



## DAILY DRILLING REPORT


<b>General Information</b>									
LEASE UNIVERSITY EAST		WELL NUMBER 4110 NH		API WELL NUMBER 42-105-42310		DATE 11/15/2015			
COUNTY, STATE CROCKETT		LOCATION 7.14 MILES SE OF BARNHART				TRRC PERMIT NUMBER 810356			
OPERATOR EP ENERGY				CONTRACTOR Integrity Services, LLC					
OPERATOR REPRESENTATIVE JOHNNY CHATAGNIER				CONTRACTOR REPRESENTATIVE JORDAN CLICK					
<b>Texas Railroad Commission</b>						<b>Depth</b>			
TRRC JOB NUMBER DISPATCH		TRRC CONTACT NAME 1.152777778				PROPOSED MEASURED DEPTH (MD) 1049			
TRRC CONTACT DATE 11/13/2015		TRRC CONTACT TIME TERRY							
<b>Casing</b>						<b>Survey Information</b>			
	OD	ID	WEIGHT	GRADE	CONNECTION	MD	TVD	ANGLE	
Conductor	14"								
Surface	9 5/8	8.835	40	J-55	LTC				
<b>Drill Pipe</b>									
	OD	ID	WEIGHT	GRADE	CONNECTION				
	4 1/2	2 1/8	16.6		2 7/8" IF		-		
<b>BHA</b>									
	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		-		
<b>Daily Activities</b>									
FROM	TO	ELAPSED TIME	REMARKS						
6:00	6:00		SAFETY MEETING TOWER CHANGE						
6:00	11:00	5.00	DRILL AHEAD FRO 611' TO 1049'						
11:00	11:30	0.50	SWEEP HOLE						
11:30	12:30	1.00	TOOH FRO 1049' TO 131' BHA						
12:30	13:00	0.50	L/D BHA						
13:00	14:00	1.00	R/U TO RUN CASING						
14:00	15:00	1.00	RUN 18 JOINTS OF CASING TO 760'						
15:00	15:30	0.50	LOAD CASING WITH F/W						
15:30	16:00	0.50	RUN 4 JOINTS OF CASING TO 928'						
16:00	18:00	2.00	WASH 2 JOINT OF CASING DOWN						
18:00	18:00		SAFETY MEETING TOWER CHANGE						
18:00	19:00	1.00	WASH 1 JOINT OF CASING TO TD						
19:00	20:00	1.00	R/U CEMENT HEAD SAFETY MEETING						
20:00	21:00	1.00	PUMP CEMENT, 116BBLs F/W,85BBLs LEAD,36BBLs TAIL,5BBLs BACK TO SURFACE						
21:00	22:00	1.00	LET CEMENT SET REALEASE RIG						
TOTAL HOURS		16.00							
<b>Crew</b>									
TITLE		NAME		HOURS	NAME				
RIG MANAGER		CODY LARSEN		24	CODY LARSEN				
DRILLER		MYRON		12	TANNER				
FLOOR HAND		ETHAN		12	TERRY				
FLOOR HAND		CHACE		12	RAY				
<b>LOA</b>									
BIT NO	SIZE	MAKE	TYPE	FOOTAGE	HOURS	ROP	WOB	RPM	
1 NEW	12 1/4	NUMA	DHT	438	5	87.00	2 - 3000 LBS	35 - 40	
BIT SERIAL #	INT125008								
220302									
<b>Mist Drilling Information</b>					<b>Compressed Air Information</b>				
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	
<b>Drilling Fluid &amp; Chemicals</b>									
	TYPE			AMOUNT	TYPE			AMOUNT	
	WEATHERFORD FMA 100			2GAL/HR					
<b>Fuel</b>									
FUEL TYPE	VENDOR		BEG QTY	RECEIVED QTY	TOTAL QTY	QTY USED	QTY REMAINING		
Diesel	Fuel Source		2,210	0	2,210	882	1,328		
<b>SAFETY MEETING / JOB SAFETY ANALYSIS</b>									
	DAYLIGHT TOUR			MORNING TOUR					
TOPIC	SKID RIG			CEMENT					
JSA	FORKLIFT OPERATION			EYE CONTACT					
STOP CARDS	0			0					
NEAR MISSES	0			0					







