INTEGRITY SERVICES

DAILY DRILLING REPORT

General Information			
LEASE	WELL NUMBER	API WELL NUMBER	DATE
UNIVERSITY SALT DRAW	3820KH	42-105-42351	1/27/2017
COUNTY, STATE	LOCATION		TRRC PERMIT NUMBER
CROCKETT	7.43 MILES SE OF BARNHART		821518
OPERATOR		CONTRACTOR	
EP ENERGY		Integrity Services, LLC	
OPERATOR REPRESENTATIVE		CONTRACTOR REPRESENTATIVE	
RYAN WILLAMS		JORDAN CLICK	

Texas Railroad Commission		Depth
TRRC JOB NUMBER	TRRC CONTACT NAME	PROPOSED MEASURED DEPTH (MD)
69499	IVY	968.59
TRRC CONTACT DATE	TIME	
1/27/2017	9:00	

Casing / **Survey Information**

	OD	ID	WEIGHT	GRADE	CONNECTION	MD	TVD	ANGLE
Conductor	14"							
Surface	9 5/8	8.835	40	J-55	LTC			

Drill Pipe

	OD	ID	WEIGHT	GRADE	CONNECTION			
	4 1/2	2 1/8	16.6		2 7/8" IF		-	

BHA

	OD	ID	LENGTH	WEIGHT	CONNECTION			
							-	
Bit	12.25"	N/A	0.38		DTH SPLINE		-	
DTH	10.625"	2.50"	6.55		6 5/8" REG		-	
BIT SUB	6.625"	3.50"	3.15		4" FH x 6 5/8" reg		-	
SPIRAL	8"	3.50"	31 1/3		4" FH		-	
SLIP SUB	5.5"	2.8125"	1		4"FH		-	
3 EA. D/C's	5.5"	2.8125"	90		4" FH		-	
X.O. SUB	5.5"	2.25"	1.28		4" FH x 2 7/8" IF		-	

Daily Activities

FROM	TO	ELAPSED TIME	REMARKS
7:00	8:00	1.00	SKID RIG
8:00	9:00	1.00	R/U ON 3820KH
9:00	15:00	6.00	W/O MECHANIC / REPAIR HYD HOSE ON RIG
15:00	15:30	0.50	P/U BHA F/ BIT - 40'
15:30	16:30	1.00	DRLG F/ 40' - 105'
16:30	17:00	0.50	CHANGE HEAD RUBBER TO DP
17:00	18:00	1.00	DRLG F/ 105' - 310'
18:00	18:00	-	TOUR CHANGE / SAFETY MEETING
18:00	1:30	7.50	DRLG F/ 310' - 970' TD WELL
1:30	2:00	0.50	CIRCULATE / PUMP SWEEP
2:00	3:00	1.00	TOOH F/ 970' - 101'
3:00	4:00	1.00	L/D BHA F/ 101' - BIT
4:00	4:30	0.50	R/U FOR CSG
4:30	6:00	1.50	RUN 10 JTS OF 9 5/8 CSG
TOTAL HOURS		23.00	

Crew

TITLE	NAME	HOURS	NAME
RIG MANAGER	JESSE CANTU	23	JESSE CANTU
DRILLER	MYRON	12	TERRY
FLOOR HAND	RAY	12	ROWDY
FLOOR HAND	DAVID	12	RAY

LOA

BIT NO	SIZE	MAKE	TYPE	FOOTAGE	HOURS	ROP	WOB	RPM
1 NEW	12 1/4	NUMA	DHT	930	9 1/2	97.89	2 - 3000 LBS	35 - 40
BIT SERIAL #		INT125010						
23564								

Mist Drilling Information / **Compressed Air Information**

COMBO	PUMP #1	COMBO	DECK AIR	COMPRESSOR #1	COMPRESSOR #2	COMPRESSOR #3	COMPRESSOR #4	BOOSTER
Type	BEAN	MAKE	ATLAS COPCO	SULLAIR	SULLAIR	SULLAIR	SULLAIR	Hurricane
Gal/Min	40	CFM	1250	900	900	900	900	
		PSI	350	350	350	350	350	2000

Drilling Fluid & Chemicals

TYPE	AMOUNT	TYPE	AMOUNT
WEATHERFORD FMA 100	2GAL/HR		

Fuel

FUEL TYPE	VENDOR	BEG QTY	RECEIVED QTY	TOTAL QTY	QTY USED	QTY REMAINING
Diesel	Fuel Source	2,892	0	2,892	964	1,928

SAFETY MEETING / JOB SAFETY ANALYSIS

	DAYLIGHT TOUR	MORNING TOUR
TOPIC	DRLG	RUN CSG
JSA	PINCH POINTS	FORKLIFT OPERATION
STOP CARDS	0	0
NEAR MISSES	0	0

INTEGRITY SERVICES

DAILY DRILLING REPORT

General Information			
LEASE	WELL NUMBER	API WELL NUMBER	DATE
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OPERATOR		CONTRACTOR	
EP ENERGY		Integrity Services, LLC	
OPERATOR REPRESENTATIVE		CONTRACTOR REPRESENTATIVE	
RYAN WILLAMS		JORDAN CLICK	

Texas Railroad Commission		Depth
TRRC JOB NUMBER	TRRC CONTACT NAME	PROPOSED MEASURED DEPTH (MD)
69499	IVY	968.59
TRRC CONTACT DATE	TIME	
1/27/2017	9:00	

Casing

	OD	ID	WEIGHT	GRADE	CONNECTION
Conductor	14"				
Surface	9 5/8	8.835	40	J-55	LTC

Drill Pipe

	OD	ID	WEIGHT	GRADE	CONNECTION
	4 1/2	2 1/8	16.6		2 7/8" IF

BHA

	OD	ID	LENGTH	WEIGHT	CONNECTION
Bit	12.25"	N/A	0.38		DTH SPLINE
DTH	10.625"	2.50"	6.55		6 5/8" REG
BIT SUB	6.625"	3.50"	3.15		4" FH x 6 5/8" reg
SPIRAL	8"	3.50"	31 1/3		4" FH
SLIP SUB	5.5"	2.8125"	1		4"FH
3 EA. D/C's	5.5"	2.8125"	90		4" FH
X.O. SUB	5.5"	2.25"	1.28		4" FH x 2 7/8" IF

Survey Information

MD	TVD	ANGLE
	-	
	-	
	-	
	-	
	-	
	-	
	-	
	-	

Daily Activities

FROM	TO	ELAPSED TIME	REMARKS
6:00	6:00	-	TOUR CHANGE / SAFETY MEETING
6:00	8:00	2.00	RUN 10 JTS OF 9 5/8 CSG
8:00	9:00	1.00	WASHDOWN 3 JTS LANDNG @ 968.59'
9:00	9:30	0.50	R/U CEMENTERS
9:30	11:00	1.50	CEMENT WELL W/ COMPASS - 78 BBLS LEAD - 37 BBLS TAIL - 40 BBLS TO SURFACE
11:00	12:00	1.00	LOWER RIG / CUT CSG @ GROUND LEVEL
			RELEASE RIG @ 12:OO ON 1/28/2017
	TOTAL HOURS	6.00	

Crew

TITLE	NAME	HOURS	NAME
RIG MANAGER	JESSE CANTU	6	
DRILLER	MYRON	6	
FLOOR HAND	RAY	6	
FLOOR HAND	DAVID	6	

LOA

BIT NO	SIZE	MAKE	TYPE	FOOTAGE	HOURS	ROP	WOB	RPM
1 NEW	12 1/4	NUMA	DHT	930	9 1/2	97.89	2 - 3000 LBS	35 - 40
BIT SERIAL #		INT125010						
23564								

Mist Drilling Information

COMBO	PUMP #1	COMBO
Type	BEAN	MAKE
Gal/Min	40	CFM
		PSI

Compressed Air Information

DECK AIR	COMPRESSOR #1	COMPRESSOR #2	COMPRESSOR #3	COMPRESSOR #4	BOOSTER
ATLAS COPCO	SULLAIR	SULLAIR	SULLAIR	SULLAIR	Hurricane
1250	900	900	900	900	
350	350	350	350	350	2000

Drilling Fluid & Chemicals

TYPE	AMOUNT	TYPE	AMOUNT
WEATHERFORD FMA 100	2GAL/HR		

Fuel

FUEL TYPE	VENDOR	BEG QTY	RECEIVED QTY	TOTAL QTY	QTY USED	QTY REMAINING
Diesel	Fuel Source	1,928	0	1,928	-	1,928

SAFETY MEETING / JOB SAFETY ANALYSIS

	DAYLIGHT TOUR	MORNING TOUR
TOPIC	R/U CEMENTERS	
JSA	PINCH POINTS	
STOP CARDS	0	0
NEAR MISSES	0	0

Daily Drilling Report Onshore

EP ENERGY

Data shared on this report is CONFIDENTIAL

Well Name/Wellbore No.: UNIVERSITY SALT DRAW 3820KH/00

Country:	USA
State/OCSG	TEXAS
Field/Permit#:	SALT DRAW
Supervisors:	WILKERSON, JOE / JARED FAUST
Engineer/Manager:	MOTLEY, DEREK / MARES, SERGIO

Report Number:	002	API #:	4210542351
Report Date:	03/12/2017		
Spud Date:			
Release Date:			
DFS: 0.00	DOL: 0		AFE Days: 8
Last BOP T.:	03/07/2017		

Depth md/tvd (ft):	998.00 / 997.98
Progress (ft):	0.00
ROP:	0.0 / = 0.00
Proposed TD (ft):	14,908.60
Next Csg Point (ft):	14,894.03

Rig:	NABORS DRILLING/F-34
Rig Phone:	713-997-1205
RKB (ft):	2,642.01
Ground Level (ft):	2,612.0
POB:	28
Total Man Hours:	340.00

Current Activity:	N/U BOP & FLOWLINE.
24 Hr Summary:	WALK RIG OVER WELL CENTER. NU & TEST BOP. P/U BHA. TIH. SLIP & CUT DRILL LINE. DRILL CMT & FE. DRILL SIDE BUILD.
24 Hr Forecast:	LD CASING BAILS & ELEVATORS. INSTALL RIG ELEVATORS. TEST BOP. P/U BHA. TIH. SLIP & CUT DRILL LINE. DRILL CMT & FE. DRILL SIDE BUILD.

