ

LI. E . LIGHT Y/ / RDINATES.4..., Z2P 22H1f "X...2ZCf03f f2C'

LaF.f 2' 22" C f 100' N Lkng..102' 2f "0) h 0" W NAD 26 ELEVATI/ N f f0f 1H1Q )00Q NL 4 3f f ". ELPSEYTI/ N 12PBL/ YK f P ANDREWS Y/ UNTXPTE4AS

/ 4 X DS& TRAILER.231v6f f v262O

N/ TI. X TRRY / . INTENT T/ S: UD AND RUN SUR. AYE YASING ..12M2M, S: / KE T/ YINDX TRRY E&: L/ XEEP% B #210)

N/ TI. IED TRRY / . INTENT T/ RUN AND YE&ENT 3h 2C5INT YASING..1M0MOYINDX / : #,

N/ TI. IED TRRY / . INTENT T/ RUN AND YE&ENT 0C5INT YASING ...

Unsato Apf\$.1.

Sato Apf\$.f

Unsato Eq- inx onF.0

SWA.1.

Noa7&issos.0.

Wk7esiF0 %6A..12

SatoFy & oofngs..10

L/ M/ .1.

: o7x iF\$ fK v k7e..2

: kv o7Lino Y\$opelisF.12M2M01,

: 7o Sm dNfRig Insmopfkns...

Haza7d ID's.2

En2 / bso7Jaffkns.0.

BEST ST/ : YARD../BSERVED E&: L/ XEE N/ T WEARING H2S &/ NIT/ R/ N : R/ : ER : LAYE E4: LAINED : / LIYXPHE Y/ &: LIED % B Y/ NTINUED SA. ELX

f M2M010

Z.C f.3A&

: ago , kt ,

/ 4X USA INY

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 01M0M010

Prim. Reason: / RIG DRILL H/ RIC

USA

Report No: 21DR

. 7kx	Tk	H7s	/ m : \$aso	/ m Ykdo	/ m S-b	/ m Tymo	/ m7afkn Dofails
10.00	1, .00	, f00	f 1: RDR	DRILL	HRCBLD	:	SLIDEV/ TATE DRILL 6 6M35: R/ DUYTI/ N H/ LE . MZP82QTMZP6, Q : R/ GRESS Z2 . T R/ : AVG.2f . TMIR W/ B.20W0 KLBS SR: &..00 &R: &..12, BR: &..16, . L/ W RATE...6OG: & : U&: : RESSURE / N B/ TT/ &...02O: SI : U&: : RESSURE / . . B/ TT/ &..f, 6Q SI DI. . : RESSURE...000: SI &UD WT.Zh) VIS )3 : M WT.20OKI: S SM WT..21, KI: S R/ T WT..12 KI: S T/ R' UE / N BT&..1hZ KLBh T T/ R' UE / . . BT&..1300 KLB  SLIDE . R/ & ZP32Q/ ZP12Q R/ TATE . R/ & Z)12Q/ Z)f0Q SLIDE . R/ & Z)f0Q/ Z),1Q R/ TATE . R/ & Z),1Q/ Z)fQ SLIDE . R/ & Z)fQ/ Z)6,Q  SURVEX @ZP200QINY 22h2 AC& 1)f f f 0QEL/ WMB/ VE 2f Q.E. T ( L/ ST 300: SI/ . : U&: : RESSURE 9
1, .00	21.00	6f00	f 1: RDR	RIG&T	RE:	: T	TR/ UBLE SH/ / T L/ SS/ . : U&: : RESSUREP. / UND 25BLEEDER VALVE / N THE STAND : I: E WASHED / UT IN THE B/ DX h: ULL U: IN THE SH/ E WITH 66M5YURVE DRILL STRING hBLANK / . . 25P TEST STAND : I: EP, 5STAND : I: E VALVE LEAKEDPREBUILD VALVEh
21.00	0.00	f f00	f 1: RDR	DRILL	HRCBLD	:	SLIDEV/ TATE DRILL 6 6M35: R/ DUYTI/ N H/ LE . MZP6, QTMZP6f 6Q : R/ GRESS )f . T R/ : AVG..21 . TMIR  W/ B.20W0 KLBS SR: &..00 &R: &..12, BR: &..16, . L/ W RATE...00 G: & : U&: : RESSURE / N B/ TT/ &..f000: SI : U&: : RESSURE / . . B/ TT/ &..f200: SI DI. . : RESSURE..f00: SI  &UD WT..10h2 VIS )3 : M WT.20OKI: S SM WT..21, KI: S R/ T WT..12 KI: S T/ R' UE / N BT&..1hZ KLBh T T/ R' UE / . . BT&..1300 K  R/ TATE . R/ & Z)6, Q/ Z)Z)Q SLIDE . R/ & Z)Z)Q/ ZP00)Q R/ TATE . MZP0)QTMZP2)Q SLIDE . MZP2)QTMZP6f 6Q  SURVEX @ZP0Q@INY 2f h6 AC& 1)f f f AB/ VE f 1Q.E. T 20
TkFai Tix o		2, f00					
Safety Incident? N Days since Last RI: , ) ) f00							Weather Comments:
Environ Incident? N Days since Last LTA: , ) ) f00							
Incident Comments: Nk inpidonf5 7onk7od lasF2, \$k- 7sh							

f M2M010

Z.Cf.f.3A&

: ago f kt,

## DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING  
Prim. Reason: / RIG DRILL H/ RIC

ST ANDREWS UNIT 1220H  
USA

Date: 01MOM2010  
Report No: 21DR

## OPERATIONS

7x	Tk	H7s	/ m : \$aso	/ m Ykdo	/ m S- b	/ m Tymo	/ no7aRkn DoFails
0.00	0.f.0	0f00	f 1: RDR	YIRY	YH/ VR	:	. INISH DIS: LAYING H/ LE WITH 10#/ B&
0.f.0	, .f.0	, f00	f 1: RDR	DRILL	HRCBLD	:	SLIDEV/ TATE DRILL 6 6M5: R/ DUYTI/ N H/ LE . MZP 000T MZP ) 2Q  : R/ GRESS 106 . T R/ : AVG. 26 . TWR W/ B . 20# 0 KLBS SR: & . .00 & R: & . .12, BR: & . .16, . L/ W RATE. . . 00 G: & : U& : : RESSURE / N B/ TT/ & . f 0 : SI : U& : : RESSURE / . . B/ TT/ & . f 2f 0 : SI DI. . : RESSURE . f 00 : SI & UD WT. ZP8 VIS ) 3  : N0 WT. 226 KI: S SM WT. 210 KI: S R/ T WT. 213 KI: S T/ R' UE / N BT& . .0000 KLBh T T/ R' UE / . . BT& . .1300 KLB  R/ TATE . R/ & ZP 000T/ ZP 20Q SLIDE . R/ & ZP 20QT/ ZP ) 2Q  SURVEX @Zf f 00INY 110 AC& 120f 440BEL/ W 440E. T
, .f.0	) .00	1f00	f 1: RDR	DRILL	HRCBLD	:	SLIDEV/ TATE DRILL 6 6M5: R/ DUYTI/ N H/ LE . MZP ) 20T MZP 002Q  : R/ GRESS , 0 . T R/ : AVG. 26 . TWR W/ B . 20# 0 KLBS SR: & . .00 & R: & . .12, BR: & . .16, . L/ W RATE. . . 00 G: & : U& : : RESSURE / N B/ TT/ & . f 0 : SI : U& : : RESSURE / . . B/ TT/ & . f 2f 0 : SI DI. . : RESSURE . f 00 : SI & UD WT. ZP8 VIS ) 3  : N0 WT. 226 KI: S SM WT. 210 KI: S R/ T WT. 213 KI: S T/ R' UE / N BT& . .0000 KLBh T T/ R' UE / . . BT& . .1300 KLB  SLIDE . R/ & ZP ) 2QT/ ZP 002Q  SURVEX @ZP f 00INY , 10AC& 113h10 Z0AB/ VE ) 0E. T
) .00	10.00	, f00	f 1: RDR	DRILL	HRCLAT	:	SLIDEV/ TATE DRILL 6 6M5: R/ DUYTI/ N H/ LE . MZP 002QT MZP 002Q  : R/ GRESS 30 . T R/ : AVG. 20 . TWR W/ B . 20# 0 KLBS SR: & . .00 & R: & . .12, BR: & . .16, . L/ W RATE. . . 60G: & : U& : : RESSURE / N B/ TT/ & . . 100 : SI : U& : : RESSURE / . . B/ TT/ & . f 600: SI DI. . : RESSURE . . 00 : SI & UD WT. ZP ) VIS ) 3  : N0 WT. 200 KI: S SM WT. 21, KI: S R/ T WT. 213 KI: S T/ R' UE / N BT& . .0000 KLBh T T/ R' UE / . . BT& . .1300 KLB  SLIDE . R/ & ZP 002QT/ ZP 002Q SURVEX @ZP 000INY 10h AC& 1f Z10 1) 0AB/ VE 200E. T HELD . HR SA. ETX & EETINGh

/ 4X USA INY

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 01M012010

Prim. Reason: / RIG DRILL H/ RIC

USA

Report No: 21DR

Wellbore / Top MD: 00 @ 0 tF

Rig: Hr : 2),

Ref Datum: / 7ginal KB @f R0Q h0tF

DFS: 16h1Z

Today's MD: Z6f 6 tF

Progress: , 02 tF

Ground Elev: f R0f 1h10 tF

Daily Cost: 86f R2) 3

Prev MD: Zf f 0tF

Rot Hrs Today: 1) h00 \$7

AFE MD/Days: 1ZR00h0 M Q8 days

Cum Cost: 82R000R061

PBMD: Avg ROP Today: 2, h 1R07

AFE Number: 113Z06Z#0102

AFE Cost: 8, R016R06,

Current Formation: W/ L. YA& : @ZR6Q0

Lithology: 6Qr SHALE P2Qr Li& EST/ NE

Current Ops:

24-Hr Summary: R/ ATAE AND SLIDE DRILL 6 6M5: R/ DUYTI/ N YURVE . MZP 00Q1MZ6f 6Q

24-Hr Forecast: (EST RR 1M) M0Q/R/ L 1M2M09DRILL 6 6M5: R/ DUYTI/ N YURVE AND LATERAL AS : ER AI& DIREYTI/ NAL : LAN

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg		Max	
Last Casing:	3h 2Qn @ ZP f QF	Str Wt Up/Dn:	2, 0h0M 21Q0 ein	Pump Rate:	, , Zf6	Conn:					
Next Casing:	Q000in @ 1ZR00tF	Str Wt Rot:	220h0 ein	Pump Press:	f 630	Trip:					
Last BOP Press Test:	12M3M01,	Torq Off Btm:				Backgr:					
Form Test/EMW:	. IT M12h00 mmg	Torq On Btm:									

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	R/ N & / RSE	MD	Incl	Azi	TVD	N/-S	E/-W	VS	DLS	Build
Supervisor 2:	YA: / LIVAREC	ZP Q h0	2f h60	1) f h0	ZP , f h02	v08h0	212hf	10f h0	, h8,	, h8,
Engineer:	KEVIN THREADGILL	ZP 2Q0	22h20	1) f h0	ZP 1, h23	w) hZ	203hZ	Z1h0	) h63	QZ,
Geologist:	S- x iyya\$ A\$x od	ZR2f h0	20hf 0	1) 0h 0	ZR08Qh10	w QZ	20Qf	6Zh	12h00	Zh0f
Oxy Personnel:	f	ZR0 2h0	16h00	1Q2h10	ZR00082	v0 h6	201hf	) Zh	1f h23	) h0
Contractor Personnel:	12	ZR0 0h0	1Qh 0	1f Zh00	ZR0Qh12	vd Zh2	1Z) h2	) 1h2	1f h ,	Qf 1
Total on Site:	10	ZP, Z3h0	1f h60	12f h20	ZP Z, h1,	vd f hZ	1Z0hf	Q, h8	1f hZ,	12h00

BIT RECORD										
Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
5	7.875	HALLIBURTON	MMD54DM	12609219	M434	Qc10	9335	15,102	1v2wTv6	4vwWTVBHA

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB x inM ac	RPM x inM ac	TFA	P Drop Bit	Noz Vel	HHPSI
0	1) h00	1) h00	, 02	, 02	2, h	2, h	20h0M0h0	20M00	0h8) f	200	1) 6h2	1hf

MUD DATA - M-I LLC (Schlumberger)					LAST OR CURRENT BHA									
Engineer:	YHRIS % HNS/ N	MBT:			BHA Nk...	)	BiFNk...	O	& D In...	Zf f 0tF				
Sample From:	In (S- pflkn : iR9	pH:			: - 7rkso... DRILL : R/ DUYTI/ N H/ LE YURVE SEYTI/ N& D / - F... 1Qh02 tF									
Mud Type:	DiosolVBasod	Pm / Pom:	1h20		Component						OD	ID	Jts	Length
Time / MD:	1) .00 MZP 6, h0	Pf / Mf:	M		DY BIT						6h86C	2h200	1	1h00
Density @ Temp:	10h00 M	Chlorides:			YURVE DRILLING & / T/ R						) h000	2h200	1	2Zh )
Rheology Temp:	100	Ca++ / K+:	M		UBH/ SUB						) h000	2h000	1	2hZ6
Viscosity:	62h00	CaCl2:			N/ Nv& AG DRILL Y/ LLAR						) h000	2h200	1	2Zh0)
PV / YP:	13 M12	Cl- in water phase:	f 1R00h00		N/ Nv& AG . LE4 DRILL Y/ LLAR						) h000	2h200	1	f 0h) 3
Gels 10s/10m/30m:	3 Ml, Ml)	Lime:	1h) f		DRILL : I: E						, h000	f h82)	21	) Qf 0
API WL:		ES:	) f Zh00		AGITAT/ R						) h000	2h200	1	13hf 6
HTHP WL:	12h 0	ECD:			SH/ YK SUB						) h000	2h200	1	12hf 3
Cake API / HTHP:	M2h0	n / K:	M		DRILL : I: E						, h000	f h82)	120	f h8Z1h) 3
Solids / Sol Corr:	1, h00 M12h0	Carbonate:			HWD:						, h000	2h600	f 0	Z20h) f
Oil / Water:	62h0 Ml, h0	Bicarbonate:												
Oil / Water % for OWR:	16h00 M8f h00	Form Loss / Cum Loss:	0h0 M0h0											
Sand:		Fluid Disch:	M											
Water Added:		Daily Mud Cost:	816R0f 2											
Oil Added:		Cum Mud Cost:	8QZR01Z											
LGS:	2h00 M													
VG Meter:	f 0@f 00 M 3@) 00	Total Length: QR01hf f tF Wt below Jars:												
Comments:														

MUD PRODUCTS			
Product	Number of Units	Units	Qty Used
Blkv o7Ronfal	1h00	oap\$	1h00
B- le Tane Ronfal	1h00	oap\$	2h00
YaY12 ZQu	1h00	oap\$	10h00
E& lvZf f	1h00	lb	2C0h00
HR:	00h00	gal	1h00
Lix o	1h00	oap\$	f 0h00
& w Wafo	1h00	Rkn (\$\$k 79	10h00
& - d So7lipo v2, H7	1h00	day	1h00
Skdi- x Y\$lk7doWlaYl	1h00	oap\$	2h00
Vo7saFkl	1h00	oap\$	10h00

f M2M010 Z.C f.3A&

: ago 1 kt ,



/ 4 X USA INY

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 01M12010

Prim. Reason: / RIG DRILL H/ RIC

USA

Report No: 22DR

Other Remarks:

UNIVERSITX STHANDREWS UNIT # 1220DH  
: 7kx t\$O Into7soptikn kf Hig\$V ay P6Oand Hig\$V ay 1F9 in And7ov sZTocasZd7Jo 2Hl x ilos East kn Hig\$V ay 1F9 tk into7soptikn kf Hig\$V ay 1F9 and Hig\$V ay 11Ch T- 7h loft )Nk7\$soast&kn Hig\$V ay 11Ch : 7kx into7soptikn kf Hig\$V ay 11Oand Hig\$V ay 1F9Zd7Jo 9fFOX ilos Nk7\$soast kn Hig\$V ay 11Ch At into7soptikn kf Hig\$V ay 11Oand : ( 1F66Zpkntin- o st7aig\$T )Nk7\$soast&1f6 x ilos° Ht\$on t- 7h 7g\$T )Sk- t\$&kntk loaso 7kadh D7Jo 1f9Ox ilos and t- 7h loft )East&kntk loaso 7kadh D7Jo 0f9 x ilos and 7kad v ill x aeo a slig\$T bond tk t\$O 7g\$T )Sk- t\$&n At bond in 7kadZpkntin- o East fk7ankt\$so70h x ilos )7kad v ill t- 7h loft k7Nk7\$ afto7 0f2 x ilos&and a77Jo at UniJo7sity SthAnd7ov s Unit #1220DH kn West sido kf 7kadh  
  
HELIY/ 5TER.)666&92, vPCF1 M600&92Fv2PF9 M600&2, 2v01. .  
LI: E : LIGHT Y/ / RDINATES.4... , 2Z 22H1P"X...2. Q06P12O'  
  
Lat..P2' 22"CP10O' N Lkng..102' 2P"09f90" W NAD 2F ELEVATI/ N P0P1H1Q  
900Q NL 4 6PP": ELZSEYTI/ N 12ZBL/ YK PZ ANDREWS Y/ UNTXZTE4AS  
  
/ 4 X DS( TRAILER.261v6PPv2F2O  
N/ TI: X TRRY / : INTENT T/ S5UD AND RUN SUR: AYE YASING ..12M2M, S5/ KE T/ YINDX TRRY E( 5L/ XEEZ% B #2109  
N/ TI: IED TRRY / : INTENT T/ RUN AND YE( ENT 6f92C8INT YASING..1M0MOYINDX/ 5 #,  
N/ TI: IED TRRY / : INTENT T/ RUN AND YE( ENT 0C8INT YASING ...  
Unsafo Apts.1.  
Safo Apts..P  
Unsafo Eq- inx ont..0  
SWA.1.  
Noa7( issos.0  
  
Wk7esito %6A..10  
Safoty ( ootings..6  
L/ M/ .2  
5o7x its tk v k7e..P  
5kv o7Lino Y\$opelist..12M. M01,  
57o Sm dN7Rig Insmoptikns...  
Haza7d ID's.1.  
En2 / bso7Jatikns.0  
  
BEST ST/ 5 YARD../ BSERVERD E( 5L/ XEE WALKING UNDER SUS5ENDED L/ ADZST/ 55ED % B E45LAINED  
DANGER\$ ZHE Y/ ( 5LIED % B Y/ NTINUED WITH/ UT INYIDENT

PM12M010

..CP.PQA(

5ago , kf ,

/ 4X USA INY											
DAILY OPERATIONS PARTNER REPORT											
Event:		DEV DRILLING				ST ANDREWS UNIT 1220H		Date:		01M12010	
Prim. Reason:		/ RIG DRILL H/ RIC				USA		Report No:		22DR	
: 7x	Tk	H7s	/ m	/ m	/ m	/ m	/ no7atkn Details				
10.00	12.P0	2t00	P15RDR	DRILL	HRCBLD	5	SLIDEV/ TATE DRILL F F035R/ DUYTI/ N H/ LE : M Z 69QTM10Z01Q 5R/ GRESS 90: T R/ 5 AVG..1610: TMIR  W/ B.20P0 KLBS SR5( .00 ( R5( .12, BR5( .1F, : L/ W RATE...00 G5( 5U( 5 5RESSURE / N B/ TT/ ( .PF60 5SI 5U( 5 5RESSURE / : : B/ TT/ ( .P, 005SI DI: : 5RESSURE...00 5SI  ( UD WT..1010 VIS 96 5N1 WT..200KI5S SM WT..21, KI5S R/ T WT..12 KI5S T/ R' UE / N BT( .1h KLBh T T/ R' UE / : : BT( ...10KLB : T  R/ TATE : M Z 69QTM10Z09Q SLIDE : M10Z09QTM100CFQ  SURVEX @10Z0, QINY , 116 AC( 1FCh AB/ VE 1FQLE: T 1FQ H2S ALR( S G/ ING / : : ZSHUT WELL IN AND EVAYUATED RIG T/ SA: E BRE: ING STATI/ Nh				
12.P0	10P0	P100	P15RDR	SA: E	5%6(	5T	WAIT / N HSEZHSE ARRIVED YLEARED THE RIG / 5EN WELL AND YIRYULATED B/ TT/ ( S U5 ( / NIT/ R BX HSEh				
10P0	19.P0	1100	P15RDR	DRILL	HRCBLD	5	SLIDEV/ TATE DRILL F F035R/ DUYTI/ N H/ LE : M10Z01QTM10Z0F. Q 5R/ GRESS 16 : T R/ 5 AVG..26 : TMIR  W/ B.20P0 KLBS SR5( .00 ( R5( .12, BR5( .1F, : L/ W RATE...00 G5( 5U( 5 5RESSURE / N B/ TT/ ( .PF60 5SI 5U( 5 5RESSURE / : : B/ TT/ ( .P, 005SI DI: : 5RESSURE...00 5SI  ( UD WT..1010 VIS 96 5N1 WT..200KI5S SM WT..21, KI5S R/ T WT..12 KI5S T/ R' UE / N BT( .1h KLBh T T/ R' UE / : : BT( ...10KLB : T  SLIDE : M10Z01QTM10QF. Q  SURVEX @10Z0, QINY , 116 AC( 1FCh AB/ VE 1FQLE: T 1FQ H2S ALAR( WENT / : : ZSHUTWN WELLh				
19.P0	1. .00	2t00	P15RDR	SA: E	5%6(	5T	WAIT : / R HSEZHSE ARRIVED YLEARED THE RIGZ: / UND 2 BAD SENS/ RSZ RE5LAYED BAD SENS/ RSZYIRYULATE VERI: X N/ H2SZ/ 5EN WELL				
1. .00	0.00	0000	P15RDR	DRILL	HRCBLD	5	SLIDEV/ TATE DRILL F F035R/ DUYTI/ N H/ LE : M10Z0F. QTM10Z16Q 5R/ GRESS 1P. : T R/ 5 AVG..26 : TMIR  W/ B.20P0 KLBS SR5( .0 ( R5( .12, BR5( .1, 6 : L/ W RATE...00 G5( 5U( 5 5RESSURE / N B/ TT/ ( .P660 5SI 5U( 5 5RESSURE / : : B/ TT/ ( .P, 605SI DI: : 5RESSURE...00 5SI  ( UD WT..1010 VIS 96 5N1 WT..2, 0 KI5S SM WT..216 KI5S R/ T WT..222 KI5S T/ R' UE / N BT( .1h KLBh T T/ R' UE / : : BT( ...10KLB : T  SLIDE : M10Z0F. QTM10Q16Q  SURVEX @10Z1, 9QINY QPH1AC( 1F210 AB/ VE PHQMLE: T 9Q				
Tktal Tix o		2, 100									
Safety Incident?		N		Days since Last RI:		, 9F100		Weather Comments:			
Environ Incident?		N		Days since Last LTA:		, 9F100					
Incident Comments:											
Nk inpidonts 7onk7od last 2, \$k- 7sh											

PM121010 . .CP.PQA(5ago Pkf ,

/ 4X USA INY									
DAILY OPERATIONS PARTNER REPORT									
Event:		DEV DRILLING				ST ANDREWS UNIT 1220H			
Prim. Reason:		/ RIG DRILL H/ RIC				USA			
						Date:		01M12010	
						Report No:		22DR	
OPERATIONS									
: 7kx	Tk	H7s	/ m 5\$aso	/ m Ykdo	/ m S-b	/ m Tymo	/ mo7atikn Details		
0.00	, .00	, 100	P15RDR	DRILL	HRCBLD	5	SLIDEV/ TATE DRILL F F1035R/ DUYTI/ N H/ LE : M ZPFQTM Z, Q 5R/ GRESS 10F : T R/ 5 AVG.2F : TMR  W/ B.204P0 KLBS SR5( .00 ( R5( .12, BR5( .1F, : L/ W RATE...00 G5( 5U( 5 5RESSURE / N B/ TT/ ( .PF60 5SI 5U( 5 5RESSURE / : : B/ TT/ ( .PP605SI DI: : 5RESSURE...00 5SI  ( UD WT..1012 VIS 96 5N1 WT..200KI5S SM WT..21, KI5S R/ T WT..12 KI5S T/ R' UE / N BT( .1h KLBh T T/ R' UE / : : BT( .P12KLB : T  R/ TATE : M ZPFQTM Z00 SLIDE : M Z00QTM Z9F R/ TATE : M Z9FQTM Z6. Q SLIDE : M Z6. QTM Z. . Q R/ TATE : M Z. . QTM Z2, Q SLIDE : M Z2, QTM ZP2Q R/ TATE : M ZP2QTM Z, , Q  SURVEX @. Z6PQZINY 2Fh AC( 1F0h AB/ VE PPQLE: T 2,		
, .00	9.00	2100	P15RDR	DRILL	HRCBLD	5	SLIDEV/ TATE DRILL F F1035R/ DUYTI/ N H/ LE : M Z, QTM Z. QQ 5R/ GRESS 10F : T R/ 5 AVG.2F : TMR  W/ B.204P0 KLBS SR5( .00 ( R5( .12, BR5( .1F, : L/ W RATE...00 G5( 5U( 5 5RESSURE / N B/ TT/ ( .PF60 5SI 5U( 5 5RESSURE / : : B/ TT/ ( .PP605SI DI: : 5RESSURE...00 5SI  ( UD WT..1012 VIS 96 5N1 WT..200KI5S SM WT..21, KI5S R/ T WT..12 KI5S T/ R' UE / N BT( .1h KLBh T T/ R' UE / : : BT( .P12KLB : T  SLIDE : M Z, , QTM Z Z91Q R/ TATE : M Z91QTM ZFPQ SLIDE : M 6FPQTM Z. QQ  SURVEX @. Z1, QZINY 26h AC( 1F0h AB/ VE P1QLE: T 2P		
9.00	10.00	, 100	P15RDR	DRILL	HRCBLD	5	SLIDEV/ TATE DRILL F F1035R/ DUYTI/ N H/ LE : M Z. QTM Z 69Q 5R/ GRESS . 1 : T R/ 5 AVG.2P : TMR  W/ B.204P0 KLBS SR5( .00 ( R5( .12, BR5( .1F, : L/ W RATE...00 G5( 5U( 5 5RESSURE / N B/ TT/ ( .PF60 5SI 5U( 5 5RESSURE / : : B/ TT/ ( .P, 005SI DI: : 5RESSURE...00 5SI  ( UD WT..1010 VIS 96 5N1 WT..200KI5S SM WT..21, KI5S R/ T WT..12 KI5S T/ R' UE / N BT( .1h KLBh T T/ R' UE / : : BT( ....10KLB : T  R/ TATE : M Z. QTM Z 00Q SLIDE : M Z 00QTM Z 69Q  SURVEX @. Z 0. QZINY PP10 AC( 196h AB/ VE 22QLE: T 29Q		

PM1212010 . .QP.PQA(

5ago 2 kf ,

/ 4 X USA INY

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 01M12010

Prim. Reason: / RIG DRILL H/ RIC

USA

Report No: 22DR

Wellbore / Top MD: 00 @ 0 ft

Rig: Hr 5 29,

Ref Datum: / 7ginal KB @P20C9H0ft

DFS: 16H1.

Today's MD: 10Z216 ft

Progress: , 61 ft

Ground Elev: P20P1H10 ft

Daily Cost: 890Z6P

Prev MD: . FPF ft

Rot Hrs Today: 16H00 \$7

AFE MD/Days: 1. Z00H0 MPO6 days

Cum Cost: 82Z091ZOP

PBMD: 29H0 ft\$7

Avg ROP Today: 29H0 ft\$7

AFE Number: 116. 0F. #0102

AFE Cost: 8, Z01FZ0F,

Current Formation: W/ L: YA( 5@. ZFQ0

Lithology: 60u SHALE 20u LI( EST/ NE

Current Ops:

24-Hr Summary: DRILL F F035R/ DUYTI/ N YURVE : M ZPFQTM10Z16QZHAD H2S ALAR( S DUE T/ : AULTX SENS/ RS WERE RE5LAYED

24-Hr Forecast: )EST RR 1M9M03R/ L 1M. MC&DRILL F F035R/ DUYTI/ N YURVE AND LATERAL AS 5ER AI( DIREYTI/ NAL 5LAN

CASING/WELL CONTROL

HOOKLOAD & TORQUE

HYDRAULICS

MUD GAS

Avg

Max

Last Casing: 6H92Qn @ . ZPQft

Str Wt Up/Dn: 2, 0H0M 216H0 ein

Pump Rate: , , . IF

Conn:

Next Casing: Q000in @ 1. Z00ft

Str Wt Rot: 222H0 ein

Pump Press: P660

Trip:

Last BOP Press Test: 12M6M01,

Torq Off Btm:

Backgr:

Form Test/EMW: : IT M12H0 mmg

Torq On Btm:

PERSONNEL

SURVEY DATA (LAST 6)

Supervisor 1: R/ N / RSE

MD

Incl

Azi

TVD

N/-S

E/-W

VS

DLS

Build

Supervisor 2: YA5 / LIVAREC

10Z, 9H0

QPH0

1F2H90

10Z0P. IF1

wPPP0

2, . HP

PF. H0

1PHQ

11h 9

Engineer: KEVIN THREADGILL

10Z0. 6H0

, F1H0

1FFH10

10Z00. H0.

w2. 9HF

2, Qh

P, 2h

6h .

9H1F

Geologist: S- x iyya\$ A\$x od

10Z0H1H0

, , HF0

160h 0

. Z F9H02

w292H6

2, QP

P0. HF

. H00

9H1F

Oxy Personnel: P

10Z00, H0

, 1H60

1FCh 0

. Z, 2H26

w2P0HF

2, , H0

2F6H1

FPP

QF,

Contractor Personnel: 19

. Z CFH0

P. H10

1F2H90

. Z 09H02

w200HF

2, 1h

2, Fh

1Ph .

12HF1

Total on Site: 1.

