



Fuel						
FUEL TYPE	VENDOR	BEG QTY	RECEIVED QTY	TOTAL QTY	QTY USED	QTY REMAINING
Diesel	Fuel Source	2,892	0	2,892	541	2,351

SAFETY MEETING / JOB SAFETY ANALYSIS		
	DAYLIGHT TOUR	MORNING TOUR
TOPIC		SKID RIG
JSA		SIGNAL
STOP CARDS	0	0
NEAR MISSES	0	0

<div>EP ENERGY</div> <div>Daily Drilling Report Onshore</div>		<div>Well Name/Wellbore No.: UNIVERSITY CENTRAL 0823DH/00</div> <div>Country: USA State/OCSG: TEXAS Field/Permit#: WOLFCAMP CENTRAL Supervisors: DANNY RICHMOND / ROBERT HARPE Engineer/Manager: MOTLEY, DEREK / MARES, SERGIO</div>		<div>Report Number: 003 Report Date: 11/01/2017 Spud Date: 10/31/2017 Release Date: DFS: 0.83 Last BOP T.: 10/31/2017</div> <div>DOL: 1 AFE Days: 6</div>				
Data shared on this report is CONFIDENTIAL								
Depth md/tvd (ft): 5,775.01 / 5,733.85 Progress (ft): 4,837.01 ROP: 4,837.0 / 20.00 = 241.85 Proposed TD (ft): 16,327.10 Next Csg Point (ft): 16,327.03		Rig: NABORS DRILLING/888 Rig Phone: 713-997-1160 RKB (ft): 2,875.01 Ground Level (ft): 2,845.0 POB: 27 Total Man Hours: 308.00						
Current Activity: DRILLING TANGENT @ 5,775'. PTB: INC- 0.4° AZ- 200.0° BEHIND- 5.0' LEFT- 10.0'								
24 Hr Summary: TEST CASING TO 1500 PSI. P/U VERTICAL BHA. TIH TO 758'. SLIP AND CUT DRIL LINE. DRILL SHOE TRACK TO 930'. DRILL VERTICAL TO 5,775'.								
24 Hr Forecast: DRILL VERTICAL W/ BACKBUILD TO KOP. CCM POOH.								
MUD PROPERTIES		MUD MATERIALS		BIT RECORD				
Fluids Co.: HALLIBURTON Fluids Eng: Michael Burkett Time: 20:50 Oil Cnt (%): 67 Location: JCTION TANK H2O Cnt (%): 21 Pit Temp (°F): 118 Sand Cnt (%): 0.01 Depth (ft): 3,421.01 MBT (lbm/bbl): 0.0 Density (ppg): 9.50 pH: 0.0 FV (s/qt): 58 Pm (cc): 0.0 PV (cp): 16 Pf (cc)/Mf (cc): 0.0 / 0.0 YP (lb/100ft²): 14 Chloride (ppm): 0 Gels (l): 10/12/15 Calcium (ppm): 0.00 WL (cc/30min): 4.40 LCM (lbm/bbl): 0.0 HTHP (°F): 250 ES (mV): 876.0 Cake (32nd"): 2.00 LGS (%): 7.20 Solids (lbm/bbl): 66 Ex Lime (ppb): 3.0 ECD (ppg): 9.9 OWR: 76.1 / 23.9		Mud Additives Used TAX 5,071 INVERMUL 2 ENGINEER 1 EZ MUL 2 CALCIUM CHLORIDE 50 LIME 50 DRILL TREAT 10		Bit# 1 S/N 12899954 Size (in) 8.75 Mfg HALLIBURTON IADC Type MM56D Model # Jets 5X16 Depth In (ft) 938 Depth Out (ft) Bit Rotations 70/70 On Btm Hrs Cum 20.00 Footage Cum (ft) 4,837 ROP Cum 241.9 WOB mn/mx (kip) / 25 / 25 RPM rot/bit 70 / 70 Bit HP 1.85 HSI 1.88 PSI Drop (psi) 324.59 Jet Vel (ft/s) 195.42 Imp Force 575.13 Grading I O D L B G O R Bit # Bit # 1				