MUD PROPERTIES

Fluids Co.:	HALLIBURTON		
Fluids Eng:	Wesley Vaughn		
Time:	0:00	Oil Cnt (%):	70
Location:	JCTION TANK	H2O Cnt (%):	20
Pit Temp (°F	96	Sand Cnt (%):	0.01
Depth (ft):	1,190.00	MBT (lbm/bbl):	0.0
Density (ppg):	8.90	pH:	0.0
FV (s/qt):	61	Pm (cc):	0.0
PV (cp):	15	Pf (cc):/Mf (cc):	0.0 / 0.0
YP (lbf/100ft²):	11	Chloride (ppm):	0
Gels ():	13/17/22	Calcium (ppm):	0.00
WL (cc/30min):	12.00	LCM (lbm/bbl):	0.0
HTHP (°F):	250	ES (mV):	844.0
Cake (32nd"):	2.00	LGS (%):	6.90
Solids (lbm/bbl):	72	Ex Lime (ppb):	2.7
ECD (ppg):	9.4	OWR:	77.8 / 22.2

MUD MATERIALS

Mud Additives	Used

BIT RECORD

Bit#		
S/N		
Size (in)		
Mfg		
IADC Type		
Model #		
Jets		
Depth In (ft)		
Depth Out (ft)		
Bit Rotations		
On Btm Hrs Cum		
Footage Cum (ft)		
ROP Cum		
WOB mn/mx (kip)	/	/
RPM rot/bit	/	/
Bit HP		
HSI		
PSI Drop (psi)		
Jet Vel (ft/s)		
Imp Force		

Grading	I	O	D	L	B	G	O	R
Bit #								
Bit #								

CASING

Size(in)	MD(ft)/TVD(ft)		FIT/LOT(ppg)
14.00	70.00 /	70.00	
9.63	1,000.00 /	1,000.00	
5.50	14,894.03 /	6,653.01	

INVENTORY

Item	Inv
DIESEL	13,475
MUD DIESEL	8,000

SOLIDS CONTROL

Skr	Deck 1 Screens	Deck 2 Screens
1	100/100/100/100	
2	100/100/100/100	
3	140/100/100/100	

MUD LOGGING

Trip Gas (units):	@	BG Gas (units):		Surf to Surf:	
Conn Gas (units)	@			Lag Strokes:	
Form:		Pore Pressure:	0 (%)	Lag Time:	(min)

MUD PUMPS

	#1	#2	#3
Pump Type:	DR	DR	
Liner ID:	5.50	5.50	
SPM:	0.00	0.00	
GPM:	0.00	0.00	
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):		SPP (psi):	
AV (DC):	0	AV (DP):	0

SURVEYS

MD (ft)	Inclination(°)	Azimuth (°)	TVD (ft)	V Section (ft)	+E/-W (ft)	+N/-S (ft)	Dog Leg (°/100ft)
896	0.23	199.03	896	2.86	-2.68	2.88	0.00

OPERATION DETAILS

FROM	TO	HRS	OP CODE	PHASE	CODE	ACTIVITY	DESCRIPTION
00:30	03:30	2.00	P	MIRU	01	MIRU	WALK RIG 20' TO WELL CENTER.
03:30	06:00	2.50	P	CASSURF	28	NUBOPE	N/U BOP AND FLOWLINE

Daily Operations Comments

UTILIZING DIRECTIONAL PLAN #2.

CONFIDENTIAL

Daily Drilling Report Onshore

EP ENERGY

Data shared on this report is CONFIDENTIAL

Well Name/Wellbore No.: UNIVERSITY SALT DRAW 3820KH/00
Country: USA
State/OCSG: TEXAS
Field/Permit#: SALT DRAW
Supervisors: WILKERSON, JOE / JARED FAUST
Engineer/Manager: MOTLEY, DEREK / MARES, SERGIO

Report Number: 003 API #: 4210542351
Report Date: 03/13/2017
Spud Date: 03/12/2017
Release Date:
DFS: 0.39 DOL: 1 AFE Days: 8
Last BOP T.: 03/12/2017

Depth md/tvd (ft): 3,569.01 / 3,511.72
Progress (ft): 2,571.01
ROP: 2,571.0 / 8.50 = 302.47
Proposed TD (ft): 14,908.60
Next Csg Point (ft): 14,894.03

Rig: NABORS DRILLING/F-34
Rig Phone: 713-997-1205
RKB (ft): 2,642.01
Ground Level (ft): 2,612.0
POB: 26 Total Man Hours: 328.00

Current Activity: DRILLING SIDEBUILD @ 3,569' (PTB INC 13.5°, AZM 102°, A-32.5', L-1.3')

24 Hr Summary: LD CASING BAILS & ELEVATORS. INSTALL RIG ELEVATORS. CHANGE OUT HYDRAULIC HOSE ON TOP DRIVE. TEST BOP. P/U BHA. TIH. SLIP & CUT DRILL LINE. DRILL CMT & FE. DRILL SIDE BUILD. (SERVICE RIG, WORK ON HMI SCREEN AND TOP DRIVE LUBE PUMP)

24 Hr Forecast: DRILL SIDEBUILD TO KOP. CIRC B/U. POOH FOR CURVE BHA. P/U CURVE BHA. TIH. BUILD CURVE.

MUD PROPERTIES

Fluids Co.: HALLIBURTON
Fluids Eng: Wesley Vaughn

Time:	0:00	Oil Cnt (%):	69
Location:	JCTION TANK	H2O Cnt (%):	23
Pit Temp (°F	105	Sand Cnt (%):	0.01
Depth (ft):	1,700.00	MBT (lbm/bbl):	0.0
Density (ppg):	8.90	pH:	0.0
FV (s/qt):	60	Pm (cc):	0.0
PV (cp):	13	Pf (cc):/Mf (cc):	0.0 / 0.0
YP (lbf/100ft²):	13	Chloride (ppm):	0
Gels ():	11/13/15	Calcium (ppm):	0.00
WL (cc/30min):	12.40	LCM (lbm/bbl):	0.0
HTHP (°F):	250	ES (mV):	700.0
Cake (32nd"):	2.00	LGS (%):	5.40
Solids (lbm/bbl):	61	Ex Lime (ppb):	3.1
ECD (ppg):	9.3	OWR:	75.3 / 24.7

MUD MATERIALS

Mud Additives	Used
DRIL-TREAT	15
TAX	6,552
CALCIUM CHLORIDE PO	50
MUD ENGINEER	1
EZ MUL	3
INVERMUL	3
PALLETS	10

BIT RECORD

Bit#		1
S/N		12856010
Size (in)		8.75
Mfg		HALLIBURTON
IADC Type		
Model #		12871263
Jets		5X16
Depth In (ft)		998
Depth Out (ft)		
Bit Rotations		40/50
On Btm Hrs Cum		8.50
Footage Cum (ft)		2,571
ROP Cum		302.5
WOB mn/mx (kip)	/	30 / 30
RPM rot/bit	/	40 / 50
Bit HP		1.73
HSI		1.76
PSI Drop (psi)		304.09
Jet Vel (ft/s)		195.42
Imp Force		538.80

Grading: I O D L B G O R
Bit #
Bit # 1

CASING

Size(in)	MD(ft)/TVD(ft)		FIT/LOT(ppg)
14.00	70.00 /	70.00	
9.63	1,000.00 /	1,000.00	
5.50	14,894.03 /	6,653.01	

INVENTORY

Item	Inv
MUD DIESEL	4,500
DIESEL	12,449

SOLIDS CONTROL

Skr	Deck 1 Screens	Deck 2 Screens
1	100/100/100/100	
2	100/100/100/100	
3	140/100/100/100	

MUD LOGGING

Trip Gas (units):	@	BG Gas (units):		Surf to Surf:	
Conn Gas (units)	@			Lag Strokes:	
Form:		Pore Pressure:	(%)	Lag Time:	(min)

BHA # 1

Qty	Item Description	ID (in)	OD (in)	Len (ft)	Cum (ft)
1	MM56D		8.750	1.00	1.00
1	RYAN 6-3/4" 6/7 5.0 1.75 FBH MUD		6.750	25.46	26.46
1	PONY DC	2.875	6.500	9.35	35.81
1	EM TOOL	2.812	6.500	27.55	63.36
1	NMDC	2.875	6.500	30.09	93.45
1	CROSSOVER	2.812	6.750	3.94	97.39
3	3 DRILL COLLARS	2.875	6.500	91.58	188.97
1	CROSSOVER	2.250	6.500	3.05	192.02
	5" DP	4.276	5.000	3,376.99	3,569.01
				Total Length:	3,569.01

STRING LOADS

On Btm Torque:	9,000
Off Btm Torque:	2,000
Str. Wt. Up:	130
Str. Wt. Down:	120
Str. Wt. Rot.:	125
Max Over Pull:	

BHA PROPERTIES

BHA Hrs:	9
Jar Hrs:	
Cum String Hours:	9
Weight B Jars (kip):	

MUD PUMPS

	#1	#2	#3
Pump Type:	DR	DR	
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): 600 SPP (psi): 2,400
AV (DC): 474 AV (DP): 204

SURVEYS

MD (ft)	Inclination(°)	Azimuth (°)	TVD (ft)	V Section (ft)	+E/-W (ft)	+N/-S (ft)	Dog Leg (°/100ft)
2,018	14.38	106.80	2,003	-43.69	144.42	-44.69	0.27
2,205	14.31	101.70	2,184	-54.77	189.28	-56.09	0.68
2,393	12.56	90.80	2,367	-59.47	232.48	-61.08	1.63
2,581	12.75	97.66	2,550	-62.24	273.48	-64.14	0.81
2,769	13.69	100.65	2,733	-68.82	315.91	-71.01	0.62
2,957	13.75	97.66	2,916	-75.61	359.92	-78.10	0.38
3,144	13.75	105.22	3,098	-84.10	403.39	-86.90	0.96
3,332	12.88	105.74	3,281	-95.37	445.12	-98.45	0.47