. Z 0. H0

PH00

196h 0

. Z09HF2

w1F2H0

2FFH0

21. HF

6H0P

Fh 2

BIT RECORD

Bit No

Size

Manufacturer

Model

Serial No

IADC Code

Nozzles

MD In

MD Out

I-O-D-L

B-G-O-R

5

7.875

HALLIBURTON

MMD54DM

12609219

M434

Qc10

9335

15,102

1v2wTv6

4vWVTvBHA

BIT OPERATING PARAMETERS TODAY

Bit No

Rot Hrs

Cum Rot Hrs

Prog

Cum Prog

ROP

Cum ROP

WOB x inM ac

RPM x inM ac

TFA

P Drop Bit

Noz Vel

HHPSI

O

16H00

PQ00

, 61

66P

29H0

20Z

20H0WQ0

20Q00

0H69P

200

19FH2

1HP

MUD DATA - M-I LLC (Schlumberger)

LAST OR CURRENT BHA

Engineer: Y\$7s %k\$nskN

MBT:

BHA Nk... 9

Bit Nk... O

( D In... . PPOft

Sample From: In )S- ptikn 5it&

pH:

5- 7rkso... DRILL 5R/ DUYTI/ N H/ LE YURVE SEYTI/ N( D / -t... 10Z02 ft

Mud Type: DiosolvBasod

Pm / Pom: 1H00

Time / MD: 19.00 M10Z000

Pf / Mf:

Density @ Temp: 10H00 M,

Chlorides:

Rheology Temp: 100

Ca++ / K+: M

Viscosity: 92H00

CaCl2:

PV / YP: 1, M1

Cl- in water phase: P2Z00H00

Gels 10s/10m/30m: 6 M12 M10

Lime: 1h O

API WL:

ES: 96. H00

HTHP WL: 10H00

ECD: 11H20

Cake API / HTHP: M2H0

n / K: M

Solids / Sol Corr: 1, H00 M12H60

Carbonate:

Oil / Water: 9. H0 M1HF0

Bicarbonate:

Oil / Water % for OWR: F6H00 M22H00

Form Loss / Cum Loss: 0H0 M0H0

Sand:

Fluid Disch: M

Water Added:

Daily Mud Cost: 80ZPPF

Oil Added:

Cum Mud Cost: 890Z0CF

LGS: PHF0 M

VG Meter: 20@P00 MP. @900

Total Length: Q001HPP ft

Wt below Jars:

Comments:

MUD PRODUCTS

Product

Number of Units

Units

Qty Used

Blkv o7Rontal

1H00

oap\$

1H00

B- le Tane Rontal

1H00

oap\$

2H00

YaY12 . Qu

1H00

oap\$

2, H00

YloanvWm

1H00

oap\$

1H00

E( lw PP

1H00

lb

9H00

Lix o

1H00

oap\$

96H00

( ogad7H Systox

1H00

bbl

2FFH00

( - d So7Hipo w2, H7

1H00

day

1H00

SS7ne W7am

1H00

oap\$

11H00

Vo7sax kd

00H00

gal

1H00

Vo7sat7kl

1H00

oap\$

9H00

PM12M010

. .QP.POA(

5ago 1 kf ,

4 XY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 01Q2Q01/

Prim. Reason: 4 RIG DRILL H4 RIZ

USA

Report No: 2MDR

( 7kx	Tk	H7s	4 m . \$aso	4 m Ckdo	4 m S- b	4 m Tymo	4 m7a3kn Do3ails
22.00	0.00	2r00	M. RDR	DRILL	HRZLAT	.	R4 TATE DRILL 5 50: . R4 DUCTI4 N H4 LE ( 0106M5/ Q0116 5f Q . R4 GRESS 105 ( T R4 . AVG. J. M( T0IR SLIDE ( 016 5f Q0116 t MQ  W4 B. 2/ w0 KLBS SR. h .90 h R. h .1f 9 BR. h .209 ( L4 W RATE. ff 1 G. h . Uh . . RESSURE 4 N B4 TT4 h .M00 . SI . Uh . . RESSURE 4 ( ( B4 TT4 h .M2t 0. SI DI( ( . RESSURE.500 . SI  h UD WT..10r0 VIS 92 . 00 WT..2f 0 KI. S S0 WT. 215 KI. S R4 T WT..220 KI. S T4 R' UE 4 N BTh ..10 KLBr( T T4 R' UE 4 ( ( BTh ..f KLBr( T  SURVEY P 110MMQINC @r/ AZh 150r/ AB4 VE 0QMLE( T 0 4 TL
Tk3al Tix o		2f r00					
Safety Incident?		N	Days since Last RI:		f 9t r00		
Environ Incident?		N	Days since Last LTA:		f 9t r00		
Incident Comments:		Nk inpidon3 7bnk7bd las32f \$k- 7sr					
Other Remarks:		UNIVERSITY STr ANDREWS UNIT # 1220DH ( 7kx 3so In37sop3kn kFHig\$V ay M/ and Hig\$V ay 159 in And7bv s6Tocas6d7Jo 2r1 x ilos Eas3kn Hig\$V ay 159 3k in37sop3kn kF Hig\$V ay 159 and Hig\$V ay 11/ r T- 7h loB)Nk73soas3kn Hig\$V ay 11/ r ( 7kx in37sop3kn kFHig\$V ay 11/ and Hig\$V ay 1596d7Jo 9r5/ x ilos Nk73soas3kn Hig\$V ay 11/ r A3in37sop3kn kFHig\$V ay 11/ and ( h 15t t 6pkn3n- o s3aig\$3)Nk73soas31rt x ilos° rr3on 3 7h 7g\$3)Sk- 3&kn3k loaso 7kadr D7Jo 1r9/ x ilos and 3 7h loB)Eas3kn3k loaso 7kadr D7Jo 0r9 x ilos and 7kad v ill x aeo a slig\$3bond 3k 3so 7g\$3)Sk- 3& A3bond in 7kad6pkn3n- o Eas3R7ank3so70rf x ilos )7kad v ill 3 7h loBk7Nk73 aB37 0r2 x ilos&and a77Jo a3UniJo7si3y S3 And7bv s Uni3#1220DH kn Wos3sido kF7kadr  HELIC4 . TER..)t t t &92f wM 51 Q)t 00&925v2M59 Q)t 00&2f 2v01@@ LI( E ( LIGHT C4 4 RDINATES..X...f @6 22r1MY...2@0t M2/ "  La3..M2' 22"/ M0/ " N Lkng..102' 2M'09r90" W NAD 25 ELEVATI4 N M0M1r1Q 9/ 0Q NL X t MM( EL6SECTI4 N 126BL4 CK M6 ANDREWS C4 UNTY6TEXAS  4 XY DSh TRAILER.2t 1w MM252/ N4 TI( Y TRRC 4 ( INTENT T4 S. UD AND RUN SUR( ACE CASING ..12Q2Qf S. 4 KE T4 CINDY TRRC Eh . L4 YEE6%B #21/ 09 N4 TI( IED TRRC 4 ( INTENT T4 RUN AND CEh ENT t r92/ : INT CASING..10Q/ CINDY 4 . #f N4 TI( IED TRRC 4 ( INTENT T4 RUN AND CEh ENT / r/ : INT CASING ... UnsaF0 Ap3.1. SaF0 Ap3..2 UnsaF0 Eq- imx on3.0 SWA.2 Noa7h issos.0  Wk7esi30 %A..11 SaF03y h oo3ngs..@ L4 Q4 .1. . o7x i3 3k v k7e..f . kv o7Lino C\$opelis3.120@201f . 7o Sm dQrig Insnop3kns... Haza7d ID's.2 En2 4 bso7Ja3kns.0  BEST ST4 . CARD.4 BSRVED Eh . L4 YEE BREAKING STUDS 4 N S. 4 4 LAND N4 T USING R4 . E 4 N Hah h ER WRENCH6EX. LAINED . 4 LICY AND DANGERS HE C4 h . LIED ATTACHED R4 . E T4 WRENCH6%B C4 NTINUED WITH4 UT INCIDENT					

<div> <div>4 XY USA INC</div> <div>DAILY OPERATIONS PARTNER REPORT</div> <div> <div>Event: DEV DRILLING</div> <div>ST ANDREWS UNIT 1220H</div> <div>Date: 01Q2Q01/</div> </div> <div> <div>Prim. Reason: 4 RIG DRILL H4 RIZ</div> <div>USA</div> <div>Report No: 2MDR</div> </div> </div>									
( 7x	Tk	H7s	4 m \$aso	4 m Ckdo	4 m S-b	4 m Tymo	4 m7a3kn Do3ails		
10.00	11.M0	1r/ 0	MI. RDR	DRILL	HRZBLD	.	SLIDEV R4 TATE DRILL 5 50: . R4 DUCTI4 N H4 LE ( O100 2f QTO100 5MQ . R4 GRESS f @ T R4 . AVG..@ ( T0IR  W4 B..2/ W0 KLBS SR. h ..0 h R. h ..1ft BR. h ..1ft ( L4 W RATE..f/ 0 G. h . Uh . . RESSURE 4 N B4 TT4 h ..Mt 0 . SI . Uh . . RESSURE 4 ( ( B4 TT4 h ..Mt 0. SI DI( ( . RESSURE..f.00 . SI  h UD WT..10r0 VIS 9t . @ WT..2f 0 KI. S S@ WT..21t KI. S R4 T WT..222 KI. S T4 R' UE 4 N BTh ..1r@KLB r( T T4 R' UE 4 ( ( BTh ..@ KL SLIDE ( O100 25QTO100 / 9 R4 TATE ( O100 2f QTO100 5MQ LANDED CURVE SURVEY P 100 5MQINC @r AZh 19t r5 AB4 VE MQLE( T 1Q		
11.M0	1f .00	2r/ 0	MI. RDR	DRILL	HRZLAT	.	SLIDEV R4 TATE DRILL 5 50: . R4 DUCTI4 N H4 LE ( O100 5MQTO100 65@ . R4 GRESS 209 ( T R4 . AVG..t2f ( T0IR  W4 B..2/ W0 KLBS SR. h ..90 h R. h ..1ft BR. h ..1ft ( L4 W RATE..f/ 0 G. h . Uh . . RESSURE 4 N B4 TT4 h ..M 1/ . SI . Uh . . RESSURE 4 ( ( B4 TT4 h ..Mt 0. SI DI( ( . RESSURE..f/ 0 . SI h UD WT..10r0 VIS 9t . @ WT..2/ 2 KI. S S@ WT..20f KI. S R4 T WT..21f KI. S T4 R' UE 4 N BTh ..1r@KLB r( T T4 R' UE 4 ( ( BTh ..10rMKL SLIDE ( O100 25QTO100 / 9 R4 TATE ( O100 2f QTO100 5MQ LANDED CURVE  SURVEY P 100 692QINC t @ AZh 199rt AB4 VE 2QMLE( T 2Q		
1f .00	1t .00	f r00	MI. RDR	DRILL	HRZLAT	.	SLIDEV R4 TATE DRILL 5 50: . R4 DUCTI4 N H4 LE ( O100 65@TO100 00Q . R4 GRESS 209 ( T R4 . AVG..t2f ( T0IR  W4 B..2/ W0 KLBS SR. h ..90 h R. h ..1ft BR. h ..1ft ( L4 W RATE..f/ 0 G. h . Uh . . RESSURE 4 N B4 TT4 h ..M 1/ . SI . Uh . . RESSURE 4 ( ( B4 TT4 h ..Mt 0. SI DI( ( . RESSURE..f/ 0 . SI  h UD WT..10r0 VIS 9t . @ WT..2/ 2 KI. S S@ WT..20f KI. S R4 T WT..21f KI. S T4 R' UE 4 N BTh ..1r@KLB r( T T4 R' UE 4 ( ( BTh ..10rMKL R4 TATE ( O100 65@TO100 00Q  SLIDE ( O100 00Q TO100 00Q R4 TATE ( O100 00Q TO100 00Q SURVEY P 100 020QINC @r AZh 150r2 AB4 VE 0QMLE( T 11Q		
1t .00	22.00	f r00	MI. RDR	DRILL	HRZLAT	.	R4 TATE DRILL 5 50: . R4 DUCTI4 N H4 LE ( O100 00QTO100 05/ Q . R4 GRESS M M( T R4 . AVG..@ ( T0IR  W4 B..2/ W0 KLBS SR. h ..90 h R. h ..1f 9 BR. h ..209 ( L4 W RATE..ff 1 G. h . Uh . . RESSURE 4 N B4 TT4 h ..M@ 0 . SI . Uh . . RESSURE 4 ( ( B4 TT4 h ..M2t 0. SI DI( ( . RESSURE..500 . SI  h UD WT..10r0 VIS 92 . @ WT..2f 0 KI. S S@ WT..215 KI. S R4 T WT..220 KI. S T4 R' UE 4 N BTh ..10 KLB r( T T4 R' UE 4 ( ( BTh ..f KLB r( T  SURVEY P 110MMQINC @r/ AZh 150r/ AB4 VE 0QMLE( T 0 4 TL		

4 XY USA INC									
DAILY OPERATIONS PARTNER REPORT									
Event: DEV DRILLING		ST ANDREWS UNIT 1220H				Date: 01Q2Q01/			
Prim. Reason: 4 RIG DRILL H4 RIZ		USA				Report No: 2MDR			
OPERATIONS									
( 7kx	Tk	H7s	4 m . \$aso	4 m Ckdo	4 m S- b	4 m Tymo	4 m7a3kn Do3ails		
0.00	f .00	f r00	Mi. RDR	DRILL	HRZBLD	.	SLIDEW4 TATE DRILL 5 50: . R4 DUCTI4 N H4 LE ( O10021t QTO100M2/ Q . R4 GRESS 105 ( T R4 . AVG.25 ( T0IR  W4 B..2/ W0 KLBS SR. h .0 h R. h .1ft BR. h .1ft ( L4 W RATE.f / 0 G. h . Uh . . RESSURE 4 N B4 TT4 h .Mt 0 . SI . Uh . . RESSURE 4 ( ( B4 TT4 h .Mt 0. SI DI( ( . RESSURE.f 00 . SI  h UD WT..10r0 VIS 9t . @ WT..2f 0 KI. S S@ WT. 21t KI. S R4 T WT. 222 KI. S T4 R' UE 4 N BTh .1r@KLB r( T T4 R' UE 4 ( ( BTh .@ KLB ( T  SLIDE ( O10021t QTO100M2/ Q  SURVEY P 1002f 00INC9M@AZh 151r9 AB4 VE 2r0QMLE( T 1Q		
f .00	9.00	2r00	Mi. RDR	DRILL	HRZBLD	.	SLIDEW4 TATE DRILL 5 50: . R4 DUCTI4 N H4 LE ( O100M2/ QTO100M f Q . R4 GRESS / @ T R4 . AVG. 2@ T0IR  W4 B..2/ W0 KLBS SR. h .0 h R. h .1ft BR. h .1ft ( L4 W RATE.f / 0 G. h . Uh . . RESSURE 4 N B4 TT4 h .Mt 0 . SI . Uh . . RESSURE 4 ( ( B4 TT4 h .Mt 0. SI DI( ( . RESSURE.f 00 . SI  h UD WT..10r0 VIS 9t . @ WT..2f 0 KI. S S@ WT. 21t KI. S R4 T WT. 222 KI. S T4 R' UE 4 N BTh .1r@KLB r( T T4 R' UE 4 ( ( BTh .@ KLB ( T  SLIDE ( O100M2/ TO100M f Q  SURVEY P 1002t 50INC 9t r@AZh 150rt AB4 VE 1r/ QMLE( T 0Q		
9.00	10.00	f r00	Mi. RDR	DRILL	HRZBLD	.	SLIDEW4 TATE DRILL 5 50: . R4 DUCTI4 N H4 LE ( O100M f QTO100f 2f Q . R4 GRESS 1f 0 ( T R4 . AVG.M ( T0IR  W4 B..2/ W0 KLBS SR. h .0 h R. h .1ft BR. h .1ft ( L4 W RATE.f / 0 G. h . Uh . . RESSURE 4 N B4 TT4 h .Mt 0 . SI . Uh . . RESSURE 4 ( ( B4 TT4 h .Mt 0. SI DI( ( . RESSURE.f 00 . SI  h UD WT..10r0 VIS 9t . @ WT..2f 0 KI. S S@ WT. 21t KI. S R4 T WT. 222 KI. S T4 R' UE 4 N BTh .1r@KLB r( T T4 R' UE 4 ( ( BTh .@ KLB ( T SLIDE ( O100M f TO100M@ Q R4 TATE ( O100M@ TO100f 2@ SLIDE ( O100f 2@TO10f 92Q R4 TATE ( O100f 92QTO100f t 1Q SLIDE ( O100f t 1QTO100f 0MQ SLIDE ( O100f 0MQTO100f SURVEY P 100f M2QINC t 0r0 AZh 195r5 AB4 VE f QMLE( T 1Q		

4 XY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 01Q2Q01/

Prim. Reason: 4 RIG DRILL H4 RIZ

USA

Report No: 2MDR

Wellbore / Top MD: 00 P 0 R

Rig: H, . 29f

Ref Datum: 4 7ginal KB P M0/ 9r10R

DFS: 1Q01@

Today's MD: 11f t 2 R

Progress: 129f R

Ground Elev: M0M r10 R

Daily Cost: 8t 0Q f

Prev MD: 10Q21t R

Rot Hrs Today: 2M/ 0 \$7

AFE MD/Days: 1@ 00r0 QM r t days

Cum Cost: 82Q f 2Q M5

PBMD:

Avg ROP Today: / Mt R37

AFE Number: 11t @5@0102

AFE Cost: 8f 015Q5f

Current Formation: W4 L( CAh . P @65/ r0

Lithology: 100u SHALE

Current Ops: DRILLING 5 5Q: . R4 DUCTI4 N LATERAL P 12Qf / Q

24-Hr Summary: DRILL AND LAND 5 5Q: . R4 DUCTI4 N CURVE ( Q10Q21t Q101Q5 M0S DRILL 5 5Q: LATERAL ( Q0Q5 M0 Q011Q f t 2Q

24-Hr Forecast: )EST RR 1Q9Q/ 3R4 L 1Q@ / &DRILL 5 5Q: . R4 DUCTI4 N LATERAL AS . ER AIh DIRECTI4 NAL . LAN

CASING/WELL CONTROL

HOOKLOAD & TORQUE

HYDRAULICS

MUD GAS

Avg

Max

Last Casing: t r92/ in P @M R

Str Wt Up/Dn: 2f 0r0 O 215r0 ein

Pump Rate: f f 1rM

Conn: f

5

Next Casing: / r/ 00in P 1@500R

Str Wt Rot: 220r0 ein

Pump Press: M@0

Trip:

Last BOP Press Test: 12Q2t Q01f

Torq Off Btm:

Backgr:

f

5

Form Test/EMW: ( IT Q12r00 mng

Torq On Btm:

PERSONNEL

SURVEY DATA (LAST 6)

Supervisor 1: R4 N h 4 RSE

MD

Incl

Azi

TVD

N/-S

E/-W

VS

DLS

Build

Supervisor 2: CA. 4 LIVAREZ

11Q 2/ r0

@r/ 0

150f 0

10Q / / r@

w Q 99r9

f t f r0

1Q M r2

0r11

0r00

Engineer: KEVIN THREADGILL

11Q M r0

@r/ 0

150r/ 0

10Q / 9r5f

w Q 5M@

f 9t r f

1Q f 0rM

0r/ M

0rM2

Geologist: S- x iyya\$ A\$ x od

11Q M0r0

@r20

150r10

10Q / 5rM2

w Q M 0r2

f / 2r f

1Q f / r f

0rMM

0r11

Oxy Personnel: M

11Q f 1r0

@r10

150f 0

10Q / 5r/ 5

w Q2t 9r9

f M0rM

1Q M 0r/

0r/ f

0r11

Contractor Personnel: 19

11Q f 9r0

@r00

150r@

10Q / 5r9/

w Q @r@

f 20r@

1Q / / r5

0r5f

0r00

Total on Site: 1@

10Q @2r0

@r00

150r20

10Q / 5r9/

w Q 00r1

f 0/ r/

1Q 91r t

M9@

1r0f

BIT RECORD

Bit No

Size

Manufacturer

Model

Serial No

IADC Code

Nozzles

MD In

MD Out

I-O-D-L

B-G-O-R

5

7.875

HALLIBURTON

MMD54DM

12609219

M434

/ c1/

9335

15,102

1v2vCtV6

XvWVTvBHA

BIT OPERATING PARAMETERS TODAY

Bit No

Rot Hrs

Cum Rot Hrs

Prog

Cum Prog

ROP

Cum ROP

WOB

RPM

TFA

P Drop Bit

Noz Vel

HHPSI

/

2M/ 0

/ t r/ 0

129f

21f 5

/ Mt

M0r5

2/ r0 QM0

/ 0Q0

0rt 9M

2f 1

19f r1

1rM

MUD DATA - M-I LLC (Schlumberger)

LAST OR CURRENT BHA

Engineer: CHRIS % HNS4 N

MBT:

BHA Nk... 9

Bi3Nk...

/

h D In...

@M R

Sample From: In )S- p3kn . i3&

pH:

. - 7rkso... DRILL . R4 DUCTI4 N H4 LE CURVE SECTI4 Nh D 4 - 3..

1/ 6102 R

Mud Type: DiosolvBasod

Pm / Pom: 1r0/

Component

OD

ID

Jts

Length

Time / MD: 19.00 Q10Q20r0

Pf / Mf:

DC BIT

5rt 5/

2r2/ 0

1

1r00

Density @ Temp: 10r00 Q@

Chlorides:

CURVE DRILLING h 4 T4 R

9r/ 00

2r2/ 0

1

2@ 9

Rheology Temp: 1/ 0

Ca++ / K+:

UBH4 SUB

9r/ 00

2r/ 00

1

2r@

Viscosity: 92r00

CaCl2:

N4 Nvh AG DRILL C4 LLAR

9r/ 00

2r2/ 0

1

2@09

PV / YP: 15 Q12

Cl- in water phase:

N4 Nvh AG ( LEX DRILL C4 LLAR

9r/ 00

2r2/ 0

1

M0r9t

Gels 10s/10m/30m: t Q1M015

Lime:

DRILL . I. E

f r/ 00

Mt 29

21

99/ rM0

API WL:

ES:

AGITAT4 R

9r/ 00

2r2/ 0

1

1t rM5

HTHP WL: 1f r00

ECD:

SH4 CK SUB

9r/ 00

2r2/ 0

1

12rM

Cake API / HTHP: Q2r0

n / K:

DRILL . I. E

f r/ 00

Mt 29

120

M5@ r f t

Solids / Sol Corr: 1M00 Q12r05

Carbonate:

HWD.

f r/ 00

2r5/ 0

M0

@0r9M

Oil / Water: 50r0 Q15r0

Bicarbonate:

Oil / Water % for OWR: t 0r00 Q20r00

Form Loss / Cum Loss:

Sand:

Fluid Disch:

Water Added:

Daily Mud Cost:

Oil Added:

Cum Mud Cost:

LGS: 1r00 O

VG Meter: 2@ M00 Q 9P 900

Total Length:

/ 6 01rMMR

Wt below Jars:

Comments:

MUD PRODUCTS

Product

Number of Units

Units

Qty Used

Blkv o7Ron3al

1r00

oap\$

1r00

B- le Tane Ron3al

1r00

oap\$

2r00

Eh IvQAM

1r00

lb

5r00

( 7Qs\$ Wa3Q7). imQd&

1Q000r00

Lix o

1r00

oap\$

11r00

h w Wa3

1r00

3kn )s\$ k7&

/ r00

h - d So7Jipo w2f H7

1r00

day

1r00

4 noh - l

// r00

gal

1r00

Vo7Sax kd

// r00

gal

1r00

Vo7Sa3kl

1r00

oap\$

t r00



## DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING  
 Prim. Reason: XRIG DRILL HXRI6

ST ANDREWS UNIT 1220H  
 USA

Date: 010/ 0014  
 Report No: 2MDR

## Other Remarks:

UNIVERSITC STR ANDREWS UNIT # 1220DH

) 7w 3c In37scb3vn vFHig\$pay / : 4 and Hig\$pay 15t in And7cp sf Tckasf d7Jc 2r1 wilcs Eas3vn Hig\$pay 15t 3v in37scb3vn vF  
 Hig\$pay 15t and Hig\$pay 114r To7h lcB9Nv7\$cas3vn Hig\$pay 114r ) 7vw in37scb3vn vFHig\$pay 114 and Hig\$pay 15t f d7Jc  
 t r54 wilcs Nv7\$cas3vn Hig\$pay 114r A3in37scb3vn vFHig\$pay 114 and ) h 15: : f bvn3noc s3aig\$39Nv7\$cas31r:  
 wilcs° n3cn 37h 7g\$39Svo3&vn3/ lcasc 7vadr D7Jc 1rt 4 wilcs and 37h lcB9Eas3vn3/ lcasc 7vadr D7Jc 0rt wilcs and 7vad  
 pill waec a slig\$3xcnd 3v 3c 7g\$39Svo3& A3xcnd in 7vadf bvn3noc Eas3Fv7anv3c70rMwilcs 9vad pill 37h lcBv7Nv7\$ aB37  
 0r2 wilcs&and a7Jc a3Unijc7si3y S3 And7cp s Uni3#1220DH vn Wcs3sidc vF7vadr

HELIZXPTER.9 : : &t 2M/ 451 000&t 25-2/ 5t 000&2M2-t 1@@  
 LI) E ) LIGHT ZXXRDINATES..Y...M22r1/ "C...2@f0: / r24"

La3../ 2' 22"4/ r04" N Lvng..102' 2/ "0t rt 0" W NAD 25 ELEVATIXN / f0/ 1r1(  
 t 40( ) NL Y : / / ") ELf SEZTIXN 12f BLXZK / f ANDREWS ZXUNTCf TEYAS

XYC DSh TRAILER.2: 1-: / / -2524

NXTI) C TRRZ X) INTENT TX SPUD AND RUN SUR) AZE ZASING ..12020MSPXKE TX ZINDC TRRZ Eh PLXCEEf %B  
 #2140t

NXTI) IED TRRZ X) INTENT TX RUN AND ZEH ENT : rt 24. INT ZASING..1004 ZINDC XP #M

NXTI) IED TRRZ X) INTENT TX RUN AND ZEH ENT 4r4. INT ZASING ...

UnsaFc Ab3.2

SaFc Ab3..M

UnsaFc Eqoimwcn3.0

SWA../

Nca7h isscs.0.

Wv7esi3: %A..12

SaFc3y h cc3ngs..:

LX0X.2

Pc7wi3 3v pv7e.4

Pvp c7Linc Z\$cbelis3.120001M

P7c SmodRig Insmcb3vns...

Haza7d ID's../

En2 Xxsc7Ja3vns.1.

BEST STXP ZARD. XBSERVED Eh PLXCEE USING PRESSURE WASHER WITHXUT ) AZESHIELD STXPPED %B  
 EYPLAINED PXLIZC AND PRXZEDURE THEC ZXh PLIEDf %B ZXNTINUED WITHXUT INZIDENT

XYC USA INZ											
DAILY OPERATIONS PARTNER REPORT											
Event:		DEV DRILLING				ST ANDREWS UNIT 1220H		Date:		01Q / Q2014	
Prim. Reason:		XRIG DRILL HXRIG				USA		Report No:		2MDR	
) Tw		Tv	H7s	Xm P\$asc	Xm Zvdc	Xm Sox	Xm Tynr	Xnc7a3vn Dc3ails			
1M00		1: .00	M00	/ 1PRDR	DRILL	HR6LAT	P	RXTATE DRILL 5 50. PRXDUZTIXN HXLE ) 012f5: 4( TO1/ f0t 0( PRXGRESS 254 ) T RXP AVG.t: ) T0IR  WXB .24-/ 0 KLBS SRPh .t 0 h RPh .1M BRPh .20t ) LXW RATE..MMI GPh PUh P PRESSURE XN BXTTXh .M24 PSI PUh P PRESSURE X) ) BXTTXh .J.440PSI DI) ) PRESSURE..500 PSI  h UD WT..10r0 VIS t 2 P0W WT..2M5 KIPS S0X WT..20MKIPS RXT WT..225 KIPS TXR' UE XN BTh .10 KLBr) T TXR' UE X) ) BTh .MKLBr) T  SURVEC Q 12(05f INZ : @4 A6h 1t : rt ABXVE 1(- RIGHT 5(			
1: .00		22.00	M00	/ 1PRDR	DRILL	HR6LAT	P	RXTATE DRILL 5 50. PRXDUZTIXN HXLE ) 01/ f0t 0( TO1/ f/ 00( PRXGRESS 2M0 ) T RXP AVG.t 0 ) T0IR SLIDE ) 0/ f2: 1 T0/ f2@(  WXB .24-/ 0 KLBS SRPh .t 0 h RPh .1M BRPh .20t ) LXW RATE..MMI GPh PUh P PRESSURE XN BXTTXh .M24 PSI PUh P PRESSURE X) ) BXTTXh .J.440PSI DI) ) PRESSURE..500 PSI  h UD WT..10r0 VIS t 2 P0W WT..2M5 KIPS S0X WT..20MKIPS RXT WT..225 KIPS TXR' UE XN BTh .10 KLBr) T TXR' UE X) ) BTh .MKLBr) T  SURVEC Q 12(05f INZ : @4 A6h 1t : rt ABXVE 1(- RIGHT 5(			
22.00		0.00	2r00	/ 1PRDR	DRILL	HR6LAT	P	RXTATE DRILL 5 50. PRXDUZTIXN HXLE ) 01/ f/ 00( TO1/ fM4t ( PRXGRESS 14t ) T RXP AVG.5: ) T0IR SLIDE ) 0/ f/ 5t ( TO1/ f/ : : ( )  WXB .24-/ 0 KLBS SRPh .t 0 h RPh .1M BRPh .20t ) LXW RATE..MMI GPh PUh P PRESSURE XN BXTTXh .M24 PSI PUh P PRESSURE X) ) BXTTXh .J.440PSI DI) ) PRESSURE..500 PSI  h UD WT..10r0 VIS t 2 P0W WT..2M5 KIPS S0X WT..20MKIPS RXT WT..225 KIPS TXR' UE XN BTh .10 KLBr) T TXR' UE X) ) BTh .MKLBr) T  SURVEC Q 1/ fM22f INZ @r: A6h 1tt rt BELXW / (- RIGHT 11(			
Tv3al Tiwc		2M00									
Safety Incident?		N	Days since Last RI:		M @00		Weather Comments:				
Environ Incident?		N	Days since Last LTA:		M @00						
Incident Comments:		Nv inbidcn3 7cnv73:d las32M\$vo7sr									

<div> <div>XYC USA INZ</div> <div> <div> <div>Event: DEV DRILLING</div> <div>Prim. Reason: XRIG DRILL HXRI6</div> </div> <div> <div>DAILY OPERATIONS PARTNER REPORT</div> <div>ST ANDREWS UNIT 1220H</div> <div>USA</div> </div> <div> <div>Date: 01Q / Q014</div> <div>Report No: 2MDR</div> </div> </div> </div>									
OPERATIONS									
) 7w	Tv	H7s	Xm P\$asc	Xm Zvdc	Xm Sox	Xm Tynr	Xnc7a3vn Dc3ails		
0.00	M00	M00	/ 1PRDR	DRILL	HR6LAT	P	RXTATE DRILL 5 50. PRXDUZTIXN HXLE ) 011fM / (TO11f: t 4( PRXGRESS / : 2 ) T RXP AVG. @ ) T0IR  WXB.24-/ 0 KLBS SRPh .t 0 h RPh .1M BRPh .20t ) LXW RATE. MM GPh PUh P PRESSURE XN BXTTXh .J. @0 PSI PUh P PRESSURE X ) ) BXTTXh .J.2: 0PSI DI ) ) PRESSURE.500 PSI  h UD WT..10r0 VIS t 2 P@ WT..2M KIPS S@ WT.215 KIPS RXT WT.220 KIPS TXR' UE XN BTh .10 KLBr) T TXR' UE X ) ) BTh .MKLBr) T  SURVEC Q 11f: 04f INZ @r/ A6h 15@ ABXVE / ( - LE ) T 2(		
M00	t .00	2r00	/ 1PRDR	DRILL	HR6LAT	P	RXTATE DRILL 5 50. PRXDUZTIXN HXLE ) 011f: t 4(TO12f0M PRXGRESS 1: 0 ) T RXP AVG. @ ) T0IR  WXB.24-/ 0 KLBS SRPh .t 0 h RPh .1M BRPh .20t ) LXW RATE. MM GPh PUh P PRESSURE XN BXTTXh .J. @0 PSI PUh P PRESSURE X ) ) BXTTXh .J.2: 0PSI DI ) ) PRESSURE.500 PSI  h UD WT..10r0 VIS t 2 P@ WT..2M KIPS S@ WT.215 KIPS RXT WT.220 KIPS TXR' UE XN BTh .10 KLBr) T TXR' UE X ) ) BTh .MKLBr) T  SURVEC Q 11f@0f INZ @r1 A6h 1t @2 ABXVE / ( - LE ) T / (		
t .00	10.00	M00	/ 1PRDR	DRILL	HR6LAT	P	RXTATE DRILL 5 50. PRXDUZTIXN HXLE ) 012f0M4(TO12fM2M PRXGRESS / 5@ T RXP AVG. @M) T0IR  WXB.24-/ 0 KLBS SRPh .t 0 h RPh .1M BRPh .20t ) LXW RATE. MM GPh PUh P PRESSURE XN BXTTXh .J. @0 PSI PUh P PRESSURE X ) ) BXTTXh .J.2: 0PSI DI ) ) PRESSURE.500 PSI  h UD WT..10r0 VIS t 2 P@ WT..2M KIPS S@ WT.215 KIPS RXT WT.220 KIPS TXR' UE XN BTh .10 KLBr) T TXR' UE X ) ) BTh .MKLBr) T  SURVEC Q 12(1: t f INZ @rMA6h 1t @2 ABXVE 2r4( - RIGHT M		
10.00	1M00	M00	/ 1PRDR	DRILL	HR6LAT	P	RXTATE DRILL 5 50. PRXDUZTIXN HXLE ) 012fM2M TO12f5: 4( PRXGRESS / 5@ T RXP AVG. @M) T0IR  WXB.24-/ 0 KLBS SRPh .t 0 h RPh .1M BRPh .20t ) LXW RATE. MM GPh PUh P PRESSURE XN BXTTXh .M4/ PSI PUh P PRESSURE X ) ) BXTTXh .J.440PSI DI ) ) PRESSURE.500 PSI  h UD WT..10r0 VIS t 2 P@ WT..2M5 KIPS S@ WT.20MKIPS RXT WT.225 KIPS TXR' UE XN BTh .10 KLBr) T TXR' UE X ) ) BTh .MKLBr) T  SURVEC Q 12(545f INZ : @5 A6h 1t @2 ABXVE 1( - RIGHT 5(		