MUD LOGGING		Trip Gas (units): @ Conn Gas (units): @ Form: Pore Pressure: 0 (%)		Surf to Surf: Lag Strokes: Lag Time: (min)				
BHA # 1		STRING LOADS		MUD PUMPS				
Qty	Item Description	ID (in)	OD (in)	Len (ft)	Cum (ft)	On Btm Torque: 9,000 Off Btm Torque: 4,000 Str. Wt. Up: 175 Str. Wt. Down: 150 Str. Wt. Rot.: 160 Max Over Pull: 15	Pump Type: DR Liner ID: 5.50 SPM: 85.00 GPM: 298.98 SPR: 1 SPM: 0.00 Pressure: 0.00 2 SPM: 0.00 Pressure: 0.00	#1 #2 #3
1	HALLIBURTON MM56D [5x16's]		8.750	1.00	1.00			
1	RYAN 6-3/4" 7/8 5.0 1.75 FBH MUD		6.750	26.07	27.07			
1	PONY DC	2.812	6.750	10.07	37.14			
1	EM TOOL	2.812	6.812	27.05	64.19			
1	NMDC	3.250	6.812	29.91	94.10			
1	CROSSOVER	2.875	6.750	3.01	97.11			
3	3 DRILL COLLARS	2.875	6.500	92.30	189.41			
1	CROSSOVER	2.750	6.500	3.00	192.41			
177	5" DP	4.276	5.000	745.59	938.00			
Total Length: 938.00						BHA Hrs: 20 Jar Hrs: Cum String Hours: 21 Weight B Jars (kip):	T GPM (gpm): 599 AV (DC): 427	SPP (psi): 2,800 AV (DP): 276
SURVEYS								
MD (ft)	Inclination(°)	Azimuth (°)	TVD (ft)	V Section (ft)	+E/-W (ft)	+N/-S (ft)	Dog Leg (°/100ft)	
4,211	1.38	3.80	4,170	442.42	42.51	441.94	0.26	
4,400	0.88	14.52	4,359	446.10	43.02	445.62	0.29	
4,590	0.75	22.78	4,549	448.67	43.87	448.18	0.09	
4,779	0.81	59.87	4,738	450.50	45.50	449.99	0.26	
4,968	1.44	155.85	4,927	449.02	47.63	448.49	0.91	
5,158	0.69	125.97	5,117	446.20	49.53	445.64	0.48	
5,347	0.81	126.32	5,306	444.76	51.53	444.18	0.06	
5,536	0.38	245.85	5,495	443.72	52.03	443.13	0.56	
OPERATION DETAILS								
FROM	TO	HRS	OP CODE	PHASE	CODE	ACTIVITY	DESCRIPTION	
06:00	06:30	0.50	P	CASSURF	19	TEST	TEST CASING TO 1500 PSI FOR 30 MIN ON CHART.	
06:30	07:30	1.00	P	CASSURF	14	PULDSTR	P/U SIDEBUILD BHA (1.75" FBH PDM, 8.75" SECURITY MM56D BIT, EM TOOL, 1 STAND OF 6.5" DC'S).	
07:30	08:30	1.00	P	CASSURF	17	CUTSLIP	TIH TO 758'	
08:30	09:00	0.50	P	CASSURF	13	TRIP	SLIP AND CUT DRILL LINE.	
09:00	10:00	1.00	P	CASSURF	72	DRLCMT	DISPLACE HOLE W/ 9.6 OBM. DRILL SHOE TRACK F/ 882' - 930'. DRILL 8" RATHOLE TO 938'.	
10:00	06:00	20.00	P	DRLPRD	07	DRLVERT	SPUD WELL @ 10:00 HRS 10-31-17 DRILL VERTICAL W/ SIDEBUILD F/ 938' - 5,775' SPUD WELL @ 10:00 HRS 10-31-17.	
Daily Operations Comments UTILIZING RYAN DIRECTIONAL PN2.(SPUD WELL @ 10:00 HRS 10-31-17)								