EP ENERGY		Daily Drilling Report Onshore		Well Name/Wellbore No.: UNIVERSITY EAST 4110NH/00				Report Number: 005 Report Date: 12/09/2015 Spud Date: 12/06/2015 Release Date: DFS: 4.00 Last BOP T.: 12/05/2015				API #: 4210542310  AFE Days: 9			
				Country: USA State/OCSG: TEXAS Field/Permit#: WOLFCAMP EAST Supervisors: JOE WILKERSON / KENNETH SWILLE Engineer/Manager: MOTLEY, DEREK / ROY DERDEN											
Depth md/tvd (ft): 11,575.02 / 6,245.22 Progress (ft): 2,737.01 ROP: 2,737.0 / 12.00 = 228.08 Proposed TD (ft): 15,239.00 Next Csg Point (ft): 16,716.03				Rig: NABORS DRILLING/888 Rig Phone: 713-997-1245 RKB (ft): 2,664.01 Ground Level (ft): 2,636.0 POB: 27 Total Man Hours: 327.00											
Current Activity: DRILLING LATERAL @ 11,575'. PTB 91.4° INC, 181 AZM. 2' BELOW, 15' RIGHT. TOTAL LATERAL 4,986'.															
24 Hr Summary: DRILLED LATERAL 8,838'-11,032'. TROUBLE SHOOT FOR POSSIBLE MOTOR FAILURE, POOH FOR MOTOR FAILURE. LD BAD MOTOR. STATOR RUBBER FOUND IN BIT. TIH. DRILLED LATERAL 11,032-11,575'.															
24 Hr Forecast: DRILL LATERAL UTILIZING TARGET ADVISORY #7.															
MUD PROPERTIES				MUD MATERIALS		BIT RECORD				CASING					
Fluids Co.: HALLIBURTON Fluids Eng: WESLEY VAUGHN						Bit# 3 S/N 7158045 Size (in) 8.75 Mfg BAKER IADC Type Model # T606X Jets 6X18 Depth In (ft) 5,901 Depth Out (ft) 11,032 Bit Rotations 60/70 On Btm Hrs Cum 9.50 Footage Cum (ft) 2,194 ROP Cum 226.6 WOB mm/mx (kip) 20 / 35 RPM rot/bit 60 / 70 Bit HP 1.17 HSI 0.79 PSI Drop (psi) 134.97 Jet Vel (ft/s) 129.11 Imp Force 363.20				Size(in) MD(ft)/TVD(ft) FIT/LOT(ppg) 14.00 67.00 / 67.00 9.63 1,076.00 / 1,075.00 5.50 16,716.03 / 6,225.01					
Time: 3:00 Oil Cnt (%): 69 Location: PIT H2O Cnt (%): 21 Pit Temp (°F): 125 Sand Cnt (%): 0.00 Depth (ft): 11,032.02 MBT (lbm/bbl): 0.0 Density (ppg): 9.05 pH: 0.0 FV (s/qt): 47 Pm (cc): 0.0 PV (cp): 13 Pf (cc)/Mf (cc): 0.0 / 0.0 YP (lb/100ft²): 11 Chloride (ppm): 0 Gels (l): 9/11/13 Calcium (ppm): 0.00 WL (cc/30min): 18.60 LCM (lbm/bbl): 0.0 HTHP (°F): 250 ES (mV): 421.0 Cake (32nd"): 3.00 LGS (%): 7.40 Solids (lbm/bbl): 71 Ex Lime (ppb): 3.8 ECD (ppg): 9.5 OWR: 76.5 / 23.5				Mud Additives Used EZ MUL 1 CALCIUM CHLORIDE PO 140 DURATONE HT 10 FACTANT 1 ENGINEER 24 HOURS 1 LIME 80 GELTONE 18 BAROID 41 60											
MUD LOGGING						Grading I O D L B G O R Bit # 3 0 0 NO A 1 I NOBHA Bit # 3				INVENTORY Item Inv RIG FUEL 11,201 MUD DIESEL 6,786					
Trip Gas (units): @ Conn Gas (units): @ Form:				BG Gas (units): Surf to Surf: Lag Strokes: Lag Time: (min)						SOLIDS CONTROL Skr Deck 1 Screens Deck 2 Screens 1 100/100// 2 100/100// 3 140/100/100/					