XYC USA INZ

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

Prim. Reason: XRIG DRILL HXRI6

ST ANDREWS UNIT 1220H

USA

Date: 010 / 02014

Report No: 2MDR

Wellbore / Top MD: 00 Q 0 B

Rig: H, P 2t M

Ref Datum: X7iginal KB Q / f04t r10B

DFS: 20r1 @

Today's MD: 1 / fM4t B

Progress: 1 @MB

Ground Elev: / f0 / 1r10 B

Daily Cost: 8 @fM4t

Prev MD: 11fM 2 B

Rot Hrs Today: 2M00 \$7

AFE MD/Days: 1 @ 00r0 0 4r: days

Cum Cost: 82f2 / f5 @

PBMD:

Avg ROP Today: : 2r2 B37

AFE Number: 11: @5 @0102

AFE Cost: 8M015f05M

Current Formation: WXL) Zah PQ @554r0

Lithology: @u SHALEf 10u Lih ESTXNE

Current Ops: DRILLING 5 50. PRXDUZTIXN LATERAL Q 1 / f: 42(

24-Hr Summary: DRILL 5 50. PRXDUZTIXN LATERAL ) 011fM 2 (TO1 / fM4t (

24-Hr Forecast: 9EST RR 1Q1 048RXL 1Q @4&DRILL 5 50. PRXDUZTIXN LATERAL AS PER Aih DIREZTIXNAL PLAN

CASING/WELL CONTROL

Hookload & Torque

Hydraulics

Mud Gas

Avg

Max

Last Casing: : rt 24in Q @ / 4B

Str Wt Up/Dn: 2M @O 210r0 ein

Pump Rate: MMr /

Conn: 4

4

Next Casing: 4r400in Q 1 @500B

Str Wt Rot: 21: r0 ein

Pump Press: M0: 0

Trip:

Last BOP Press Test: 12Q: Q01M

Torq Off Btm: / f000r0 B3xF

Backgr: 4

:

Form Test/EMW: ) IT 012r0 mng

Torq On Btm: @400r0 B3xF

PERSONNEL

SURVEY DATA (LAST 6)

Supervisor 1: RXN h XRSE

MD

Incl

Azi

TVD

N/-S

E/-W

VS

DLS

Build

Supervisor 2: ZAP XLIVARE6

1 / f / 25r0

: @ @

1t @ @

10f145r5M

- / fM / r @

: M4t

/ f4 / 4r /

0r45

0r21

Engineer: KEVIN THREADGILL

1 / f2 / 2r0

: @50

150rM0

10f145rM

- / f / M0r /

: 2: r /

/ fM0rM

0r5t

0rM2

Geologist: Sowiyya\$ A\$wcd

1 / f1 / 5r0

: @ 0

1t @ 0

10f14t r4:

- / f2M r:

: 12r0

/ f / M4rt

1r50

0r21

Oxy Personnel: /

1 / f0M2r0

: @10

1t : r20

10f144r2t

- / f14 / r4

5 @r @

/ f240rt

0rt 0

-0rM2

Contractor Personnel: 1t

12f @5r0

: @40

1t : rt 0

10f14M0 @

- / f0t 0r4

55M:

/ f144rt

0r51

-0r / 2

Total on Site: 1 @

12f: 42r0

: @ 0

1t @20

10f14 / r41

-2f @5r /

54t r4

/ f0t 0rt

0r11

0r11

BIT RECORD

Bit No

Size

Manufacturer

Model

Serial No

IADC Code

Nozzles

MD In

MD Out

I-O-D-L

B-G-O-R

5

7.875

HALLIBURTON

MMD54DM

12609219

M434

4k14

9335

15,102

1-2-ZT-S

Y-I-WT-BHA

BIT OPERATING PARAMETERS TODAY

Bit No

Rot Hrs

Cum Rot Hrs

Prog

Cum Prog

ROP

Cum ROP

WOB win@wak

RPM win@wak

TFA

P Drop Bit

Noz Vel

HHPSI

4

2M00

: 2r40

1 @M

M421

: 2r2

40r0

20r00 / r0

40 @4

0r: t /

2M

1t M1

1r /

MUD DATA - M-I LLC (Schlumberger)

LAST OR CURRENT BHA

Engineer: ZHRIS %HNSXN

MBT:

BHA Nv... t

Bi3Nv... 4

h D In... @ / 4 B

Sample From: In 9Sob3vn Pi3&

pH:

Po7rvsc... DRILL PRXDUZTIXN HXLE ZURVE SEZTIXNh D Xo3... 14f102 B

Mud Type: Dicscl-Bascd

Pm / Pom: 1r54

Time / MD: 1t .00 012f: @ @

Pf / Mf:

Density @ Temp: 10r00 010:

Chlorides:

Rheology Temp: 140

Ca++ / K+: O

Viscosity: 41r00

CaCl2:

PV / YP: 1 / Q

Cl- in water phase: 2: f000r00

Gels 10s/10m/30m: : 012 01t

Lime: 2r2:

API WL:

ES: 5 / 0r00

HTHP WL: 1 / rt 0

ECD: 10rM0

Cake API / HTHP: Q2r0

n / K: O

Solids / Sol Corr: 1 / r00 010r @M

Carbonate:

Oil / Water: 52r0 014r0

Bicarbonate:

Oil / Water % for OWR: : / r00 015r00

Form Loss / Cum Loss: 0r0 00r0

Sand:

Fluid Disch: O

Water Added:

Daily Mud Cost: 8M540

Oil Added:

Cum Mud Cost: 854f150

LGS: 0r40 O

VG Meter: 1 @ / 00 0 2Q t 00

Total Length: 4f401r / B

Wt below Jars:

Comments:

MUD PRODUCTS

Product

Number of Units

Units

Qty Used

Blvp c7Rcn3al

1r00

cab\$

1r00

Bole Tane Rcn3al

1r00

cab\$

2r00

ZaZ12 @u

1r00

cab\$

t r00

) 7cs\$ Wa379Pimcd&

1f000r00

h -I Wa3

1r00

3 / n \$ \$v73&

2r00

h od Sc7Jibc - 2MH7

1r00

day

1r00

Xnch ol

44r00

gal

1r00

Vc7sa3in

4r00

gal

/ r00

Vc7sa3vl

1r00

cab\$

2M00

VG-Plos

1r00

cab\$

/ r00

/ 0202014 @4 / .2: Ah

Page 1 vFM

4 XY USA INC							
DAILY OPERATIONS PARTNER REPORT							
Event: DEV DRILLING		ST ANDREWS UNIT 1220H				Date: 01Q / Q01M	
Prim. Reason: 4 RIG DRILL H4 RIZ		USA				Report No: 2MDR	
( 7ko	Tk	H7s	4 u . \$asw	4 u Ckdw	4 u Sx-	4 u Tyuw	4 uw7afkn Dwails
22.00	0.00	2r00	1. RDR	DRILL	HRZLAT	.	R4 TATE DRILL 3 3G: . R4 DUCTI4 N H4 LE ( 01/ 01MDT01/ 0 of Q . R4 GRESS 2f 0 ( T R4 . AVG. f M( T0IR SLIDE ( 01/ 01MDT01/ 02MQ  W4 B..2M) 0 KLBS SR. h . f 0 h R. h .1/ 2 BR. h .202 ( L4 W RATE. /.) 0 G. h . Uh . . RESSURE 4 N B4 TT4 h ..) 350 . SI . Uh . . RESSURE 4 ( ( B4 TT4 h ..) M 0. SI DI( ( . RESSURE..M00 . SI  h UD WT..10r0 VIS M0 . 0 WT..2/ 3 KI. S S0 WT..20/ KI. S R4 T WT..223 KI. S T4 R' UE 4 N BTh ..11 KLBr( T T4 R' UE 4 ( ( BTh ..MKLBr( T SLIDE ( 01/ 01MDT01/ 02MQ  SURVEY P 1/ 0M 1 INC @r1 AZh 1f @ BEL4 W 2QLE( T 1/ Q
Tkfal Tio w		2/ r00					
Safety Incident?		N		Days since Last RI:		/ 30r00	
Environ Incident?		N		Days since Last LTA:		/ 30r00	
Incident Comments:							
Nk inpidwnf 7wuk7wd lasF2/ \$kx7sr							
Other Remarks:		UNIVERSITY STR ANDREWS UNIT # 1220DH ( 7ko fSwInfw7swpfkn kt Hig\$ v ay ) 5Mand Hig\$ v ay 13f in And7w s6Twas6d7Jw2r1 o ilws EasFkn Hig\$ v ay 13f fK infw7swpfkn kt Hig\$ v ay 13f and Hig\$ v ay 11M Tx7h lwtF9Nk7\$wasfkn Hig\$ v ay 11M ( 7ko infw7swpfkn kt Hig\$ v ay 11Mand Hig\$ v ay 13f 6d7Jw f r3Mo ilws Nk7\$wasfkn Hig\$ v ay 11M AFInfw7swpfkn kt Hig\$ v ay 11Mand ( h 13556pknfnxwsFagf\$F9Nk7\$wasfkn1r5 o ilws" rrf\$wn f7h 7g\$F9Sknf\$&knfk lwasw7kadr D7Jw1rf Mo ilws and f7h lwtF9Easfknfk lwasw7kadr D7Jw0rf o ilws and 7kad v ill o anwa slig\$F- wnd fK fSw7g\$F9Sknf\$& AF- wnd in 7kad6pknfnxwEasFtk7ankf\$w70r/ o ilws 9kad v ill f7h lwtFk7Nk7\$ atfw7 0r2 o ilws&and a7JwaFUniJw7sify Sfr And7w s UniF#1220DH kn WwsFsidwkt 7kadr  HELIC4 . TER..955&f 2/ e) M81 0500&f 2302) 3f 0500&2/ 20 100 LI( E ( LIGHT C4 4 RDINATES..X../ 00 22r1) "Y..2005) r2M  LaF..) 2' 22" M r0M N Lkng..102' 2) "0f rf 0" W NAD 23 ELEVATI4 N ) 0) 1r1Q f M0Q NL X 5) ) "( EL6SECTI4 N 126BL4 CK ) 6 ANDREWS C4 UNTY6TEXAS  4 XY DSh TRAILER..25105) ) 0232M N4 TI( Y TRRC 4 ( INTENT T4 S. UD AND RUN SUR( ACE CASING ..12Q2Q/ S. 4 KE T4 CINDY TRRC Eh . L4 YEE6% B #21M0f N4 TI( IED TRRC 4 ( INTENT T4 RUN AND CEh ENT 5rf 2M INT CASING..1000MCINDY 4 . #/ N4 TI( IED TRRC 4 ( INTENT T4 RUN AND CEh ENT MM INT CASING ... UnsatwApfS..1. SatwApfS..) UnsatwEqxiuo wnF..0 SWA.2 Nwa7h issws..0  Wk7nsifw%6A..10 Satwfy h wwfngs..3 L4 04 .). . w7o ifS fK v k7m.2 . kv w7LinwC\$wptisF..120001/ . 7wSuxd0rig Insuwpfkns... Haza7d ID's.2 Eu2 4 - sw7Jafkns.2  BEST ST4 . CARD.4 BSERVED Eh . L4 YEE TAILING . I. E WITH W4 RN TAIL R4 . E EX. LAINED DANGERS HE INSTALLED NEW TAIL R4 . E % B C4 NTINUED WITH4 UT INCIDENT					

4 XY USA INC											
DAILY OPERATIONS PARTNER REPORT											
Event:		DEV DRILLING			ST ANDREWS UNIT 1220H			Date:		01Q/ Q01M	
Prim. Reason:		4 RIG DRILL H4 RIZ			USA			Report No:		2MDR	
( 7ko	Tk	H7s	4 u \$asw	4 u Ckdw	4 u Sx-	4 u Tyuw	4 uw7afkn Dwails				
10.00	1/ .00	/ r00	) 1. RDR	DRILL	HRZLAT	.	R4 TATE DRILL 3 3G: . R4 DUCTI4 N H4 LE ( O1/ 030QT01/ 01 @00 . R4 GRESS 215 ( T R4 . AVG.M ( T0IR DRILLING WITH 4 NE . Uh . 9CHANGING 4 UT SWAB , LINER #1& W4 B.2M0 0 KLBS SR. h .f 0 h R. h .1/ 2 BR. h .202  ( L4 W RATE./.) 0 G. h . Uh . . RESSURE 4 N B4 TT4 h .) @0 . SI . Uh . . RESSURE 4 ( ( B4 TT4 h .)/ 20. SI DI( ( . RESSURE..M00 . SI  h UD WT..10r0 VIS M0 . 00 WT..2/ 3 KI. S S00 WT..20/ KI. S R4 T WT..223 KI. S T4 R' UE 4 N BTh ..11 KLBr( T T4 R' UE 4 ( ( BTh ...  SLIDE ( O1/ 030QT01/ 03/ Q R4 TATE ( O1/ 03/ QT01/ 01M0Q SLIDE ( O1/ 01M0QT01/ 01f 0Q R4 TATE ( O1/ 01f 0QT01/ 01 @0 SURVEY P 1/ 055QINC 55r3 AZh 1f 3rf 1QAB4 VE 3QLE( T				
1/ .00	15.00	/ r00	) 1. RDR	DRILL	HRZLAT	.	R4 TATE DRILL 3 3G: . R4 DUCTI4 N H4 LE ( O1/ 01 @00T01/ 02M0Q . R4 GRESS 101 ( T R4 . AVG.M0 ( T0IR DRILLING WITH 4 NE . Uh . 9CHANGING 4 UT SEAT AND VALVES #2&  W4 B.2M0 0 KLBS SR. h .f 0 h R. h .1/ 2 BR. h .202 ( L4 W RATE./.) 0 G. h . Uh . . RESSURE 4 N B4 TT4 h .) @0 . SI . Uh . . RESSURE 4 ( ( B4 TT4 h .)/ 00. SI DI( ( . RESSURE..M00 . SI  h UD WT..10r0 VIS M0 . 00 WT..2/ 3 KI. S S00 WT..20/ KI. S R4 T WT..223 KI. S T4 R' UE 4 N BTh ..11 KLBr( T T4 R' UE 4 ( ( BTh ..MKLBr( T SLIDE ( O1/ 01 @00T01/ 02M0Q  SURVEY P 1/ 0151 INC 55r) AZh 1f 3r5 BEL4 W 2QLE( T 11Q				
15.00	22.00	/ r00	) 1. RDR	DRILL	HRZLAT	.	R4 TATE DRILL 3 3G: . R4 DUCTI4 N H4 LE ( O1/ 02M0QT01/ 01M1Q . R4 GRESS 2f 0 ( T R4 . AVG.f.M( T0IR  W4 B.2M0 0 KLBS SR. h .f 0 h R. h .1/ 2 BR. h .202 ( L4 W RATE./.) 0 G. h . Uh . . RESSURE 4 N B4 TT4 h .) @0 . SI . Uh . . RESSURE 4 ( ( B4 TT4 h .)/ 00. SI DI( ( . RESSURE..M00 . SI  h UD WT..10r0 VIS M0 . 00 WT..2/ 3 KI. S S00 WT..20/ KI. S R4 T WT..223 KI. S T4 R' UE 4 N BTh ..11 KLBr( T T4 R' UE 4 ( ( BTh ..MKLBr( T SLIDE ( O1/ 01 @00T01/ 02M0Q  SURVEY P 1/ 0151 INC 55r) AZh 1f 3r5 BEL4 W 2QLE( T 11Q				

## DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING  
Prim. Reason: 4 RIG DRILL H4 RIZ

ST ANDREWS UNIT 1220H  
USA

**Date:** 01/01/2011  
**Report No:** 2MDR

## OPERATIONS

( 7ko	Tk	H7s	4 u \$asw	4 u Ckdw	4 u Sx-	4 u Tyuw	4 uw7afkn Dw7ails
0.00	/ .00	/ r00	)1. RDR	DRILL	HRZLAT	.	<p>R4 TATE DRILL 3 305: . R4 DUCTI4 N H4 LE ( 01) 0 M QTO1) 0MIQ  . R4 GRESS 200 ( T R4 . AVG.3/ ( T0IR</p> <p>W4 B.2M00 KLBS SR. h .f0 h R. h .1/ f BR. h .20f  ( L4 W RATE.1/ 1 G. h  . Uh . . RESSURE 4 N B4 TT4 h .1.22M. SI  . Uh . . RESSURE 4 ( ( B4 TT4 h .) )M0. SI  DI( ( . RESSURE.300 . SI</p> <p>h UD WT.10r0 VIS M0  . 00 WT.2/ 3 KI. S S04 WT.20/ KI. S R4 T WT.223 KI. S  T4 R' UE 4 N BTh .10 KLBr( T  T4 R' UE 4 ( ( BTh .1. KLBr( T</p> <p>SURVEY P 1) 0056INC 00r) AZh 1f 3r2  AB4 VE 200RIGHT 1rM0</p>
/ .00	f.00	2r00	)1. RDR	DRILL	HRZLAT	.	<p>R4 TATE DRILL 3 305: . R4 DUCTI4 N H4 LE ( 01) 0MIQTO1) 0M2Q  . R4 GRESS 101 ( T R4 . AVG.10 ( T0IR  DRILLING WITH 4 NE . Uh . 9CHANGING 4 UT SWAB , LINER #2&amp;</p> <p>W4 B.2M00 KLBS SR. h .f0 h R. h .1/ 2 BR. h .202  ( L4 W RATE.1/ )0 G. h  . Uh . . RESSURE 4 N B4 TT4 h .) )00 . SI  . Uh . . RESSURE 4 ( ( B4 TT4 h .) )/ 00. SI  DI( ( . RESSURE.100 . SI</p> <p>h UD WT.10r0 VIS M0  . 00 WT.2/ 3 KI. S S04 WT.20/ KI. S R4 T WT.223 KI. S  T4 R' UE 4 N BTh .11 KLBr( T  T4 R' UE 4 ( ( BTh .MKLBr( T</p> <p>SURVEY P 1) 0226INC 00r5 AZh 1f f r f  BEL4 W ) 00RIGHT 11Q</p>
f.00	10.00	/ r00	)1. RDR	DRILL	HRZLAT	.	<p>R4 TATE DRILL 3 305: . R4 DUCTI4 N H4 LE ( 01) 0M2QTO1/ 030Q  . R4 GRESS 215 ( T R4 . AVG.1M ( T0IR</p> <p>W4 B.2M00 KLBS SR. h .f0 h R. h .1/ 2 BR. h .202  ( L4 W RATE.1/ )0 G. h  . Uh . . RESSURE 4 N B4 TT4 h .) )00 . SI  . Uh . . RESSURE 4 ( ( B4 TT4 h .) )/ 20. SI  DI( ( . RESSURE.100 . SI</p> <p>h UD WT.10r0 VIS M0  . 00 WT.2/ 3 KI. S S04 WT.20/ KI. S R4 T WT.223 KI. S  T4 R' UE 4 N BTh .11 KLBr( T  T4 R' UE 4 ( ( BTh .MKLBr( T  R4 TATE ( 01) 0M2QTO1/ 00f M0  SLIDE ( 01/ 00f MTO1/ 030Q  SURVEY P 1) 0006INC 5003 AZh 1f f r 3  AB4 VE 100Le( T 3Q</p>

## DAILY OPERATIONS PARTNER REPORT

**Event:** DEV DRILLING  
**Prim. Reason:** 4 RIG DRILL H4 RIZ

ST ANDREWS UNIT 1220H  
USA

**Date:** 010/ 201M  
**Report No:** 2MDR

<b>Wellbore / Top MD:</b>	00 P 0 tF	<b>Rig:</b>	H, . 2f/	<b>Ref Datum:</b>	4 7ginal KB P ) 0M r10tF	<b>DFS:</b>	21r1@
<b>Today's MD:</b>	1/ 0 f tF	<b>Progress:</b>	11M tF	<b>Ground Elev:</b>	) 0) 1r10 tF	<b>Daily Cost:</b>	8330 11
<b>Prev MD:</b>	1) 0 M tF	<b>Rot Hrs Today:</b>	2/ r00 \$7	<b>AFE MD/Days:</b>	1@500r0 Q M5 days	<b>Cum Cost:</b>	820 11020/
<b>PBMD:</b>		<b>Avg ROP Today:</b>	/ 3r0@K\$7	<b>AFE Number:</b>	115@300102	<b>AFE Cost:</b>	8/ 013003/

<b>Current Formation:</b>	W4 L( CAh . P @3M0	<b>Lithology:</b>
---------------------------	--------------------	-------------------

Lithology:

**Current Ops:** DRILLING 3305 : R4 DUCTI4 N LATERAL P 1M000Q

**24-Hr Summary:** DRILL 3 30: R4 DUCT 4 N LATERAL ( 01) 6 M Q 01/ 6 of Q

**24-Hr Forecast:** EST RR 12 OF 0 MR 4 L 12 @ M & DRILL 3 30 : . R4 DUCTI 4 N LATERAL AS . ER AIh DIRECTI 4 NAL . LAN

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg		Max	
Last Casing:	5r 2Mn P @ ) MF	Str Wt Up/Dn:	2M0rO 20f r niu	Pump Rate:	/ 2/ r3	Conn:	M				5
Next Casing:	MM0in P 1@300tF	Str Wt Rot:	215r0 niu	Pump Press:	/ 1M0	Trip:					
Last BOP Press Test:	12Q5Q01/	Torq Off Btm:	f @00r0 tF-t			Backgr:	3				5
Form Test/EMW:	( IT O12r0 uug	Torq On Btm:	10@00r0 tF-t								

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	R4 N h 4 RSE	MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
Supervisor 2:	CA. 4 LIVAREZ	1/6M1r0	@r10	1f @ 0	106lM rM	6 6 ) 5r3	16l10rf	/ 6f @1	1r ) /	0r@M
Engineer:	KEVIN THREADGILL	1/ 6 f f r0	@r20	1f 5rM0	106lMMf 1	6 6M M/	16@r/	/ 6 3/ r1	1r05	60r@M
Geologist:	Sxo iyya\$A\$0 wd	1/ 6 31r0	@r10	1f @00	106lM rf @	6 6 M2r)	1603)r@	/ 6M@1	1r51	1r ) 5
Oxy Personnel:	)	1/ 6233r0	5@50	1f 3r@	106lM8r/ )	6 6 f 0r2	160MM0	/ 6 5M2	1rM8	1rM
Contractor Personnel:	1f	1/ 6l51r0	55r) 0	1f 3r50	106lMM5)	6 6 f r )	160 ) / r5	/ 6 5@2	0r/ 5	60r/ )
Total on Site:	1@	1/ 655r0	55r30	1f 3rf 0	106lM r 0	6 6l3MM	1601M0	/ 6@r2	1r )	6l0rf

[illegible]

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB o in O ac	RPM o in O ac	TFA	P Drop Bit	Noz Vel	HHPSI
M	2/ r00	10f r00	11M0	M231	/ 3r00	/ @1	20r00M0	M000	0r5f )	22)	1M8r00	1r1

MUD DATA - M-I LLC (Schlumberger)		LAST OR CURRENT BHA				
Engineer: CHRIS % HNS4 N	MBT:	BHA Nk... f	BiFNk... M	h D In...	@ ) Mf	
Sample From: In 9SxpRkn . iR&	pH:	. x7uksw... DRILL . R4 DUCTI4 N H4 LE CURVE SECTI4 Nh D 4 xF...				1M02 fF
Mud Type: DiwswlBaswd	Pm / Pom: 1r00	Component				
Time / MD: 1f .00 O1/ 02M0r0	Pf / Mf: O	OD	ID	Jts	Length	
Density @ Temp: 10r00 O102	Chlorides:	DC BIT	3r53M	2r2M0	1	1r00
Rheology Temp: 1M0	Ca++ / K+: O	CURVE DRILLING h 4 T4 R	f rM00	2r2M0	1	2@ f
Viscosity: Mf r00	CaCl2:	UBH4 SUB	f rM00	2rM00	1	2r0
PV / YP: 15 O11	Cl- in water phase: 25000r00	N4 Ndh AG DRILL C4 LLAR	f rM00	2r2M0	1	2@f
Gels 10s/10m/30m: @O1M01	Lime: 1r10	N4 Ndh AG ( LEX DRILL C4 LLAR	f rM00	2r2M0	1	)0rf 5
API WL:	ES: 321r00	DRILL . I. E	/ rM00	) r52f	21	f f M) 0
HTHP WL: 1) r50	ECD: 10rf 0	AGITAT4 R	f rM00	2r2M0	1	15r) 3
Cake API / HTHP: 02r0	n / K: O	SH4 CK SUB	f rM00	2r2M0	1	12r) 5
Solids / Sol Corr: 1) r00 O11r@	Carbonate:	DRILL . I. E	/ rM00	) r52f	120	) 0@ r/ 5
Oil / Water: 30r0 O13r0	Bicarbonate:	HWD.	/ rM00	2r3M0	) 0	@0rf )
Oil / Water % for OWR: 50r00 020r00	Form Loss / Cum Loss: 0r0 O0r0					
Sand:	Fluid Disch: O					
Water Added:	Daily Mud Cost: 8) 6 5M					
Oil Added:	Cum Mud Cost: 8350 MM					
LGS: ) r0 O						

VG Meter: 2@ )00 Q 3P f 00	Total Length: M01r) ) tF	Wt below Jars:
Comments:		

MUD PRODUCTS			
Product	Number of Units	Units	Qty Used
Blkv w7Rwnfal	1r00	wap\$	1r00
BxlmTanmRwnfal	1r00	wap\$	2r00
CaCl2 @b	1r00	wap\$	M00
HR.	MM00	gal	1r00
h xd Sw7Jipwe2/ H7	1r00	day	1r00
Vw7saFkl	1r00	wap\$	1r00



<div style="display: flex; justify-content: space-between; align-items: center;"> <div>OXY USA INC</div> <div><b>DAILY OPERATIONS PARTNER REPORT</b></div> <div></div> </div>								
<b>Event:</b>		DEV DRILLING				<b>Date:</b>		01/15/2015
<b>Prim. Reason:</b>		ORIG DRILL HORIZ				<b>Report No:</b>		26DR
		ST ANDREWS UNIT 1220H						
		USA						
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details	
18:00	21:00	3.00	31PRDR	TRIP	DRILL	P	POH 4½" DRILL PIPE F/ 14,326' T/ 11,512'. • TIGHT SPOT AT 11,512' - MAX OVERPULL: 45 KLBS OVER UP WEIGHT. NOTE: * MONITORING HOLE ALL TIME WITH TRIP TANK, OK.	
21:00	22:00	1.00	31PRDR	REAM	BKRM	P	RIH F/ 11,512' T/ 11,780'. BACK REAM F/ 11,780' TO 11,475'.	
22:00	23:00	1.00	31PRDR	CIRC	CNDHOL	P	CIRCULATING HOLE AT 11,475' WITH 415GPM & 65 RPM , WHILE RECIPROCATING PIPE I.C.P.: 3100 PSI F.C.P.: 2800 PSI	
23:00	0:00	1.00	31PRDR	TRIP	DRILL	P	POH 4½" DRILL PIPE F/ 11,475' T/ 10,500'. NOTE: * MONITORING HOLE ALL TIME WITH TRIP TANK, OK.	
Total Time		24.00						
<b>Safety Incident?</b>		N		<b>Days since Last RI:</b>		471.00		<b>Weather Comments:</b>
<b>Environ Incident?</b>		N		<b>Days since Last LTA:</b>		471.00		
<b>Incident Comments:</b> No incidents reported last 24 hours.								
<b>Other Remarks:</b>								
<p>UNIVERSITY ST. ANDREWS UNIT # 1220DH</p> <p>From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.</p> <p>HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199 LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'</p> <p>Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1' 650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS</p> <p>OXY DSM TRAILER: 281-833-2725 NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB #21506 NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 8.625" INT CASING: 1/5/15 CINDY OP #4 NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING : Unsafe Acts:1 Safe Acts: 3 Unsafe Equipment: 0 SWA:2 Near Misses:0</p> <p>Worksite JSA: 16 Safety Meetings: 5 LO/TO:3 Permits to work: 2 Power Line Checklist: 12/19/2014 Pre Spud/Rig Inspections: Hazard ID's:2 Ep2 Observations:2</p> <p>BEST STOP CARD: OBSERVED EMPLOYEE PRESSURE WASHING MUD TANK WITHOUT FACE SHIELD. STOPPED JOB AND EXPLAINED TO EMPLOYEE SAFETY POLICIES AND DANGERS OF NOT USING A FACE SHIELD, EMPLOYEE AGREED. JOB CONTINUED WITHOUT INCIDENT.</p>								

<div>OXY USA INC</div> <div>DAILY OPERATIONS PARTNER REPORT</div> <div> <div> <div>Event: DEV DRILLING</div> <div>Prim. Reason: ORIG DRILL HORIZ</div> </div> <div> <div>ST ANDREWS UNIT 1220H</div> <div>USA</div> </div> <div> <div>Date: 01/15/2015</div> <div>Report No: 26DR</div> </div> </div>							
OPERATIONS							
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	4:00	4.00	31PRDR	DRILL	HRZLAT	P	ROTATE DRILL 7 7/8" PRODUCTION HOLE F/ 14,606' T/ 14,853' PROGRESS 247 FT ROP AVG: 62 FT/HR  WOB: 25-30 KLBS SRPM: 60 MRPM: 142 BRPM: 202 FLOW RATE: 430 GPM PUMP PRESSURE ON BOTTOM: 3780 PSI PUMP PRESSURE OFF BOTTOM: 3560PSI DIFF PRESSURE: 500 PSI  MUD WT: 10.0 VIS 50 P/U WT: 247 KIPS S/O WT: 204 KIPS ROT WT: 227 KIPS TORQUE ON BTM: 11 KLB.FT TORQUE OFF BTM: 5 KLB.FT SLIDE F/ 14,199' T/ 14,225'  SURVEY @14,751 INC 90.5 AZM 168.3 BELOW 0' - LEFT 13'
4:00	6:00	2.00	31PRDR	DRILL	HRZLAT	P	ROTATE DRILL 7 7/8" PRODUCTION HOLE F/ 14,853' T/ 15,000 PROGRESS 147 FT ROP AVG: 73 FT/HR  WOB: 25-30 KLBS SRPM: 60 MRPM: 142 BRPM: 202 FLOW RATE: 430 GPM PUMP PRESSURE ON BOTTOM: 3780 PSI PUMP PRESSURE OFF BOTTOM: 3560PSI DIFF PRESSURE: 500 PSI  MUD WT: 10.0 VIS 50 P/U WT: 247 KIPS S/O WT: 204 KIPS ROT WT: 227 KIPS TORQUE ON BTM: 11 KLB.FT TORQUE OFF BTM: 5 KLB.FT SLIDE F/ 14,199' T/ 14,225'  SURVEY @ 14,846' INC 90.7 AZM 169.8 ABOVE 1'- LEFT 13"
6:00	8:30	2.50	31PRDR	DRILL	HRZLAT	P	ROTATE DRILL 7 7/8" PRODUCTION HOLE F/ 15,000' T/ 15,102 PROGRESS 102 FT ROP AVG: 29 FT/HR  WOB: 25-30 KLBS SRPM: 60 MRPM: 142 BRPM: 202 FLOW RATE: 430 GPM PUMP PRESSURE ON BOTTOM: 3780 PSI PUMP PRESSURE OFF BOTTOM: 3560PSI DIFF PRESSURE: 500 PSI  MUD WT: 10.0 VIS 50 P/U WT: 247 KIPS S/O WT: 204 KIPS ROT WT: 227 KIPS TORQUE ON BTM: 11 KLB.FT TORQUE OFF BTM: 5 KLB.FT SLIDE F/ 15,000' T/ 15,102' PICK UP TO 285K DID NOT BREAK OVER ATTEMPTED TO ROTATE WITH NO SUCCESS.
8:30	11:00	2.50	31PRDR	FISH	OTH	PT	WORK STUCK PIPE FROM 210K ROTATING WT TO 395K STRAIGHT PULL 150K OVER, WITH TORQUE IN PIPE PULL UP TO 380K, KEEP WORKING PIPE WHILE CIRCULATING @415 GPM, PIPE CAME FREE @ 405K DEPTH 15,102'.
11:00	12:00	1.00	31PRDR	CIRC	CNDHOL	P	CIRCULATE HOLE @ 15,102' T/ 15,009' 415 GPM 3100 PSI 1 BOTTOM UP WORKING PIPE UP AND DOWN ROTATING IT.
12:00	13:30	1.50	31PRDR	TRIP	DRILL	P	POOH 4½" DRILL PIPE W/ BACKREAMING F/ 15,102' ( T/ 14,727' ). STRAIGHT PULL OUT TO 14,694' 35-40K • TIGHT SPOT AT 14,694' - MAX OVERPULL: 35-40 KLBS
13:30	17:30	4.00	31PRDR	CIRC	CNDHOL	P	CIRCULATING HOLE AT 14694' WITH 415GPM & 65 RPM , WHILE RECIPROCATING PIPE I.C.P.: 3100 PSI F.C.P.: 2950 PSI
17:30	18:00	0.50	31PRDR	REAM	BKRM	P	BACK REAM F/ 14,694' T/ 14,326'

OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

USA

Date: 01/15/2015

Report No: 26DR

Wellbore / Top MD: 00 @ 0 ft

Rig: H&P 264

Ref Datum: Original KB @3,056.10ft

DFS: 22.19

Today's MD: 15,102 ft

Progress: 496 ft

Ground Elev: 3,031.10 ft

Daily Cost: \$89,142

Prev MD: 14,606 ft

Rot Hrs Today: 8.50 hr

AFE MD/Days: 19,800.0 / 35.8 days

Cum Cost: \$2,400,346

PBMD: 58.4 ft/hr

Avg ROP Today: 58.4 ft/hr

AFE Number: 1189079#0102

AFE Cost: \$4,017,074

Current Formation: WOLFCAMP@9,775.0

Lithology: 70% SHALE 30% LIME

Current Ops:

24-Hr Summary: DRILL 7 7/8" PRODUCTION LATERAL F/ 14,606' T/15,102'. BACK REAM T/ 14,326'. POH T/ 10,500'.