OPERATION DETAILS

FROM	TO	HRS	OP CODE	PHASE	CODE	ACTIVITY	DESCRIPTION
06:00	07:30	1.50	N	CASSURF	43	RRTOP	CHANGE OUT HYDRAULIC HOSE ON TOP DRIVE.
07:30	11:30	4.00	P	CASSURF	30	TSTWCEQ	TEST BOPE WITH YELLOW JACKET. 250 PSI LOW, 5,000 PSI HIGH, 5MIN EACH WITH H20. TEST ANNULAR TO 3,500 PSI. CHANGED OUT KILL LINE.
11:30	12:00	0.50	P	CASSURF	31	TESTCAS	TEST CASING TO 1,400 PSI FOR 30 MIN.
12:00	13:30	1.50	P	CASSURF	28	NUBOPE	CENTER BOP WITH ROTARY AND INSTALL FLOW LINE.
13:30	15:30	2.00	N	CASSURF	44	RRHOIST	HMI DOWN TROUBLE SHOOT SAME.
15:30	17:00	1.50	P	CASSURF	13	TRIP	MU SIDEBUILD BHA. (HES MM56D, RYAN 1.75° 7/8 5.0 FBH PDM, PC, EM, NMDC.) TIH TO 848'.
17:00	19:30	2.50	P	CASSURF	17	CUTSLIP	CUT & SLIP DRILL LINE. LEVEL RIG. CHANGE GRABBER DIES.
19:30	20:30	1.00	P	CASSURF	72	DRLCMT	WASHED TO CMT @ 935'. DRILLED CMT & FE 935'-998'.
20:30	00:30	4.00	P	DRLPRD	08	DRLDIR	DRILLED SIDEBUILD 998'-2,246' (SPUD WELL 3/12/2017 @ 20:30 HRS)
00:30	01:00	0.50	P	DRLPRD	12	RIGSVC	SERVICE RIG
01:00	01:30	0.50	N	DRLPRD	43	RRTOP	CHANGE OUT LUBE PUMP FILTER ON TOP DRIVE. ADD OIL AND CHECK LUBE PUMP.
01:30	06:00	4.50	P	DRLPRD	08	DRLDIR	DRILLED SIDEBUILD 2,246'-3,569'

Daily Operations Comments
UTILIZING DIRECTIONAL PLAN #2.

CONFIDENTIAL

Daily Drilling Report Onshore

EP ENERGY

Data shared on this report is CONFIDENTIAL

Well Name/Wellbore No.: UNIVERSITY SALT DRAW 3820KH/00

Country:	USA
State/OCSG	TEXAS
Field/Permit#:	SALT DRAW
Supervisors:	WILKERSON, JOE / JARED FAUST
Engineer/Manager:	MOTLEY, DEREK / MARES, SERGIO

Report Number:	004	API #:	4210542351
Report Date:	03/14/2017		
Spud Date:	03/12/2017		
Release Date:			
DFS: 1.39	DOL: 2	AFE Days: 8	
Last BOP T.:	03/12/2017		

Depth md/tvd (ft):	3,795.01 / 3,730.63
Progress (ft):	226.00
ROP:	226.0 / 1.00 = 226.00
Proposed TD (ft):	14,908.60
Next Csg Point (ft):	14,894.03

Rig:	NABORS DRILLING/F-34		
Rig Phone:	713-997-1205		
RKB (ft):	2,642.01		
Ground Level (ft):	2,612.0		
POB:	27	Total Man Hours:	340.00

Current Activity: TIH @ 483'

24 Hr Summary: DRILLED SIDEBUILD 3,569'-3,795'. CIRC BU AND TOOH FOR BACKED OFF MOTOR. P/U FISHING TOOLS AND TIH. LATCHED ON TO MOTOR AND BIT. TOOH AND L/D FISHING TOOLS, MOTOR AND BIT. P/U SIDEBUILD BHA. TIH.

24 Hr Forecast: TIH. DRILL SIDEBUILD TO KOP. CIRC B/U. POOH FOR CURVE BHA. P/U CURVE BHA. TIH. BUILD CURVE.

MUD PROPERTIES

Fluids Co.: HALLIBURTON
Fluids Eng: Wesley Vaughn

Time:	0:00	Oil Cnt (%):	68
Location:	JCTION TANK	H2O Cnt (%):	23
Pit Temp (°F	100	Sand Cnt (%):	0.01
Depth (ft):	3,795.01	MBT (lbm/bbl):	0.0
Density (ppg):	8.85	pH:	0.0
FV (s/qt):	63	Pm (cc):	0.0
PV (cp):	12	Pf (cc):/Mf (cc):	0.0 / 0.0
YP (lbf/100ft²):	10	Chloride (ppm):	0
Gels ():	9/11/12	Calcium (ppm):	0.00
WL (cc/30min):	14.80	LCM (lbm/bbl):	0.0
HTHP (°F):	250	ES (mV):	730.0
Cake (32nd"):	2.00	LGS (%):	5.80
Solids (lbm/bbl):	58	Ex Lime (ppb):	2.9
ECD (ppg):	8.9	OWR:	74.7 / 25.3

MUD MATERIALS

Mud Additives	Used
BARITE 41	176
TRANSPORTATION	267
MUD ENGINEER	1
BARABLOK	6
FUEL SURCHARGE	300
CALCIUM CHLORIDE PO	50
SHRINK WRAP	8
LIME	65
TAX	5,129
BAROID RIG WASH	1
FORKLIFT W/OPERATOR	1
BAROID 41	0
SWAMPER HOURS	2

MUD LOGGING

Trip Gas (units):	@	BG Gas (units):	Surf to Surf:
Conn Gas (units)	@		Lag Strokes:
Form:		Pore Pressure: (%)	Lag Time: (min)

BIT RECORD

Bit#	1	2
S/N	12856010	12871262
Size (in)	8.75	8.75
Mfg	HALLIBURTON	HALLIBURTON
IADC Type		
Model #	12871263	12871262
Jets		5X16
Depth In (ft)	998	3,795
Depth Out (ft)	3,795	
Bit Rotations	40/50	/
On Btm Hrs Cum	1.00	
Footage Cum (ft)	226	
ROP Cum	294.4	0.0
WOB mn/mx (kip)	30 / 30	/
RPM rot/bit	40 / 50	/
Bit HP	1.72	0.00
HSI	1.75	0.00
PSI Drop (psi)	302.38	0.00
Jet Vel (ft/s)	195.42	0.00
Imp Force	535.77	0.00

Grading	I	O	D	L	B	G	O	R
Bit # 1	1	2	CT	G	X	I	WT	DSF
Bit # 2								

CASING

Size(in)	MD(ft)/TVD(ft)		FIT/LOT(ppg)
14.00	70.00 /	70.00	
9.63	1,000.00 /	1,000.00	
5.50	14,894.03 /	6,653.01	

INVENTORY

Item	Inv
MUD DIESEL	9,000
DIESEL	12,034

SOLIDS CONTROL

Skr	Deck 1 Screens	Deck 2 Screens
1	100/100/100/100	
2	100/100/100/100	
3	140/100/100/100	

BHA # 3

Qty	Item Description	ID (in)	OD (in)	Len (ft)	Cum (ft)
1	MM56D		8.750	1.00	1.00
1	RYAN 6-3/4" 7/8 5.0 1.75 FBH MUD		6.750	26.26	27.26
1	PONY DC	2.875	6.500	15.11	42.37
1	MP TOOL	2.812	6.500	30.81	73.18
1	NMDC	2.875	6.500	30.08	103.26
1	CROSSOVER	2.812	6.750	3.94	107.20
3	3 DRILL COLLARS	2.875	6.500	91.98	199.18
1	CROSSOVER	2.250	6.500	3.05	202.23
	5" DP	4.276	5.000	3,592.78	3,795.01
				Total Length:	3,795.01

STRING LOADS

On Btm Torque:	9,000
Off Btm Torque:	2,000
Str. Wt. Up:	130
Str. Wt. Down:	120
Str. Wt. Rot.:	125
Max Over Pull:	

BHA PROPERTIES

BHA Hrs:	1
Jar Hrs:	
Cum String Hours:	10
Weight B Jars (kip):	

MUD PUMPS

	#1	#2	#3
Pump Type:			
Liner ID:	0.00	0.00	
SPM:	0.00	0.00	
GPM:	0.00	0.00	
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): 600 SPP (psi): 2,400
AV (DC): 474 AV (DP): 204

SURVEYS

MD (ft)	Inclination(°)	Azimuth (°)	TVD (ft)	V Section (ft)	+E/-W (ft)	+N/-S (ft)	Dog Leg (°/100ft)
2,393	12.56	90.80	2,367	-59.47	232.48	-61.08	1.63
2,581	12.75	97.66	2,550	-62.24	273.48	-64.14	0.81
2,769	13.69	100.65	2,733	-68.82	315.91	-71.01	0.62
2,957	13.75	97.66	2,916	-75.61	359.92	-78.10	0.38
3,144	13.75	105.22	3,098	-84.10	403.39	-86.90	0.96
3,332	12.88	105.74	3,281	-95.37	445.12	-98.45	0.47
3,520	13.56	111.72	3,464	-108.92	485.76	-112.29	0.81
3,708	14.13	102.58	3,646	-121.78	528.64	-125.45	1.20