BHA # 4						STRING LOADS				MUD PUMPS					
Qty	Item Description			ID (in)	OD (in)	Len (ft)	Cum (ft)	On Btm Torque: 17,500 Off Btm Torque: 14,000 Str. Wt. Up: 220 Str. Wt. Down: 190 Str. Wt. Rot.: 200 Max Over Pull: 25				Pump Type: DR DR Liner ID: 5.50 5.50 SPM: 82.00 82.00 GPM: 297.54 297.54 SPR: 1 SPM: 50.00 0.00 Pressure: 625.00 0.00 2 SPM: 30.00 0.00 Pressure: 410.00 0.00			
1	BAKER T606X RR				8.750	1.00	1.00								
1	RYAN 7" 7/8 5.0 1.83 FBH MUD MC				7.000	25.22	26.22								
1	PONY DC			3.250	6.750	8.13	34.35								
1	EM TOOL			3.250	6.500	28.87	63.22								
1	NMDC			3.250	6.750	29.54	92.76								
90	5" D.P.			4.276	5.000	2,840.16	2,932.92								
1	AGITATOR			2.875	6.500	12.98	2,945.90								
1	SHOCK SUB			2.562	6.500	10.85	2,956.75								
	5" DP			4.276	5.000	12,333.28	15,290.03								
Total Length:							15,290.03	BHA PROPERTIES BHA Hrs: 10 Jar Hrs: Cum String Hours: 20 Weight B Jars (kip):				T GPM (gpm): 600 SPP (psi): 4,200 AV (DC): 434 AV (DP): 289			
SURVEYS															
MD (ft)		Inclination(°)		Azimuth (°)		TVD (ft)		V Section (ft)		+E/-W (ft)		+N/-S (ft)		Dog Leg (°/100ft)	
10,484		93.56		180.75		6,273		4,287.51		-174.70		-4,286.90		1.73	
10,579		90.70		182.86		6,270		4,382.39		-177.69		-4,381.77		3.74	
10,674		91.01		184.62		6,268		4,477.20		-183.89		-4,476.55		1.88	
10,769		88.55		184.44		6,269		4,571.92		-191.39		-4,571.25		2.60	
10,864		89.74		181.54		6,270		4,666.79		-196.35		-4,666.10		3.30	
10,958		91.41		182.51		6,269		4,760.73		-199.67		-4,760.03		2.05	
11,053		91.49		180.13		6,267		4,855.67		-201.85		-4,854.97		2.51	
11,147		92.46		180.40		6,264		4,949.62		-202.29		-4,948.91		1.07	
OPERATION DETAILS															
FROM	TO	HRS	OP CODE	PHASE	CODE	ACTIVITY	DESCRIPTION								
06:00	06:30	0.50	P	DRLPRD	12	RIGSVC	SERVICED RIG.								
06:30	16:00	9.50	P	DRLPRD	10	DRLLAT	DRILLED LATERAL 8,838'-11,032'.								
16:00	18:30	2.50	N	DRLPRD	57	DIRFAIL	TROUBLE SHOOT FOR POSSIBLE MOTOR FAILURE, ERRATIC TORQUE & DIFFERENTIAL PRESSURE SPIKES OBSERVED. CIRCULATE HOLE CLEAN.								
18:30	23:30	5.00	N	DRLPRD	57	DIRFAIL	POOH FOR MOTOR FAILURE. LD BAD MOTOR. FOUND STATOR RUBBER IN BIT.								
23:30	03:30	4.00	N	DRLPRD	57	DIRFAIL	MU LATERAL BHA & TIH. FILL EVERY 3,000'.								
03:30	06:00	2.50	P	DRLPRD	10	DRLLAT	DRILLED LATERAL 11,032-11,575'.								
Daily Operations Comments UTILIZING PLAN #6, KOP 5,844' MD, LATERAL STARTS @ 6,589'. 90.49 INC, 180.18 AZM. RYAN 7" 7/8 5.0 1.83 FBH MUD MOTOR BTS 50, BTG 48, BTB 5.15'. SLIDE FTG 239'. HRS 2															