24-Hr Forecast: (EST RR 1/26/15)(ROL 1/29/15) POH TO SURFACE. TEST BOP'S. M/U LATERAL DIRECTIONAL ASSEMBLY. RIH T/ 15,102'.

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg	Max
Last Casing:	8.625in @ 9,335ft	Str Wt Up/Dn:	247.0/ 204.0 kip	Pump Rate:	416.4	Conn:			
Next Casing:	5.500in @ 19,700ft	Str Wt Rot:	227.0 kip	Pump Press:	3780	Trip:			
Last BOP Press Test:	12/28/2014	Torq Off Btm:	5,000.0 ft-lbf			Backgr:			
Form Test/EMW:	FIT / 12.00 ppg	Torq On Btm:	11,000.0 ft-lbf						

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	RON MORSE	MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
Supervisor 2:	ROBERT SOTELLO	15,037.0	91.80	168.00	10,145.80	-5,105.6	1,202.5	5,244.8	0.15	0.10
Engineer:	KEVIN THREADGILL	14,941.0	91.70	168.10	10,148.73	-5,011.7	1,182.7	5,148.9	2.08	1.05
Geologist:	Sumiyah Ahmed	14,846.0	90.70	169.80	10,150.72	-4,918.5	1,164.5	5,053.9	1.59	0.21
Oxy Personnel:	3	14,751.0	90.50	168.30	10,151.71	-4,825.2	1,146.4	4,959.0	1.23	-0.42
Contractor Personnel:	16	14,656.0	90.90	169.40	10,152.87	-4,732.0	1,128.1	4,864.0	0.21	-0.21
Total on Site:	19	14,561.0	91.10	169.40	10,154.53	-4,638.7	1,110.6	4,769.1	1.34	0.95

BIT RECORD

Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
5	7.875	HALLIBURTON	MMD54DM	12609219	M434	5x15	9335	15,102	1-2-CT-S	X-I-WT-BHA

BIT OPERATING PARAMETERS TODAY

Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI
5	8.50	115.00	496	5767	58.4	50.1	25.0/30.0	30/60	0.863	214	154.8	1.1

MUD DATA - M-I LLC (Schlumberger)				LAST OR CURRENT BHA			
Engineer:	CHRIS JOHNSON	MBT:		BHA No:	6	Bit No:	5
Sample From:	In (Suction Pit)	pH:		MD In:	9335 ft		
Mud Type:	Diesel-Based	Pm / Pom:	1.50	Purpose:	DRILL PRODUCTION HOLE CURVE SECTIONMD Out: 15,102 ft		
Time / MD:	16:00 / 15,102.0	Pf / Mf:	/				
Density @ Temp:	10.00 / 108	Chlorides:					
Rheology Temp:	150	Ca++ / K+:	/				
Viscosity:	50.00	CaCl2:					
PV / YP:	11 / 7	Cl- in water phase:	28,000.00				
Gels 10s/10m/30m:	8 / 11 / 15	Lime:	1.95				
API WL:		ES:	742.00				
HTHP WL:	13.80	ECD:	3.40				
Cake API / HTHP:	/ 2.0	n / K:	/				
Solids / Sol Corr:	13.00 / 11.92	Carbonate:					
Oil / Water:	72.0 / 15.0	Bicarbonate:					
Oil / Water % for OWR:	83.00 / 17.00	Form Loss / Cum Loss:	0.0 / 0.0				
Sand:		Fluid Disch:	/				
Water Added:		Daily Mud Cost:	\$5,728				
Oil Added:		Cum Mud Cost:	\$84,383				
LGS:	3.40 /						
VG Meter:	18@300 / 29@600						
Comments:							

MUD PRODUCTS

Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	2.00
CaCl2 95%	1.00	each	19.00
EMI-933	1.00	lb	8.00
Lime	1.00	each	6.00
Mud Service - 24 Hr	1.00	day	1.00
OneMul	55.00	gal	1.00
Shrink Wrap	1.00	each	6.00
Sodium Chloride/NaCl	1.00	each	4.00
Versamod	55.00	gal	1.00
Versathin	5.00	gal	2.00

**DAILY OPERATIONS PARTNER REPORT**

**Event:** DEV DRILLING  
**Prim. Reason:** ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
 USA

**Date:** 01/16/2015  
**Report No:** 27DR

**Safety Incident?** N **Days since Last RI:** 472.00  
**Environ Incident?** N **Days since Last LTA:** 472.00

**Incident Comments:**

No incidents reported last 24 hours.

**Weather Comments:****Other Remarks:**

UNIVERSITY ST. ANDREWS UNIT # 1220DH

From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.

HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199

LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'

Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1'  
 650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS

OXY DSM TRAILER: 281-833-2725

NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB #21506

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 8.625" INT CASING: 1/5/15 CINDY OP #4

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING :

Unsafe Acts:1

Safe Acts: 3

Unsafe Equipment: 0

SWA:2

Near Misses:0

Worksite JSA: 13

Safety Meetings: 5

LO/TO:3

Permits to work: 2

Power Line Checklist: 12/19/2014

Pre Spud/Rig Inspections:

Hazard ID's:2

Ep2 Observations:2

BEST STOP CARD: OBSERVED EMPLOYEE DRIVING FORKLIFT WITHOUT WEARING HIS SEAT BELT. STOPPED THE JOB, AND EXPLAINED TO THE EMPLOYEE THE IMPORTANCE OF WEARING HIS SEAT BELT, EMPLOYEE AGREED. JOB CONTINUED WITHOUT INCIDENT.

<div>OXY USA INC</div> <div>DAILY OPERATIONS PARTNER REPORT</div> <div> <div>Event: DEV DRILLING</div> <div>ST ANDREWS UNIT 1220H</div> <div>Date: 01/16/2015</div> </div> <div> <div>Prim. Reason: ORIG DRILL HORIZ</div> <div>USA</div> <div>Report No: 27DR</div> </div>							
OPERATIONS							
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	4:00	4.00	31PRDR	TRIP	DRILL	P	POH 4½" DRILL PIPE F/ 10,500' T/ 2600'. NOTE: * MONITORING HOLE ALL TIME WITH TRIP TANK, OK.
4:00	6:00	2.00	31PRDR	TRIP	DRILL	P	POH 4½" DRILL PIPE F/ 2600' T/ SURFACE, BROKE BIT. NOTE: * MONITORING HOLE ALL TIME WITH TRIP TANK, OK.
6:00	8:00	2.00	31PRDR	TRIP	DRILL	P	LAYDOWN MUD MOTOR, MWD, CLEAR FLOOR. MONITORING HOLE ALL TIME WITH TRIP TANK *
8:00	9:00	1.00	31PRDR	BOP	RPWB	P	P/U WEARBUSHING PULLER AND PULL WEARBUSHING, L/D TOOL.
9:00	10:00	1.00	31PRDR	BOP	TSTBOP	P	P/U AND INSTALL TEST PLUG. FILL STACK.
10:00	14:00	4.00	31PRDR	BOP	TSTBOP	P	TEST BOP AS FOLLOWED:  TEST #1 BLIND RAMS, CASING, INSIDE KILL VALVE AND PRIMARY CLUSTER OF CHOKE MANIFOLD VALVES 250 LOW, 5000 HIGH, 5 MINS TEST #2 BLINDS, OUTSIDE 2" KILL, INSIDE 4", # 4 CMV L&R 250 LOW 5000 HIGH 5 MINS TEST #3 BLINDS, 2" CHECK VALVE, INSIDE 4"CMV, #3CMV 250 LOW 5000 HIGH 5 MINS TEST #4 BLINDS, 2" CHECK VALVE, INSIDE 4" CMV, POWER CHOKE 250 LOW 5000 HIGH 5 MINS TEST #5 BLIND, 2" CHECK VALVE INSIDE 4" CMV #2 CMV L&R 250 LOW 5000 HIGH 5 MINS TEST #6 TOP PIPE RAMS, HCR 250 LOW 5000 HIGH 5 MIN TEST #7 TOP PIPE RAMS 4" MAN CLV 250 LOW 5000 HIGH 5 MINS
14:00	16:00	2.00	31PRDR	BOP	TSTBOP	P	TEST #8 BOTTOM PIPE RAMS 250 LOW 5000 HIGH 5 MINS TEST #9 ANNULAR 250 LOW 5000 HIGH 5 MINS TEST #10 MUD LINES, STAND PIPE 250 5000 HIGH 5 MINS TEST #11 TOP DRIVE 250 LOW 5000 HIGH 5 MINS TEST #12 FULL OPENING VALVE 250 LOW 5000 HIGH 5 MINS TEST #13 DART VALVE 250 LOW 5000 HIGH 5 MINS
16:00	17:00	1.00	31PRDR	BOP	RPWB	P	INSTALL WEAR BUSHING AND LAY DOWN TOOL.
17:00	18:00	1.00	31PRDR	TRIP	DRILL	P	LOAD WALK WITH 7-7/8" LATERAL BHA.  CREW CHANGE 1800 HOURS
18:00	22:00	4.00	31PRDR	TRIP	BHA	P	PICK UP AND MAKE UP 7 7/8" LATERAL ASSEMBLY F/ SURFACE T/ 3158', SCRIBE MOTOR, INSTALL MWD, TEST SAME AS FOLLOW'S:  7 7/8" PDC Bit (MMD54DM 6" Gauge) 6-1/2" BAKER 5/6 6.0 1.5" ADJ .33 REV/GAL SLICK, 5.89 BIT TO BEND(ULTRA XL) 1- UBHO 1-NMDC (MWD/Gamma) 1- NM DRILL COLLAR 90 jts 4-1/2" DP 1- TTS XRV PLUS AGITATOR 1- XRV SAFETY LATCH 1- COUGAR SHOCK PDC Setting on Shock Sub 234 jts 4-1/2" DP 30 jts 4-1/2" HWDP  NOTE: MONITORING DISPLACEMENT TO TRIP TANK AT ALL TIMES, OK.  SAFETY BREAK: TRIPPING OPERATIONS
22:00	0:00	2.00	31PRDR	TRIP	DRILL	P	CONTINUE TO RIH WITH LATERAL ASSEMBLY F/ 3158' T/ 6400'.  NOTE: MONITORING DISPLACEMENT TO TRIP TANK AT ALL TIMES, OK.
Total Time		24.00					

OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

Prim. Reason: ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H

USA

Date: 01/16/2015

Report No: 27DR

Wellbore / Top MD: 00 @ 0 ft

Rig: H&P 264

Ref Datum: Original KB @3,056.10ft

DFS: 23.19

Today's MD: 15,102 ft

Progress:

Ground Elev: 3,031.10 ft

Daily Cost: \$126,748

Prev MD: 15,102 ft

Rot Hrs Today: 0.00 hr

AFE MD/Days: 19,800.0 / 35.8 days

Cum Cost: \$2,527,093

PBMD:

Avg ROP Today: 0.0 ft/hr

AFE Number: 1189079#0102

AFE Cost: \$4,017,074

Current Formation: WOLFCAMP@9,775.0

Lithology: 75% SHALE, 25% LIMESTONE

Current Ops:

24-Hr Summary: POH F/10500' TO SURFACE. RIG UP AND TEST BOPE. MAKE UP LATERAL BHA, RIH TO 6400'.

24-Hr Forecast: (EST RR 1/26/15)(ROL 1/29/15) RIH TO 8-5/8" CASING SHOE. SLIP & CUT DRILL LINE. RIH TO 15,102'. DRILL 7-7/8" LATERAL SECTION.

CASING/WELL CONTROL

Last Casing: 8.625in @ 9,335ft

Next Casing: 5.500in @ 19,700ft

Last BOP Press Test: 12/28/2014

Form Test/EMW: FIT / 12.00 ppg

HOOKLOAD & TORQUE

Str Wt Up/Dn: /

Str Wt Rot:

Torq Off Btm:

Torq On Btm:

HYDRAULICS

Pump Rate: 0.0

Pump Press: 0

MUD GAS

Avg

Max

Supervisor 1: RON MORSE

Supervisor 2: ROBERT SOTELLO

Engineer: KEVIN THREADGILL

Geologist: Sumiyah Ahmed

Oxy Personnel: 3

Contractor Personnel: 16

Total on Site: 19

SURVEY DATA (LAST 6)

MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
15,037.0	91.80	168.00	10,145.80	-5,105.6	1,202.5	5,244.8	0.15	0.10
14,941.0	91.70	168.10	10,148.73	-5,011.7	1,182.7	5,148.9	2.08	1.05
14,846.0	90.70	169.80	10,150.72	-4,918.5	1,164.5	5,053.9	1.59	0.21
14,751.0	90.50	168.30	10,151.71	-4,825.2	1,146.4	4,959.0	1.23	-0.42
14,656.0	90.90	169.40	10,152.87	-4,732.0	1,128.1	4,864.0	0.21	-0.21
14,561.0	91.10	169.40	10,154.53	-4,638.7	1,110.6	4,769.1	1.34	0.95

BIT RECORD

Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
6	7.875	HALLIBURTON	MMD54DM	12599506	M333	5x15	15,102	19,700	1-2-CT-S	X-I-WT-TD
5	7.875	HALLIBURTON	MMD54DM	12609219	M434	5x15	9335	15,102	1-2-CT-S	X-I-WT-BHA

BIT OPERATING PARAMETERS TODAY

Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI

MUD DATA - M-I LLC (Schlumberger)

Engineer: CHRIS JOHNSON

Sample From: In (Suction Pit)

Mud Type: Diesel-Based

Time / MD: 16:00 / 15,102.0

Density @ Temp: 10.10 / 0

Rheology Temp: 150

Viscosity: 55.00

PV / YP: 12 / 8

Gels 10s/10m/30m: 7 / 13 / 18

API WL:

HTHP WL: 12.80

Cake API / HTHP: / 2.0

Solids / Sol Corr: 13.00 / 11.97

Oil / Water: 72.0 / 15.0

Oil / Water % for OWR: 83.00 / 17.00

Sand:

Water Added:

Oil Added:

LGS: 4.50 /

MBT:

pH:

Pm / Pom: 1.30

Pf / Mf: /

Chlorides:

Ca++ / K+: /

CaCl2:

Cl- in water phase: 27,000.00

Lime: 1.69

ES: 699.00

ECD:

n / K: /

Carbonate:

Bicarbonate:

Form Loss / Cum Loss: 0.0 / 0.0

Fluid Disch: /

Daily Mud Cost: \$2,520

Cum Mud Cost: \$86,903

LAST OR CURRENT BHA

BHA No: 7

Bit No: 6

MD In: 15,102 ft

Purpose: DRILL 7-7/8" LATERAL SECTION

MD Out: 19,700 ft

Component	OD	ID	Jts	Length
PDC BIT	7.875	2.250	1	1.00
LATERAL DRILLING MOTOR	6.500	2.250	1	32.15
UBHO SUB	6.500	2.500	1	2.97
NON-MAG DRILL COLLAR	6.500	2.250	1	29.06
NON-MAG DRILL COLLAR	6.500	2.250	1	29.57
DRILL PIPE	4.500	3.826	90	2,842.68
AGITATOR	6.500	2.250	1	18.37
SHOCK SUB	6.500	2.250	1	12.71
DRILL PIPE	4.500	3.826	234	7,397.92
HWDP	4.500	2.750	30	920.63
DRILL PIPE	4.500	3.826		8,412.94

Total Length: 11,287.06 ft

Wt below Jars:

Comments:

MUD PRODUCTS

Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	2.00
CaCl2 95%	1.00	each	5.00
EMI-933	1.00	lb	9.00
Mud Service - 24 Hr	1.00	day	1.00
Versatrol	1.00	each	12.00
VG-Plus	1.00	each	4.00

XYC USA INZ

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

Prim. Reason: XRIG DRILL HXRI6

ST ANDREWS UNIT 1220H

USA

Date: 01Q/ 2014

Report No: 2MDR

Other Remarks: UNIVERSITC ST( ANDREWS UNIT d 1220DH  
: 7cx fSo ll f67 ovfcl ct Hgn\$ky s 8M4 yl a Hgn\$ky s 1/ . g Al a7bk i f Towyi fa7po 2(1 x g6i Eyi Fcl Hgn\$ky s 1/ . f6 g f67 ovfcl ct Hgn\$ky s 1/ . yl a Hgn\$ky s 114( T- 7 l6tF9Nc7\$oyi Rcl Hgn\$ky s 114( : 7cx g f67 ovfcl ct Hgn\$ky s 114 yl a Hgn\$ky s 1/ . fa7po . (/ 4 x g6i Nc7\$oyi Fcl Hgn\$ky s 114( AFg f67 ovfcl ct Hgn\$ky s 114 yl a : 3 1/ MM vcl f6 - o i Fygn\$F9Nc7\$oyi R1(M x g6i ° ((f6ol F 7 7gn\$F9Sc- f5&cl f6 l6yi o 7cya( D7po 1(. 4 x g6i yl a F 7 l6tF9Eyi Rcl f6 l6yi o 7cya( D7po 0(. x g6i yl a 7cya k gKx yeo y i kgn\$F%ol a f6 f6o 7gn\$F9Sc- f5& AF%ol a g 7cyaf vcl f6 - o Eyi Ftc7yl c f6o70(P x g6i 9cya k gKf 7 l6tFc7Nc7\$ ytf67 0(2 x g6i &yl a y7po yFUL g6o7 gS SR Al a7bk i Ul gfd1220DH cl Woi Fi gao ct 7cya(  
  
HELIZXhTERJ9MM&. 2P)84/ 1 C9M00&. 2/ )28/ . C9M00&2P2). 1@@  
LI: E : LIGHT ZXXRDINATESJYJ P@fP22(18"CJ 2@f0M8(24"  
  
LyfJ 82' 22"48(04" N Lcl nJ102' 28"0. (. 0" W NAD 2/ ELEVATIXN 8f081(1Q  
. 40Q NL Y M88": ELf SEZTIXN 12f 5LXZB 8f ANDREWS ZXUNTCf TEYAS  
  
XYC DS3 TRAILERJ2M)M8)2/ 24  
NXTI: C TRRZ X: INTENT TX ShUD AND RUN SUR: AZE ZASING J12Q2QP ShXBE TX ZINDC TRRZ E3 hLXCEEf bX5 d2140.  
NXTI: IED TRRZ X: INTENT TX RUN AND ZE3 ENT M. 24..INT ZASINGJ1Q04 ZINDC Xh dP  
NXTI: IED TRRZ X: INTENT TX RUN AND ZE3 ENT 4(4..INT ZASING J  
Ul i yto Avf J1  
Syto Avf J8  
Ul i yto Eq- gnx ol fJ0  
SWA&  
Noy73 gi oi J  
  
Wc7ei g6 bSAJ18  
Sytof6 3 oo f6 ni J4  
LX0X.B  
ho7x g f6 k c7eJ2  
hck o7Lg o Z\$ovef6 fJ12Q@201P  
h7o Sm aQgn ll i novfcl i J  
Hyzy7a ID1 J  
En2 X% o7pyfcl i J  
  
5EST STXh ZARDJX5SERVED hRESSURE WASHER HXSE IN WALB WAC TX STAIRS( E3 hLXCEE STXhhED WHAT HE WAS DXING AND RERXUTED THE HXSE( bX5 ZXNTINUED WITHXUT INZIDENT(

8Q2Q014

@48.D1A3

hyno Pct P

XYC USA INZ

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 010 / 0014

Prim. Reason: XRIG DRILL HXRIG

USA

Report No: 2MDR

Tcx	Tc	H7	Xm h\$yi o	Xm Zcao	Xm S- %	Xm Tsmo	Xm Tfcl DoFyg
1MD0	22.00	P(00	81hRDR	DRILL	HR6LAT	h	<div>RXTATE DRILL / / 0M.hRXDUZTIXN HXLE : 014f. 40014f. 400 hRXGRESS 1@ : T RXh AVGJP/ (/ 4 : T0IR</div> <div>WX5J24)80 BL5S SRh3 JM0 3 Rh3 J1P0 5Rh3 J210 : LXW RATEJP20 Gh3 hU3 h hRESSURE XN 5XTTX3 JP224 hSI hU3 h hRESSURE X: : 5XTTX3 J8. 40 hSI DI: : hRESSUREJ. . 4 hSI</div> <div>3 UD WTJ10(0 VIS 40 h0 WTJ240 BlhS S0X WTJ20. BlhS RXT WTJ212 BlhS TXR' UE XN 5T3 J10 BL5(: T TXR' UE X: : 5T3 JPBL5(: T SLIDE : 014f/ M0014fP00Q SLIDE : 04f4/ 80004f4M0Q SURVECr 14f. 10 INZ MPA63 1/ 0 A5XVE 2Q LE: T 100</div> <div>SA: ETC 5REABJLXTX</div>
22.00	0.00	2(00	81hRDR	DRILL	HR6LAT	h	<div>RXTATE DRILL / / 0M.hRXDUZTIXN HXLE : 014f. 40014f. 410 hRXGRESS @ : T RXh AVGJP. : T0IR</div> <div>WX5J24)80 BL5S SRh3 JM0 3 Rh3 J1P0 5Rh3 J210 : LXW RATEJP20 Gh3 hU3 h hRESSURE XN 5XTTX3 JP224 hSI hU3 h hRESSURE X: : 5XTTX3 J8. 40 hSI DI: : hRESSUREJ. . 4 hSI</div> <div>3 UD WTJ10(0 VIS 40 h0 WTJ24P BlhS S0X WTJ20P BlhS RXT WTJ21MBlhS TXR' UE XN 5T3 J12 BL5(: T TXR' UE X: : 5T3 JPBL5(: T</div> <div>SURVECr 14f/ 04 INZ M00 A63 1/ 0(P A5XVE 0Q LE: T 1. Q</div>
TcFyKfG o		2P(00					
Safety Incident?		N		Days since Last RI:		P/ 8(00	
Environ Incident?		N		Days since Last LTA:		P/ 8(00	
Incident Comments:							
Nc g vgaol f 70m70a ki F2P \$c- 7 (							

8020014

@48.D1A3

hyno 8 ct P



<div> <div>XYC USA INZ</div> <div> <div> <div>Event: DEV DRILLING</div> <div>Prim. Reason: XRIG DRILL HXRIG</div> </div> <div> <div>DAILY OPERATIONS PARTNER REPORT</div> <div>ST ANDREWS UNIT 1220H</div> <div>USA</div> </div> <div> <div>Date: 01Q / 2014</div> <div>Report No: 2MDR</div> </div> </div> </div>							
OPERATIONS							
Tc	H7	Xm h\$yi o	Xm Zcao	Xm S- %	Xm Tsmo	Xm7yfgl DoFygk	
0.00	1.00	1(40	81hRDR	TRih	DRILL	h	ZXNTINUE TX RIH WITH LATERAL ASSE3 5LC : Q P000TQ@28Q  NXTEJ 3 XNITXRING DISHLAZE3 ENT TX TRIh TANB AT ALL TI3 ESf XB(
1.00	P.00	8(00	81hRDR	DRILL	ZUTDLIN	h	INSTALL : XSVf DXZB TXh DRIVEf ZUT DRILL LINE(  UN)DXZB TXh DRIVEf RE3 XVE : XSVf ZALI5RATE 5LXZBS AND ZRXWN)X)3 ATIZ(  NXTEJ3 XNITIXR WELL THXUGH TRIh TANB DURING XherATIXNf XB(  SA: ETC 5REABJZUTTING DRILL LINE XherATIXNS(
P.00	.00	1(40	81hRDR	TRih	DRILL	h	ZXNTINUE TX RIH WITH LATERAL ASSE3 5LC : Q@28QTO10f400QWITH NX HXLE ISSUES(  NXTEJ 3 XNITXRING DISHLAZE3 ENT TX TRIh TANB AT ALL TI3 ESf XB(
.00	10.00	P(00	81hRDR	TRih	DRILL	h	ZXNTINUE TX RIH WITH LATERAL ASSE3 5LC : O10f400QTO1P@QWITH NX HXLE ISSUES( SA: ETC REA3 : O1P@QTO14f102Q NXTEJ 3 XNITXRING DISHLAZE3 ENT TX TRIh TANB AT ALL TI3 ESf XB(
10.00	18.00	8(40	81hRDR	DRILL	HR6LAT	h	RXTATE DRILL / / QM.hRXDUZTIXN HXLE : O14f102QTO14f82Q hRXGRESS 22/ : T RXh AVGJ. P: T0IR  WX5J24)80 BL5S SRh3 J/ 0 3 Rh3 J1P0 5Rh3 J210 : LXW RATEJP2P Gh3 hU3 h hRESSURE XN 5XTTX3 JP100 hSI hU3 h hRESSURE X: : 5XTTX3 J8. 40 hSI DI: : hRESSUREJP40 hSI  3 UD WTJ10(0 VIS 40 hQ WTJ240 BlhS SQ WTJ20. BlhS RXT WTJ212 BlhS TXR' UE XN 5T3 J10 BL5(: T TXR' UE X: : 5T3 JPBL5(: T SLIDE : O14f102QTO14f11/ Q SURVECr 14f22MINZ M@A63 1. M0 A5XVE M@ LE: T 14Q H2S ALAR3 WENT X: : f ZLXSE WELL Inf EVAZUATED TX SA: E AREA
18.00	1.00	2(40	81hRDR	WAIT	XTH	hT	WAIT XN HSEf HSE ARRIVED ZLEARED THE RIG AND : XUND XNE SENSXR IN THE ZELLAR SLID DXWN THE 5EA3 AND ShIBED SETTING THE ALAR3 X: : ( XhEN WELL(
1.00	1M00	2(00	81hRDR	DRILL	HR6LAT	h	RXTATE DRILL / / QM.hRXDUZTIXN HXLE : O14f82QTO14fP. M hRXGRESS 18@ T RXh AVGJ. @ T0IR  WX5J24)80 BL5S SRh3 J/ 0 3 Rh3 J1P0 5Rh3 J210 : LXW RATEJP2P Gh3 hU3 h hRESSURE XN 5XTTX3 JP100 hSI hU3 h hRESSURE X: : 5XTTX3 J8. 40 hSI DI: : hRESSUREJP40 hSI  3 UD WTJ10(0 VIS 40 hQ WTJ240 BlhS SQ WTJ20. BlhS RXT WTJ212 BlhS TXR' UE XN 5T3 J10 BL5(: T TXR' UE X: : 5T3 JPBL5(: T  SURVECr 14fP1@NZ M0 A63 1. / (P A5XVE 4Q LE: T 1/ Q  ZREW ZHANGE AT 1M00 HXURS

## DAILY OPERATIONS PARTNER REPORT

**Event:** DEV DRILLING  
**Prim. Reason:** XRIG DRILL HXRIG

ST ANDREWS UNIT 1220H  
USA

**Date:** 010/ 2014  
**Report No:** 2MDR

<b>Wellbore / Top MD:</b>	00 r 0 tF	<b>Rig:</b>	H, h 2. P	<b>Ref Datum:</b>	X 7nd ykB5 r 8f04. (10tF	<b>DFS:</b>	2P(1@
<b>Today's MD:</b>	14f/ 41 tF	<b>Progress:</b>	. P@F	<b>Ground Elev:</b>	8f081(10 tF	<b>Daily Cost:</b>	#. 2f@M
<b>Prev MD:</b>	14f102 tF	<b>Rot Hrs Today:</b>	/ (40 \$7	<b>AFE MD/Days:</b>	1@M0(0 C84(Maysi	<b>Cum Cost:</b>	#2f4@f0M2
<b>PBMD:</b>		<b>Avg ROP Today:</b>	M (4 tF\$7	<b>AFE Number:</b>	11M@/ @0102	<b>AFE Cost:</b>	#P01/ f0/ P

**Current Formation:** WXL: ZA3 hr @ / 4(0) **Lithology:** Mu SHALEf 14u LI3 ESTXNE

**Current Ops:**

**24-Hr Summary:** RIH WITH LATERAL ASSE3 5LC : OP000104f102Q (DRILL / ) / NO LATERAL HXLE TO 104f/ 41Q

**24-Hr Forecast:** EST RR 12.048 RXL 12.048 DRILL / ) / NO LATERAL SEZTIXN(

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS	Avg	Max
Last Casing:	M, 24g r @884tF	Str Wt Up/Dn:	24P(0 O 20P(0 egr	Pump Rate:	P1. (P	Conn:	2MM	48M
Next Casing:	4(400g r 1@ 00tF	Str Wt Rot:	21M0 egr	Pump Press:	P100	Trip:		
Last BOP Press Test:	12Q201P	Torq Off Btm:				Backgr:	8. 4	// @
Form Test/EMW:	: IT Oi2(00 mm	Torq On Btm:						