OPERATION DETAILS

FROM	TO	HRS	OP CODE	PHASE	CODE	ACTIVITY	DESCRIPTION
06:00	07:00	1.00	P	DRLPRD	08	DRLDIR	DRILLED SIDEBUILD 3,569'-3,795'. WHILE DRILLING @ 3,795' THE ROTARY STALLED OUT AND THEN BACK SPUN. PRESSURE REMAINED CONSTANT.
07:00	07:30	0.50	N	DRLPRD	15	CIRC	CIRCULATE HOLE CLEAN 35' OFF BOTTOM.
07:30	11:00	3.50	N	DRLPRD	13	TRIP	POOH. POWER SECTION OF MOTOR LOST IN HOLE AND 8 3/4" MM56D SECURITY BIT. BACKED OFF AT CONNECTION 2.8' ABOVE KICK PAD. TOF @ 3,770.7'. FISH LENGTH 24.26'.
11:00	16:30	5.50	N	DRLPRD	53	FISH	CLEAN RIG FLOOR , SERVICE RIG, CALIPER & RACK BACK 3- 6 1/2" DC WHILE WAITING ON BAKER FISHING TOOLS AND TECH TO ARRIVE ON LOCATION. FISHING TOOL HAND ON LOCATION @ 16:00. HOT SHOT WITH FISHING TOOLS ON LOCATION AT 16:30 HRS.
16:30	20:00	3.50	N	DRLPRD	53	FISH	UNLOAD, LAY OUT, STRAP, & PU FISHING TOOLS (8 1/8" CUT LIP GUIDE W/6 3/4" GRAPPLE, 18' OVERSHOT EXTENSIONS,TOP SUB, CIRC SUB, BUMBER JARS, OIL JARS, X/O, 6- 6 1/2" DC, XO, DP)
20:00	22:00	2.00	N	DRLPRD	53	FISH	TIH WITH OVERSHOT SLOWLY TO 3,734'.
22:00	23:30	1.50	N	DRLPRD	53	FISH	CLEAR OVERSHOT WITH 600 GPM & CBU. WASHED 3,734' TO 3,788'. PUMP PRESSURE INCREASE OBSERVED. KILL PUMP AND SET 20K DOWN ON FISH. OBSERVED THE WEIGHT DROP AS OVERSHOT SLIPPED OVER FISH. SET 70K DOWN ON FISH. PU FROM 150K TO 170K IN 10K INCREAMENTS TO LET OIL JARS SLOWLY BLEED DOWN. PU TO 180K AND OBSERVED FISH PULL FREE W/10K EXCESS DRAG.
23:30	04:30	5.00	N	DRLPRD	53	FISH	POOH SLOWLY W/FISH. RECOVERED ALL OF THE FISH, BREAK OFF BIT & LD OVERSHOT WITH FISH TO BE BROKE DOWN IN BAKER SHOP. LD ALL FISHING TOOLS FROM RIG FLOOR.
04:30	05:30	1.00	N	DRLPRD	13	TRIP	P/U SIDE BUILD BHA. (HES MM56D, RYAN 1.75° 7/8 5.0 FBH PDM, PC, MP, NMDC.)
05:30	06:00	0.50	N	DRLPRD	13	TRIP	TIH WITH SIDEBUILD BHA @ 483'

Daily Operations Comments
UTILIZING DIRECTIONAL PLAN #2.

CONFIDENTIAL

Daily Drilling Report Onshore

EP ENERGY

Data shared on this report is CONFIDENTIAL

Well Name/Wellbore No.: UNIVERSITY SALT DRAW 3820KH/00

Country:	USA
State/OCSG	TEXAS
Field/Permit#:	SALT DRAW
Supervisors:	WILKERSON, JOE / JARED FAUST
Engineer/Manager:	MOTLEY, DEREK / MARES, SERGIO

Report Number:	005	API #:	4210542351
Report Date:	03/15/2017		
Spud Date:	03/12/2017		
Release Date:			
DFS: 2.39	DOL: 3	AFE Days: 8	
Last BOP T.:	03/12/2017		

Depth md/tvd (ft):	5,169.01 / 5,073.05
Progress (ft):	1,374.00
ROP:	1,374.0 / 7.50 = 183.20
Proposed TD (ft):	14,908.60
Next Csg Point (ft):	14,894.03

Rig:	NABORS DRILLING/F-34
Rig Phone:	713-997-1205
RKB (ft):	2,642.01
Ground Level (ft):	2,612.0
POB: 26	Total Man Hours: 328.00

Current Activity:	DRILLING SIDEBUILD @ 5,169 '(PTB INC 7.5°, AZM 102°, A-10.8', R-0.2')
24 Hr Summary:	TIH WITH SIDEBUILD BHA. DRILL SIDEBUILD 3,795'-3,846'. TOP DRIVE SPUN IN REVERSE WHILE DRILLING. TOOH TO INSPECT BHA & TROUBLESHOOT TOP DRIVE WITH CANRIG. P/U SIDEBUILD BHA & TIH CHECKING TQ ON ALL CONNECTIONS. DRILL SIDEBUILD 3846'-5,169'
24 Hr Forecast:	DRILL SIDEBUILD TO KOP. CIRC B/U & TOOH FOR CURVE BHA. TIH. BUILD CURVE. TOOH FOR LATERAL BHA.

MUD PROPERTIES

Fluids Co.: HALLIBURTON
Fluids Eng: Wesley Vaughn

Time:	0:00	Oil Cnt (%):	68
Location:	JCTION TANK	H2O Cnt (%):	23
Pit Temp (°F	100	Sand Cnt (%):	0.01
Depth (ft):	3,846.01	MBT (lbm/bbl):	0.0
Density (ppg):	8.90	pH:	0.0
FV (s/qt):	64	Pm (cc):	0.0
PV (cp):	12	Pf (cc):/Mf (cc):	0.0 / 0.0
YP (lbf/100ft²):	10	Chloride (ppm):	0
Gels ():	9/11/12	Calcium (ppm):	0.00
WL (cc/30min):	14.80	LCM (lbm/bbl):	0.0
HTHP (°F):	250	ES (mV):	732.0
Cake (32nd"):	2.00	LGS (%):	5.40
Solids (lbm/bbl):	60	Ex Lime (ppb):	2.7
ECD (ppg):	8.9	OWR:	74.7 / 25.3

MUD MATERIALS

Mud Additives	Used
MUD ENGINEER	1

BIT RECORD

Bit#	2	2
S/N	12871262	12871262
Size (in)	8.75	8.75
Mfg	HALLIBURTON	HALLIBURTON
IADC Type		
Model #	12871262	12871262
Jets	5X16	5X16
Depth In (ft)	3,795	3,846
Depth Out (ft)	3,846	
Bit Rotations	40/40	40/40
On Btm Hrs Cum	0.50	7.00
Footage Cum (ft)	51	1,323
ROP Cum	102.0	189.0
WOB mn/mx (kip)	10 / 25	20 / 25
RPM rot/bit	40 / 40	40 / 40
Bit HP	1.74	1.73
HSI	1.78	1.76
PSI Drop (psi)	306.16	304.09
Jet Vel (ft/s)	196.08	195.42
Imp Force	540.63	538.80

Grading	I	O	D	L	B	G	O	R
Bit # 2	0	0	NO	A	X	I	NO	BHA
Bit # 2								

CASING

Size(in)	MD(ft)/TVD(ft)		FIT/LOT(ppg)
14.00	70.00 /	70.00	
9.63	1,000.00 /	1,000.00	
5.50	14,894.03 /	6,653.01	

INVENTORY

Item	Inv
DIESEL	11,201
MUD DIESEL	8,000

SOLIDS CONTROL

Skr	Deck 1 Screens	Deck 2 Screens
1	100/100/100/100	
2	100/100/100/100	
3	140/100/100/100	

MUD LOGGING

Trip Gas (units):	@	BG Gas (units):	Surf to Surf:
Conn Gas (units)	@		Lag Strokes:
Form:		Pore Pressure: (%)	Lag Time: (min)

BHA # 4

Qty	Item Description	ID (in)	OD (in)	Len (ft)	Cum (ft)
1	MM56D		8.750	1.00	1.00
1	RYAN 6-3/4" 6/7 5.0 1.75 FBH MUD		6.750	25.79	26.79
1	PONY DC	2.875	6.500	15.11	41.90
1	EM TOOL	2.875	6.625	26.26	68.16
1	NMDC	2.875	6.500	30.08	98.24
1	CROSSOVER	2.812	6.750	3.94	102.18
3	3 DRILL COLLARS	2.875	6.500	91.98	194.16
1	CROSSOVER	2.250	6.500	3.05	197.21
	5" DP	4.276	5.000	4,971.80	5,169.01
				Total Length:	5,169.01

STRING LOADS

On Btm Torque:	8,000
Off Btm Torque:	2,500
Str. Wt. Up:	135
Str. Wt. Down:	125
Str. Wt. Rot.:	130
Max Over Pull:	

BHA PROPERTIES

BHA Hrs:	1
Jar Hrs:	
Cum String Hours:	1
Weight B Jars (kip):	

MUD PUMPS

	#1	#2	#3
Pump Type:	DR	DR	
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): 600 SPP (psi): 2,800
AV (DC): 474 AV (DP): 204

SURVEYS

MD (ft)	Inclination(°)	Azimuth (°)	TVD (ft)	V Section (ft)	+E/-W (ft)	+N/-S (ft)	Dog Leg (°/100ft)
3,520	13.56	111.72	3,464	-108.92	485.76	-112.29	0.81
3,708	14.13	102.58	3,646	-121.78	528.64	-125.45	1.20
3,895	9.56	94.49	3,829	-127.71	566.42	-131.64	2.59
4,083	12.94	105.04	4,014	-134.15	602.33	-138.32	2.10
4,271	13.06	100.65	4,197	-143.25	643.53	-147.71	0.53
4,458	12.81	106.80	4,379	-152.87	684.14	-157.61	0.75
4,646	13.81	102.93	4,562	-163.62	725.97	-168.65	0.71
4,834	11.94	98.19	4,745	-171.13	767.09	-176.45	1.14

OPERATION DETAILS

FROM	TO	HRS	OP CODE	PHASE	CODE	ACTIVITY	DESCRIPTION
06:00	08:30	2.50	N	DRLPRD	13	TRIP	TIH W/SIDEBUILD BHA TO 3,579'. WASHED SLOWLY TO BOTTOM @ 3,795'.
08:30	09:00	0.50	P	DRLPRD	08	DRLDIR	DRILLED SIDE BUILD 3,795'-3,846'. TOP DRIVE SPUN IN REVERSE. SHUT DOWN PUMP. SET 10K WOB & TURN TO THE RIGHT. BRING PUMPS ONLINE. PUMP PRESSURE NORMAL.
09:00	12:30	3.50	N	DRLPRD	43	RRTOP	POOH TO INSPECT MOTOR AND REPAIR RIG. MOTOR APPEARED TO BE TORQUED AT ALL CONNECTIONS. LD ALL DIRECTIONAL TOOLS.
12:30	19:00	6.50	N	DRLPRD	43	RRTOP	CANRIG TROUBLE SHOOTING TOP DRIVE.
19:00	20:00	1.00	N	DRLPRD	13	TRIP	M/U SIDEBUILD BHA (HES MM56D, RYAN 1.75° 6/7 5.0 FBH PDM, PC, EM, NMDC.)
20:00	23:00	3.00	N	DRLPRD	13	TRIP	TIH CHECKING TQ ON ALL CONNECTIONS IN DRILLSTRING.
23:00	06:00	7.00	P	DRLPRD	08	DRLDIR	DRILL SIDEBUILD 3,846'-5,169'.