	Daily Drilling Report Onshore				Well Name/Wellbore No.: UNIVERSITY EAST 4110NH/00				Report Number: 006      API #: 4210542310								
					Country: USA				Report Date: 12/10/2015								
					State/OCSG TEXAS				Spud Date: 12/06/2015								
					Field/Permit#: WOLFCAMP EAST				Release Date:								
					Supervisors: WESTON WHITE / JIMMY DAVIS				DFS: 5.00      DOL: 5      AFE Days: 9								
					Engineer/Manager: MOTLEY, DEREK / ROY DERDEN				Last BOP T.: 12/05/2015								
Depth md/tvd (ft): 15,290.03 / 6,085.76					Rig: NABORS DRILLING/888												
Progress (ft): 3,715.01					Rig Phone: 713-997-1245												
ROP: 3,715.0 / 23.50 = 158.09					RKB (ft): 2,664.01												
Proposed TD (ft): 15,239.00					Ground Level (ft): 2,636.0												
Next Csg Point (ft): 16,716.03					POB: 32      Total Man Hours: 350.00												
Current Activity: DRILLING LATERAL @ 15,290' PTB= INC-91.45 AZ-183.82 ABOVE-2.0' LEFT-2.2' ( TOTAL LATERAL- 8701' ).																	
24 Hr Summary: DRILL LATERAL 11,575'- 15,290'.																	
24 Hr Forecast: DRILL LATERAL TO TD. CIRCULATE HOLE CLEAN. POOH TO BOC. CIRCULATE HOLE CLEAN. POOH & LD DIRECTIONAL TOOLS. RU CASING CREW. RUN 5.5" PROD. CSG.																	
MUD PROPERTIES					MUD MATERIALS			BIT RECORD			CASING						
Fluids Co.: HALLIBURTON								Bit#			Size(in)		MD(ft)/TVD(ft)		FIT/LOT(ppg)		
Fluids Eng: BRENT DIERLAM								S/N			7158045		14.00		67.00 / 67.00		
Time: 3:00 Oil Cnt (%): 69					Mud Additives			Size (in)			8.75		9.63		1,076.00 / 1,075.00		
Location: PIT H2O Cnt (%): 21					FACTANT			Mfg			BAKER		5.50		16,716.03 / 6,225.01		
Pit Temp (°F): 122 Sand Cnt (%): 0.00					LIME			IADC Type			T606X						
Depth (ft): 15,000.03 MBT (lbm/bbl): 0.0					DURATONE HT			Model #									
Density (ppg): 9.10 pH: 0.0					EZ MUL			Jets			6X18						
FV (s/qt): 45 Pm (cc): 0.0					ENGINEER 24 HOURS			Depth In (ft)			11,032						
PV (cp): 14 Pf (cc)/Mf (cc): 0.0 / 0.0					SUSPENTONE			Depth Out (ft)									
YP (lbf/100ft²): 12 Chloride (ppm): 0					CALCIUM CHLORIDE PO			Bit Rotations			0/60						
Gels (l): 9/11/13 Calcium (ppm): 0.00								On Btm Hrs Cum			26.00						
WL (cc/30min): 18.60 LCM (lbm/bbl): 0.0								Footage Cum (ft)			4,801						
HTHP (°F): 250 ES (mV): 437.0								ROP Cum			184.7						
Cake (32nd"): 3.00 LGS (%): 7.30								WOB mn/mx (kip)			/ 30 / 65						
Solids (lbm/bbl): 66 Ex Lime (ppb): 3.4								RPM rot/bit			/ 0 / 60						
ECD (ppg): 9.9 OWR: 77.0 / 23.0								Bit HP			0.99						
								HSI			0.66						
								PSI Drop (psi)			120.79						
								Jet Vel (ft/s)			121.80						
								Imp Force			325.05						
MUD LOGGING								Grading			I O D L B G O R						
Trip Gas (units): @ BG Gas (units): Surf to Surf:								Bit #									
Conn Gas (units): @ Lag Strokes:								Bit # 3									
Form: Pore Pressure: (%) Lag Time: (min)																	
BHA # 4												STRING LOADS			MUD PUMPS		
Qty	Item Description				ID (in)	OD (in)	Len (ft)	Cum (ft)	On Btm Torque: 18,000			Pump			#1	#2	#3
1	BAKER T606X RR					8.750	1.00	1.00	Off Btm Torque: 12,000			Type: DR			DR		
1	RYAN 7" 7/8 5.0 1.83 FBH MUD MC					7.000	25.22	26.22	Str. Wt. Up: 270			Liner ID: 5.50			5.50		
1	PONY DC				3.250	6.750	8.13	34.35	Str. Wt. Down: 105			SPM: 78.00			78.00		
1	EM TOOL				3.250	6.500	28.87	63.22	Str. Wt. Rot.: 165			GPM: 283.03			283.03		
1	NMDC				3.250	6.750	29.54	92.76	Max Over Pull:			SPR:					
90	5" D.P.				4.276	5.000	2,840.16	2,932.92				1 SPM: 0.00			0.00		
1	AGITATOR				2.875	6.500	12.98	2,945.90				Pressure: 0.00			0.00		
1	SHOCK SUB				2.562	6.500	10.85	2,956.75				2 SPM: 0.00			0.00		
	5" DP				4.276	5.000	12,333.28	15,290.03				Pressure: 0.00			0.00		
								Total Length:	15,290.03			BHA PROPERTIES					
												BHA Hrs: 24					
												Jar Hrs:					
												Cum String Hours: 26					
												Weight B Jars (kip):					
												T GPM (gpm): 566			SPP (psi): 4,450		
												AV (DC): 434			AV (DP): 289		
SURVEYS																	
MD (ft)		Inclination(°)		Azimuth (°)		TVD (ft)		V Section (ft)		+E/-W (ft)		+N/-S (ft)		Dog Leg (°/100ft)			
10,484		93.56		180.75		6,273		4,287.51		-174.70		-4,286.90		1.73			
10,579		90.70		182.86		6,270		4,382.39		-177.69		-4,381.77		3.74			
10,674		91.01		184.62		6,268		4,477.20		-183.89		-4,476.55		1.88			
10,769		88.55		184.44		6,269		4,571.92		-191.39		-4,571.25		2.60			
10,864		89.74		181.54		6,270		4,666.79		-196.35		-4,666.10		3.30			
10,958		91.41		182.51		6,269		4,760.73		-199.67		-4,760.03		2.05			
11,053		91.49		180.13		6,267		4,855.67		-201.85		-4,854.97		2.51			
11,147		92.46		180.40		6,264		4,949.62		-202.29		-4,948.91		1.07			
OPERATION DETAILS																	
FROM	TO	HRS	OP CODE	PHASE	CODE	ACTIVITY	DESCRIPTION										
06:00	06:30	0.50	P	DRLPRD	12	RIGSVC	SERVICE RIG										
06:30	06:00	23.50	P	DRLPRD	10	DRLLAT	DRILL LATERAL 11,575' -15,290'										
Daily Operations Comments																	
UTILIZING PLAN #6, KOP 5,844' MD, LATERAL STARTS @ 6,589'. 90.49 INC, 180.18 AZM. RYAN 7" 7/8 5.0 1.83 FBH MUD MOTOR BTS 50, BTG 48, BTB 5.22'. SLIDE FTG. = 440' IN 3.2. HRS.																	