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	RXN 3 XRSE	MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
Supervisor 2:	RX5ERT SXTLLX	14f41P(0	MM00	1. / (P0	10f1PM/ M	)4f4/ 1(@	1f802(8	4f/ 21(/	0(00	0(00
Engineer:	BEVIN THREADGILL	14fP1@0	MM00	1. / (P0	10f1P4(P.	)4fP/ @2	1f2M(.	4f. 2. (/	2(0/	)1(4.
Geologist:	S- x \$syA \$Ax oa	14f828(0	M@40	1. M/ 0	10f1P8(8/	)4f8M/(8	1f2. 1(M	4f480(M	0(M#	)0(P2
Oxy Personnel:	8	14f228M0	M@40	1. M00	10f1P2(M	)4f2@/8	1f2P2(.	4fP84(M	1(0/	)1(04
Contractor Personnel:	1.	14f188(0	@(@	1. / (M0	10f1P8(4P	)4f1@0P	1f222(/	4f8P0(M	0(@	0(@
Total on Site:	1@	14f08/ (0	@(M0	1. M00	10f1P4(M0	)4f104(.	1f202(4	4f2PP(M	0(14	0(10

## BIT RECORD

Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
6	7.875	HALLIBURTON	MMD54DM	12599506	M333	4w14	15,102	19,700	1)2)ZT)S	Y)1)WT)TD
5	7.875	HALLIBURTON	MMD54DM	12609219	M434	4w14	9335	15,102	1)2)ZT)S	Y)1)WT)5HA

## BIT OPERATING PARAMETERS TODAY

Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB x 10 <sup>3</sup> yw	RPM x 10 <sup>3</sup> yw	TFA	P Drop Bit	Noz Vel	HHPSI
.	/ (40	/ (40	. P@	. P@	M (4	M (4	24(030(0	P000	0(M 8	21F	14P(M	1(1

MUD DATA - M-I LLC (Schlumberger)		LAST OR CURRENT BHA				
Engineer: ZHRIS bXHNSXN	MBT:	5HA NcJ /	5gNcJ	3 D II J	14f102 fF	
Sample From: II 9S- vRpl h g8	pH:	h- 7rcioJ DRILL / y / 00 LATERAL SEZTIXN			3 D X- fJ	1@ 00 fF
Mud Type: Dgi oK5yi oa	Pm / Pom: 1(20	Component		OD	ID	Jts
Time / MD: 1. J00 O14f88@0	Pf / Mf: O					Length
Density @ Temp: 10(00 O100	Chlorides:	hDZ 5IT	/ (M 4	2(240	1	1(00
Rheology Temp: 140	Ca++ / K+: O	LATERAL DRILLING 3 XT XR	. (400	2(240	1	82(14
Viscosity: 42(00	CaCl2 in:	U5HX SU5	. (400	2(400	1	2(@
PV / YP: 1P O@	Cl- in water phase: 24f000(00	NXN)3 AG DRILL ZXLLAR	. (400	2(240	1	2@0.
Gels 10s/10m/30m: . O18 O1.	Lime: 1(4.	NXN)3 AG DRILL ZXLLAR	. (400	2(240	1	2@4/
API WL: . @ (00	ES: 10(400	DRILL hIhE	P(400	8(M2.	@	2fMP2(. M
HTHP WL: 12(M0	ECD: 10(40	AGITATXR	. (400	2(240	1	1M8/
Cake API / HTHP: O2(0	n / K: O	SHXZB SU5	. (400	2(240	1	12(/ 1
Solids / Sol Corr: 18(00 O12(21	Carbonate:	DRILL hIhE	P(400	8(M2.	28P	/ f8@(@
Oil / Water: / P(0 O18(0	Bicarbonate:	HWDh	P(400	2(/ 40	80	@0(. 8
Oil / Water % for OWR: M4(00 O14(00	Form Loss / Cum Loss: 0(0 O0(0	DRILL hIhE	P(400	8(M2.		MP12(@
Sand:	Fluid Disch: O					
Water Added:	Daily Mud Cost: #1f/ 4.					
Oil Added:	Cum Mud Cost: #MM. 4@					
LGS: P(80 O						

VG Meter:	28r	800	08/ r	. 00
-----------	-----	-----	-------	------

Comments:

## MUD PRODUCTS

Product	Number of Units	Units	Qty Used
516k o7Rol fyK	1(00	oyv\$	1(00
5- 16 Tyl e Rol fyK	1(00	oyv\$	2(00
ZyZ12 @u	1(00	oyv\$	P(00
Lgx o	1(00	oyv\$	. (00
3 - a So7pgo ) 2PH7	1(00	ays	1(00
Vo7 yfck	1(00	oyv\$	12(00

Total Length:	11f2M (0. tF
---------------	--------------

Wt below Jars:

XYC USA INZ

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 010/ 0014

Prim. Reason: XRIG DRILL HXRIG

USA

Report No: 2MDR

. \$cx	Tc	H\$	Xm & ,aso	Xm Zcdo	Xm S- %	Xm Tym	Xm a3cn Do3ails
22.00	0.00	200	71&RDR	DRILL	HR6LAT	&	RXTATE DRILL f f 0 . &RXDUZTIXN HXLE . 01( t / f : TO1f t02f : &RXGRESS 1( 0 . T RX & AVGJ/ 0 . T 0IR  WXBj24570 KLBS SR&9 J/ 0 9 R&9 J174 BR&9 J214 . LXW RATEJr0/ G&9 &U9 & &RESSURE XN BX TTX9 Jr 700 &SI &U9 & &RESSURE X. . BX TTX9 J7424 &SI DI. . &RESSUREJf f 4 &SI  9 UD WTJ100 VIS 40 &0 WTJ2( 0 KI&S S0X WTJ1M KI&S RXT WTJ21f KI&S TXR' UE XN BT9 J17 KLBP T TXR' UE X. . BT9 J4 KLBP T SURVEC @1( t / rr : INZ MI 0 A69 1( M0 BELXW 2 : 5LE. T f :
Tc3al Tix o		2r 00					
Safety Incident?		N		Days since Last RI:		r f r 00	
Environ Incident?		N		Days since Last LTA:		r f r 00	
Incident Comments:		Nc invidon3 \$mc33d las32r , c- \$P					
Other Remarks:		UNIVERSITC STPANDREWS UNIT # 1220DH . \$cx 3 o In3\$sov3cn cFHig, kay 7/ 4 and Hig, kay 1f ( in And\$bk st Towast d\$po 20 x ilos Eas3cn Hig, kay 1f ( 3 in3\$sov3cn cF Hig, kay 1f ( and Hig, kay 114P T- \$n loB0Nc33 oas3 cn Hig, kay 114P . \$cx in3\$sov3cn cFHig, kay 114 and Hig, kay 1f ( t d\$po ( 0 4 x ilos Nc33 oas3cn Hig, kay 114P A3in3\$sov3cn cFHig, kay 114 and . 9 1f / / t vcn3n- o s3aig, 30Nc33 oas3 10 x ilos° 03 on 3 \$n \$g, 30C- 3 ) cn3: loaso \$cadP D\$po 10 4 x ilos and 3 \$n loB0Eas3 cn3: loaso \$cadP D\$po 00 x ilos and \$cad k ill x aeo a slig, 3%ond 3 3 o \$g, 30C- 3 ) P A3%ond in \$cad t vcn3n- o Eas3f0\$anc3 o\$00 x ilos \$cad k ill 3 \$n loB0c\$Nc33 aB0\$ 002 x ilos) and a\$3po a3Unipo\$33 S3PAnd\$ok s Uni3#1220DH cn Wos3sido cF\$cadP  HELIZX&TERJQ / / ) ( 2r 54f 1 0000 ) ( 2f 527f ( 0000 ) 2r 25 1MM LI. E . LIGHT ZXXRDINATESJYJ r M2tr 2207" CJ 2M4t0/ 7024"  La30 72' 22" 4704" N LcngJ102' 27" 0( 00" W NAD 2f ELEVATIXN 710710: ( 40: . NL Y / 77" . ELt SEZTIXN 12t BLXZK 7t ANDREWS ZXUNTCt TEYAS  XYC DS9 TRAILERJ2/ 15 752f 24 NXTI. C TRRZ X. INTENT TX S&UD AND RUN SUR. AZE ZASING J12020r S&XKE TX ZINDC TRRZ E9 &LXCEEt bXB #2140( NXTI. IED TRRZ X. INTENT TX RUN AND ZE9 ENT / 0 24..INT ZASINGJ1004 ZINDC X& #r NXTI. IED TRRZ X. INTENT TX RUN AND ZE9 ENT 40..INT ZASING J Unsa0 Av3J7 Sa0 Av3J4 Unsa0 Eq- inx on30 SWA0 Noa\$9 issos.0  Wc\$esi3b SAJ17 Sa03y 9 oo3ngsJ4 LX0XJ7 &o\$ i3 3 k c\$J2 &ck o\$Lino Z, ovelis3120M001r &\$o Sm d0Rig Insmov3cnsJ Haza\$0 ID's.0 En0 X%so\$pa3cns.0  BEST STX& ZARDJXBSERVED HAND WALKING XN TX& X. DRILL &I&E SX THAT HE ZXULD STRA& ITPSTX&&ED THE bXBt EY&LAINED TX THE HAND IT WAS SA. ER TX DX . RX9 THE END AND WHAT THE &XLIZC WAST HE AGRREDPbXB ZXNTINUED WITHXUT INZIDENTP					

<div> <div>XYC USA INZ</div> <div> <div>DAILY OPERATIONS PARTNER REPORT</div> <div> <div>Event: DEV DRILLING</div> <div>ST ANDREWS UNIT 1220H</div> <div>Date: 010/ 0014</div> </div> </div> <div> <div>Prim. Reason: XRIG DRILL HXRIG</div> <div>USA</div> <div>Report No: 2MDR</div> </div> </div>							
Scx	Tc	H\$	Xm & aso	Xm Zcdo	Xm S- %	Xm Tymo	Xm 3cn Doails
10.00	1r.00	r 00	71&RDR	DRILL	HR6LAT	&	<div> <div>RXTATE DRILL f f 0..&amp;RXDUZTIXN HXLE . 01(t0f r: TO1(tr 2/ :</div> <div>&amp;RXGRESS 74r . T RX&amp; AVGJ/ / . T0IR</div> </div> <div> <div>WXBj24570 KLBS SR&amp;9 J/ 0 9 R&amp;9 J1r0 BR&amp;9 J210</div> <div>. LXW RATEJr0/ G&amp;9</div> <div>&amp;U9 &amp; &amp;RESSURE XN BXTTX9 Jr 140 &amp;SI</div> <div>&amp;U9 &amp; &amp;RESSURE X. . BXTTX9 J7424 &amp;SI</div> <div>DI. . &amp;RESSUREJ( 24 &amp;SI</div> </div> <div> <div>9 UD WTJ100 VIS 40</div> <div>&amp;0 WTJ24r KI&amp;S S0X WTJ20r KI&amp;S RXT WTJ21/ KI&amp;S</div> <div>TXR' UE XN BT9 J12 KLBP T</div> <div>TXR' UE X. . BT9 Jr KLBP T</div> <div>RXTATED . 01(t0f r: TO1(tr 2f :</div> <div>SLIDE . 01(tr 2f: TO1(tr 2/ :</div> <div>SURVEC @1(t7f 0 INZ // R A69 1(f R</div> <div>BELXW r :5LE. T (:</div> </div>
1r.00	1/.00	r 00	71&RDR	DRILL	HR6LAT	&	<div> <div>RXTATE DRILL f f 0..&amp;RXDUZTIXN HXLE . 01(tr 2/ : TO1(t( 0/ :</div> <div>&amp;RXGRESS 1/ 0 . T RX&amp; AVGJr 4 . T0IR</div> </div> <div> <div>WXBj24570 KLBS SR&amp;9 J/ 0 9 R&amp;9 J1r0 BR&amp;9 J210</div> <div>. LXW RATEJr0/ G&amp;9</div> <div>&amp;U9 &amp; &amp;RESSURE XN BXTTX9 Jr 140 &amp;SI</div> <div>&amp;U9 &amp; &amp;RESSURE X. . BXTTX9 J7424 &amp;SI</div> <div>DI. . &amp;RESSUREJ( 24 &amp;SI</div> </div> <div> <div>9 UD WTJ100 VIS 40</div> <div>&amp;0 WTJ24r KI&amp;S S0X WTJ20r KI&amp;S RXT WTJ21/ KI&amp;S</div> <div>TXR' UE XN BT9 J12 KLBP T</div> <div>TXR' UE X. . BT9 Jr KLBP T</div> <div>SLIDE . 01(tr 2/ : TO1(tr 4(:</div> <div>SLIDE . 01(tr 4( : TO1(t42(</div> <div>RXTATE. 01(t42( : TO1(t( 0/ :</div> <div>SURVEC @1(t7f 0 INZ // R A69 1(f R</div> <div>BELXW r :5LE. T (:</div> </div> <div>ZREW ZHANGE 1/ 00 HXURS</div>
1/.00	22.00	r 00	71&RDR	DRILL	HR6LAT	&	<div> <div>RXTATE DRILL f f 0..&amp;RXDUZTIXN HXLE . 01(t( 0/ : TO1(t( f :</div> <div>&amp;RXGRESS 24M. T RX&amp; AVGJ( 4 . T0IR</div> </div> <div> <div>WXBj24570 KLBS SR&amp;9 J/ 0 9 R&amp;9 J1r0 BR&amp;9 J210</div> <div>. LXW RATEJr0/ G&amp;9</div> <div>&amp;U9 &amp; &amp;RESSURE XN BXTTX9 Jr 700 &amp;SI</div> <div>&amp;U9 &amp; &amp;RESSURE X. . BXTTX9 J7424 &amp;SI</div> <div>DI. . &amp;RESSUREJf f 4 &amp;SI</div> </div> <div> <div>9 UD WTJ100 VIS 40</div> <div>&amp;0 WTJ2( 0 KI&amp;S S0X WTJ1M KI&amp;S RXT WTJ21f KI&amp;S</div> <div>TXR' UE XN BT9 J17 KLBP T</div> <div>TXR' UE X. . BT9 J4 KLBP T</div> <div>SLIDE . 01(t( 0/ : TO1(t( 77:</div> <div>SURVEC @1(t( 4r INZ M2R A69 1(/ R</div> <div>BELXW r :5LE. T (:</div> </div> <div>SA. ETC BREAKJ9 ANLI. T X&amp;ERATIXNS</div>

<div> <div>XYC USA INZ</div> <div> <div> <div>Event: DEV DRILLING</div> <div>Prim. Reason: XRIG DRILL HXRIG</div> </div> <div> <div>DAILY OPERATIONS PARTNER REPORT</div> <div>ST ANDREWS UNIT 1220H</div> <div>USA</div> </div> <div> <div>Date: 01Q/ Q014</div> <div>Report No: 2MDR</div> </div> </div> </div>							
OPERATIONS							
Scx	Tc	H\$	Xm & aso	Xm Zcdo	Xm S- %	Xm Tymo	Xm a3cn Do3ails
0.00	1.00	100	71&RDR	DRILL	HR6LAT	&	RXTATE DRILL f f Ø..&RXDUZTIXN HXLE . 014tf 41: TO14tf f 4:P &RXGRESS 2r . T RX& AVGJ2r . TØIR  WXBj24570 KLBS SR&9 J/ 0 9 R&9 J1r 0 BR&9 J210 . LXW RATEJr 20 G&9 &U9 & &RESSURE XN BX TTX9 Jr 224 &SI &U9 & &RESSURE X. . BX TTX9 J7(40 &SI DI. . &RESSUREJ( (4 &SI  9 UD WTJ100 VIS 40 &Q WTJ24r KI&S SØ WTJ20r KI&S RXT WTJ21/ KI&S TXR' UE XN BT9 J12 KLBP T TXR' UE X. . BT9 Jr KLBP T SLIDE . 04tf 4r: T04tf f 4:  SURVEC @14tf 04 INZ / MØ A69 1f 0R ABXVE 2: 5LE. T 1M  SA. ETC BREAKJ. XRKLI. T SA. ETC
1.00	r J0	700	71&RDR	WAIT	XTH	&T	WAIT XN HSEt HSE ARRIVED ZLEARED THE RIG AND . XUND XNE SENSXR XN SHAKER &IT TX BE AT . AULPHSE ZLEARED ALAR9 AND RE&LAZED SENSXR X&ENED WELLP
r J0	(.00	100	71&RDR	DRILL	HR6LAT	&	RXTATE DRILL f f Ø..&RXDUZTIXN HXLE . 014tf 44: TO14tf f MP &RXGRESS r . T RX& AVGJ2R . TØIR  WXBj24570 KLBS SR&9 J/ 0 9 R&9 J1r 0 BR&9 J210 . LXW RATEJr 20 G&9 &U9 & &RESSURE XN BX TTX9 Jr 224 &SI &U9 & &RESSURE X. . BX TTX9 J7(40 &SI DI. . &RESSUREJ( (4 &SI  9 UD WTJ100 VIS 40 &Q WTJ24r KI&S SØ WTJ20r KI&S RXT WTJ21/ KI&S TXR' UE XN BT9 J12 KLBP T TXR' UE X. . BT9 Jr KLBP T SLIDE . 014tf 44 TO14tf f M  SURVEC @14tf 04 INZ / MØ A69 1f 0R ABXVE 2: 5LE. T 1M  ZREW ZHANGE 0(00 HXURS
(.00	10.00	r 00	71&RDR	DRILL	HR6LAT	&	RXTATE DRILL f f Ø..&RXDUZTIXN HXLE . 014tf f M TO1( t0f r : &RXGRESS 2M: . T RX& AVGJf 7: . TØIR  WXBj24570 KLBS SR&9 J/ 0 9 R&9 J1r 0 BR&9 J210 . LXW RATEJr 20 G&9 &U9 & &RESSURE XN BX TTX9 Jr 224 &SI &U9 & &RESSURE X. . BX TTX9 J7(40 &SI DI. . &RESSUREJ( (4 &SI  9 UD WTJ100 VIS 40 &Q WTJ24r KI&S SØ WTJ20r KI&S RXT WTJ21/ KI&S TXR' UE XN BT9 J12 KLBP T TXR' UE X. . BT9 Jr KLBP T RXTATE . 014t f f M TO14tM(: SLIDE . 014tM(: TO14M r : RXTATE . 014tM r: TO1( t041: SLIDE . 01( t041: TO1( t0f r SURVEC @14tMM INZ / MØ A69 1f 0RM BELXW M 5LE. T M

XYC USA INZ

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 010 / 0014

Prim. Reason: XRIG DRILL HXRIG

USA

Report No: 2MDR

Wellbore / Top MD: 00 @ 0 R

Rig: Hh & 2(r

Ref Datum: X\$ginal KB @7t04( R 0R

DFS: 24RM

Today's MD: 1f t02f R

Progress: 12f ( R

Ground Elev: 7t071R 0 R

Daily Cost: 8( / tM1

Prev MD: 14tf 41 R

Rot Hrs Today: 20R 0 , \$

AFE MD/Days: 1M/ 00R 0 04P days

Cum Cost: 82t( 4/ tM7

PBMD: Avg ROP Today: ( 2R R 0 \$

AFE Number: 11/ M0f M#0102

AFE Cost: 8rt01f t0f r

Current Formation: WXL. ZA9 &@Mf f 4R

Lithology: 100u SHALE

Current Ops:

24-Hr Summary: DRILL f 5 0:: LATERAL SEZTIXN . 04tf 41: TX 1f t02f P

24-Hr Forecast: 0EST RR 1Q( 04)0RXL 1QMD4) DRILL f 5 0:: LATERAL SEZTIXNP

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg		Max	
Last Casing:	/ R 24in @ M774R	Str Wt Up/Dn:	2( 0R 0 1M R ein	Pump Rate:	r 0/ R	Conn:	77M			r f 4	
Next Casing:	4R400in @ 1Mf 00R	Str Wt Rot:	21f R ein	Pump Press:	r 700	Trip:					
Last BOP Press Test:	12Q/ Q01r	Torq Off Btm:				Backgr:	74/			410	
Form Test/EMW:	. IT 012R0 mng	Torq On Btm:									

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	RXN 9 XRSE	MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
Supervisor 2:	RXBERT SXTLLX	1( t/ r r R	Mf R 0	1( M R 0	10t1r M R f	5 t/ f / R	1t4r M2	f t040R	0R 7	0R 0
Engineer:	KEVIN THREADGILL	1( t f r M R	Mf R 0	1( / R 0	10t142R M	5 t f / 4R	1t470P	( tM4R	0P f	50P r
Geologist:	S- x iyya, A, x od	1( t( 4r R	M2R 0	1( / R 0	10t14( R f	5 t( M2P	1t412R	( t/ ( 0P	2P 7	2P 1
Oxy Personnel:	7	1( t44M R	M R 0	1( / R 0	10t14/ R 4	5 t4MM R	1tr M R2	( t f ( 4P	1P 0	0P 2
Contractor Personnel:	1(	1( tr ( r R	M R2 0	1( M R 0	10t14M2r	5 t404P	1tr f 4R	( t( f 0P	2P M	1P 1
Total on Site:	1M	1( t7f 0R	// R 0	1( f R 0	10t14/ R f	5 tr 17R	1tr 4( R	( t4f ( P	1M	51P f

BIT RECORD										
Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
6	7.875	HALLIBURTON	MMD54DM	12599506	M333	4w14	15,102	19,700	1325T3S	Y53WT5TD

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB	RPM	TFA	P Drop Bit	Noz Vel	HHPSI
(	20R 0	2/ R 0	12f (	1M24	( 2P2	( / R	24R 0R 0	r 0R 0	0P ( 7	20(	141P	1R

MUD DATA - M-I LLC (Schlumberger)					LAST OR CURRENT BHA					
Engineer:	ZHRIS bXHNSXN	MBT:			BHA NcJ	f	Bi3NcJ	(	9 D InJ	14t102 R
Sample From:	In (\$- v3cn &i3)	pH:			&- \$trcoJ	DRILL f 5 0:: LATERAL SEZTIXN			9 D X- 3J	1Mf 00 R
Mud Type:	Diosol5Basod	Pm / Pom:	1P20							
Time / MD:	1( J0 O1( t40M R	Pf / Mf:	O							
Density @ Temp:	10R 0 011r	Chlorides:								
Rheology Temp:	140	Ca++ / K+:	O							
Viscosity:	40R 0	CaCl2:								
PV / YP:	11 O	Cl- in water phase:	2/ t000R 0							
Gels 10s/10m/30m:	r 0f 011	Lime:	1R(							
API WL:		ES:	( 0M R 0							
HTHP WL:	12P 0	ECD:	10P /							
Cake API / HTHP:	02R	n / K:	O							
Solids / Sol Corr:	12R 0 011P 1	Carbonate:								
Oil / Water:	f ( R 0 012R	Bicarbonate:								
Oil / Water % for OWR:	/ ( R 0 01r R 0	Form Loss / Cum Loss:	0R 0 0R 0							
Sand:		Fluid Disch:	O							
Water Added:		Daily Mud Cost:	87t( 47							
Oil Added:		Cum Mud Cost:	8M2t717							
LGS:	2P 0 O									
VG Meter:	1M@700 070@( 00									
Comments:										

MUD PRODUCTS			
Product	Number of Units	Units	Qty Used
Blick o\$Ron3al	1R 0	oav,	1R 0
B- le Tane Ron3al	1R 0	oav,	2R 0
ZaZ12 M4u	1R 0	oav,	7R 0
Lix o	1R 0	oav,	r 7R 0
9- d So\$ivo 52r H\$	1R 0	day	1R 0
Xno9- l	44R 0	gal	1R 0
Vo\$sa3cl	1R 0	oav,	1f R 0
VG&l- s	1R 0	oav,	7R 0

XYC USA INZ

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

Prim. Reason: XRIG DRILL HXRI6

ST ANDREWS UNIT 1220H

USA

Date: 01Q / Q2014

Report No: MDR

Other Remarks:

UNIVERSITC STQANDREWS UNIT # 1220DH

P7ko 3\$wIn3v7\$w3kn kFHig\$V ay M 4 and Hig\$V ay 15) in And7w st Twcast d7bw2Q o ilws Eas3kn Hig\$V ay 15) 3k in3v7\$w3kn kF Hig\$V ay 15) and Hig\$V ay 114QTx7h lwB(Nk7\$was39kn Hig\$V ay 114QP7ko in3v7\$w3kn kFHig\$V ay 114 and Hig\$V ay 15)t d7bw ) Q4 o ilws Nk7\$was3kn Hig\$V ay 114QA3in3v7\$w3kn kFHig\$V ay 114 and P& 15f f t pkn3nxws3aig\$3(Nk7\$was391Q o ilws° Q\$wn 3k7h 7ig\$3(Skx3\$9kn3k lwasw 7kadQD7bw1Q4 o ilws and 3k7h lwB(Eas39kn3k lwasw 7kadQD7bw0Q o ilws and 7kad v ill o aewa slig\$3- wnd 3k 3\$w 7ig\$3(Skx3\$9QA3- wnd in 7kad t pkn3nxw Eas3R7 ank 3\$w70Q o ilws (7kad v ill 3k7h lwBk7Nk7\$ aF3w7 0Q o ilws9and a7lbwa3Unibw7si3y S3QAnd7w s Uni3#1220DH kn Wws3sidwkF7kadQ

HELIXX@TER%f f f 9) 2, :M451 Qf 009) 25:2M5) Qf 0092, 2:) 1/ /

LIPE PLIGHT ZXXRDINATES%&%, / 2t, 22QM C%2/ 4tof M24"

La3%M2' 22"4M04" N Lkng%a02' 2M0) Q0" W NAD 25 ELEVATIXN M0MIQ.

) 40. PNL Y f MPPElt SEZTIXN 12t BLXZK M ANDREWS ZXUNTct TEYAS

XYC DS& TRAILER2f 1:f MM2524

NXTIPC TRRZ XP INTENT TX S@JD AND RUN SURPAZE ZASING %a2Q2Q, S@XKE TX ZINDC TRRZ E& @XCEEt JXB #2140)

NXTIPIED TRRZ XP INTENT TX RUN AND ZE& ENT f Q24..INT ZASING%aQ04 ZINDC X@#,

NXTIPIED TRRZ XP INTENT TX RUN AND ZE& ENT 4Q..INT ZASING %

UnsaFwAp3%1

SaFwAp3%4

UnsaFwEqximb wn3/0

SWA2

Nwa7& issws2

Wk7esi3vJSA%aM

SaFw3y & ww3ngs%4

LX0X%1

@v7o i3s 3k v k7e%2

@xv w7LinwZ \$vpelis3/a2Q/ Q01,

@wSmxdQrig Insmmp3kns%

Haza7d ID's2

En2 X- sw7ba3kns2

BEST STX@ZARD%KBSERVED E& @XCEE HA& & ERING A HA& & ER UNIXN WITHXUT HIS SAPETC GLASSESQ

STX@QD THE JXB AND EY@AINED TX THE E& @XCEE ABXUT THE DANGERS XP NXT WEARING SAPETC GLASSES

ALXNG WITH THE SAPETC @LIZIESt HE AGREEDQJXB ZXNTINUED WITHXUT INZIDENTQ

M02Q2014

/ %a2%, A&

@@gw, kF,

XYC USA INZ							
DAILY OPERATIONS PARTNER REPORT							
Event: DEV DRILLING		ST ANDREWS UNIT 1220H				Date: 01Q / Q2014	
Prim. Reason: XRIG DRILL HXRIG		USA				Report No: MDR	
P7ko	Tk	H7s	Xm @asw	Xm Zkdw	Xm Sx-	Xm Tynw	Xnw7a3kn Dw3ails
12%0	1M%0	1Q0	M @RDR	WAIT	XTH	@	WAITED PXR HSE TX ARRIVEt ZLEARED THE RIGt BAD SENSXR AT THE SHAKert X @EN WELLQ
1M%0	1f %0	, Q0	M @RDR	DRILL	HR6LAT	@	RXTATE DRILL 5 50...@RXDUZTIXN HXLE PO15t) , 5. TO15tf ) 0. @RXGRESS 21M PT RX @AVG% 5 PT0IR  WXB%24:M0 KLBS SR@ % 0 & R@ %4M# BR@ %224 PLXW RATE% Of G@ @J& @@RESSURE XN BXTTX& % M00 @SI @J& @@RESSURE XPP BXTTX& %M#24 @SI DIPP @RESSURE%554 @SI  & UD WT%40Q VIS 40 @J WT%2) 0 KI@S S@X WT%4/ f KI@S RXT WT%215 KI@S TXR' UE XN BT& %4MKLB@T TXR' UE XPP BT& %4 KLB@T RXTATE PO15t) , 5. TO15t) 4/ . SLIDE PO15t) 4/ . TO15t) ) 4. RXTATE PO15t) ) 4. TO15tf , 0. SLIDE PO15tf , 0. TO15tf ) 0. SURVECh 15t5/ 2. INZ f 5Q A6& 1) f Q ABXVE 5Q. : LEPT@RIGHT 0.  ZREW ZHANGE AT 1f 00 HXURS
1f %0	22%0	, Q0	M @RDR	DRILL	HR6LAT	@	RXTATE DRILL 5 50...@RXDUZTIXN HXLE PO15tf ) 0. TO1f t0M0. @RXGRESS 150. PT RX @AVG% MPT0IR  WXB%24:M0 KLBS SR@ % 0 & R@ %4M# BR@ %224 PLXW RATE% Of G@ @J& @@RESSURE XN BXTTX& % 2f 0 @SI @J& @@RESSURE XPP BXTTX& %M#) 0 @SI DIPP @RESSURE%520 @SI  & UD WT%40Q VIS 40 @J WT%2) 0 KI@S S@X WT%4/ , KI@S RXT WT%21) KI@S TXR' UE XN BT& %4MKLB@T TXR' UE XPP BT& %4 KLB@T SLIDE PO15tf ) 0. TO15tf 51. SURVECh 15t/ f MINZ f / Q A6& 150Q ABXVEO, .: RIGHT 2.  SAPETC BREAK%FALL @RXTEZTIXN
22%0	0%0	2Q0	M @RDR	DRILL	HR6LAT	@	RXTATE DRILL 5 50...@RXDUZTIXN HXLE PO1f t0M0. TO1f t1M2. @RXGRESS 102. PT RX @AVG%41 PT0IR  WXB%24:M0 KLBS SR@ % 0 & R@ %4M# BR@ %224 PLXW RATE% Of G@ @J& @@RESSURE XN BXTTX& % 2f 0 @SI @J& @@RESSURE XPP BXTTX& %M#) 0 @SI DIPP @RESSURE%520 @SI  & UD WT%40Q VIS 40 @J WT%2) 0 KI@S S@X WT%4/ , KI@S RXT WT%21) KI@S TXR' UE XN BT& %4MKLB@T TXR' UE XPP BT& %4 KLB@T SURVECh 1f t05f . INZ f / Q A6& 1) / Q ABXVE M: RIGHT 4.
Tk3al Tio w		2, Q0					
Safety Incident?		N	Days since Last RI:		, 54Q0		
Environ Incident?		N	Days since Last LTA:		, 54Q0		
Incident Comments:							Weather Comments:
Nk inpidwn3 7wrk73wd las32, \$kx7sQ							