EP ENERGY

Daily Drilling Report Onshore

Well Name/Wellbore No.: UNIVERSITY CENTRAL 0823DH/00

Country: USA

State/OCSG: TEXAS

Field/Permit#: WOLFCAMP CENTRAL

Supervisors: DANNY RICHMOND / ROBERT HARPE

Engineer/Manager: MOTLEY, DEREK / MARES, SERGIO

Report Number: 004

Report Date: 11/02/2017

Spud Date: 10/31/2017

Release Date:

DFS: 1.83

DOL: 2

AFE Days: 6

Data shared on this report is CONFIDENTIAL

Depth md/tvd (ft): 7,380.01 / 7,336.31

Progress (ft): 1,605.00

ROP: 1,605.0 / 13.00 = 123.46

Proposed TD (ft): 16,327.10

Next Csg Point (ft): 16,327.03

Rig: NABORS DRILLING/888

Rig Phone: 713-997-1160

RKB (ft): 2,875.01

Ground Level (ft): 2,845.0

POB: 24

Total Man Hours: 298.00

Current Activity: POOH DUE TO EM TOOL ISSUES.

24 Hr Summary: DRILL VERTICAL W/ BACKBUILD TO KOP 7,210'. CCM POOH. P/U CURVE ASSEMBLY. TIH. DRILLING CURVE @ 7,380'. HAVING EM TOOL ISSUES. CCM. POOH.

24 Hr Forecast: POOH CHANGE OUT EM TOOL. TIH WITH CURVE ASSEMBLY. DRILL CURVE.

MUD PROPERTIES

Fluids Co.: HALLIBURTON

Fluids Eng: Michael Burkett

Time: 20:50

Oil Cnt (%): 68

Location: JCTION TANK

H2O Cnt (%): 21

Pit Temp (°F): 119

Sand Cnt (%): 0.01

Depth (ft): 7,210.01

MBT (lbm/bbl): 0.0

Density (ppg): 9.50

pH: 0.0

FV (s/qt): 57

Pm (cc): 0.0

PV (cp): 15

Pf (cc)/Mf (cc): 0.0 / 0.0

YP (lbf/100ft²): 14

Chloride (ppm): 0

Gels (l): 10/12/15

Calcium (ppm): 0.00

WL (cc/30min): 4.40

LCM (lbm/bbl): 0.0

HTHP (°F): 250

ES (mV): 780.0

Cake (32nd"): 2.00

LGS (%): 5.10

Solids (lbm/bbl): 46

Ex Lime (ppb): 3.4

ECD (ppg): 9.9

OWR: 76.4 / 23.6

MUD MATERIALS

Mud Additives

Used

EZ MUL 2

SUSPENTONE 2

DRILL TREAT 8

INVERMUL 2

LIME 100

GELTONE 2

ENGINEER 1

TAX 6,338

CALCIUM CHLORIDE 100

MUD LOGGING

Trip Gas (units): @

BG Gas (units): @

Conn Gas (units): @

Surf to Surf: Lag Strokes:

Form: Pore Pressure: (%)

Lag Time: (min)

BIT RECORD

Bit# 1

S/N 12899954

Size (in) 8.75

Mfg HALLIBURTON

IADC Type BAKER

Model # MM56D

VG-20M

Jets 5X16

3X18

Depth In (ft) 938

7,210

Depth Out (ft) 7,210

7,380

Bit Rotations 70/237

20/313

On Btm Hrs Cum 9.50

13.00

Footage Cum (ft) 1,435

170

ROP Cum 212.6

13.1

WOB mn/mx (kip) 25 / 25

30 / 30

RPM rot/bit 70 / 237

20 / 313

Bit HP 1.85

2.43

HSI 1.89

3.27

PSI Drop (psi) 325.71

562.88

Jet Vel (ft/s) 195.75

257.34

Imp Force 576.12

757.37

Grading I O D L B G O R

Bit # 1 1 1 FC S X I CT BHA

Bit # 2

CASING

Size(in) MD(ft)/TVD(ft) FIT/LOT(ppg)