EP ENERGY

Daily Drilling Report Onshore

Well Name/Wellbore No.: UNIVERSITY EAST 4110NH/00

Country: USA  
State/OCSG: TEXAS  
Field/Permit#: WOLFCAMP EAST  
Supervisors: WESTON WHITE / JIMMY DAVIS  
Engineer/Manager: MOTLEY, DEREK / ROY DERDEN

Report Number: 008  
Report Date: 12/12/2015  
Spud Date: 12/06/2015  
Release Date:  
DFS: 7.00  
Last BOP T.: 12/05/2015

API #: 4210542310  
DOL: 7  
AFE Days: 9

Depth md/tvd (ft): 16,690.03 / 6,243.35  
Progress:  
ROP: / = 0.00  
Proposed TD (ft): 15,239.00  
Next Csg Point (ft): 16,716.03

Rig: NABORS DRILLING/888  
Rig Phone: 713-997-1245  
RKB (ft): 2,664.01  
Ground Level (ft): 2,636.0  
POB: 40

Total Man Hours: 488.00

Current Activity: CIRC. BOTTOMS UP.  
24 Hr Summary: FINISH POOH & LD DIRECTIONAL TOOLS. RU CASING CREW. RUN 5.5" PROD. CSG. SHEAR FLOTATION COLLAR. CIRC. W/ RIG PUMP.  
24 Hr Forecast: FINISH CIRC. BOTTOMS UP.. CEMENT WITH BAKER HUGHES. ND. SET SLIPS. CUT CSG. INSTALL CAP. RELEASE RIG.