Daily Operations Comments
UTILIZING DIRECTIONAL PLAN #2.

CONFIDENTIAL

Daily Drilling Report Onshore

EP ENERGY

Data shared on this report is CONFIDENTIAL

Well Name/Wellbore No.: UNIVERSITY SALT DRAW 3820KH/00

Country:	USA
State/OCSG	TEXAS
Field/Permit#:	SALT DRAW
Supervisors:	JOHNSON,DUSTY / PANNELL,CHARLE
Engineer/Manager:	MOTLEY, DEREK / MARES, SERGIO

Report Number:	006	API #:	4210542351
Report Date:	03/16/2017		
Spud Date:	03/12/2017		
Release Date:			
DFS: 3.39	DOL: 4		AFE Days: 8
Last BOP T.:	03/12/2017		

Depth md/tvd (ft):	6,757.01 / 6,517.88
Progress (ft):	1,588.00
ROP:	1,588.0 / 12.50 = 127.04
Proposed TD (ft):	14,908.60
Next Csg Point (ft):	14,894.03

Rig:	NABORS DRILLING/F-34
Rig Phone:	713-997-1205
RKB (ft):	2,642.01
Ground Level (ft):	2,612.0
POB:	25
Total Man Hours:	310.00

Current Activity: TOOH FOR LATERAL BHA @ 5,000'. PTB: 82º, 4.67º AZ, 13.3' A, 8.6' R

24 Hr Summary: DRILL SIDEBUILD TO KOP (6,185'). CIRC B/U & TOOH FOR CURVE BHA. TIH. DRILL CURVE. F/ 6,185'- 6,757', CIRCULATE HOLE CLEAN AND PUMP SLUG, TOOH FOR LATERAL BHA

24 Hr Forecast: TOOH FOR LATERAL BHA., DRILL LATERAL

MUD PROPERTIES

Fluids Co.: HALLIBURTON
Fluids Eng: Michael Burkett

Time:	0:00	Oil Cnt (%):	71
Location:	JCTION TANK	H2O Cnt (%):	21
Pit Temp (°F	112	Sand Cnt (%):	0.01
Depth (ft):	6,195.01	MBT (lbm/bbl):	0.0
Density (ppg):	8.75	pH:	0.0
FV (s/qt):	53	Pm (cc):	0.0
PV (cp):	10	Pf (cc):/Mf (cc):	0.0 / 0.0
YP (lbf/100ft²):	10	Chloride (ppm):	0
Gels ():	8/10/12	Calcium (ppm):	0.00
WL (cc/30min):	14.80	LCM (lbm/bbl):	0.0
HTHP (°F):	250	ES (mV):	455.0
Cake (32nd"):	2.00	LGS (%):	4.40
Solids (lbm/bbl):	40	Ex Lime (ppb):	3.4
ECD (ppg):	9.0	OWR:	77.2 / 22.8

MUD MATERIALS

Mud Additives	Used
INVERMUL	1
GELTONE	11
TRANSPORTATION	358
FUEL SURCHARGE	300
MUD ENGINEER	1
BARABLOK	8
DRIL-TREAT	2
TAX	3,255
SHRINK WRAP	11
Adapta	3

BIT RECORD

Bit#	2	3
S/N	12871262	5265547
Size (in)	8.75	8.75
Mfg	HALLIBURTON	BAKER
IADC Type		
Model #	12871262	VG20M
Jets	5X16	3X18
Depth In (ft)	3,846	6,185
Depth Out (ft)	6,185	
Bit Rotations	40/40	0/20
On Btm Hrs Cum	4.50	8.00
Footage Cum (ft)	1,016	572
ROP Cum	203.4	71.5
WOB mn/mx (kip)	20 / 25	25 / 58
RPM rot/bit	40 / 40	0 / 20
Bit HP	1.81	2.39
HSI	1.85	3.20
PSI Drop (psi)	311.68	540.50
Jet Vel (ft/s)	199.53	262.76
Imp Force	552.26	727.26

Grading	I	O	D	L	B	G	O	R
Bit # 2								
Bit # 3								

CASING

Size(in)	MD(ft)/TVD(ft)		FIT/LOT(ppg)
14.00	70.00 /	70.00	
9.63	1,000.00 /	1,000.00	
5.50	14,894.03 /	6,653.01	

INVENTORY

Item	Inv
DIESEL	12,243
MUD DIESEL	9,450

SOLIDS CONTROL

Skr	Deck 1 Screens	Deck 2 Screens
1	100/100/100/100	
2	100/100/100/100	
3	140/100/100/100	

MUD LOGGING

Trip Gas (units):	@	BG Gas (units):		Surf to Surf:	
Conn Gas (units)	@			Lag Strokes:	
Form:		Pore Pressure:	(%)	Lag Time:	(min)

BHA # 5

Qty	Item Description	ID (in)	OD (in)	Len (ft)	Cum (ft)
1	INSERT BIT		8.750	1.00	1.00
1	2.25º 4/5 7.0 STG SLICK MOTOR. B		6.687	27.12	28.12
1	PONY COLLAR	3.250	6.750	15.11	43.23
1	EM TOOL	2.750	6.625	26.26	69.49
1	NMDC	3.250	6.500	30.08	99.57
213	5" S-135	4.276	5.000	6,657.44	6,757.01
				Total Length:	6,757.01

STRING LOADS

On Btm Torque:	10,000
Off Btm Torque:	3,000
Str. Wt. Up:	155
Str. Wt. Down:	145
Str. Wt. Rot.:	150
Max Over Pull:	

BHA PROPERTIES

BHA Hrs:	5
Jar Hrs:	
Cum String Hours:	12
Weight B Jars (kip):	

MUD PUMPS

	#1	#2	#3
Pump Type:	DR	DR	
Liner ID:	5.50	5.50	
SPM:	85.00	85.00	
GPM:	305.28	305.28	
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): 600 SPP (psi): 2,900
AV (DC): 426 AV (DP): 284

SURVEYS

MD (ft)	Inclination(°)	Azimuth (°)	TVD (ft)	V Section (ft)	+E/-W (ft)	+N/-S (ft)	Dog Leg (°/100ft)
5,960	1.31	98.71	5,866	-177.91	864.72	-183.90	0.46
6,131	0.88	112.42	6,037	-178.69	867.87	-184.70	0.29
6,236	6.88	1.33	6,141	-172.69	868.76	-178.71	6.90
6,330	20.13	2.03	6,233	-150.80	869.47	-156.82	14.10
6,424	30.25	3.44	6,318	-110.88	871.47	-116.92	10.78
6,518	40.69	4.32	6,394	-56.52	875.21	-62.58	11.12
6,611	53.31	359.04	6,457	11.31	876.87	5.24	14.18
6,705	71.13	4.67	6,501	94.05	879.89	87.97	19.67

OPERATION DETAILS

FROM	TO	HRS	OP CODE	PHASE	CODE	ACTIVITY	DESCRIPTION
06:00	09:00	3.00	P	DRLPRD	07	DRLVERT	DRILL SIDE BUILD F/ 5,169' - 5,715'. (546' @ 182 FPH)
09:00	09:30	0.50	N	DRLPRD	43	RRTOP	TROUBLE SHOOT TOP DRIVE. LUBE PUMP INTERMITENTLY SHUTTING DOWN CAUSING TOP DRIVE TO SHUT DOWN.
09:30	11:00	1.50	P	DRLPRD	07	DRLVERT	DRILL SIDE BUILD F/ 5,715' - 6,185'. 470' @ 313.3 FPH)
11:00	11:30	0.50	P	DRLPRD	15	CIRC	CIRC. HOLE CLEAN @ 635 GPM & 85 RPM. FLOW CHECK
11:30	14:00	2.50	P	DRLPRD	13	TRIP	POOH & LD SIDE BUILD BHA.
14:00	19:30	5.50	P	DRLPRD	13	TRIP	PU CURVE BHA (RYAN 2.25° 4/5 7.0 FBH PDM) & TIH. FILL DP E/30 STANDS.
19:30	03:30	8.00	P	DRLPRD	09	DRLCRV	DRILL CURVE F/ 6,185' - 6,757'. MOTOR STARTED THROWING RUBBER @ 6,550' CAUSING DIFFERENTIAL PRESSURE TO INCREASE F/ 700 PSI TO 1,000 PSI. OFF BOTTOM PRESSURE INCREASED F/ 2,115 PSI TO 2,600 PSI. DRILL FROM 6,615' - 6,757' WITH 300 PSI DIFFERENTIAL PRESSURE. LAST SURVEY; 71.13º, 4.67 AZ. PTB; 82º, 13.3' A, 8.6' R
03:30	04:00	0.50	P	DRLPRD	15	CIRC	CIRCULATE HOLE CLEAN AND PUMP SLUG.
04:00	06:00	2.00	P	DRLPRD	13	TRIP	POOH FOR LATERAL BHA @ 5,000'

Daily Operations Comments
UTILIZING DIRECTIONAL PLAN #2.