14.00 70.00 / 70.00

9.63 938.00 / 938.00

5.50 16,327.03 / 7,589.02

INVENTORY

Item Inv

MUD DIESEL 6,397

RIG FUEL 14,876

SOLIDS CONTROL

Skr Deck 1 Screens Deck 2 Screens

1 100/100/100/100

2 100/100/100/100

3 100/100/100/100

BHA # 2

Qty Item Description ID (in) OD (in) Len (ft) Cum (ft)

1 HUGHES VG-20M 3.250 6.500 1.00 1.00

1 2.12° 4/5 7.0 FBH MOTOR BTB 3.6 2.750 6.625 27.16 28.16

1 PONY NMDC 2.750 6.625 10.07 38.23

1 EM TOOL 3.250 6.500 27.05 65.28

1 FLEX NMDC 3.250 6.500 29.91 95.19

231 5" DRILL PIPE 4.276 5.000 7,284.82 7,380.01

Total Length: 7,380.01

STRING LOADS

On Btm Torque: 10,000

Off Btm Torque: 5,500

Str. Wt. Up: 185

Str. Wt. Down: 145

Str. Wt. Rot.: 165

Max Over Pull: 20

BHA PROPERTIES

BHA Hrs: 10

Jar Hrs:

Cum String Hours: 31

Weight B Jars (kip):

MUD PUMPS

#1 #2 #3

Pump DR DR

Type:

Liner ID: 5.50 5.50

SPM: 85.00 85.00

GPM: 298.98 298.98

SPR:

1 SPM: 0.00 0.00

Pressure: 0.00 0.00

2 SPM: 0.00 0.00

Pressure: 0.00 0.00

T GPM (gpm): 599 SPP (psi): 2,450

AV (DC): 427 AV (DP): 276

SURVEYS

MD (ft) Inclination(°) Azimuth (°) TVD (ft) V Section (ft) +E/-W (ft) +N/-S (ft) Dog Leg (°/100ft)

6,103 0.13 84.83 6,062 443.70 50.44 443.13 0.04

6,293 0.06 102.59 6,252 443.70 50.75 443.13 0.04

6,482 0.19 47.57 6,441 443.89 51.08 443.32 0.09

6,671 0.13 71.82 6,630 444.18 51.51 443.60 0.05

6,860 0.38 99.77 6,819 444.15 52.34 443.56 0.14

7,050 0.50 112.78 7,009 443.73 53.72 443.13 0.08

7,160 0.56 101.36 7,119 443.45 54.69 442.84 0.11

7,235 9.88 168.50 7,193 437.08 56.34 436.44 12.90

OPERATION DETAILS

FROM TO HRS OP CODE PHASE CODE ACTIVITY DESCRIPTION

06:00 15:00 9.00 P DRLPRD 07 DRLVERT DRILL VERTICAL F/ 5,775' - 7,146'

15:00 15:30 0.50 P DRLPRD 12 RIGSVC SERVICE RIG.

15:30 16:00 0.50 P DRLPRD 07 DRLVERT DRILL VERTICAL F/ 7,146" - 7,210'

16:00 16:30 0.50 P DRLPRD 15 CIRC CIRCULATE B/U. CHECK FOR FLOW. PUMP SLUG.

16:30 19:00 2.50 P DRLPRD 13 TRIP POOH UP TO BHA.

19:00 20:00 1.00 P DRLPRD 14 PULDSTR L/D VERTICAL BHA.

20:00 20:30 0.50 P DRLPRD 14 PULDSTR P/U CURVE BHA. (BHA #2) (2.12° FBH PDM, 8.75" HUGHES VG20M BIT, EM TOOL).

20:30 00:00 3.50 P DRLPRD 13 TRIP TIH. BREAK CIRCULATION EVERY 30 STANDS.

00:00 03:30 3.50 P DRLPRD 09 DRLCRV DRILL CURVE 7,210'- 7,380'.

03:30 04:30 1.00 N DRLPRD 57 DIRFAIL TROUBLESHOOT EM TOOL.

04:30 05:00 0.50 N DRLPRD 15 CIRC CIRCULATE B/U. CHECK FOR FLOW. PUMP SLUG.