MUD PROPERTIES

Fluids Co.: HALLIBURTON  
Fluids Eng: BRENT DIERLAM  
Time: 3:00  
Location: PIT  
Pit Temp:  
Depth (ft): 16,690.03  
Density (ppg): 9.10  
FV (s/qt): 48  
PV (cp): 14  
YP (lb/100ft²): 12  
Gels (): 9/11/13  
WL (cc/30min): 16.00  
HTHP (°F): 250  
Cake (32nd"): 3.00  
Solids (lbm/bbl): 64  
ECD (ppg): 9.1

Oil Cnt (%): 69  
H2O Cnt (%): 21  
Sand Cnt (%): 0.00  
MBT (lbm/bbl): 0.0  
pH: 0.0  
Pm (cc): 0.0  
Pf (cc)/Mf (cc): 0.0 / 0.0  
Chloride (ppm): 0  
Calcium (ppm): 0.00  
LCM (lbm/bbl): 0.0  
ES (mV): 430.0  
LGS (%): 7.00  
Ex Lime (ppb): 3.2  
OWR: 77.0 / 23.0

Mud Additives  
Used

MUD LOGGING

Trip Gas (units): @  
Conn Gas (units) @  
Form:

BG Gas (units):  
Pore Pressure: (%)

Surf to Surf:  
Lag Strokes:  
Lag Time: (min)

BIT RECORD

Bit# 3  
S/N 7158045  
Size (in) 8.75  
Mfg BAKER  
IADC Type  
Model # T606X  
  
Jets 6X18  
  
Depth In (ft) 11,032  
Depth Out (ft) 16,690  
Bit Rotations /60  
On Btm Hrs Cum 51.00  
Footage Cum (ft) 7,601  
ROP Cum 149.0  
WOB mn/mx (kip) / 30 / 65  
RPM rot/bit / 60  
Bit HP 0.13  
HSI 0.09  
PSI Drop (psi) 31.77  
Jet Vel (ft/s) 62.46  
Imp Force 85.48

Grading  
Bit #  
Bit # 3

I O D L B G O R  
1 1 WT G X I WT TD

CASING

Size(in) 14.00  
9.63  
5.50

MD(ft)/TVD(ft) 67.00 / 1,076.00 / 16,716.03 /

FIT/LOT(ppg) 67.00 1,075.00 6,225.01

INVENTORY

Item  
RIG FUEL  
MUD DIESEL

Inv  
16,584  
9,671

SOLIDS CONTROL

Skr 1  
2  
3

Deck 1 Screens 100/100//  
100/100//  
140/100/100/

Deck 2 Screens

BHA # 4

Qty 1  
1  
1  
1  
1  
90  
1  
1  
5"

Item Description BAKER T606X RR  
RYAN 7" 7/8 5.0 1.83 FBH MUD MC  
PONY DC  
EM TOOL  
NMDC  
5" D.P.  
AGITATOR  
SHOCK SUB  
DP

ID (in) 3.250  
3.250  
3.250  
4.276  
2.875  
2.562  
4.276

OD (in) 8.750  
7.000  
6.750  
6.500  
6.750  
5.000  
6.500  
6.500  
5.000

Len (ft) 1.00  
25.22  
8.13  
28.87  
29.54  
2,840.16  
12.98  
10.85  
13,733.29

Cum (ft) 1.00  
26.22  
34.35  
63.22  
92.76  
2,932.92  
2,945.90  
2,956.75  
16,690.03

Total Length: 16,690.03

STRING LOADS

On Btm Torque: 18,000  
Off Btm Torque: 12,000  
Str. Wt. Up: 270  
Str. Wt. Down: 105  
Str. Wt. Rot.: 165  
Max Over Pull:

BHA PROPERTIES

BHA Hrs: 13  
Jar Hrs:  
Cum String Hours: 61  
Weight B Jars (kip):