CONFIDENTIAL

Daily Drilling Report Onshore

EP ENERGY

Data shared on this report is CONFIDENTIAL

Well Name/Wellbore No.: UNIVERSITY SALT DRAW 3820KH/00

Country:	USA
State/OCSG	TEXAS
Field/Permit#:	SALT DRAW
Supervisors:	JOHNSON,DUSTY / PANNELL,CHARLE
Engineer/Manager:	MOTLEY, DEREK / MARES, SERGIO

Report Number:	007	API #:	4210542351
Report Date:	03/17/2017		
Spud Date:	03/12/2017		
Release Date:			
DFS: 4.39	DOL: 5		AFE Days: 8
Last BOP T.:	03/12/2017		

Depth md/tvd (ft):	11,000.02 / 6,579.20
Progress (ft):	4,243.01
ROP:	4,243.0 / 17.00 = 249.59
Proposed TD (ft):	14,908.60
Next Csg Point (ft):	14,894.03

Rig:	NABORS DRILLING/F-34
Rig Phone:	713-997-1205
RKB (ft):	2,642.01
Ground Level (ft):	2,612.0
POB:	25
Total Man Hours:	310.00

Current Activity: DRILLING LATERAL @ 11,000. PTB; 89.13º, 2.74º AZ, 6.5' A, 13.0' R

24 Hr Summary: FINSIH TOOH FOR LATERAL BHA.,DRILL CURVE F/ 6,757' - 6,914'. DRILL LATERAL F/ 6,914' - 11,000'

24 Hr Forecast: DRILL LATERAL TO TD. CIRC HOLE CLEAN

MUD PROPERTIES

Fluids Co.: HALLIBURTON
Fluids Eng: Michael Burkett

Time:	0:00	Oil Cnt (%):	71
Location:	JCTION TANK	H2O Cnt (%):	21
Pit Temp (°F	114	Sand Cnt (%):	0.01
Depth (ft):	8,624.02	MBT (lbm/bbl):	0.0
Density (ppg):	8.80	pH:	0.0
FV (s/qt):	53	Pm (cc):	0.0
PV (cp):	15	Pf (cc):/Mf (cc):	0.0 / 0.0
YP (lbf/100ft²):	11	Chloride (ppm):	0
Gels ():	10/13/18	Calcium (ppm):	0.00
WL (cc/30min):	9.60	LCM (lbm/bbl):	0.0
HTHP (°F):	250	ES (mV):	668.0
Cake (32nd"):	2.00	LGS (%):	4.00
Solids (lbm/bbl):	36	Ex Lime (ppb):	2.7
ECD (ppg):	9.3	OWR:	77.2 / 22.8

MUD MATERIALS

Mud Additives	Used
RM-63	1
LIME	20
GELTONE	12
BARITE 41	240
MUD ENGINEER	1
BARABLOK	16
CALCIUM CHLORIDE PO	38
SUSPENTONE	7
Factant	1
TAX	7,874

MUD LOGGING

Trip Gas (units):	@	BG Gas (units):		Surf to Surf:	
Conn Gas (units)	@			Lag Strokes:	
Form:		Pore Pressure:	(%)	Lag Time:	(min)

BIT RECORD

Bit#		4
S/N		32512
Size (in)		8.50
Mfg		BAKER
IADC Type		
Model #		T606X
Jets	3X18	7X20
Depth In (ft)		6,757
Depth Out (ft)		
Bit Rotations		167/70
On Btm Hrs Cum		17.00
Footage Cum (ft)		4,243
ROP Cum		249.6
WOB mn/mx (kip)	/	30 / 45
RPM rot/bit	/	167 / 70
Bit HP		0.88
HSI		0.41
PSI Drop (psi)		65.51
Jet Vel (ft/s)		91.21
Imp Force		253.90

Grading	I	O	D	L	B	G	O	R
Bit #								
Bit # 4								

CASING

Size(in)	MD(ft)/TVD(ft)		FIT/LOT(ppg)
14.00	70.00 /	70.00	
9.63	1,000.00 /	1,000.00	
5.50	14,894.03 /	6,653.01	

INVENTORY

Item	Inv
DIESEL	15,072
MUD DIESEL	9,779

SOLIDS CONTROL

Skr	Deck 1 Screens	Deck 2 Screens
1	100/100/100/100	
2	100/100/100/100	
3	140/100/100/100	

BHA # 6

Qty	Item Description	ID (in)	OD (in)	Len (ft)	Cum (ft)
1	BAKER T 606X 6-22'S		8.500	1.00	1.00
1	RYAN 1.75° 7/8 5.0 STG FBH (BTS		6.750	25.76	26.76
1	PONY DC	2.875	6.500	15.11	41.87
1	EM TOOL	2.812	6.500	26.26	68.13
1	NMDC	2.875	6.500	30.08	98.21
90	5" D.P.	4.276	5.000	2,814.11	2,912.32
1	AGITATOR	2.500	6.750	11.96	2,924.28
1	SHOCK SUB	2.500	6.750	12.96	2,937.24
504	5" DP	4.276	5.000	8,062.79	11,000.02
				Total Length:	11,000.02

STRING LOADS

On Btm Torque:	17,500
Off Btm Torque:	6,000
Str. Wt. Up:	245
Str. Wt. Down:	185
Str. Wt. Rot.:	212
Max Over Pull:	

BHA PROPERTIES

BHA Hrs:	17
Jar Hrs:	
Cum String Hours:	17
Weight B Jars (kip):	

MUD PUMPS

	#1	#2	#3
Pump Type:	DR	DR	
Liner ID:	5.50	5.50	
SPM:	85.00	85.00	
GPM:	305.28	305.28	
SPR:			
1 SPM:	70.00	70.00	
Pressure:	715.00	680.00	
2 SPM:	50.00	50.00	
Pressure:	495.00	480.00	

T GPM (gpm): 251 SPP (psi): 4,030

AV (DC): 489 AV (DP): 310

SURVEYS

MD (ft)	Inclination(°)	Azimuth (°)	TVD (ft)	V Section (ft)	+E/-W (ft)	+N/-S (ft)	Dog Leg (°/100ft)
10,107	88.50	2.56	6,580	3,490.31	875.46	3,484.33	3.02
10,200	89.31	2.03	6,582	3,583.24	879.19	3,577.24	1.04
10,294	91.00	2.21	6,582	3,677.19	882.67	3,671.17	1.81
10,388	88.13	2.21	6,583	3,771.14	886.29	3,765.09	3.05
10,482	88.25	1.33	6,586	3,865.06	889.19	3,859.00	0.94
10,576	90.13	2.91	6,587	3,959.00	892.67	3,952.92	2.61
10,670	91.00	3.79	6,586	4,052.87	898.16	4,046.75	1.32
10,763	91.19	2.74	6,584	4,145.74	903.46	4,139.58	1.15

OPERATION DETAILS

FROM	TO	HRS	OP CODE	PHASE	CODE	ACTIVITY	DESCRIPTION
06:00	08:30	2.50	P	DRLPRD	13	TRIP	TOH WITH CURVE ASSEMBLY. L/D BIT & MOTOR.
08:30	09:00	0.50	P	DRLPRD	13	TRIP	CLEAN RIG FLOOR
09:00	12:30	3.50	P	DRLPRD	13	TRIP	P/U LATERAL ASSEMBLY & TIH. WITH 30 STANDS. PICK UP AGITATOR & TIH TO 6,757'.
12:30	14:00	1.50	P	DRLPRD	09	DRLCRV	DRILL CURVE F/ 6,757' - 6,914'. 85 deg. = 6,914' md / 6,532 tvd.
14:00	14:30	0.50	P	DRLPRD	12	RIGSVC	SERVICE RIG & TOP DRIVE
14:30	06:00	15.50	P	DRLPRD	10	DRLLAT	DRILL LATERAL F/ 6,914' - 11,000'

Daily Operations Comments

UTILIZING DIRECTIONAL PLAN #2. 85º @ 6,914'

CONFIDENTIAL

Daily Drilling Report Onshore

EP ENERGY

Data shared on this report is CONFIDENTIAL

Well Name/Wellbore No.: UNIVERSITY SALT DRAW 3820KH/00
Country: USA
State/OCSG: TEXAS
Field/Permit#: SALT DRAW
Supervisors: JOHNSON,DUSTY / PANNELL,CHARLE
Engineer/Manager: MOTLEY, DEREK / MARES, SERGIO

Report Number: 008 API #: 4210542351
Report Date: 03/18/2017
Spud Date: 03/12/2017
Release Date:
DFS: 5.39 DOL: 6 AFE Days: 8
Last BOP T.: 03/12/2017

Depth md/tvd (ft): 14,886.03 / 6,645.12
Progress (ft): 3,886.01
ROP: 3,886.0 / 16.00 = 242.88
Proposed TD (ft): 14,908.60
Next Csg Point (ft): 14,880.03

Rig: NABORS DRILLING/F-34
Rig Phone: 713-997-1205
RKB (ft): 2,642.01
Ground Level (ft): 2,612.0
POB: 25 Total Man Hours: 308.00

Current Activity: TOOH FOR PRODUCTION CASING @ 7,000'
24 Hr Summary: DRILL LATERAL TO TD; 14,886' / 6,645' TVD, CIRCULATE HOLE CLEAN, TOOH FOR PRODUCTION CASING. CURRENT DEPTH 7,000'
24 Hr Forecast: FINISH TOOH & L/D BHA. RUN & CEMENT 5 1/2" PRODUCTION CASING.