<div> <div>XYC USA INZ</div> <div> <b>DAILY OPERATIONS PARTNER REPORT</b> </div> <div> <div> <div>Event: DEV DRILLING</div> <div>Prim. Reason: XRIG DRILL HXRIG</div> </div> <div> <div>ST ANDREWS UNIT 1220H</div> <div>USA</div> </div> <div> <div>Date: 010/ 0014</div> <div>Report No: MDR</div> </div> </div> </div>							
OPERATIONS							
P7ko	Tk	H7s	Xm @asw	Xm Zkdw	Xm Sx-	Xm Tymw	Xnw7a3kn Dwails
0%0	2%0	200	M@RDR	DRILL	HR6LAT	@	RXTATE DRILL 5 50..<@RXDUZTIXN HXLE PO15t025. TO15t0/ ). @RXGRESS )/ PT RX@AVG%0 PT0IR  WXB%24:M0 KLBS SR@%0 &R@%M# BR@%214 PLXW RATE% Of G@ @J& @@RESSURE XN BXTTX&% M00 @SI @J& @@RESSURE XPP BXTTX&%M#24 @SI DIPP @RESSURE%554 @SI  &UD WT%400 VIS 40 @W WT%2) 0 KI@S SX WT%4/ f KI@S RXT WT%215 KI@S TXR' UE XN BT&%M KLB@T TXR' UE XPP BT&%M KLB@T SLIDE P05t0f , . T05t0/ ). SURVECh 15t0M#. INZ / 1Q A6& 1)/ Q ABXVE 5.: LEPT , .  SAPETC BREAK%AKING ZXNNEZ TIXNS IN &XUSE HXLE
2%0	)%0	, 00	M@RDR	DRILL	HR6LAT	@	RXTATE DRILL 5 50..<@RXDUZTIXN HXLE PO15t0/ ). TO15tM04. @RXGRESS 20/ PT RX@AVG%42 PT0IR  WXB%24:M0 KLBS SR@%0 &R@%M# BR@%214 PLXW RATE% Of G@ @J& @@RESSURE XN BXTTX&% M00 @SI @J& @@RESSURE XPP BXTTX&%M#24 @SI DIPP @RESSURE%554 @SI  &UD WT%400 VIS 40 @W WT%2) 0 KI@S SX WT%4/ f KI@S RXT WT%215 KI@S TXR' UE XN BT&%M KLB@T TXR' UE XPP BT&%M KLB@T SLIDE P05t25M T05t2f 4.Q SURVECh 15t22, . INZ f/ Q A6& 1)f @I ABXVE f.: LEPT 4.  ZREW ZHANGE AT 0) 00 HXURS
)%0	10%0	, 00	M@RDR	DRILL	HR6LAT	@	RXTATE DRILL 5 50..<@RXDUZTIXN HXLE PO15tM04. TO15t4) 4. @RXGRESS 2) 0. PT RX@AVG%4 PT0IR  WXB%24:M0 KLBS SR@%0 &R@%M# BR@%214 PLXW RATE% Of G@ @J& @@RESSURE XN BXTTX&% M00 @SI @J& @@RESSURE XPP BXTTX&%M#24 @SI DIPP @RESSURE%554 @SI  &UD WT%400 VIS 40 @W WT%2) 0 KI@S SX WT%4/ f KI@S RXT WT%215 KI@S TXR' UE XN BT&%M KLB@T TXR' UE XPP BT&%M KLB@T SURVECh 15t40f . INZ / 1Q A6& 1)/ @I ABXVE 10@.: LEPT@RIGHT 0.
10%0	12%0	2Q0	M@RDR	DRILL	HR6LAT	@	RXTATE DRILL 5 50..<@RXDUZTIXN HXLE PO15t4) 4. TO15t) , 5. @RXGRESS f 2. PT RX@AVG%M2 PT0IR  WXB%24:M0 KLBS SR@%0 &R@%M# BR@%224 PLXW RATE% Of G@ @J& @@RESSURE XN BXTTX&% M00 @SI @J& @@RESSURE XPP BXTTX&%M#24 @SI DIPP @RESSURE%554 @SI  &UD WT%400 VIS 40 @W WT%2) 0 KI@S SX WT%4/ f KI@S RXT WT%215 KI@S TXR' UE XN BT&%M KLB@T TXR' UE XPP BT&%M KLB@T SLIDE PO15t4) 4. TO15t45/ . RXTATE PO15t45/ . TO15t) , 5. SURVECh 15t40f . INZ / 1Q A6& 1)/ @I ABXVE 10@.: LEPT@RIGHT 0. H2S ALAR& WENT XPPt ZLXSE WELL Int EVAZUATED TX SAPE AREA

XYC USA INZ

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

Prim. Reason: XRIG DRILL HXRIG

ST ANDREWS UNIT 1220H

USA

Date: 01Q / Q2014

Report No: MDR

Wellbore / Top MD: 00 h 0 B

Rig: Hr @2),

Ref Datum: X7ginal KB h M04) Q0B

DFS: 2) Q/

Today's MD: 1ft1M B

Progress: 1104 B

Ground Elev: M0M Q0 B

Daily Cost: 8)ft / 41

Prev MD: 15t025 B

Rot Hrs Today: 2M00 \$7

AFE MD/Days: 1/ 1f 00Q QM Q days

Cum Cost: 82t525/ , ,

PBMD: , f Q B37

Avg ROP Today: , f Q B37

AFE Number: 11f / 05/ #0102

AFE Cost: 8, t015t05,

Current Formation: WXPZA& @ / t554Q

Lithology: 100u SHALE

Current Ops:

24-Hr Summary: DRILL 5:50.. LATERAL SEZTIXN POI5t025. TQft1M2.Q

24-Hr Forecast: (EST RR 1Q) Q49RXL 1Q/ Q49DRILL 5:50.. LATERAL SEZTIXNQ

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg		Max	
Last Casing:	f Q24in h / tM4B	Str Wt Up/Dn:	2) 0Q0 1/ , Q ein	Pump Rate:	, 0f Q	Conn:	41M			) ) M	
Next Casing:	4Q00in h 1/ t500B	Str Wt Rot:	21) Q ein	Pump Press:	, 2f 0	Trip:					
Last BOP Press Test:	12Qf Q01,	Torq Off Btm:	4t000Q B3- F			Backgr:	, / ,			f 2/	
Form Test/EMW:	PIT 012Q0 mng	Torq On Btm:	1M000Q B3- F								

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	RXN & XRSE	MD	Incl	Azi	TVD	N/-S	E/-W	VS	DLS	Build
Supervisor 2:	RXBERT SXTELLX	1ft05f Q	f / Q0	1) / Q0	10t1, 5Q5	:ft0/ 0Q	1t555Q	f t2f MQ	0Qf	:0Q21
Engineer:	KEVIN THREADGILL	15t/ f MQ	f / Q0	150Q0	10t1, ) Q,	:5t/ / 5Q	1t5) 0Q	f t1ff Q	0Q,	0Q,
Geologist:	Sxo iyya\$ A\$o wd	15tf ff Q	ff Q0	1) / Q0	10t1, 4Q21	:5t/ 0MQ	1t5, , Q	f t0/ MQ	1Q,	1Q4
Oxy Personnel:	M	15t5/ 2Q	f 5Q0	1) f Q0	10t1, 2Q20	:5tf 0/ Q	1t52) Q	5t/ / 5Q	0Q4	:0Q4
Contractor Personnel:	1)	15t) / 5Q	ff Q0	1) f Q0	10t1M Q)	:5t51) Q	1t505Q	5t/ 02Q	2Qf	:1Q/
Total on Site:	1/	15t) 02Q	/ 0Q0	1) / Q0	10t1M5Q/	:5t) 2MQ	1t) f / Q	5tf 0f Q	1Q/	:1Q/

BIT RECORD										
Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
6	7.875	HALLIBURTON	MMD54DM	12599506	M333	4c14	15,102	19,700	1:2:Z:T:S	Y:I:WT:TD

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB o inQ ac	RPM o inQ ac	TFA	P Drop Bit	Noz Vel	HHPSI
)	2M00	41Q0	1104	M0M0	, f Q	4/ Q	24Q00Q	40Q0	0Q) M	20)	141Q	1Q

MUD DATA - M-I LLC (Schlumberger)					LAST OR CURRENT BHA								
Engineer:	ZHRIS JXHNSXN	MBT:			BHA Nk%	5	Bi3Nk%	)	& D In%	14t102 B			
Sample From:	In (Sxp3kn @39	pH:			@7rksw%	DRILL 5:50.. LATERAL SEZTIXN			& D Xx3%	1/ t500 B			
Mud Type:	Divswl:Baswd	Pm / Pom:	1Q4		Component					OD	ID	Jts	Length
Time / MD:	1) Q0 015t540Q	Pf / Mf:	O		@Z BIT					5Q54	2Q40	1	1Q0
Density @ Temp:	10Q0 011f	Chlorides:			LATERAL DRILLING & XT XR					) Q00	2Q40	1	MQ4
Rheology Temp:	140	Ca++ / K+:	O		UBHX SUB					) Q00	2Q00	1	2Q5
Viscosity:	41Q0	CaCl2:			NXN:& AG DRILL ZXLLAR					) Q00	2Q40	1	2/ Q)
PV / YP:	1f 010	Cl- in water phase:	2) t000Q0		NXN:& AG DRILL ZXLLAR					) Q00	2Q40	1	2/ Q5
Gels 10s/10m/30m:	, Q' 01,	Lime:	1QM		DRILL @Q					, Q00	MQ2)	/ 0	2tf , 2Qf
API WL:		ES:	) 54Q0		AGITATXR					) Q00	2Q40	1	1f Q5
HTHP WL:	12Q0	ECD:	10Q5		SHXZK SUB					) Q00	2Q40	1	12Q1
Cake API / HTHP:	Q2Q	n / K:	O		DRILL @Q					, Q00	MQ2)	2M	5tM 5Q2
Solids / Sol Corr:	12Q0 012Q0	Carbonate:			HWD@					, Q00	2Q40	M0	/ 20QM
Oil / Water:	5MQ 014Q0	Bicarbonate:			DRILL @Q					, Q00	MQ2)		ft, 12Q,
Oil / Water % for OWR:	f, Q0 01) Q0	Form Loss / Cum Loss:	0Q 00Q										
Sand:		Fluid Disch:	O										
Water Added:		Daily Mud Cost:	85t0) ,										
Oil Added:		Cum Mud Cost:	8/ / tM5)										
LGS:	M30 O												
VG Meter: 2fh M00 Q ) h ) 00					Total Length:					11t2f 5Q) B	Wt below Jars:		
Comments:													

MUD PRODUCTS			
Product	Number of Units	Units	Qty Used
Blkv w7Rwn3al	1Q0	wap\$	1Q0
Bxle Tane Rwn3al	1Q0	wap\$	2Q0
ZaZ12 / 4u	1Q0	wap\$	1/ Q0
HR@	44Q0	gal	1Q0
Lio w	1Q0	wap\$	2/ Q0
&xd Sw7bipw: 2, H7	1Q0	day	1Q0
Xnw&xl	44Q0	gal	1Q0
Vw7sao kd	44Q0	gal	1Q0
Vw7sa3kl	1Q0	wap\$	14Q0

M02Q2014 / %2%, A&

@gw1 kF,

**DAILY OPERATIONS PARTNER REPORT**

**Event:** DEV DRILLING  
**Prim. Reason:** ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
USA

**Date:** 01/20/2015  
**Report No:** 31DR

**Other Remarks:**

UNIVERSITY ST. ANDREWS UNIT # 1220DH

From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.

HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199

LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'

Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1'  
650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS

OXY DSM TRAILER: 281-833-2725

NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB #21506

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 8.625" INT CASING: 1/5/15 CINDY OP #4

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING :

Unsafe Acts:3

Safe Acts: 5

Unsafe Equipment: 0

SWA:2

Near Misses:0

Worksite JSA: 13

Safety Meetings: 5

LO/TO:3

Permits to work: 2

Power Line Checklist: 12/19/2014

Pre Spud/Rig Inspections:

Hazard ID's:2

Ep2 Observations:2

BEST STOP CARD: OBSERVED EMPLOYEE ABOUT TO DISCHARGE THE VACUUM WITHOUT TRACING DOWN THE DISCHARGE LINE TO MAKE SURE IT WAS SECURED. STOPPED THE JOB AND EXPLAINED TO EMPLOYEE THAT IF THE DISCHARGE LINE WAS NOT SECURE IT COULD POTENTIALLY CREATE A SPILL OR SPRAY SOMEONE, HE AGREED. JOB CONTINUED WITHOUT INCIDENT.

## DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING  
 Prim. Reason: ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
 USA

Date: 01/20/2015  
 Report No: 31DR

From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
14:00	18:00	4.00	31PRDR	DRILL	HRZLAT	P	ROTATE DRILL 7 7/8" PRODUCTION HOLE F/ 18,740' T/ 18,930' PROGRESS 190' FT ROP AVG: 47 FT/HR  WOB: 25-30 KLBS SRPM: 90 MRPM: 135 BRPM: 225 FLOW RATE: 408 GPM PUMP PRESSURE ON BOTTOM: 4271 PSI PUMP PRESSURE OFF BOTTOM: 3560 PSI DIFF PRESSURE: 720 PSI  MUD WT: 10.0 VIS 50 P/U WT: 260 KIPS S/O WT: 194 KIPS ROT WT: 216 KIPS TORQUE ON BTM: 13.3 KLB.FT TORQUE OFF BTM: 5 KLB.FT SURVEY @18,839' INC 90.5 AZM 168.9 ABOVE/BLOW 0' - RIGHT 18'  CREW CHANGE AT 18:00 HOURS
18:00	22:00	4.00	31PRDR	DRILL	HRZLAT	P	ROTATE DRILL 7 7/8" PRODUCTION HOLE F/ 18,930' T/ 19,165' PROGRESS 235' FT ROP AVG: 59 FT/HR  WOB: 25-30 KLBS SRPM: 90 MRPM: 135 BRPM: 225 FLOW RATE: 408 GPM PUMP PRESSURE ON BOTTOM: 4280 PSI PUMP PRESSURE OFF BOTTOM: 3560 PSI DIFF PRESSURE: 720 PSI  MUD WT: 10.0 VIS 50 P/U WT: 260 KIPS S/O WT: 194 KIPS ROT WT: 216 KIPS TORQUE ON BTM: 13 KLB.FT TORQUE OFF BTM: 5 KLB.FT SURVEY @19,123' INC 89.1 AZM 168.2 ABOVE/BLOW 1' - RIGHT 16'  STAYING FOCUSED ON LAST TOUR
22:00	0:00	2.00	31PRDR	DRILL	HRZLAT	P	ROTATE DRILL 7 7/8" PRODUCTION HOLE F/ 19,165' T/ 19,196' PROGRESS 31' FT ROP AVG: 16 FT/HR  WOB: 25-30 KLBS SRPM: 90 MRPM: 135 BRPM: 225 FLOW RATE: 408 GPM PUMP PRESSURE ON BOTTOM: 4300 PSI PUMP PRESSURE OFF BOTTOM: 3700 PSI DIFF PRESSURE: 600 PSI  MUD WT: 10.0 VIS 50 P/U WT: 258 KIPS S/O WT: 190 KIPS ROT WT: 215 KIPS TORQUE ON BTM: 13 KLB.FT TORQUE OFF BTM: 5 KLB.FT SLIDE F/19,182' T/19,196' SURVEY @19,123' INC 89.1 AZM 168.2 ABOVE/BLOW 1' - RIGHT 16'
Total Time		24.00					
Safety Incident?		N		Days since Last RI:		476.00	Weather Comments:
Environ Incident?		N		Days since Last LTA:		476.00	
Incident Comments: No incidents reported last 24 hours.							

## DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING  
Prim. Reason: ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
USA

Date: 01/20/2015  
Report No: 31DR

## OPERATIONS

From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	2:00	2.00	31PRDR	DRILL	HRZLAT	P	ROTATE DRILL 7 7/8" PRODUCTION HOLE F/ 18,132' T/ 18,280' PROGRESS 148' FT ROP AVG: 74 FT/HR  WOB: 25-30 KLBS SRPM: 90 MRPM: 135 BRPM: 225 FLOW RATE: 408 GPM PUMP PRESSURE ON BOTTOM: 4280 PSI PUMP PRESSURE OFF BOTTOM: 3560 PSI DIFF PRESSURE: 720 PSI  MUD WT: 10.0 VIS 50 P/U WT: 260 KIPS S/O WT: 194 KIPS ROT WT: 216 KIPS TORQUE ON BTM: 13 KLB.FT TORQUE OFF BTM: 5 KLB.FT SURVEY @18,173' INC 90.6 AZM 170.1 ABOVE 3' - RIGHT 7'  SAFETY BREAK: WORKING ON MUD PUMPS.
2:00	6:00	4.00	31PRDR	DRILL	HRZLAT	P	ROTATE DRILL 7 7/8" PRODUCTION HOLE F/ 18,280' T/ 18,432' PROGRESS 152' FT ROP AVG: 38 FT/HR  WOB: 25-30 KLBS SRPM: 90 MRPM: 135 BRPM: 225 FLOW RATE: 408 GPM PUMP PRESSURE ON BOTTOM: 4280 PSI PUMP PRESSURE OFF BOTTOM: 3560 PSI DIFF PRESSURE: 720 PSI  MUD WT: 10.0 VIS 50 P/U WT: 260 KIPS S/O WT: 194 KIPS ROT WT: 216 KIPS TORQUE ON BTM: 13 KLB.FT TORQUE OFF BTM: 5 KLB.FT SLIDE F/ 18,318' T/18,333' SURVEY @18,269' INC 90. AZM 171.1 ABOVE 3' - RIGHT 10'  CREW CHANGE AT 0600 HOURS
6:00	10:00	4.00	31PRDR	DRILL	HRZLAT	P	ROTATE DRILL 7 7/8" PRODUCTION HOLE F/ 18,432' T/ 18,621' PROGRESS 189' FT ROP AVG: 47 FT/HR  WOB: 25-30 KLBS SRPM: 90 MRPM: 135 BRPM: 225 FLOW RATE: 408 GPM PUMP PRESSURE ON BOTTOM: 4280 PSI PUMP PRESSURE OFF BOTTOM: 3560 PSI DIFF PRESSURE: 720 PSI  MUD WT: 10.0 VIS 50 P/U WT: 260 KIPS S/O WT: 194 KIPS ROT WT: 216 KIPS TORQUE ON BTM: 13 KLB.FT TORQUE OFF BTM: 5 KLB.FT SLIDE F/ 18,615' T/ 18,621' SURVEY @18,553' INC 89.1 AZM 171.8 ABOVE 1' - RIGHT 17'
10:00	14:00	4.00	31PRDR	DRILL	HRZLAT	P	ROTATE DRILL 7 7/8" PRODUCTION HOLE F/ 18,621' T/ 18,740' PROGRESS 189' FT ROP AVG: 47 FT/HR  WOB: 25-30 KLBS SRPM: 90 MRPM: 135 BRPM: 225 FLOW RATE: 408 GPM PUMP PRESSURE ON BOTTOM: 4280 PSI PUMP PRESSURE OFF BOTTOM: 3560 PSI DIFF PRESSURE: 720 PSI  MUD WT: 10.0 VIS 50 P/U WT: 260 KIPS S/O WT: 194 KIPS ROT WT: 216 KIPS TORQUE ON BTM: 13 KLB.FT TORQUE OFF BTM: 5 KLB.FT SLIDE F/ 18,621' T/ 18,638' SURVEY @18,649' INC 89.8 AZM 168.4 ABOVE/BLOW 0' - RIGHT 19'

OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

Prim. Reason: ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H

USA

Date: 01/20/2015

Report No: 31DR

Wellbore / Top MD: 00 @ 0 ft

Rig: H&P 264

Ref Datum: Original KB @3,056.10ft

DFS: 27.19

Today's MD: 19,196 ft

Progress: 1064 ft

Ground Elev: 3,031.10 ft

Daily Cost: \$128,324

Prev MD: 18,132 ft

Rot Hrs Today: 24.00 hr

AFE MD/Days: 19,800.0 / 35.8 days

Cum Cost: \$2,856,268

PBMD: 44.3 ft/hr

Avg ROP Today: 44.3 ft/hr

AFE Number: 1189079#0102

AFE Cost: \$4,017,074

Current Formation: WOLFCAMP@9,775.0

Lithology: 95% SHALE, 5% LIMESTONE

Current Ops:

24-Hr Summary: DRILL 7-7/8" LATERAL SECTION F/ 18,132' T/19,196'.

24-Hr Forecast: (EST RR 1/26/15)(ROL 1/29/15) DRILL 7-7/8" LATERAL SECTION.

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg	Max
Last Casing:	8.625in @ 9,335ft	Str Wt Up/Dn:	258.0/ 190.0 kip	Pump Rate:	408.0	Conn:	374		513
Next Casing:	5.500in @ 19,700ft	Str Wt Rot:	215.0 kip	Pump Press:	4300	Trip:			
Last BOP Press Test:	12/28/2014	Torq Off Btm:	5,000.0 ft-lbf			Backgr:	362		540
Form Test/EMW:	FIT / 12.00 ppg	Torq On Btm:	13,000.0 ft-lbf						

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	RON MORSE	MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
Supervisor 2:	ROBERT SOTELLO	19,123.0	89.10	168.20	10,148.29	-9,117.7	1,969.2	9,327.8	1.28	-1.26
Engineer:	KEVIN THREADGILL	19,028.0	90.30	168.00	10,147.79	-9,024.7	1,949.6	9,232.8	0.54	0.11
Geologist:	Sumiyah Ahmed	18,934.0	90.20	168.50	10,148.20	-8,932.7	1,930.5	9,138.8	0.53	-0.32
Oxy Personnel:	3	18,839.0	90.50	168.90	10,148.78	-8,839.6	1,911.9	9,043.8	0.97	0.74
Contractor Personnel:	16	18,744.0	89.80	168.30	10,149.03	-8,746.4	1,893.1	8,948.9	0.11	0.00
Total on Site:	19	18,649.0	89.80	168.40	10,148.70	-8,653.4	1,873.9	8,853.9	3.62	0.73

BIT RECORD

Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
6	7.875	HALLIBURTON	MMD54DM	12599506	M333	5x15	15,102	19,700	1-2-CT-S	X-I-WT-TD

BIT OPERATING PARAMETERS TODAY

Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI
6	24.00	75.00	1064	4094	44.3	54.6	25.0/30.0	50/90	0.863	206	151.7	1.0

MUD DATA - M-I SWACO				LAST OR CURRENT BHA			
Engineer: Mathew Comer	MBT:	BHA No: 7	Bit No: 6	MD In: 15,102 ft			
Sample From: In	pH:	Purpose: DRILL 7-7/8" LATERAL SECTION	MD Out: 19,700 ft				
Mud Type: Diesel-Based	Pm / Pom: 1.50						
Time / MD: 16:00 / 18,790.0	Pf / Mf: /						
Density @ Temp: 10.00 / 118	Chlorides:						
Rheology Temp: 150	Ca++ / K+: / 1,756						
Viscosity: 50.00	CaCl2:						
PV / YP: 13 / 7	Cl- in water phase: 25,000.00						
Gels 10s/10m/30m: 7 / 15 / 18	Lime: 1.63						
API WL: 12.60	ES: 569.00						
HTHP WL: / 2.0	ECD: 10.46						
Solids / Sol Corr: 15.00 / 15.00	n / K: 0.82 /						
Oil / Water: 73.0 / 15.0	Carbonate:						
Oil / Water % for OWR: 85.00 / 15.00	Bicarbonate:						
Sand:	Form Loss / Cum Loss: 0.0 / 0.0						
Water Added:	Fluid Disch: /						
Oil Added:	Daily Mud Cost: \$1,707						
LGS: 3.70 /	Cum Mud Cost: \$101,083						
VG Meter: ?@300 / ?@600							
Comments: No Comments.							

MUD PRODUCTS

Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	1.00
Lime	1.00	each	22.00
Mud Service - 24 Hr	1.00	day	1.00
Myacide GA25	1.00	each	1.00
Versatrol	1.00	each	9.00

3/12/2015

9:52:49AM

Page 1 of 4

**DAILY OPERATIONS PARTNER REPORT**

**Event:** DEV DRILLING  
**Prim. Reason:** ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
 USA

**Date:** 01/21/2015  
**Report No:** 32DR

**Safety Incident?** N **Days since Last RI:** 477.00  
**Environ Incident?** N **Days since Last LTA:** 477.00

**Incident Comments:**

No incidents reported last 24 hours.

**Weather Comments:****Other Remarks:**

UNIVERSITY ST. ANDREWS UNIT # 1220DH

From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.

HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199

LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'

Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1'  
 650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS

OXY DSM TRAILER: 281-833-2725

NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB #21506

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 8.625" INT CASING: 1/5/15 CINDY OP #4

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING :

Unsafe Acts:3

Safe Acts: 5

Unsafe Equipment: 0

SWA:2

Near Misses:0

Worksite JSA: 13

Safety Meetings: 5

LO/TO:3

Permits to work: 2

Power Line Checklist: 12/19/2014

Pre Spud/Rig Inspections:

Hazard ID's:2

Ep2 Observations:2

BEST STOP CARD: WHILE WALKING ACROSS THE MUD PITS, EMPLOYEE OBSERVED HOPPER VALVE LEFT OPEN AND UNATTENDED. STOPPED THE JOB, AND CLOSED THE VALVE. TALKED TO OTHER EMPLOYEES ABOUT THE DANGERS OF HOPPER VALVE BEING LEFT OPEN WHICH COULD CAUSE A SPILL, EMPLOYEES AGREED. JOB CONTINUED WITHOUT INCIDENT.

<div>OXY USA INC</div> <div>DAILY OPERATIONS PARTNER REPORT</div> <div> <div> <div>Event:</div> <div>DEV DRILLING</div> </div> <div> <div>Prim. Reason:</div> <div>ORIG DRILL HORIZ</div> </div> </div> <div> <div>ST ANDREWS UNIT 1220H</div> <div>USA</div> </div> <div> <div>Date:</div> <div>01/21/2015</div> </div> <div> <div>Report No:</div> <div>32DR</div> </div>							
OPERATIONS							
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	2:00	2.00	31PRDR	DRILL	HRZLAT	P	ROTATE DRILL 7 7/8" PRODUCTION HOLE F/ 19,196' T/ 19,262' PROGRESS 66' FT ROP AVG: 33 FT/HR  WOB: 25-30 KLBS SRPM: 90 MRPM: 135 BRPM: 225 FLOW RATE: 408 GPM PUMP PRESSURE ON BOTTOM: 4300 PSI PUMP PRESSURE OFF BOTTOM: 3700 PSI DIFF PRESSURE: 600 PSI  MUD WT: 10.0 VIS 50 P/U WT: 258 KIPS S/O WT: 190 KIPS ROT WT: 215 KIPS TORQUE ON BTM: 13 KLB.FT TORQUE OFF BTM: 5 KLB.FT SLIDE F/19,196' T/19,197' SURVEY @19,218' INC 88.8 AZM 168.2 ABOVE/BLOW 1' - RIGHT 15'  SAFETY BREAK: VEHICLE SAFETY
2:00	6:00	4.00	31PRDR	DRILL	HRZLAT	P	ROTATE DRILL 7 7/8" PRODUCTION HOLE F/ 19,262' T/ 19,489' PROGRESS 227' FT ROP AVG: 57 FT/HR  WOB: 25-30 KLBS SRPM: 90 MRPM: 135 BRPM: 225 FLOW RATE: 408 GPM PUMP PRESSURE ON BOTTOM: 4300 PSI PUMP PRESSURE OFF BOTTOM: 3700 PSI DIFF PRESSURE: 600 PSI  MUD WT: 10.0 VIS 50 P/U WT: 258 KIPS S/O WT: 190 KIPS ROT WT: 215 KIPS TORQUE ON BTM: 13 KLB.FT TORQUE OFF BTM: 5 KLB.FT SURVEY @19,313' INC 88.9 AZM 168 ABOVE/BLOW 3' - RIGHT 14'  CREW CHANGE AT 0600 HOURS
6:00	10:30	4.50	31PRDR	DRILL	HRZLAT	P	ROTATE DRILL 7 7/8" PRODUCTION HOLE F/ 19,489' T/ 19,700'. REACHED TD ON WELL SAU 1220H WITH H&P RIG 264 ON 1/21/2015 AT 1030 HOURS. PROGRESS 211' FT ROP AVG: 47 FT/HR  WOB: 25-30 KLBS SRPM: 90 MRPM: 135 BRPM: 225 FLOW RATE: 408 GPM PUMP PRESSURE ON BOTTOM: 4300 PSI PUMP PRESSURE OFF BOTTOM: 3700 PSI DIFF PRESSURE: 600 PSI  MUD WT: 10.0 VIS 50 P/U WT: 258 KIPS S/O WT: 190 KIPS ROT WT: 215 KIPS TORQUE ON BTM: 13 KLB.FT TORQUE OFF BTM: 5 KLB.FT SURVEY @19,650' INC 89.1 AZM 166.8 BELOW 9' - RIGHT 5'
10:30	19:30	9.00	31PRDR	CIRC	CNDHOL	P	CIRCULATE 6 X BOTTOMS UP, 425 GPM, 100 RPM, 4150 PSI. WHILE RECIPROCATING PIPE. 1ST - 4TH B/U SHAKERS LOADED UP 4TH -6TH SHAKERS CLEANED UP TO HARDLY NO CUTTINGS.  MUD WT 10.0 52 VIS IN/OUT P/U 258 S/O 192 ROT 218
19:30	20:30	1.00	31PRDR	TRIP	DRILL	P	PULL OUT OF HOLE F/19,700' T/ 18,355'.  NOTE: CHECK FLOW, OK. NO EXCESS DRAG, HOLE TAKING PROPER FILL.
20:30	22:30	2.00	31PRDR	CIRC	CNDHOL	P	SPOT 5 PPB BEADS IN OPEN HOLE AT 18,355'. 425 GPM, 100 RPM, 3950 PSI
22:30	0:00	1.50	31PRDR	TRIP	PULD	P	LAY DOWN 4½" DP F/ 18,355' T/16,646', WITH NO HOLE ISSUES. NOTE: * CHECK FLOW, OK. MONITORING HOLE ALL TIME WITH TRIP TANK, OK.
Total Time		24.00					



OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

USA

Date: 01/21/2015

Report No: 32DR

Wellbore / Top MD: 00 @ 0 ft

Rig: H&P 264

Ref Datum: Original KB @3,056.10ft

DFS: 28.19

Today's MD: 19,700 ft

Progress: 504 ft

Ground Elev: 3,031.10 ft

Daily Cost: \$63,564

Prev MD: 19,196 ft

Rot Hrs Today: 10.50 hr

AFE MD/Days: 19,800.0 / 35.8 days

Cum Cost: \$2,919,832

PBMD: 48.0 ft/hr

Avg ROP Today: 48.0 ft/hr

AFE Number: 1189079#0102

AFE Cost: \$4,017,074

Current Formation: WOLFCAMP@9,775.0

Lithology:

Current Ops:

24-Hr Summary: DRILL 7-7/8" LATERAL SECTION F/19,196' T/19,700'. CIRCULATE 6 BOTTOMS UP. POH T/18,355'. SPOT BEADS ACROSS OPEN HOLE. LAY C

24-Hr Forecast: (EST RR 1/26/15)(ROL 1/29/15) FINISH LAYING DOWN DP. RUN 5 1/2" PRODUCTION CASING.