MUD PUMPS

Pump Type:  
Liner ID:  
SPM:  
GPM:  
SPR:  
1 SPM:  
Pressure:  
2 SPM:  
Pressure:

#1  
#2  
#3

0.00  
0.00  
0.00  
0.00  
0.00  
0.00  
0.00  
0.00

T GPM (gpm): 290  
AV (DC):

SPP (psi): 650  
AV (DP):

SURVEYS

MD (ft) 16,072  
16,166  
16,261  
16,356  
16,451  
16,545  
16,640  
16,690

Inclination(°) 90.88  
88.29  
89.25  
90.57  
89.25  
91.45  
92.68  
92.68

Azimuth (°) 181.71  
180.66  
179.78  
178.99  
175.83  
177.67  
176.00  
176.00

TVD (ft) 6,247  
6,247  
6,249  
6,250  
6,250  
6,249  
6,246  
6,243

V Section (ft) 9,871.71  
9,965.69  
10,060.66  
10,155.65  
10,250.52  
10,344.34  
10,439.11  
10,488.92

+E/-W (ft) -205.33  
-207.28  
-207.64  
-206.62  
-202.33  
-197.00  
-191.76  
-188.28

+N/-S (ft) -9,871.03  
-9,965.00  
-10,059.97  
-10,154.96  
-10,249.85  
-10,343.69  
-10,438.48  
-10,488.30

Dog Leg (°/100ft) 2.81  
2.97  
1.37  
1.62  
3.60  
3.05  
2.18  
0.00

OPERATION DETAILS

FROM 06:00  
09:00  
09:30  
11:00  
22:00  
22:00  
23:00  
23:30  
00:00  
03:30  
03:30  
04:30

TO 09:00  
09:30  
11:00  
22:00  
23:00  
23:30  
00:00  
03:30  
04:30  
06:00

HRS 3.00  
0.50  
1.50  
11.00  
1.00  
0.50  
0.50  
3.50  
1.00  
1.50

OP CODE P  
P  
N  
P  
N  
P  
N  
P  
P  
P

PHASE CASPRD1  
CASPRD1  
CASPRD1  
CASPRD1  
CASPRD1  
CASPRD1  
CASPRD1  
CASPRD1  
CASPRD1  
CASPRD1

CODE 13  
12  
65  
24  
49  
24  
49  
24  
15  
15

ACTIVITY TRIP  
RIGSVC  
WOEP  
RUNCAS  
RPR3  
RUNCAS  
RPR3  
RUNCAS  
CIRC  
CIRC

DESCRIPTION TOOH. LD DIRECTIONAL TOOLS.  
SERVICE RIG.  
WAITING ON FRANKS CSG CREW.  
PJSM. RU FRANKS CSG CREW AND TORQUE TURN. MU SHOE TRACK. RUN 292 JTS. 5 1/2" CASING TO 11,580'.  
FRANK'S CASING HYDRAULIC POWER UNIT FAILED. CHANGE OUT SAME.  
RUN 5 1/2" CASING TO 12,150'  
DUMP VALVE FAILED ON CASING TONGS. CHANGE OUT SAME.  
RUN 412 JOINTS OF 5 1/2" 17# HC-P110 LTC TO 16,690'. MARKER JOINTS @ 16,474', 13,317', 9,958', 6,560', 5,829', FLOTATION COLLAR @ 8,581', LANDING COLLAR @ 16,641', ORIO @ 16,599'.  
RAN 89 CENTRALIZERS PLACED E/3RD JOINT TO KOP. ALL DEPTHS FROM RIG RKB 27'. FINAL SLACK OFF WEIGHT WITH BLOCK 105K. FINAL SLACK OFF RIGHT BEFORE INSTALLING FLOTATION COLLAR 75 K.  
RIG DOWN FRANK'S CASING CREW AND RIG UP BAKER HUGHES CEMENT HEAD AND LINES.  
SHEAR FLOTATION COLLAR W/ 2600 PSI. CIRC. BOTTOMS UP W/ RIG PUMP.

Daily Operations Comments  
NOTIFIED VIVIAN W/TRRC @ 14:00 ON 12/11/15 ABOUT PLAN TO RUN AND CEMENT 5.5" PRODUCTION CASING.