05:00 06:00 1.00 N DRLPRD 13 TRIP POOH TO DUE TO EM TOOL ISSUES.

Daily Operations Comments

UTILIZING RYAN DIRECTIONAL PN2.(SPUD WELL @ 10:00 HRS 10-31-17)

EP ENERGY

Daily Drilling

Report Onshore

Well Name/Wellbore No.:

UNIVERSITY CENTRAL 0823DH/00

Country:

USA

State/OCSG:

TEXAS

Field/Permit#:

WOLFCAMP CENTRAL

Supervisors:

DANNY RICHMOND / ROBERT HARPE

Engineer/Manager:

MOTLEY, DEREK / MARES, SERGIO

Report Number:

005

API #:

4238339823

Report Date:

11/03/2017

Spud Date:

10/31/2017

Release Date:

DIFS: 2.83

DOL: 3

AFE Days: 6

Last BOP T.:

10/31/2017

Data shared on this report is CONFIDENTIAL

Depth md/tvd (ft):

7,854.02 / 7,656.37

Progress (ft):

474.00

ROP:

474.0 / 11.00 = 43.09

Proposed TD (ft):

16,327.10

Next Csg Point (ft):

16,327.03

Rig:

NABORS DRILLING/888

Rig Phone:

713-997-1160

RKB (ft):

2,875.01

Ground Level (ft):

2,845.0

POB:

24

Total Man Hours:

298.00

Current Activity:

SLIP AND CUT DRILL LINE. PTB: INC- 91.4° AZ- 177.0° BELOW- 37.0' LEFT- 51.0'

24 Hr Summary:

POOH CHANGE OUT EM TOOL. TIH WITH CURVE ASSEMBLY. DRILL CURVE TO 7,854' POOH. L/D CURVE ASSEMBLY. P/U LATERAL ASSEMBLY. SLIP AND CUT DRILL LINE.

24 Hr Forecast:

TIH W/ LATERAL ASSEMBLY. DRILL LATERAL.

MUD PROPERTIES				MUD MATERIALS				BIT RECORD				CASING			
Fluids Co.: HALLIBURTON								Bit#				Size(in)			
Fluids Eng: Michael Burkett								S/N				MD(ft)/TVD(ft)			
Time: 20:50				Oil Cnt (%): 68				Mud Additives				Used			
Location: JCTION TANK				H2O Cnt (%): 21				FACTANT				1			
Pit Temp (°F): 121				Sand Cnt (%): 0.01				TAX				9,865			
Depth (ft): 7,744.02				MBT (lbm/bbl): 0.0				BARITE 41				258			
Density (ppg): 9.50				pH: 0.0				SHRINK WRAP				14			
FV (s/qt): 58				Pm (cc): 0.0				RHEMOD L				1			
PV (cp): 15				Pf (cc):/Mf (cc): 0.0 / 0.0				CALCIUM CHLORIDE				100			
YP (lb/100ft²): 15				Chloride (ppm): 0				TRANSPORTATION				369			
Gels (l): 11/13/15				Calcium (ppm): 0.00				FUEL SURCHARGE				300			
WL (cc/30min): 4.80				LCM (lbm/bbl): 0.0				LIME				100			
HTHP (°F): 250				ES (mV): 726.0				ENGINEER				1			
Cake (32nd"): 2.00				LGS (%): 5.10											
Solids (lbm/bbl): 46				Ex Lime (ppb): 3.4											
ECD (ppg): 9.9				OWR: 76.4 / 23.6											
MUD LOGGING															
Trip Gas (units): @				BG Gas (units):				Surf to Surf:							
Conn Gas (units): @								Lag Strokes:							
Form:				Pore Pressure: (%)				Lag Time: (min)							
								Grading				I O D L B G O R			
								Bit # 3 RR				1 3 BT H 1 I WTBHA			
								Bit # 4							