MUD PROPERTIES

Fluids Co.: HALLIBURTON
Fluids Eng: Michael Burkett

Time:	0:00	Oil Cnt (%):	72
Location:	JCTION TANK	H2O Cnt (%):	20
Pit Temp (°F	129	Sand Cnt (%):	0.01
Depth (ft):	14,537.03	MBT (lbm/bbl):	0.0
Density (ppg):	8.85	pH:	0.0
FV (s/qt):	55	Pm (cc):	0.0
PV (cp):	16	Pf (cc):/Mf (cc):	0.0 / 0.0
YP (lbf/100ft²):	15	Chloride (ppm):	0
Gels ():	13/17/24	Calcium (ppm):	0.00
WL (cc/30min):	6.40	LCM (lbm/bbl):	0.0
HTHP (°F):	250	ES (mV):	688.0
Cake (32nd"):	2.00	LGS (%):	3.60
Solids (lbm/bbl):	33	Ex Lime (ppb):	3.1
ECD (ppg):	9.8	OWR:	78.3 / 21.7

MUD MATERIALS

Mud Additives	Used
LIME	52
CALCIUM CHLORIDE PO	86
BARABLOK	21
TAX	2,677
MUD ENGINEER	1

MUD LOGGING

Trip Gas (units):	@	BG Gas (units):	Surf to Surf:
Conn Gas (units)	@		Lag Strokes:
Form:		Pore Pressure: (%)	Lag Time: (min)

BIT RECORD

Bit#		4
S/N		32512
Size (in)		8.50
Mfg		BAKER
IADC Type		
Model #		T606X
Jets		7X20
Depth In (ft)		6,757
Depth Out (ft)		
Bit Rotations		70/70
On Btm Hrs Cum		33.00
Footage Cum (ft)		8,129
ROP Cum		246.3
WOB mn/mx (kip)	/	38 / 42
RPM rot/bit	/	70 / 70
Bit HP		0.06
HSI		0.03
PSI Drop (psi)		11.17
Jet Vel (ft/s)		37.56
Imp Force		43.29

Grading: I O D L B G O R
Bit #
Bit # 4

CASING

Size(in)	MD(ft)/TVD(ft)		FIT/LOT(ppg)
14.00	70.00 /	70.00	
9.63	1,000.00 /	1,000.00	
5.50	14,880.03 /	6,645.01	

INVENTORY

Item	Inv
DIESEL	14,876
MUD DIESEL	9,500

SOLIDS CONTROL

Skr	Deck 1 Screens	Deck 2 Screens
1	100/100/100/100	
2	100/100/100/100	
3	140/100/100/100	

BHA # 6

Qty	Item Description	ID (in)	OD (in)	Len (ft)	Cum (ft)
1	BAKER T 606X 6-22'S		8.500	1.00	1.00
1	RYAN 1.75° 7/8 5.0 STG FBH (BTS		6.750	25.76	26.76
1	PONY DC	2.875	6.500	15.11	41.87
1	EM TOOL	2.812	6.500	26.26	68.13
1	NMDC	2.875	6.500	30.08	98.21
90	5" D.P.	4.276	5.000	2,814.11	2,912.32
1	AGITATOR	2.500	6.750	11.96	2,924.28
1	SHOCK SUB	2.500	6.750	12.96	2,937.24
382	5" DP	4.276	5.000	11,948.79	14,886.03
				Total Length:	14,886.03

STRING LOADS

On Btm Torque:	12,500
Off Btm Torque:	6,000
Str. Wt. Up:	225
Str. Wt. Down:	120
Str. Wt. Rot.:	177
Max Over Pull:	

BHA PROPERTIES

BHA Hrs:	16
Jar Hrs:	
Cum String Hours:	36
Weight B Jars (kip):	

MUD PUMPS

	#1	#2	#3
Pump Type:	DR	DR	
Liner ID:	5.50	5.50	
SPM:	85.00	85.00	
GPM:	305.28	305.28	
SPR:			
1 SPM:	70.00	50.00	
Pressure:	820.00	575.00	
2 SPM:	50.00	70.00	
Pressure:	579.00	790.00	

T GPM (gpm): 600 SPP (psi): 4,300
AV (DC): 489 AV (DP): 310

SURVEYS

MD (ft)	Inclination(°)	Azimuth (°)	TVD (ft)	V Section (ft)	+E/-W (ft)	+N/-S (ft)	Dog Leg (°/100ft)
14,140	90.75	0.28	6,628	7,518.12	899.59	7,512.07	1.70
14,234	86.31	1.68	6,630	7,612.06	901.19	7,606.00	4.95
14,327	86.88	2.21	6,636	7,704.86	904.34	7,698.78	0.84
14,421	88.75	3.09	6,640	7,798.71	908.69	7,792.61	2.20
14,515	89.38	2.74	6,641	7,892.61	913.46	7,886.47	0.77
14,609	89.88	2.21	6,642	7,986.54	917.52	7,980.38	0.78
14,703	91.38	1.51	6,641	8,080.50	920.57	8,074.32	1.76
14,797	87.63	356.58	6,641	8,174.43	919.01	8,168.26	6.59

OPERATION DETAILS

FROM	TO	HRS	OP CODE	PHASE	CODE	ACTIVITY	DESCRIPTION
06:00	11:30	5.50	P	DRLPRD	10	DRLLAT	DRILL LATERAL F/ 11,000' - 12,514'. 1,514' @ 275.2 FPH
11:30	12:00	0.50	P	DRLPRD	12	RIGSVC	SERVICE RIG & TOP DRIVE
12:00	22:30	10.50	P	DRLPRD	10	DRLLAT	DRILL LATERAL F/ 12,514' - 14,886'. -- FINAL TVD 6,645.08', N/S 8257, E/W 913.70. VS 8,262.59'. PTB 87.63º, 356.58º AZ, 10.6' B, 12.5' L.
22:30	01:30	3.00	P	DRLPRD	15	CIRC	CIRCULATE HOLE CLEAN WHILE RECIPROCATING PIPE
01:30	02:00	0.50	P	DRLPRD	13	TRIP	TOOH TO 13,850.
02:00	03:00	1.00	N	DRLPRD	47	RROTHR	LOST ELECTRICAL POWER. RESTART GENERATORS; GENERATOR #1 IS DOWN; ELECTRICIAN IS ON THE WAY.
03:00	06:00	3.00	P	DRLPRD	13	TRIP	POOH. CURRENT DEPTH 7,000'

Daily Operations Comments
UTILIZING DIRECTIONAL PLAN #2. 85º @ 6,914'

CONFIDENTIAL

Daily Drilling Report Onshore

EP ENERGY

Data shared on this report is CONFIDENTIAL

Well Name/Wellbore No.: UNIVERSITY SALT DRAW 3820KH/00
Country: USA
State/OCSG: TEXAS
Field/Permit#: SALT DRAW
Supervisors: JOHNSON,DUSTY / PANNELL,CHARLE
Engineer/Manager: MOTLEY, DEREK / MARES, SERGIO

Report Number: 009 API #: 4210542351
Report Date: 03/19/2017
Spud Date: 03/12/2017
Release Date:
DFS: 6.39 DOL: 7 AFE Days: 8
Last BOP T.: 03/12/2017

Depth md/tvd (ft): 14,886.03 / 6,645.12
Progress:
ROP: / = 0.00
Proposed TD (ft): 14,908.60
Next Csg Point (ft): 14,868.03

Rig: NABORS DRILLING/F-34
Rig Phone: 713-997-1205
RKB (ft): 2,642.01
Ground Level (ft): 2,612.0
POB: 36 Total Man Hours: 422.00

Current Activity: NIPPLING DOWN BOPS
24 Hr Summary: FINISH TOOH & L/D BHA. RU&R 5 1/2" 17# HCP-110 PRODUCTION CSG TO 14,868' CIRC HOLE CLEAN, CEMENT 5 1/2" PRODUCTION CASING @ 14,868'
24 Hr Forecast: N/D & RAISE BOPS, SET SLIPS ON 5 1/2" CASING, CUT EXCESSS CASING. N/UP WEATHERFORD 11" 5M TA CAP.

MUD PROPERTIES

Fluids Co.: HALLIBURTON
Fluids Eng: Michael Burkett

Time:	0:00	Oil Cnt (%):	73
Location:	JCTION TANK	H2O Cnt (%):	19
Pit Temp (°F	129	Sand Cnt (%):	0.01
Depth (ft):	14,886.03	MBT (lbm/bbl):	0.0
Density (ppg):	8.85	pH:	0.0
FV (s/qt):	56	Pm (cc):	0.0
PV (cp):	15	Pf (cc):/Mf (cc):	0.0 / 0.0
YP (lbf/100ft²):	13	Chloride (ppm):	0
Gels ():	12/16/21	Calcium (ppm):	0.00
WL (cc/30min):	6.00	LCM (lbm/bbl):	0.0
HTHP (°F):	250	ES (mV):	718.0
Cake (32nd"):	2.00	LGS (%):	3.60
Solids (lbm/bbl):	33	Ex Lime (ppb):	3.0
ECD (ppg):	8.9	OWR:	79.3 / 20.7

MUD MATERIALS

Mud Additives	Used
LIME	32
OIL ABSORBANT	6
TAX	504
CALCIUM CHLORIDE PO	8
MUD ENGINEER	1
BARABLOK	2

BIT RECORD

Bit#		
S/N		
Size (in)		
Mfg		
IADC Type		
Model #		
Jets		7X20
Depth In (ft)		
Depth Out (ft)		
Bit Rotations		
On Btm Hrs Cum		
Footage Cum (ft)		
ROP Cum		
WOB mn/mx (kip)	/	/
RPM rot/bit	/	/
Bit HP		
HSI		
PSI Drop (psi)		
Jet Vel (ft/s)		
Imp Force		

Grading: I O D L B G O R
Bit #
Bit #

CASING

Size(in)	MD(ft)/TVD(ft)	FIT/LOT(ppg)
14.00	70.00 / 70.00	
9.63	1,000.00 / 1,000.00	
5.50	14,868.03 / 6,645.01	

INVENTORY

Item	Inv
DIESEL	13,678
MUD DIESEL	6,300

SOLIDS CONTROL

Skr	Deck 1 Screens	Deck 2 Screens
1	100/100/100/100	
2	100/100/100/100	
3	140/100/100/100	

MUD LOGGING

Trip Gas (units): @
Conn Gas (units) @
Form:
BG Gas (units):
Pore Pressure: (%)
Surf to Surf:
Lag Strokes:
Lag Time: (min)

BHA # 6

Qty	Item Description	ID (in)	OD (in)	Len (ft)	Cum (ft)
1	BAKER T 606X 6-22'S		8.500	1.00	1.00
1	RYAN 1.75° 7/8 5.0 STG FBH (BTS		6.750	25.76	26.76
1	PONY DC	2.875	6.500	15.11	41.87
1	EM TOOL	2.812	6.500	26.26	68.13
1	NMDC	2.875	6.500	30.08	98.21
90	5" D.P.	4.276	5.000	2,814.11	2,912.32
1	AGITATOR	2.500	6.750	11.96	2,924.28
1	SHOCK SUB	2.500	6.750	12.96	2,937.24
382	5" DP	4.276	5.000	11,948.79	14,886.03
			Total Length:		14,886.03