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg	Max
Last Casing:	8.625in @ 9,335ft	Str Wt Up/Dn:	258.0/ 190.0 kip	Pump Rate:	408.0	Conn:			
Next Casing:	5.500in @ 19,700ft	Str Wt Rot:	215.0 kip	Pump Press:	4300	Trip:			
Last BOP Press Test:	12/28/2014	Torq Off Btm:	5,000.0 ft-lbf			Backgr:			
Form Test/EMW:	FIT / 12.00 ppg	Torq On Btm:	13,000.0 ft-lbf						

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	MONFORD CRAFT	MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
Supervisor 2:	ROBERT SOTELLO	19,700.0	89.10	166.80	10,158.11	-9,681.9	2,089.8	9,904.7	0.00	0.00
Engineer:	KEVIN THREADGILL	19,650.0	89.10	166.80	10,157.32	-9,633.2	2,078.4	9,854.7	2.72	0.38
Geologist:	Sumiyyah Ahmed	19,598.0	88.90	168.20	10,156.41	-9,582.4	2,067.1	9,802.7	0.57	-0.21
Oxy Personnel:	3	19,503.0	89.10	167.70	10,154.75	-9,489.5	2,047.3	9,707.7	0.77	-0.21
Contractor Personnel:	16	19,408.0	89.30	168.40	10,153.43	-9,396.6	2,027.6	9,612.7	0.60	0.42
Total on Site:	19	19,313.0	88.90	168.00	10,151.94	-9,303.6	2,008.2	9,517.7	0.24	0.11

BIT RECORD										
Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
6	7.875	HALLIBURTON	MMD54DM	12599506	M333	5x15	15,102	19,700	1-2-CT-S	X-I-WT-TD

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI
6	10.50	85.50	504	4598	48.0	53.8	25.0/30.0	45/90	0.863	206	151.7	1.0

MUD DATA - M-I LLC (Schlumberger)						LAST OR CURRENT BHA																																																																																
Engineer:	Mathew Comer		MBT:			BHA No:	7	Bit No:	6	MD In:	15,102 ft																																																																											
Sample From:	In (Suction Pit)		pH:	8.6		Purpose:	DRILL 7-7/8" LATERAL SECTION			MD Out:	19,700 ft																																																																											
Mud Type:	Diesel-Based		Pm / Pom:	2.00		<table> <tr> <th>Component</th> <th>OD</th> <th>ID</th> <th>Jts</th> <th>Length</th> </tr> <tr> <td>PDC BIT</td> <td>7.875</td> <td>2.250</td> <td>1</td> <td>1.00</td> </tr> <tr> <td>LATERAL DRILLING MOTOR</td> <td>6.500</td> <td>2.250</td> <td>1</td> <td>32.15</td> </tr> <tr> <td>UBHO SUB</td> <td>6.500</td> <td>2.500</td> <td>1</td> <td>2.97</td> </tr> <tr> <td>NON-MAG DRILL COLLAR</td> <td>6.500</td> <td>2.250</td> <td>1</td> <td>29.06</td> </tr> <tr> <td>NON-MAG DRILL COLLAR</td> <td>6.500</td> <td>2.250</td> <td>1</td> <td>29.57</td> </tr> <tr> <td>DRILL PIPE</td> <td>4.500</td> <td>3.826</td> <td>90</td> <td>2,842.68</td> </tr> <tr> <td>AGITATOR</td> <td>6.500</td> <td>2.250</td> <td>1</td> <td>18.37</td> </tr> <tr> <td>SHOCK SUB</td> <td>6.500</td> <td>2.250</td> <td>1</td> <td>12.71</td> </tr> <tr> <td>DRILL PIPE</td> <td>4.500</td> <td>3.826</td> <td>234</td> <td>7,397.92</td> </tr> <tr> <td>HWDP</td> <td>4.500</td> <td>2.750</td> <td>30</td> <td>920.63</td> </tr> <tr> <td>DRILL PIPE</td> <td>4.500</td> <td>3.826</td> <td></td> <td>8,412.94</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						Component	OD	ID	Jts	Length	PDC BIT	7.875	2.250	1	1.00	LATERAL DRILLING MOTOR	6.500	2.250	1	32.15	UBHO SUB	6.500	2.500	1	2.97	NON-MAG DRILL COLLAR	6.500	2.250	1	29.06	NON-MAG DRILL COLLAR	6.500	2.250	1	29.57	DRILL PIPE	4.500	3.826	90	2,842.68	AGITATOR	6.500	2.250	1	18.37	SHOCK SUB	6.500	2.250	1	12.71	DRILL PIPE	4.500	3.826	234	7,397.92	HWDP	4.500	2.750	30	920.63	DRILL PIPE	4.500	3.826		8,412.94															
Component	OD	ID	Jts	Length																																																																																		
PDC BIT	7.875	2.250	1	1.00																																																																																		
LATERAL DRILLING MOTOR	6.500	2.250	1	32.15																																																																																		
UBHO SUB	6.500	2.500	1	2.97																																																																																		
NON-MAG DRILL COLLAR	6.500	2.250	1	29.06																																																																																		
NON-MAG DRILL COLLAR	6.500	2.250	1	29.57																																																																																		
DRILL PIPE	4.500	3.826	90	2,842.68																																																																																		
AGITATOR	6.500	2.250	1	18.37																																																																																		
SHOCK SUB	6.500	2.250	1	12.71																																																																																		
DRILL PIPE	4.500	3.826	234	7,397.92																																																																																		
HWDP	4.500	2.750	30	920.63																																																																																		
DRILL PIPE	4.500	3.826		8,412.94																																																																																		
Time / MD:	0:01 / 19,196.0		Pf / Mf:	/		Total Length:	11,287.06 ft			Wt below Jars:																																																																												
Density @ Temp:	10.00 / 104		Chlorides:	25,000																																																																																		
Rheology Temp:	150		Ca++ / K+:	/																																																																																		
Viscosity:	53.00		CaCl2:																																																																																			
PV / YP:	12 / 5		Cl- in water phase:																																																																																			
Gels 10s/10m/30m:	7 / 15 / 18		Lime:	2.60																																																																																		
API WL:			ES:	596.00																																																																																		
HTHP WL:	12.80		ECD:	10.34																																																																																		
Cake API / HTHP:	/ 2.0		n / K:	0.82 /																																																																																		
Solids / Sol Corr:	14.00 / 13.02		Carbonate:																																																																																			
Oil / Water:	74.0 / 12.0		Bicarbonate:																																																																																			
Oil / Water % for OWR:	14.00 / 86.00		Form Loss / Cum Loss:	0.0 / 0.0																																																																																		
Sand:			Fluid Disch:	/																																																																																		
Water Added:			Daily Mud Cost:	\$1,131																																																																																		
Oil Added:			Cum Mud Cost:	\$102,214																																																																																		
LGS:	7.10 /																																																																																					
VG Meter:	3@3 / 3@6 / 8@100 / 12@200 / 17@300 / 29@600																																																																																					
Comments:	No Comments.																																																																																					

MUD PRODUCTS			
Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	1.00
Lime	1.00	each	30.00
Mud Service - 24 Hr	1.00	day	1.00

3/12/2015

9:52:41AM

Page 1 of 3

## DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING  
 Prim. Reason: ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
 USA

Date: 01/22/2015  
 Report No: 33DR

## Other Remarks:

UNIVERSITY STMANDREWS UNIT \$ 1220DH

6hxb t4u lgtuhuctsg xf Hs 4wda 3P5 dg# Hs 4wda 17. sg Ag#huwy, Tuedy, #hs u 2M b suy Edyt xg Hs 4wda 17. tx sgtuhuctsg xf Hs 4wda 17. dg# Hs 4wda 115MTkrg nft (Nxt4udyt) xg Hs 4wda 115M6hxb sgtuhuctsg xf Hs 4wda 115 dg# Hs 4wda 17. , #hs u . M5 b suy Nxt4udyt xg Hs 4wda 115MAAt sgtuhuctsg xf Hs 4wda 115 dg# 6½ 17PP, cxgtsku ythds 4t (Nxt4udyt) 1M b suy' M4ug tkrg hs 4t (Sxkt4) xgtx ndyu hxd#MDhs u 1M5 b suy dg# tkrg nft (Edyt) xgtx ndyu hxd#MDhs u 0M b suy dg# hxd# wsnb dnu d yrs 4t oug# tx t4u hs 4t (Sxkt4)MAAt oug# sg hxd#, cxgtsku Edyt fxhdgxt4uh0M b suy (hxd# wsnbtkrg nft xhNxt4 dftuh 0M b suy) dg# dhhs u dt Ugs uhyda StMAg#huwy Ugs \$1220DH xg Wuyt ysu xf hxd#M

HELICOFTER" (PPP) . 2- r6571 / (P00) . 27r237. / (P00) 2- 2m199  
 L16E 6LIGHT COORDINATES" X" - 92,- 22M3°Y" 295,0P3M5°

Ldt" 32" 22°53M5JN Lxgi " 102" 23°0. M0JW NAD 27 ELEVATION 3,031MB  
 . 50B6NL X P33°6EL, SECTION 12, KLOC1 3, ANDREWS COUNTY, TEXAS

OXY DS½ TRAILER" 2P1r633r2725

NOTI6Y TRRC O6 INTENT TO SFUD AND RUN SUR6ACE CASING " 12/22/1- SFOI E TO CINDY TRRC E½FLOYEE, .OK  
 \$2150.

NOTI6IED TRRC O6 INTENT TO RUN AND CE½ENT PM25' INT CASING" 1/5/15 CINDY OF \$-  
 NOTI6IED TRRC O6 INTENT TO RUN AND CE½ENT 5M' INT CASING " 1/22/15 CINDY OF \$-

Ugydfu Acty"2

Sdfu Acty" 5

Ugydfu Eqkpb ugt" 0

SWA"2

Nudh½gyuy"0

Wxhvysu .SA" 11

Sdfuta ½uutgi y" .

LO/TO"3

Futb sy tx wxhv" 2

FxwuhLgu C4ucvny" 12/19/201-

Fhu Spk#/Rs Igypuctsgy"

Hdzdl# IDy"2

Ep2 Ooyuh dtsgy"2

KEST STOF CARD" WHILE LAYING DOWN DRILL FIFE USING RIG TONGS TO KREAL CONNECTIONS, E½FLOYEE  
 OKSERVED THAT THERE WAS NO I EEFER 6OR 1 O6 THE TONG DIESME½FLOYEE STOFFED THE .OK, AND  
 REPLACED THE I EEFERMHE IN6OR½ED OTHER E½FLOYEES TO ALWAYS CHECI 6LOOR E\* UIF½ENT KE6ORE USEM  
 .OK CONTINUED WITHOUT INCIDENTM

OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

Prim. Reason: ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H

USA

Date: 01/22/2015

Report No: 33DR

OPERATIONS

6hxb	Tx	Hhy	Op F4dyu	Op Cx#u	Op Sko	Op Tapu	Opuhdtsg Dutdsy
0"00	2"00	2"00	31FRDR	TRIF	FULD	F	LAY DOWN - 8 ' DF 6/1- ., - . BT/1- ., 53B WITH NO HOLE ISSUESM NOTE" Q½ONITORING HOLE ALL TI½E WITH TRIF TANI , OI M
2"00	. "00	- "00	31FRDR	TRIF	FULD	F	LAY DOWN - 8 ' DF 6/1- ., 53BT/11,133B WITH NO HOLE ISSUESM NOTE" Q½ONITORING HOLE ALL TI½E WITH TRIF TANI , OI M
. "00	11"00	5"00	31FRDR	WAIT	WOE*	FT	HYDRAULIC HOSE KUSTED ON THE FDSMDIDNT HAVE THE RIGHT 6ITTINGS ON LOCATION TO 6IXMHAD TO GO TO THE H&F YARDM  ½ONITORING HOLE ALL TI½E WITH TRIF TANI , OI M
11"00	11"30	0"00	31FRDR	SA6E	F.S½	FT	HAD A SA6ETY STAND DOWN WITH OXY SA6ETY ½AN, AND CREW ON WOR I NG IN ICY WEATHERM
11"30	12"30	1"00	31FRDR	TRIF	DRILL	FT	FULL OUT O6 HOLE 6/11,133 T/9253B NO EXCESS DRAG HOLE TAI NG FROFER 6ILL
12"30	15"00	2"00	31FRDR	WAIT	WOE*	FT	WAIT ON FARTS 6RO½ H&F YARD 6OR FDSM(HYDRAULIC 6ITTING)
15"00	15"30	0"00	31FRDR	RIG½T	SRVRIG	F	RIG SERVICE
15"30	1P"00	2"00	31FRDR	TRIF	FULD	F	LAY DOWN - 8 ' DF 6/9253BT/79- . B NOTE" Q½ONITORING HOLE ALL TI½E WITH TRIF TANI , OI M CREW CHANGE AT 1P00 HOURSM
1P"00	22"00	- "00	31FRDR	TRIF	FULD	F	LAY DOWN - 8 ' DF 6/79- . BT/5350BT ½ANUAL TONGSM NOTE" Q½ONITORING HOLE ALL TI½E WITH TRIF TANI , OI M QSA6ETY KREAI " USING ½ANUAL TONGSM
22"00	0"00	2"00	31FRDR	TRIF	FULD	F	LAY DOWN - 8 ' DF 6/5350BT/- 0P2BT ½ANUAL TONGSM NOTE" Q½ONITORING HOLE ALL TI½E WITH TRIF TANI , OI M

TxtdnTsb u

2- "00

Safety Incident? N

Days since Last RI: - 7P"00

Environ Incident? N

Days since Last LTA: - 7P"00

Incident Comments:

Nx gcs#ugty hupxhtu# rdyt 2- 4xkhyM

Weather Comments:

3/12/2015

9°52"37A½

Fdi u 2 xf 3

OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

Prim. Reason: ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H

USA

Date: 01/22/2015

Report No: 33DR

Wellbore / Top MD: 00 @ 0 ft

Today's MD: 19,700 ft

Prev MD: 19,700 ft

PBMD:

Rig: H&F 2. -

Progress: 0M0 4h

Rot Hrs Today: 0M0 ft/4h

Avg ROP Today:

Ref Datum: Off gndnl K @3.05. M0ft

Ground Elev: 3,031M0 ft

AFE MD/Days: 19,P00M / 35M#day

AFE Number: 11P9079\$0102

DFS: 29M9

Daily Cost: r 73,529

Cum Cost: r 2,993,3. 1

AFE Cost: r -,017,07-

Current Formation: WOL6CA½F@9,775M

Lithology:

Current Ops:

24-Hr Summary: LAY DOWN - 8 ' DF 6/1. ,. - . BT/11,133BFOH 6/11,133BT/9253BREFAIR FDSMLAY DOWN - 8 ' DF T/- 0P2M

24-Hr Forecast: (EST RR 1/2. /15)(ROL 1/29/15) 6INISH LAYING DOWN DFMRUN 58 BFRODUCTION CASINGM

CASING/WELL CONTROL

Hookload & Torque

Hydraulics

Mud Gas

Avg

Max

Last Casing: PM25g @ 9,335ft

Next Casing: 5M00g @ 19,700ft

Last BOP Press Test: 12/2P/201-

Form Test/EMW: 6IT / 12M0 ppi

Str Wt Up/Dn: /

Str Wt Rot:

Torq Off Btm:

Torq On Btm:

Pump Rate: 0M

Pump Press: 0

Conn:

Trip:

Backgr:

PERSONNEL

Supervisor 1: ½ON6ORD CRA6T

Supervisor 2: ROKERT SOTELLO

Engineer: I EVIN THREADGILL

Geologist: Skb sad4 A4b u#

Oxy Personnel: 3

Contractor Personnel: 1.

Total on Site: 19

SURVEY DATA (LAST 6)

MD

Incl

Azi

TVD

N-S

E-W

VS

DLS

Build

19,700M

P9M0

1. . M0

10,15PM1

r8,. P1M

2,0P9M

9,90- M

0M0

0M0

19,. 50M

P9M0

1. . M0

10,157M2

r8,. 33M

2,07PM

9,P5- M

2M2

0M0P

19,59PM

PPM0

1. PM0

10,15. M1

r8,5P2M

2,0. 7M

9,P02M

0M7

r8M1

19,503M

P9M0

1. 7M0

10,15- M5

r8,- P9M

2,0- 7M

9,707M

0M7

r8M1

19,- 0PM

P9M0

1. PM0

10,153M3

r8,39. M

2,027M

9,. 12M

0M0

0M2

19,313M

PPM0

1. PM0

10,151M-

r8,303M

2,00PM

9,517M

0M-

0M1

BIT RECORD

Bit No

Size

Manufacturer

Model

Serial No

IADC Code

Nozzles

MD In

MD Out

I-O-D-L

B-G-O-R

6

7.875

HALLIBURTON

MMD54DM

12599506

M333

5e15

15,102

19,700

1r8r8Tr8

Xr8r8Tr8D

BIT OPERATING PARAMETERS TODAY

Bit No

Rot Hrs

Cum Rot Hrs

Prog

Cum Prog

ROP

Cum ROP

WOB

RPM

TFA

P Drop Bit

Noz Vel

HHPSI

b g/b de

b g/b de

MUD DATA - M-I SWACO

Engineer: ½dt4uw Cxb uh

Sample From: IN

Mud Type: ½EGADRIL (W/ONEr½UL)

Time / MD: 17°00 / 19,700M

Density @ Temp: 10M0 / 10-

Rheology Temp: 150

Viscosity: 52M0

PV / YP: 11 / 9

Gels 10s/10m/30m: P / 1. / 1P

API WL:

HTHP WL: 12M0

Cake API / HTHP: / 2M

Solids / Sol Corr: 13M0 / 12M3

Oil / Water: 7- M / 13M

Oil / Water % for OWR: P5M0 / 15M0

Sand:

Water Added:

Oil Added:

LGS: 5M0 /

MBT:

pH:

Pm / Pom: 2M0

Pf / Mf: /

Chlorides:

Ca++ / K+: /

CaCl2:

Cl- in water phase: 25,000M0

Lime: 2M3

ES: 5P- M0

ECD:

n / K: 0M- /

Carbonate:

Bicarbonate:

Form Loss / Cum Loss: 0M / 0M

Fluid Disch: /

Daily Mud Cost: r , , , 7

Cum Mud Cost: r 10P,PP1

VG Meter: 5@3 / P@. / 12@100 / 15@200 / 20@300 / 31@. 00

Comments: Nx Cxb b ugtym

LAST OR CURRENT BHA

KHA Nx" 7

Kst Nx" .

½D Ig" 15,102 ft

Fktpxyu" DRILL 7r8/PBL LATERAL SECTION

½D Okt" 19,700 ft

Component

OD

ID

Jts

Length

FDC KIT

7M75

2M50

1

1M0

LATERAL DRILLING ½OTOR

. M00

2M50

1

32M5

UKHO SUK

. M00

2M00

1

2M7

NONr½AG DRILL COLLAR

. M00

2M50

1

29M.

NONr½AG DRILL COLLAR

. M00

2M50

1

29M7

DRILL FIFE

- M00

3M2.

90

2,P- 2MP

AGITATOR

. M00

2M50

1

1PM7

SHOCI SUK

. M00

2M50

1

12M1

DRILL FIFE

- M00

3M2.

23-

7,397M2

HWDF

- M00

2M50

30

920M3

DRILL FIFE

- M00

3M2.

P,- 12M-

Total Length: 11,2P7M. ft

Wt below Jars:

MUD PRODUCTS

Product

Number of Units

Units

Qty Used

Arp½u DhanKud½y Cxdhyu

50M0

m

- PM0

KrxwuhRugtdn

1M0

udc4

1M0

Kkrv Tdgv Rugtdn

1M0

udc4

1M0

½k# Suh ½u n2- Hh

1M0

#da

1M0

3/12/2015

9°52'37A½

Fdi u 1 xf 3

## DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING  
 Prim. Reason: XRIG DRILL HXRI9

ST ANDREWS UNIT 1220H  
 USA

Date: 0152352010  
 Report No: 3/ DR

## Other Remarks:

UNIVERSITC STMANDREWS UNIT # 1220DH

6rou -hmln-nrsnc-ion of Highway 3. Oand Highway 1f ½ in Andrmws7Trxas7dri: m2M u ilns Eas- on Highway 1f ½-o in-nrsnc-ion of Highway 1f ½and Highway 11QM7brn lnt- @or-hmas-&on Highway 11QM6rou in-nrsnc-ion of Highway 11Oand Highway 1f ½7dri: m ½M Ou ilns Nor-hmas- on Highway 11QMA- in-nrsnc-ion of Highway 11Oand 6( 1f . . 7con-inbms-raigh- @or-hmas-&1M u ilns° W hrm -brn righ- @ob-h&on-o lmasmroadMDri: m1M Ou ilns and -brn lnt- @as-&on-o lmasmroadMDri: m0M u ilns and road will u avma sligh- Qmd -o -hm righ- @ob-h&MA- Qmd in road7con-inbmEas- tor ano-hm 0M u ilns @ad will -brn lnt- or Nor-h at-m 0M u ilns&and arri: ma- Uni: nrsi-y S-MAndrmws Uni- #1220DH on Wns- sidmot roadM

HELIXFETER" @ . &½/ 63f 1 5@00&½2f 63f ½5@00&2/ 26¼, ,  
 L16E 6LIGHT ZXXRDINATES" Y" / , 27 22M3" C" 2, 00. 3M0

La-" 32J22" CMMO N Long" 102J23" 0¼M0' W NAD 2f ELEVATIXN 37031MB  
 ¼006NL Y . 33"6EL7SEZTIXN 127pLXZK 37 ANDREWS ZXUNTC7TEYAS

XYC DS( TRAILER" 2. 1e 3362f 20

NXTI6C TRRZ X6 INTENT TX SFUD AND RUN SUR6AZE ZASING " 125251/ SFXKE TX ZINDC TRRZ E( FLXCEE7.Xp  
 #210½

NXTI6IED TRRZ X6 INTENT TX RUN AND ZE( ENT . M2O INT ZASING" 15031OZINDC XF #/

NXTI6IED TRRZ X6 INTENT TX RUN AND ZE( ENT 00 INT ZASING " 15251OZINDC XF #/

UnsatmAc-s"2

SatmAc-s" O

UnsatmEqbiku m-" 0

SWA"2

Nmar ( issns"0

Worvsi-m. SA" 11

Satmy ( nmings" ½

LX5TX"3

Fmru i-s -o worv" 2

Fowmr LinmZ hncvlis-" 1251, 5201/

FrmSkbd5Rig Insknc-ions"

Hazard ID's"2

Ek2 XQsm: a-ions"2

pEST STXF ZARD" XpSERVED 3RD FARTC HAVING TX STEF XVER ( ANUAL RIG TXNGS TX XFERATE pAZK UF  
 ZASING TXNGSMSTXFFED THE .Xp7( XVED RIG TXNGS XUT X6 THE WAC XN THE RIG 6LXXR WHERE THEC WXULD  
 NXT pE A TRIF HA9ARDMEYFLAINED TX E( FLXCEES ApXUT KEFFING WXRKING 6LXXR ZLEAR X6 TRIFFING  
 HA9ARDS7THEC AGREEDM Xp ZXNTINUED WITHXUT INZIDENTM

XYC USA INZ

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 0152352010

Prim. Reason: XRIG DRILL HXR19

USA

Report No: 3/ DR

OPERATIONS

6rou	To	Hrs	Xk Fhasm	Xk Zodm	Xk SbQ	Xk Tykm	Xkma-ion Dmails
0"00	2"00	2"00	31FRDR	TRIF	FULD	F	LAC DXWN / 8 ' DF 65 0. 2BT52, 00BT52 TIGHT ZXNNEZ TIXNS7HAVING TX USE ( ANUAL TXNGSM NXTE" * ( XNITXRING HXLE ALL TI( E WITH TRIF TANK7XKM *SA6ETC pREAK" L5 TUpULARS IN SNXWC ZXNDITIXNSM
2"00	0"00	3"00	31FRDR	TRIF	FULD	F	LAC DXWN / 8 ' DF 652, 00BT5 00BT52 TIGHT ZXNNEZ TIXNS7HAVING TX USE ( ANUAL TXNGSM NXTE" * ( XNITXRING HXLE ALL TI( E WITH TRIF TANK7XKM
0"00	1"00	1"00	31FRDR	TRIF	FULD	FT	TRCING TX pREAK XUT A pENT .XINTMTHAT WAS pENT DUE TX E( FLXCEE NXT FACING ATTENTIXN TX XFERATIXN AT HAND
1"00	f "00	1"00	31FRDR	TRIF	FULD	FT	TRCING TX pREAK XUT A pENT .XINTMTHAT WAS pENT DUE TX E( FLXCEE NXT FACING ATTENTIXN TX XFERATIXN AT HAND
f "00	12"00	0"00	31FRDR	TRIF	FULD	F	FULL XUT X6 HXLE 65 00BT5UR6AZEM WITH NX ISSUESM HXLE TAKING FRXFER 6ILLM
12"00	1/ "00	2"00	31FRDR	TRIF	pHA	F	LAC DXWN DIREZ TIXNAL pHAM
1/ "00	1/ "30	0"00	31FRDR	TRIF	pHA	F	ZLEAN RIG 6LXXR X6 ALL TXXLS AND Xp(
1/ "30	10"00	0"00	31FRDR	pXF	RFWp	F	FULL WEAR pUSHING
10"00	1. "00	3"00	31FRRZ	ZSG	RIGUF	F	HELD F.S( W5p) L ZASING ZREW7TENARIS7XYC ZX4 AN7) RIG ( ANAGER RIG UF ZASING EPUIF( ENT7GET ALL ZENTRILI9ERS AND RELATED EPUIF( ENT TX RIG 6LXXRM  SWEDGE XN 6LXXR AND LX4XRGUE INSTALL AND 6UNZTIXNED
1. "00	1. "30	0"00	31FRRZ	ZSG	RUNZSG	F	HELD F.S( WITH NIGHT ZREW ) ZASING ZREWM
1. "30	22"00	3"00	31FRRZ	ZSG	RUNZSG	F	( AKE UF 08 ' 20 # Fe110 Tp FRXDUZTIXN ZASING SHXE TRAZK7AND ZHEZK 6LXATS7ZXNTINUE TX RUN TX 1. 00BM  RUN 00 20 # Fe110 Tp ZASING AS 6XLLXWS"  DAVIS LCNZH 04152' Tp TCFE 001 6LXAT SHXE 2 .XINTSe04152' 20# Fe110 Tp ZASING DAVIS LCNZH 04152' Tp TCFE f 00 6LXAT 2 .XINTe04152' 20# Fe110 Tp ZASING 1 FEAk ZX( FLETIXNS TXE INTIATXR 1 .XINTSe04152' 20# Fe110 Tp ZASING 1 FEAk ZX( FLETIXNS TXE INITIATXR 21. e.XINTS 04152' 20# Fe110 Tp ZASING 1e( ARKER .XINT 08 ' 20# Fe110 Tp 110e08 ' 20# Fe110 Tp
22"00	0"00	2"00	31FRRZ	ZSG	RUNZSG	F	ZXNTINUE TX RUN 08 ' FRXDUZTIXN ZASING 6RX( 1. 00BTX 33, 15M  SA6ETC pREAK" FDS XFERATIXNS  NXTE" ( XNITXRING DISFLAZE( ENT TX TRIF TANK AT ALL TI( ES7XKM

To-al Tiu m

2/ 00

Safety Incident? N

Days since Last RI: / f , 00

Environ Incident? N

Days since Last LTA: / f , 00

Incident Comments:

No incidm-s rnkor-m las-2/ hobrsM

Weather Comments:

351252010

,"02"30A(

Fagm2 of 3

## DAILY OPERATIONS PARTNER REPORT

**Event:** DEV DRILLING  
**Prim. Reason:** XRIG DRILL HXRIG

ST ANDREWS UNIT 1220H  
USA

**Date:** 01/23/2010  
**Report No:** 3/ DR

<b>Wellbore / Top MD:</b>	00 4 0 t-	<b>Rig:</b>	H) F 2½	<b>Ref Datum:</b>	Xoriginal Kp 4 300M0t-	<b>DFS:</b>	30M,
<b>Today's MD:</b>	1, 700 t-	<b>Progress:</b>		<b>Ground Elev:</b>	3031M0 t-	<b>Daily Cost:</b>	\$12312
<b>Prev MD:</b>	1, 700 t-	<b>Rot Hrs Today:</b>	000 hr	<b>AFE MD/Days:</b>	1, 7.000 53CM days	<b>Cum Cost:</b>	\$300713
<b>PBMD:</b>		<b>Avg ROP Today:</b>	00 t-3hr	<b>AFE Number:</b>	11., Of, #0102	<b>AFE Cost:</b>	\$/ 01f 0f /

<b>Current Formation:</b>	WXL6ZA( F4 , 7 f 00	<b>Lithology:</b>
---------------------------	---------------------	-------------------

**Current Ops:**

**24-Hr Summary:** LAC DXWN / 8 ' DF 65 0.2BT5UR6AZEM.5D DIREZTIXNAL TXXLSMRIG UF ZASING EPUIF( ENT ) RUN 08 11FRXDUZTIXN ZASING TX 33,

**24-Hr Forecast:** @ST RR 15Z/51O@XL 15Z, 51O& RUN O8 BF RXDUZTIXN ZASINGM

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS	Avg	Max
Last Casing:	12 1/4 in 40, 7300	Str Wt Up/Dn:	5	Pump Rate:	0	Conn:		
Next Casing:	12 1/4 in 40, 7000	Str Wt Rot:		Pump Press:	0	Trip:		
Last BOP Press Test:	12 1/4 in 40, 7000	Torq Off Btm:				Backgr:		
Form Test/EMW:	61T 51200 kkg	Torq On Btm:						

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1: ( XN6XRD ZRA6T		MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
Supervisor 2: RXpERT SXTELLX		1, 7.00N	. , M0	1 1/4 M0	10710 M1	e 7 1/2 1M	270. , M	, 7.0/ M	0N0	0N0
Engineer: KEVIN THREADGILL		1, 7.00N	. , M0	1 1/4 M0	10710 M2	e 7 3/3 M	270f . M	, 7.0/ M	2M2	0M.
Geologist: Sbu iyyah Ahu md		1, 7.0 . N	. . M0	1 1/2 M0	10710 M1	e 7Q 2M	270 1/2 M	, 7.02M	0Mf	e0M21
Oxy Personnel:	3	1, 7.003N	. , M0	1 1/2 M0	10710 M0	e 7 . , M	270/ f M	, 7.0f M	0Mf	e0M21
Contractor Personnel:	1 1/2	1, 7.0 . N	. , M0	1 1/2 M0	10710 M3	e 73, 1 1/2	2702f M 1/2	, 7 1/2 2M	0M0	0M2
Total on Site:	1,	1, 7.031N	. . M0	1 1/2 M0	10710 M/	e 7031M	2700. M	, 7.01f M	0M2/	0M1

[illegible]

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB u in 5u ax	RPM u in 5u ax	TFA	P Drop Bit	Noz Vel	HHPSI

MUD DATA - M-I SWACO			LAST OR CURRENT BHA				
Engineer: ( a-hnw Zou m	MBT:		pHA No" f	pi- No" ½	( D In"	10702 t-	
Sample From: IN	pH:		Fbrkosm" DRILL f ef 5	BL LATERAL SEZTIXN	( D Xb-"	1, 7 00 t-	
Mud Type: ( EGADRIL @/5KNEq UL&	Pm / Pom:		Component		OD	ID	Jts
Time / MD: 1. "30 51, 7 00M	Pf / Mf:	5	FDZ pIT	f Mf C	2M00	1	1M0
Density @ Temp: 10M0 5102	Chlorides:		LATERAL DRILLING ( XTXR	1M00	2M00	1	32M0
Rheology Temp: 1C0	Ca++ / K+:	5	UpHX Sup	1M00	2M00	1	2Mf
Viscosity: 01M0	CaCl2:		NXNq AG DRILL ZXLLAR	1M00	2M00	1	2, M½
PV / YP: 13 5½	Cl- in water phase:	20000M0	NXNq AG DRILL ZXLLAR	1M00	2M00	1	2, Mf
Gels 10s/10m/30m: f 51051f	Lime:	2M½	DRILL FIFE	/ M00	3M2½	, 0	27 / 2M½
API WL:	ES:	Of M0	AGITATXR	1M00	2M00	1	1. Mf
HTHP WL: 12M0	ECD:		SHXZK Sup	1M00	2M00	1	12M1
Cake API / HTHP: 52M	n / K:	0M05	DRILL FIFE	/ M00	3M2½	23/	f 73, f M2
Solids / Sol Corr: 13M0 512M0/	Carbonate:		HWDF	/ M00	2M00	30	, 20M½
Oil / Water: f 3M 51/ M	Bicarbonate:		DRILL FIFE	/ M00	3M2½		. 7 12M/
Oil / Water % for OWR: . / M0 51M00	Form Loss / Cum Loss:	0M 5 0M					
Sand:	Fluid Disch:	5					
Water Added:	Daily Mud Cost:	\$, Of					
Oil Added:	Cum Mud Cost:	\$10, 7 . .					
LGS: 0M0 5							

VG Meter: / 4 3 5f 4 ½5104 100 51/ 4 200 51, 4 300 5324 ½00	Total Length: 1172. f 10½t-	Wt below Jars:
Comments: No Zou u m-sM		

[illegible]

**DAILY OPERATIONS PARTNER REPORT**

**Event:** DEV DRILLING  
**Prim. Reason:** ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
 USA

**Date:** 01/24/2015  
**Report No:** 35DR

**Other Remarks:**

UNIVERSITY ST. ANDREWS UNIT # 1220DH

From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.

HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199

LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'

Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1'  
 650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS

OXY DSM TRAILER: 281-833-2725

NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB #21506

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 8.625" INT CASING: 1/5/15 CINDY OP #4

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING : 1/22/15 CINDY OP #4

Unsafe Acts:2

Safe Acts: 5

Unsafe Equipment: 0

SWA:2

Near Misses:0

Worksite JSA: 11

Safety Meetings: 6

LO/TO:3

Permits to work: 2

Power Line Checklist: 12/19/2014

Pre Spud/Rig Inspections:

Hazard ID's:2

Ep2 Observations:2

BEST STOP CARD: OBSERVED EMPLOYEE ATTEMPTING TO PUSH CASING TONGS OUT THE V-DOOR WITHOUT GETTING HELP FIRST. STOPPED THE JOB, AND EXPLAINED TO THE EMPLOYEE ABOUT GETTING HELP, HE AGREED. JOB CONTINUED WITHOUT INCIDENT.



<div style="display: flex; justify-content: space-between; align-items: center;"> <div>OXY USA INC</div> <div><b>DAILY OPERATIONS PARTNER REPORT</b></div> <div></div> </div>								
<b>Event:</b>		DEV DRILLING		ST ANDREWS UNIT 1220H		<b>Date:</b>		01/24/2015
<b>Prim. Reason:</b>		ORIG DRILL HORIZ		USA		<b>Report No:</b>		35DR
OPERATIONS								
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details	
0:00	2:00	2.00	31PRRC	CSG	RUNCSG	P	CONTINUE TO RUN 5½" PRODUCTION CASING F/3396' T/5465'.  SAFETY BREAK: HAND PLACEMENT  NOTE: MONITORING DISPLACEMENT TO TRIP TANK AT ALL TIMES, OK.	
2:00	6:00	4.00	31PRRC	CSG	RUNCSG	P	CONTINUE TO RUN 5½" PRODUCTION CASING F/5465' T/9000'.  NOTE: MONITORING DISPLACEMENT TO TRIP TANK AT ALL TIMES, OK.	
6:00	10:00	4.00	31PRRC	CSG	RUNCSG	P	CONTINUE TO RUN 5½" PRODUCTION CASING F/9000' T/12,520'.  NOTE: MONITORING DISPLACEMENT TO TRIP TANK AT ALL TIMES, OK.	
10:00	14:00	4.00	31PRRC	CSG	RUNCSG	P	CONTINUE TO RUN 5½" PRODUCTION CASING F/12,500' T/116,375'.  NOTE: MONITORING DISPLACEMENT TO TRIP TANK AT ALL TIMES, OK.	
14:00	18:00	4.00	31PRRC	CSG	RUNCSG	P	CONTINUE TO RUN 5½" PRODUCTION CASING F/16,375' T/19,690'.  DAVIS LYNCH 5-1/2" TB TYPE 501 FLOAT SHOE 2 JOINTS- 5-1/2" 20# P-110 TB CASING DAVIS LYNCH 5-1/2" TB TYPE 700 FLOAT 2 JOINT- 5-1/2" 20# P-110 TB CASING 1 PEAK COMPLETIONS TOE INITIATOR 1 JOINTS- 5-1/2" 20# P-110 TB CASING 1 PEAK COMPLETIONS TOE INITIATOR 218- JOINTS 5-1/2" 20# P-110 TB CASING 1- MARKER JOINT 5 ½" 20# P-110 TB 110- 5 ½" 20# P-110 TB CENTRALIZERS: XX BOW  BROKE GELS, AS FOLLOWS: P/U WT = 255 KIP; S/O WT = 155 KIP; 333 GPM; 1200 PSI AT 19,690'.  NOTES: * TESTED FLOAT EQUIPMENT (SHOE & COLLAR). OK. * USED SAFETY CLAMP IN 30 FIRST JOINTS. OK.	
18:00	19:00	1.00	31PRRC	CSG	RIGUP	P	RIG DOWN B&L CASING EQUIPMENT.	
19:00	22:00	3.00	31PRRC	CIRC	CNDHOL	P	CIRCULATE AND CONDITION HOLE THROUGH 5½" CASING SHOE AT 19,690'.  CIRCULATED AS FOLLOWS: P/U WT = 270 KIP; S/O WT = 175 KIP; 230- 330 GPM; 650- 850 PSI AT 19,690'. WASHED LAST JOINT FOR PRECAUTION F/ 19,651' T/ 19,690' W/ 330 GPM.  SPOT HALLIBURTON CEMENT EQUIPMENT.	
22:00	0:00	2.00	31PRRC	CIRC	CNDHOL	P	CONTINUE CIRCULATE AND CONDITION HOLE THROUGH 5½" CASING SHOE AT 19,690'.  CIRCULATED AS FOLLOWS: P/U WT = 270 KIP; S/O WT = 175 KIP; 230- 330 GPM; 650- 850 PSI AT 19,690'.  RIG UP CEMENT EQUIPMENT.	
Total Time		24.00						
<b>Safety Incident?</b>		N		<b>Days since Last RI:</b>		480.00		<b>Weather Comments:</b>
<b>Environ Incident?</b>		N		<b>Days since Last LTA:</b>		480.00		
<b>Incident Comments:</b> No incidents reported last 24 hours.								

OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

USA

Date: 01/24/2015

Report No: 35DR

Wellbore / Top MD: 00 @ 0 ft

Rig: H&P 264

Ref Datum: Original KB @3,056.10ft

DFS: 31.19

Today's MD: 19,700 ft

Progress:

Ground Elev: 3,031.10 ft

Daily Cost: \$123,879

Prev MD: 19,700 ft

Rot Hrs Today: 0.00 hr

AFE MD/Days: 19,800.0 / 35.8 days

Cum Cost: \$3,180,552

PBMD:

Avg ROP Today: 0.0 ft/hr

AFE Number: 1189079#0102

AFE Cost: \$4,017,074

Current Formation: WOLFCAMP@9,775.0

Lithology:

Current Ops:

24-Hr Summary: RUN 5½" PRODUCTION CASING F/3396' T/19,690'. CIRCULATE AND CONDITION HOLE THROUGH 5½" CASING SHOE AT 19,690'.

24-Hr Forecast: (EST RR 1/26/15)(ROL 1/29/15) CEMENT 5½" PRODUCTION CASING, REMOVE BOP, INSTALL TUBING HEAD.

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg	Max
Last Casing:	8.625in @ 9,335ft	Str Wt Up/Dn:	/	Pump Rate:	0.0	Conn:			
Next Casing:	5.500in @ 19,700ft	Str Wt Rot:		Pump Press:	0	Trip:			
Last BOP Press Test:	12/28/2014	Torq Off Btm:				Backgr:			
Form Test/EMW:	FIT / 12.00 ppg	Torq On Btm:							

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	MONFORD CRAFT	MD	Incl	Azi	TVD	N-S	E-W	VS	DLS	Build
Supervisor 2:	ROBERT SOTELLO	19,700.0	89.10	166.80	10,158.11	-9,681.9	2,089.8	9,904.7	0.00	0.00
Engineer:	KEVIN THREADGILL	19,650.0	89.10	166.80	10,157.32	-9,633.2	2,078.4	9,854.7	2.72	0.38
Geologist:	Sumiyah Ahmed	19,598.0	88.90	168.20	10,156.41	-9,582.4	2,067.1	9,802.7	0.57	-0.21
Oxy Personnel:	3	19,503.0	89.10	167.70	10,154.75	-9,489.5	2,047.3	9,707.7	0.77	-0.21
Contractor Personnel:	16	19,408.0	89.30	168.40	10,153.43	-9,396.6	2,027.6	9,612.7	0.60	0.42
Total on Site:	19	19,313.0	88.90	168.00	10,151.94	-9,303.6	2,008.2	9,517.7	0.24	0.11

BIT RECORD										
Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
6	7.875	HALLIBURTON	MMD54DM	12599506	M333	5x15	15,102	19,700	1-2-CT-S	X-I-WT-TD

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI

MUD DATA - M-I SWACO					LAST OR CURRENT BHA				
Engineer: Mathew Comer	MBT:	BHA No: 7	Bit No: 6	MD In: 15,102 ft					
Sample From: IN	pH:	Purpose: DRILL 7-7/8" LATERAL SECTION	MD Out: 19,700 ft						
Mud Type: MEGADRIL (W/ONE-MUL)	Pm / Pom: 2.00								
Time / MD: 0:00 / 19,700.0	Pf / Mf: /								
Density @ Temp: 10.00 / 102	Chlorides:	Component	OD	ID					
Rheology Temp: 150	Ca++ / K+: /	PDC BIT	7.875	2.250					
Viscosity: 51.00	CaCl2:	LATERAL DRILLING MOTOR	6.500	2.250					
PV / YP: 13 / 11	Cl- in water phase: 27,000.00	UBHO SUB	6.500	2.500					
Gels 10s/10m/30m: 8 / 16 / 18	Lime: 2.60	NON-MAG DRILL COLLAR	6.500	2.250					
API WL:	ES: 571.00	NON-MAG DRILL COLLAR	6.500	2.250					
HTHP WL: 12.60	ECD:	DRILL PIPE	4.500	3.826					
Cake API / HTHP: / 2.0	n / K: 0.72 /	AGITATOR	6.500	2.250					
Solids / Sol Corr: 15.00 / 13.93	Carbonate:	SHOCK SUB	6.500	2.250					
Oil / Water: 73.0 / 12.0	Bicarbonate:	DRILL PIPE	4.500	3.826					
Oil / Water % for OWR: 86.00 / 14.00	Form Loss / Cum Loss: 0.0 / 0.0	HWDP	4.500	2.750					
Sand:	Fluid Disch: /	DRILL PIPE	4.500	3.826					
Water Added:	Daily Mud Cost: \$907								
Oil Added:	Cum Mud Cost: \$110,695								
LGS: 9.20 /									
VG Meter: 4@3 / 6@6 / 10@100 / 16@200 / 24@300 / 37@600		Total Length: 11,287.06 ft	Wt below Jars:						
Comments: No Comments.									

MUD PRODUCTS			
Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	1.00
Mud Service - 24 Hr	1.00	day	1.00

3/12/2015

9:52:30AM

Page 1 of 3

**DAILY OPERATIONS PARTNER REPORT**

**Event:** DEV DRILLING  
**Prim. Reason:** ORIG DRILL HORIZ

ST ANDREWS UNIT 1220H  
 USA

**Date:** 01/25/2015  
**Report No:** 36DR

**Safety Incident?** N **Days since Last RI:** 481.00  
**Environ Incident?** N **Days since Last LTA:** 481.00

**Incident Comments:**

No incidents reported last 24 hours.

**Weather Comments:****Other Remarks:**

UNIVERSITY ST. ANDREWS UNIT # 1220DH

From the Intersection of Highway 385 and Highway 176 in Andrews, Texas, drive 2.1 miles East on Highway 176 to intersection of Highway 176 and Highway 115. Turn left (Northeast) on Highway 115. From intersection of Highway 115 and Highway 176, drive 6.75 miles Northeast on Highway 115. At intersection of Highway 115 and FM 1788, continue straight (Northeast) 1.8 miles.....then turn right (South) onto lease road. Drive 1.65 miles and turn left (East) onto lease road. Drive 0.6 miles and road will make a slight bend to the right (South). At bend in road, continue East for another 0.4 miles (road will turn left or North after 0.2 miles) and arrive at University St. Andrews Unit #1220DH on West side of road.

HELICOPTER: (888) 624-3571 / (800) 627-2376 / (800) 242-6199

LIFE FLIGHT COORDINATES: X: 492,422.13' Y: 295,083.25'

Lat: 32° 22' 53.05" N Long: 102° 23' 06.60" W NAD 27 ELEVATION 3,031.1'  
 650' FNL X 833' FEL, SECTION 12, BLOCK 3, ANDREWS COUNTY, TEXAS

OXY DSM TRAILER: 281-833-2725

NOTIFY TRRC OF INTENT TO SPUD AND RUN SURFACE CASING : 12/22/14 SPOKE TO CINDY TRRC EMPLOYEE, JOB #21506

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 8.625" INT CASING: 1/5/15 CINDY OP #4

NOTIFIED TRRC OF INTENT TO RUN AND CEMENT 5.5" INT CASING : 1/22/15 CINDY OP #4

Unsafe Acts:2

Safe Acts: 5

Unsafe Equipment: 0

SWA:2

Near Misses:0

Worksite JSA: 21

Safety Meetings: 6

LO/TO:3

Permits to work: 2

Power Line Checklist: 12/19/2014

Pre Spud/Rig Inspections:

Hazard ID's:2

Ep2 Observations:2

BEST STOP CARD: OBSERVED EMPLOYEE PRESSURE WASHING WITHOUT A FACESHIELD. STOPPED THE JOB AND EXPLAINED THE HAZARDS OF NOT USING A FACESHIELD AND THE SAFETY POLICIES, HE AGREED. JOB CONTINUED WITHOUT INCIDENT.

<div>OXY USA INC</div> <div>DAILY OPERATIONS PARTNER REPORT</div> <div> <div> <div>Event:</div> <div>DEV DRILLING</div> </div> <div> <div>Prim. Reason:</div> <div>ORIG DRILL HORIZ</div> </div> </div> <div> <div>ST ANDREWS UNIT 1220H</div> <div>USA</div> </div> <div> <div>Date:</div> <div>01/25/2015</div> </div> <div> <div>Report No:</div> <div>36DR</div> </div>							
OPERATIONS							
From	To	Hrs	Op Phase	Op Code	Op Sub	Op Type	Operation Details
0:00	0:30	0.50	31PRDR	CIRC	CNDHOL	P	CONTINUE TO CIRCULATE THROUGH 5½" CASING SHOE AT 19,690'.  CIRCULATED AS FOLLOWS: P/U WT = 270 KIP; S/O WT = 175 KIP; 230- 330 GPM; 650- 850 PSI AT 19,690'.  RIG UP CEMENT EQUIPMENT.
0:30	1:00	0.50	31PRDR	CSG	RIGUP	P	RIG DOWN B&L CRT.
1:00	2:00	1.00	31PRDR	CMT	RIGUP	P	HELD SAFETY MEETING WITH ALL PERSONNEL ON CEMENTING OPERATIONS. RIG UP CEMENT EQUIPMENT ON RIG FLOOR.  TESTED HALLIBURTON LINES TO 4000 PSI.
2:00	2:30	0.50	31PRDR	CMT	PRIM	P	CEMENTED 5 1/2" PRODUCTION CASING AS FOLLOWS:  PUMPING SCHEDULE:  50 BBLS 10.7 PPG TUNED SPACER III DROPPED BOTTOM PLUG  NOTE: HALLIBURTON TERGOVIS BATCH UNIT FAILED TO PRESSURE UP.
2:30	3:00	0.50	31PRDR	CIRC	CNDHOL	PT	RIG DOWN CEMENT EQUIPMENT ON RIG FLOOR. RIG UP MUD PUMP TO CIRCULATE 5½" CASING.
3:00	6:00	3.00	31PRDR	WAIT	WOEQ	PT	WAIT ON HALLIBURTON MECHANIC & SECOND TUNED SPACER III.  CIRCULATE THROUGH 5½" CASING SHOE AT 19,690' WITH RIG PUMP.  CIRCULATED AS FOLLOWS: P/U WT = 270 KIP; S/O WT = 175 KIP; 230- 330 GPM; 650- 850 PSI AT 19,690'.
6:00	8:00	2.00	31PRDR	WAIT	OTH	PT	CONTINUE CIRCULATING WHILE WAITING ON HALLIBURTON MECHANIC TO FIX BEND COMPRESOR
8:00	8:30	0.50	31PRRC	CMT	RIGUP	P	RIG UP CEMENT EQUIPMENT, SHUT DOWN RIG PUMPS, REMOVE CEMENT HEAD AND LOAD BOTTOM PLUG. AND RIG UP CEMENT LINES.
8:30	14:00	5.50	31PRRC	CMT	PRIM	P	CEMENTED 5 1/2" PRODUCTION CASING AS FOLLOWS:  PUMPING SCHEDULE:  50 BBLS TUNE SPACER III  DROPPED BOTTOM PLUG 533 BBLS (690 SXS) TERGOVIS CEMENT 10 PPG 4.337 YIELD 59 BBLS (130 SXS) VARICEM CEMENT 11.3 PPG 2.535 YIELD 355 BBLS (760SXS) ACID SOLUABLE CEMENT 15 PPG 2.625 YIELD  DROP TOP PLUG DISPLACE WITH 434 BBLS 10.0 PPG BRINE W/ 2% KCL  NOTES: * ICP= 918 PSI AT 8 BPM * FCP= 2032 PSI AT 3 BPM * BUMPED PLUG W/ 500 PSI OVER F.C.P. 2550 PSI * BLED BACK = 3 BBL * RETURNED 233 BBL OF CEMENT 306 SX. *CEMENT IN PLACE AT 13:25 HOURS
14:00	14:30	0.50	31PRRC	CMT	RIGUP	P	FLUSH OUT CEMENT LINES, BOPS AND CELLAR.
14:30	15:30	1.00	31PRRC	CMT	RIGUP	P	RIG DOWN ALL CEMENT LINES, CEMENT HEAD,
15:30	18:00	2.50	31PRRC	BOP	RDBOP	P	REMOVE DRESSER SLEEVE & KATCH KAN FROM BOP'S, INSTALL BOP HANDLER TO BOP'S. WHILE MOVING MUD FROM PITS TO FRAC TANKS.
18:00	19:00	1.00	31PRRC	WLHD	RWH	P	SET CASING SLIPS W/ FULL STRING WEIGHT THROUGH STACK. BREAK OFF PUP JOINT.
19:00	22:00	3.00	31PRRC	BOP	RDBOP	P	BREAK BOTTOM FLANGE ON BOP AND LIFT STACK. MAKE ROUGH CUT ON 5½" CASING WITH CAMERON REPRESENTATIVE. LOWER STACK AND FLUSH BOP, AND ASSOCIATED EQUIPMENT.  SAFETY BREAK: WORKING WITH 3RD PARTY CREWS.
22:00	0:00	2.00	31PRRC	BOP	RDBOP	P	REMOVE 13-5/8" BOP STACK, DSA, CHOKE LINE, AND KILL LINE.
Total Time		24.00					

OXY USA INC

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 01/25/2015

Prim. Reason: ORIG DRILL HORIZ

USA

Report No: 36DR

Wellbore / Top MD: 00 @ 0 ft

Rig: H&P 264

Ref Datum: Original KB @3,056.10ft

DFS: 32.19

Today's MD: 19,700 ft

Progress:

Ground Elev: 3,031.10 ft

Daily Cost: \$85,469

Prev MD: 19,700 ft

Rot Hrs Today: 0.00 hr

AFE MD/Days: 19,800.0 / 35.8 days

Cum Cost: \$3,266,021

PBMD:

Avg ROP Today: 0.0 ft/hr

AFE Number: 1189079#0102

AFE Cost: \$4,017,074

Current Formation: WOLFCAMP@9,775.0

Lithology:

Current Ops:

24-Hr Summary: CEMENT 5½" CASING AT 19,690'. INSTALL 5½" CASING SLIPS. LIFT BOP, CUT CASING, REMOVE BOP.

24-Hr Forecast: (EST RR 1/26/15)(ROL 1/29/15) LAY DOWN DP FROM DERICK. RELEASE RIG. RIG DOWN.

CASING/WELL CONTROL		HOOKLOAD & TORQUE		HYDRAULICS		MUD GAS		Avg	Max
Last Casing:	8.625in @ 9,335ft	Str Wt Up/Dn:	/	Pump Rate:	0.0	Conn:			
Next Casing:	5.500in @ 19,700ft	Str Wt Rot:		Pump Press:	0	Trip:			
Last BOP Press Test:	12/28/2014	Torq Off Btm:				Backgr:			
Form Test/EMW:	FIT / 12.00 ppg	Torq On Btm:							

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	MONFORD CRAFT	MD	Incl	Azi	TVD	N/-S	E/-W	VS	DLS	Build
Supervisor 2:	ROBERT SOTELLO	19,700.0	89.10	166.80	10,158.11	-9,681.9	2,089.8	9,904.7	0.00	0.00
Engineer:	KEVIN THREADGILL	19,650.0	89.10	166.80	10,157.32	-9,633.2	2,078.4	9,854.7	2.72	0.38
Geologist:	Sumiyyah Ahmed	19,598.0	88.90	168.20	10,156.41	-9,582.4	2,067.1	9,802.7	0.57	-0.21
Oxy Personnel:	3	19,503.0	89.10	167.70	10,154.75	-9,489.5	2,047.3	9,707.7	0.77	-0.21
Contractor Personnel:	16	19,408.0	89.30	168.40	10,153.43	-9,396.6	2,027.6	9,612.7	0.60	0.42
Total on Site:	19	19,313.0	88.90	168.00	10,151.94	-9,303.6	2,008.2	9,517.7	0.24	0.11

BIT RECORD										
Bit No	Size	Manufacturer	Model	Serial No	IADC Code	Nozzles	MD In	MD Out	I-O-D-L	B-G-O-R
									--	--

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB min/max	RPM min/max	TFA	P Drop Bit	Noz Vel	HHPSI

MUD DATA -				LAST OR CURRENT BHA				
Engineer:	MBT:							
Sample From:	pH:							
Mud Type:	Pm / Pom:							
Time / MD: /	Pf / Mf:	/						
Density @ Temp: /	Chlorides:							
Rheology Temp:	Ca++ / K+:	/						
Viscosity:	CaCl2:							
PV / YP: /	Cl- in water phase:							
Gels 10s/10m/30m: / /	Lime:							
API WL:	ES:							
HTHP WL:	ECD:							
Cake API / HTHP: /	n / K:	/						
Solids / Sol Corr: /	Carbonate:							
Oil / Water: /	Bicarbonate:							
Oil / Water % for OWR: /	Form Loss / Cum Loss:	0.0 / 0.0						
Sand:	Fluid Disch:	/						
Water Added:	Daily Mud Cost:	\$2,395						
Oil Added:	Cum Mud Cost:	\$113,090						
LGS: /								
VG Meter:								
Comments:								

MUD PRODUCTS			
Product	Number of Units	Units	Qty Used
Blower Rental	1.00	each	1.00
Bulk Tank Rental	1.00	each	1.00
Clean-Up	1.00	each	2.00
Mud Service - 24 Hr	1.00	day	1.00

3/12/2015

9:52:27AM

Page 1 of 3

Y CZ USA IN9

DAILY OPERATIONS PARTNER REPORT

Event: DEV DRILLING

ST ANDREWS UNIT 1220H

Date: 01520201X

Prim. Reason: YRIG DRILL HYRI,

USA

Report No: 3/ DR

OPERATIONS

6&K	Tu	H&	Yn ' @ap	Yn 9 u\$P	Yn SI c	Yn TdnP	Ynp&#-yui Dp-#y&
0w00	3w00	3f00	31' RR9	WLHD	RWH	'	. ABE 6INAL 9 UT YN Xv : 9 ASINGINSTALL TU8ING S' YYL WITH 9A. ERYN TE9 HNI9 IANINSTALL WELLHEAD 9A' WITH VALVEF  TEST SE9 YNDARZ SEALS TY X000 ' SI 6YR 10 . IN M6YYD TESTFF
3w00	0w00	3f00	31' RR9	TRI'	' ULD	'	LAZ DYWN 1/4 : DRILL ' I' E YUT Y6 DERRI9 BF
0w00	12w00	0f00	31' RR9	TRI'	' ULD	'	LAZ DYWN 2X STDS Y6 1/4X DRILL ' I' EF  WHILE 9 LEANING . UD ' ITS AND SHABERSf 8 REAB DYWN 8A9 B ZARD TRANS6ER ' U. ' S ) LINESf . UD TANBSf AND THIRD ' ARTZ E' UI' ENTf 8A9 B LYAD ALL DRILL ' I' E AND SEND 8A9 B TY " UAIL
12w00	1hw00	0f00	31' RR9	LY9. YV	RD	'	9 LEANING ' ITS AND SHABERSF START RIGGING DYWN . IS9 ELANEYUS E' UI' . ENTw RY TARZ TY YLSf DY9 B TY' DRIVE UNS' YYL DRAW WYRBSf R5D 6LYYR TY YLSF ' YWER DYWN RIGf 9 HANGE YVER TY THIRD ' ARTZ GENERATYRS UN' LUG DE6U8 AR. TY RIG 6LYYRf UN' LUG WIRE TRAZ ) . UD ' U. ' SF RIG DYWN GENERATYRF ' RESSURE WASH AND 9 LEAN RIG 6LYYR Y6 ALL Y8.  SA6ETZ 8REABwAWARNES Y6 THE Q' 8 WITH YCZ AND THIRD ' ARTZ
1hw00	0w00	0f00	31' RR9	LY9. YV	RD	'	' RESSURE WASH SU8wASESf YUTSIDE Y6 . UD TANBSF LYWERED DRILLER'S 9A8INF GAS 8 USTERf DE6U8 AR. f SHABER SBIDF ' IN . R9'S 9 ZLINDERS TY DERRI9 BF  ....RELEASED H)' RIG 20w6RY. WELL SAU 1220 H TY WELL SAU 321 . H AT 0000 HYURS YN 15/ 5201X.....

Tu-#gTYK p

2'f00

Safety Incident? N

Days since Last RI: 1/2f00

Weather Comments:

Environ Incident? N

Days since Last LTA: 1/2f00

Incident Comments:

Nu y ey\$pi -a \$pnu&p\$ \$a- 2'1/2@I &F

Other Remarks:

UNIVERSITZ STFANDREWS UNIT r 1220DH  
6&K -@ li -p&ape-yui ut Hys@#d 3hX#i \$ Hys@#d 1/ O y Ai \$&maf Tpb#af \$&op 2fI Kyga E#a- ui Hys@#d 1/ O-u y -p&ape-yui ut  
Hys@#d 1/ O#i \$ Hys@#d 11XF TI & gt- MU&@#a-Pui Hys@#d 11XF 6&K y -p&ape-yui ut Hys@#d 11X#i \$ Hys@#d 1/ O' \$&op  
O' X Kyga Nu&@#a- ui Hys@#d 11XF A- y -p&ape-yui ut Hys@#d 11X#i \$ 6. 1/ hhf eui -y I p a-\$Hys@#a-P1fh  
Kyga' F@i -I & &s@#Sul -@Pui -u g#ap &#SF D&op 1FOX Kyga#i \$ -I & gt- NE#a-Pui -u g#ap &#SF D&op OFOK yga#i \$ &# \$  
mygK#xp # ags@cpi \$ -u -@ &s@#Sul -@F A- cpi \$ y &# \$f eui -y I p E#a- tu&#i u -@&OFzKyga Nu\$ mygI & gt- u&Nu&@#t-p&  
OFz KygaP#i \$ #&op #- Ui yop&ayd S-Fai \$&ma Ui y r 1220DH ui Wpa- ay\$P ut &# \$F  
  
HELI9 Y' TERwMhhPQ2'43X/ 1 5M00PQ2/ k23/ O5M00P2'2k0177  
L16E 6LIGHT 9YYRDINATESwCw'72f/22f13°Zw27Xf0h3f2X°  
  
L#-w32" 22°X3f0XJN Lui sw102" 23°0f00JW NAD 2/ ELEVATIYN 3f031f1\*  
OX0°6NL C h33°6ELf SE9TIYN 12f 8LY9B 3f ANDREWS 9YUNTzf TECAS  
  
YCZ DS. TRAILERw2h1h33k2/ 2X  
NYTI6Z TRR9 Y6 INTENT TY S' UD AND RUN SUR6A9E 9 ASING w1252511/2S' YBE TY 9INDZ TRR9 E. ' LYZEEf Q' 8  
r 21X00  
NYTI6IED TRR9 Y6 INTENT TY RUN AND 9E. ENT hf02X: INT 9 ASINGw1551X9INDZ Y' r 1/2  
NYTI6IED TRR9 Y6 INTENT TY RUN AND 9E. ENT xfX: INT 9 ASING w15251X9INDZ Y' r 1/2  
Ui a#tp Ae-av2  
S#tp Ae-awX  
Ui a#tp Eql ynK pi -w0  
SWAv2  
Np#&. y&apav0  
  
Wu&kayp QSAw21  
S#tp-d. pp-y sawO  
LY5TYv8  
' p&K ya -u mu&w2  
' ump&Ly p 9 @exga-w1251752011/2  
' & Sni \$fRys li anpe-yui aw  
H#z#&\$ ID'av2  
En2 Ycap&#-yui av2  
  
8EST STY' 9ARDwY8SERVED E. ' LYZEE GET Y66 6YRBLI6T WHILE 6YRBLI6T WAS STILL RUNNINGFSTY' ' ED THE  
Q' 8f HAD THE E. ' LYZEE SHUT Y66 THE 6YRBLI6TFEC' LAINED TY THE E. ' LYZEE Y6 LEAVING THE 6YRBLI6T  
RUNNING AND UNATTENDEDf HE AGREEDQ' 8 9YNTINUED WITHYUT IN9IDENTF

35125201X

7w2w2'A.

#sp 2 ut 2

**Date:** 015206201X  
**Report No:** 3/ DR

<b>Current Formation:</b>	WYL69A. ' ( 7f// XfD	<b>Lithology:</b>
---------------------------	----------------------	-------------------

24-Hr Forecast: NRR 152/ 51XNRYL 152751XP. YVE RIG 65SAU 1220 H T5SAU 321 . HF

PERSONNEL		SURVEY DATA (LAST 6)								
Supervisor 1:	YN6YRD 9RA6T	MD	Incl	Azi	TVD	N/-S	E/-W	VS	DLS	Build
Supervisor 2:	RY8ERT SY TELLY	17f/ 00R0	h7F0	100F0	10f1XhF1	k7fQh1F7	2f0h7Fh	7f701/7	0F0	0R0
Engineer:	BEVIN THREADGILL	17fQX0R0	h7F0	100F0	10f1X/ R2	k7fQ83F2	2f0/ hF½	7fhX/7	2F 2	0Fh
Geologist:	SI K ydd#@A@kps	17fX7hR0	hhF0	1ChF0	10f1XCF/1	k7fXh2F½	2f0C0 F	7fh02F	0F0	k0F21
Oxy Personnel:	3	17fX03R0	h7F0	10 F 0	10f1X/7 X	k7f/7h7F½	2f0¼ F	7f/ 0/ F	0F /	k0F21
Contractor Personnel:	10	17f/0hR0	h7F0	1ChF0	10f1X3F½	k7f37FR0	2f02/ F0	7f02F	0F0	0F2
Total on Site:	17	17f313R0	hhF0	1ChR0	10f1X1F½	k7f303R0	2f00hF2	7fX1/ F	0F2½	0F1

BIT OPERATING PARAMETERS TODAY												
Bit No	Rot Hrs	Cum Rot Hrs	Prog	Cum Prog	ROP	Cum ROP	WOB K ÷ 5K #b	RPM K ÷ 5K #b	TFA	P Drop Bit	Noz Vel	HHPSI

MUD DATA -				LAST OR CURRENT BHA				
Engineer:		MBT:						
Sample From:		pH:						
Mud Type:		Pm / Pom:						
Time / MD:	5	Pf / Mf:	5	Component	OD	ID	Jts	Length
Density @ Temp:	5	Chlorides:						
Rheology Temp:		Ca++ / K+:	5					
Viscosity:		CaCl2:						
PV / YP:	5	Cl- in water phase:						
Gels 10s/10m/30m:	5 5	Lime:						
API WL:		ES:						
HTHP WL:		ECD:						
Cake API / HTHP:	5	n / K:	5					
Solids / Sol Corr:	5	Carbonate:						
Oil / Water:	5	Bicarbonate:						
Oil / Water % for OWR:	5	Form Loss / Cum Loss:	0R0 5 0R0					
Sand:		Fluid Disch:	5					
Water Added:		Daily Mud Cost:	470/					
Oil Added:		Cum Mud Cost:	4113f77/					
LGS:	5							
VG Meter:								
Comments:								

[illegible]