BHA # 4					STRING LOADS		MUD PUMPS					
Qty	Item Description	ID (in)	OD (in)	Len (ft)	Cum (ft)	On Btm Torque:	5,000	Pump	#1	#2	#3	
1	8.5" BAKER - CF519 7X20's		8.500	1.00	1.00	Off Btm Torque:	3,500	Type:	DR	DR		
1	RYAN 6 5/8" 7/8 5.0 1.75 SBTB MUI		6.625	29.27	30.27	Str. Wt. Up:	220	Liner ID:	5.50	5.50		
1	PONY DC	2.875	6.750	10.07	40.34	Str. Wt. Down:	185	SPM:	85.00	85.00		
1	EM TOOL	2.750	6.500	27.62	67.96	Str. Wt. Rot.:	165	GPM:	298.98	298.98		
1	NMDC	3.125	6.750	29.91	97.87	Max Over Pull:	55	SPR:				
90	5" D.P.	4.276	5.000	2,840.65	2,938.52			1 SPM:	0.00	0.00		
1	AGITATOR	2.500	6.625	12.96	2,951.48			Pressure:	0.00	0.00		
1	SHOCK SUB	2.500	6.625	11.92	2,963.40			2 SPM:	0.00	0.00		
155	5" DP	4.276	5.000	4,890.62	7,854.02			Pressure:	0.00	0.00		
Total Length:					7,854.02			T GPM (gpm): 599				SPP (psi): 2,800
								AV (DC): 377				AV (DP): 244

SURVEYS							
MD (ft)	Inclination(°)	Azimuth (°)	TVD (ft)	V Section (ft)	+E/-W (ft)	+N/-S (ft)	Dog Leg (°/100ft)
7,160	0.56	101.36	7,119	443.45	54.69	442.84	0.11
7,235	3.81	170.97	7,194	440.93	55.44	440.30	4.87
7,330	5.75	166.57	7,288	433.20	57.04	432.56	2.08
7,425	6.81	137.22	7,383	424.50	61.97	423.79	3.51
7,519	25.06	170.61	7,473	400.61	69.08	399.82	20.97
7,614	39.13	176.77	7,553	350.63	74.08	349.78	15.19
7,709	59.25	176.41	7,615	279.28	78.36	278.37	21.18
7,804	80.19	176.41	7,648	190.91	83.91	189.93	22.04

OPERATION DETAILS							
FROM	TO	HRS	OP CODE	PHASE	CODE	ACTIVITY	DESCRIPTION
06:00	08:00	2.00	N	DRLPRD	13	TRIP	POOH TO BHA DUE TO EM TOOL ISSUES.
08:00	08:30	0.50	N	DRLPRD	14	PULDSTR	L/D CURVE BHA.
08:30	09:00	0.50	N	DRLPRD	14	PULDSTR	P/U CURVE BHA. (BHA #3) (2.38° FBH PDM, 8.75" HUGHES VG20M BIT, EM TOOL).
09:00	12:00	3.00	N	DRLPRD	13	TRIP	TIH. BREAK CIRCULATION EVERY 30 STANDS.
12:00	12:30	0.50	N	DRLPRD	16	WASHR	WASH AND REEM F/ 7,286 T/ 7,380.
12:30	23:30	11.00	P	DRLPRD	09	DRLCRV	DRILL CURVE 7,380'- 7,854'. (85° @ 7,825')
23:30	00:00	0.50	P	DRLPRD	15	CIRC	CIRCULATE B/U. CHECK FOR FLOW. PUMP SLUG.
00:00	03:00	3.00	P	DRLPRD	13	TRIP	POOH UP TO BHA.
03:00	03:30	0.50	P	DRLPRD	14	PULDSTR	L/D CURVE BHA.
03:30	04:00	0.50	P	DRLPRD	14	PULDSTR	P/U LATERAL ASSEMBLY. (BHA #4) (1.75° FBH PDM, 8.5" ULTERRA CF519 BIT, EM TOOL). PU SHOCK SUB AND AGITATOR 30 STANDS IN.
04:00	06:00	2.00	P	DRLPRD	17	CUTSLIP	SLIP AND CUT DRILL LINE.

Daily Operations Comments

UTILIZING RYAN DIRECTIONAL PN2.(SPUD WELL @ 10:00 HRS 10-31-17) (85° @ 7,825.)