STRING LOADS

On Btm Torque:
Off Btm Torque:
Str. Wt. Up:
Str. Wt. Down:
Str. Wt. Rot.:
Max Over Pull:

BHA PROPERTIES

BHA Hrs:
Jar Hrs:
Cum String Hours:
Weight B Jars (kip):

MUD PUMPS

	#1	#2	#3
Pump Type:			
Liner ID:	0.00	0.00	
SPM:	0.00	0.00	
GPM:	0.00	0.00	
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): SPP (psi):
AV (DC): 489 AV (DP): 310

SURVEYS

MD (ft)	Inclination(°)	Azimuth (°)	TVD (ft)	V Section (ft)	+E/-W (ft)	+N/-S (ft)	Dog Leg (°/100ft)
14,140	90.75	0.28	6,628	7,518.12	899.59	7,512.07	1.70
14,234	86.31	1.68	6,630	7,612.06	901.19	7,606.00	4.95
14,327	86.88	2.21	6,636	7,704.86	904.34	7,698.78	0.84
14,421	88.75	3.09	6,640	7,798.71	908.69	7,792.61	2.20
14,515	89.38	2.74	6,641	7,892.61	913.46	7,886.47	0.77
14,609	89.88	2.21	6,642	7,986.54	917.52	7,980.38	0.78
14,703	91.38	1.51	6,641	8,080.50	920.57	8,074.32	1.76
14,797	87.63	356.58	6,641	8,174.43	919.01	8,168.26	6.59

OPERATION DETAILS

FROM	TO	HRS	OP CODE	PHASE	CODE	ACTIVITY	DESCRIPTION
06:00	10:00	4.00	P	DRLPRD	13	TRIP	FINISH TOOH & L/D BHA
10:00	11:30	1.50	P	CASPRD1	24	RUNCAS	PJSM W/ EXPRESS CASING CREW. R/U CASIN TOOLS & TORQUE TURN.
11:30	23:30	12.00	P	CASPRD1	24	RUNCAS	RUN A TOTAL 364 JTS OF 5.5" 17# HCP-110 LTC PROD CSG TO 14,868'. TAGGED BOTTOM @ 14,886', SPACED OUT. SET PIPE 12' OFF BOTTOM. TOE SLEEVE @ 14,775'. NCS AIR LOCK @ 6,658'. MARKERS @ 14,613', 12,220', 9,568', 6,902' AND 6,170'. RAN 71 CENTRALIZERS ONE ON EVERY 3RD JT. TO KOP. FULL RETURNS DURING CSG OPS.
23:30	01:30	2.00	P	CASPRD1	15	CIRC	PJSM. RU COMPASS CEMENTING HEAD. RUPTURE AIR LOCK W/ 1,515 PSI., FILL CASING & CIRCULATE OUT AIR.
01:30	05:00	3.50	P	CASPRD1	25	PRIMCEM	TEST LINES TO 6K. PUMP 40 BBLS 10 PPG TUNNED SPACER. PUMP 291.7 BBLS 11.5 PPG LEAD CMT (585 SKS, 2.79 YLD). PUMPED 360.8 BBLS 14.2 PPG TAIL CMT (1535 SKS, 1.32 YLD). DISPLACED WITH 344 BBLS CLAY STAY H20 (FIRST 10 BBLS MIXED WITH C-24L HIGH TEMP RETARDER). BUMPED PLUG w/ 2300 (500 PSI OVER). HELD 2 MIN.,BLED BACK 3 BBLS; FULL RETURNS DURING CMT OPS; HAD 20 BBLS CMT RETURNED TO SURFACE. PLUG DOWN @ 04:42 AM 3/19/17.
05:00	06:00	1.00	P	CASPRD1	29	NDBOPE	FLUSH BOP W/ SUGAR WATER. DRAIN STACK. RIG UP YELLOW JACKET NIPPLE DOWN CREW. START NIPPLING DOWN BOPS.

Daily Operations Comments
UTILIZING DIRECTIONAL PLAN #2. 85° @ 6,914' MUD STARTING THE WELL 2,417 BBLS / ENDING 2,434 BBLS = +17 BBLS

CONFIDENTIAL

EP ENERGY

Daily Drilling Report Onshore

Data shared on this report is CONFIDENTIAL

Well Name/Wellbore No.: UNIVERSITY SALT DRAW 3820KH/00

Country:	USA
State/OCSG	TEXAS
Field/Permit#:	SALT DRAW
Supervisors:	JOHNSON,DUSTY / PANNELL,CHARLE
Engineer/Manager:	MOTLEY, DEREK / MARES, SERGIO

Report Number:	010	API #:	4210542351
Report Date:	03/20/2017		
Spud Date:	03/12/2017		
Release Date:			
DFS: 6.47	DOL: 7		AFE Days: 8
Last BOP T.:	03/12/2017		

Depth md/tvd (ft): 14,886.03 / 6,645.12
Progress:
ROP: / = 0.00
Proposed TD (ft): 14,908.60
Next Csg Point (ft): 14,868.03

Rig:
Rig Phone: 713-997-1205
RKB (ft): 2,642.01
Ground Level (ft): 2,612.0
POB: 32 Total Man Hours: 374.00

Current Activity: FINAL REPORT. WALK RIG TO USD 38-20 GH. (RIG RELEASE @ 03/19/2017 08:00HRS , SPUD TO RR = 6.47 DAYS).
24 Hr Summary: SET SLIPS ON 5 1/2" CASING, CUT EXCESSS CASING. N/UP WEATHERFORD 11" 5M TA CAP.
24 Hr Forecast: WALK TO USD 38-20 GH

MUD PROPERTIES

Fluids Co.: HALLIBURTON
Fluids Eng: Michael Burkett

Time:	0:00	Oil Cnt (%):	73
Location:	JCTION TANK	H2O Cnt (%):	19
Pit Temp (°F	129	Sand Cnt (%):	0.01
Depth (ft):	14,886.03	MBT (lbm/bbl):	0.0
Density (ppg):	8.85	pH:	0.0
FV (s/qt):	56	Pm (cc):	0.0
PV (cp):	15	Pf (cc):/Mf (cc):	0.0 / 0.0
YP (lbf/100ft²):	13	Chloride (ppm):	0
Gels ():	12/16/21	Calcium (ppm):	0.00
WL (cc/30min):	6.00	LCM (lbm/bbl):	0.0
HTHP (°F):	250	ES (mV):	718.0
Cake (32nd"):	2.00	LGS (%):	3.60
Solids (lbm/bbl):	33	Ex Lime (ppb):	3.0
ECD (ppg):	8.9	OWR:	79.3 / 20.7

MUD MATERIALS

Mud Additives	Used

BIT RECORD

Bit#		
S/N		
Size (in)		
Mfg		
IADC Type		
Model #		
Jets		
Depth In (ft)		
Depth Out (ft)		
Bit Rotations		
On Btm Hrs Cum		
Footage Cum (ft)		
ROP Cum		
WOB mn/mx (kip)	/	/
RPM rot/bit	/	/
Bit HP		
HSI		
PSI Drop (psi)		
Jet Vel (ft/s)		
Imp Force		

Grading	I	O	D	L	B	G	O	R
Bit #								
Bit #								

CASING

Size(in)	MD(ft)/TVD(ft)		FIT/LOT(ppg)
14.00	70.00 /	70.00	
9.63	1,000.00 /	1,000.00	
5.50	14,868.03 /	6,645.01	

INVENTORY

Item	Inv
DIESEL	0
MUD DIESEL	0

SOLIDS CONTROL

Skr	Deck 1 Screens	Deck 2 Screens
1	100/100/100/100	
2	100/100/100/100	
3	140/100/100/100	

MUD LOGGING

Trip Gas (units): @	BG Gas (units):	Surf to Surf:
Conn Gas (units) @		Lag Strokes:
Form:	Pore Pressure: (%)	Lag Time: (min)

MUD PUMPS

	#1	#2	#3
Pump Type:			
Liner ID:		0.00	
SPM:		0.00	
GPM:		0.00	
SPR:			
1 SPM:		0.00	
Pressure:		0.00	
2 SPM:		0.00	
Pressure:		0.00	

T GPM (gpm): SPP (psi):
AV (DC): 489 AV (DP): 310

SURVEYS

MD (ft)	Inclination(°)	Azimuth (°)	TVD (ft)	V Section (ft)	+E/-W (ft)	+N/-S (ft)	Dog Leg (°/100ft)
14,140	90.75	0.28	6,628	7,518.12	899.59	7,512.07	1.70
14,234	86.31	1.68	6,630	7,612.06	901.19	7,606.00	4.95
14,327	86.88	2.21	6,636	7,704.86	904.34	7,698.78	0.84
14,421	88.75	3.09	6,640	7,798.71	908.69	7,792.61	2.20
14,515	89.38	2.74	6,641	7,892.61	913.46	7,886.47	0.77
14,609	89.88	2.21	6,642	7,986.54	917.52	7,980.38	0.78
14,703	91.38	1.51	6,641	8,080.50	920.57	8,074.32	1.76
14,797	87.63	356.58	6,641	8,174.43	919.01	8,168.26	6.59

OPERATION DETAILS

FROM	TO	HRS	OP CODE	PHASE	CODE	ACTIVITY	DESCRIPTION
06:00	08:00	2.00	P	CASPRD1	29	NDBOPE	N/D BOP. SET SLIPS WITH 100K (PIPE WEIGHT). CUT EXCESS CASING. INSTALL TA CAP (RIG RELEASE @ 03/19/2017 08:00HRS , SPUD TO RR = 6.47 DAYS).

Daily Operations Comments
UTILIZING DIRECTIONAL PLAN #2. 85º @ 6,914' MUD STARTING THE WELL 2,417 BBLS / ENDING 2,434 BBLS = +17 BBLS

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