



## Partner - Drilling

Well Name: Fcu 4472

Date: 9/21/2015

Well Name Fcu 4472	API/UWI 4200347087	State/Province Texas	County Andrews
Permit Number 804872	Spud Date 9/22/2015 04:00	Ground/Corrected Ground Elevation (ft) 3,293.00	KB-Ground Distance (ft) 13.00

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
8.40	28

### Rig Info

Rig
Basic, 35

### Rig Release Date

RR Date

### Survey Information

Date 9/21/2015	Description WLS	EW Tie In (ft) 0.00	NS Tie In (ft) 0.00	Azimuth Tie In (°) 0.0	Inclination Tie In (°) 0.0	MD Tie In (ftKB) 40.00	TVD Tie In (ftKB) 0.00
MD (ftKB) 40.00	Incl (°) 0.00	Azm (°) 0.00	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

### Daily Summary

Footage (ftKB) 216.00	End Depth (ftKB) 256.0	Daily Field Est Total (Cost) 79,354.68	Cum Field Est To Date (Cost) 79,354.68
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Activity  
Drilling @ 256'

### 24hr Activity

Com
Rig Down by Hand, Prepare for Trucks to Move on 9-21-15 @ 12:00 pm PJSM w/ Basic Rig Crew, Basic Trucking Crew, Electricians, Basic Safety, XTO Safety, XTO Consultant, RD, Move Rig, RU Basic 35 PJSM / Basic Rig Crew, Jimmy Law Welding, XTO Consultant, Weld on Conductor Pipe, RU Flowline, Install Turnbuckles Finish Rigging Up Floor, PU & MU BHA Pre Spud Rig Inspection, Safety Meeting Drlg f/ 40 - 256, 216' @ 108' hr. Spud FCU 4472 @ 4:00am, 9-22-15



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Permit Number 804872	Spud Date 9/22/2015 04:00	Ground/Corrected Ground Elevation (ft) 3,293.00	KB-Ground Distance (ft) 13.00

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.00	32

### Rig Info

Rig
Basic, 35

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
9/21/2015	WLS	0.00	0.00	0.0	0.0	40.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
40.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
489.00	0.38	0.00	449.00	1.49	0.00	1.49	0.08
992.00	0.53	0.00	951.98	5.48	0.00	5.48	0.03
1,492.00	1.29	0.00	1,451.91	13.42	0.00	13.42	0.15

### Daily Summary

Footage (ftKB)	End Depth (ftKB)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
1,519.00	1,775.0	43,951.12	123,305.80

Activity  
Circulate casing on bottom & RD casing crew

### 24hr Activity

Com
Drig f/ 256 - 531, 275' @ 110' hr WLS @ 489', 0.38° Drig f/ 531 - 1033, 502' @ 125.5' hr WLS @ 992', 0.53° Drig f/ 1033 - 1537, 504' @ 144' hr WLS @ 1492', 1.29° Drig f/ 1537 - 1775, 238' @ 158.6' hr Pump Sweep & Circulate out TOOH, LD 8" DC's, BS & 11" Bit PJSM, RU Thompson Casing & LDM Crews, Run 8 5/8" Csg as Follows: 1 Texas Pattern Guide Shoe ( 1.00'), 1 jt 8 5/8" J-55 24# STC (38.11'), 1 Float Collar (1.20'), 40 jts 8 5/8" J-55 24# STC, Ran a Total of 41 jts. ( 1778.28' ) Set at 1775' Circulate casing, RD Thompson Casing & LDM Crews



## Partner - Drilling

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Permit Number 804872	Spud Date 9/22/2015 04:00	Ground/Corrected Ground Elevation (ft) 3,293.00	KB-Ground Distance (ft) 13.00

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
10.00	29

### Rig Info

Rig
Basic, 35

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
9/21/2015	WLS	0.00	0.00	0.0	0.0	40.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
489.00	0.38	0.00	449.00	1.49	0.00	1.49	0.08
992.00	0.53	0.00	951.98	5.48	0.00	5.48	0.03
1,492.00	1.29	0.00	1,451.91	13.42	0.00	13.42	0.15
1,805.00	1.30	0.00	1,764.83	20.50	0.00	20.50	0.00
2,091.00	1.90	0.00	2,050.72	28.48	0.00	28.48	0.21

### Daily Summary

Footage (ftKB)	End Depth (ftKB)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
577.00	2,352.0	27,505.13	150,810.93

Activity  
Drilling @ 2352'

### 24hr Activity

Com
Circulate casing, RD Thompson Casing & LDM Crews PJSM, RU Basic Cementers, Test Lines to 2500 psi, Pump 20 bbl FW Spacer Ahead of 460 sx of Lead 65-35-6 Cement, Density 12.6 ppg, Yield 1.92 @ 5 bbl/m w/ 190 psi, Followed by 260 sx of Tail Class C Cement, Density 14.8, Yield 1.33 @ 5 bbl/m w/ 250 psi. Release Plug, Displace w/ 110 bbls of 8.3 ppg FW @ 5 bbls/m @ 650 psi. Bump Plug 350 psi Over @ 2 bbls/m. Final Bump 1000 psi. Release psi. Bled .5 bbl to Tank. Floats Held. Circulate 111sx, 38 bbl of Cement to Surface. Full Returns WOC, Jet Pits & Refill w/ Brine water PJSM; Weld on 11" 3m x 8 5/8" SOW GE Csghd, Test 1000 psi f/ 5 Min., Test Good Nipple Up BOP, Function Test & Pump Through Kill Lines Test Blind Rams & Choke Manifold 250 Low - 1500 High. Test Good Strap & PU BHA #2, Test Motor and Inclination Tool, TIH & Install Rotate Head Test Pipe Rams 250 Low - 1500 High. Test Good. Test 2" & 4" Manuel Valves, Test Good Test Casing and Annular 1100 psi. or 30 Minutes Drill Cement & Float Equipment Drlg f/ 1775 - 2352, 577' @ 128.2' hr., w/ Surveys

**Partner - Drilling****Well Name: Fcu 4472****Date: 9/24/2015**

Well Name Fcu 4472	API/UWI 4200347087	State/Province Texas	County Andrews
Permit Number 804872	Spud Date 9/22/2015 04:00	Ground/Corrected Ground Elevation (ft) 3,293.00	KB-Ground Distance (ft) 13.00

**Mud Properties**

Dens (lb/gal)	Vis (s/qt)
10.00	29

**Rig Info**

Rig
Basic, 35

**Rig Release Date**

RR Date

**Survey Information**

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
9/21/2015	WLS	0.00	0.00	0.0	0.0	40.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
3,167.00	2.70	0.00	3,125.13	85.97	0.00	85.97	0.21
3,295.00	2.40	0.00	3,253.00	91.66	0.00	91.66	0.23
3,452.00	2.10	0.00	3,409.88	97.82	0.00	97.82	0.19
3,610.00	1.90	0.00	3,567.79	103.34	0.00	103.34	0.13
3,769.00	1.90	0.00	3,726.70	108.61	0.00	108.61	0.00

**Daily Summary**

Footage (ftKB)	End Depth (ftKB)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
1,520.00	3,872.0	19,123.00	169,933.93

Activity  
Drilling @ 3872'

**24hr Activity**

Com
Drlg f/ 2352 - 3081, 729' @ 69.42' hr., w/ Surveys
Service Rig & Function test BOP's
Drlg f/ 3081 - 3872, 791' @ 60.84' hr., w/ Surveys

**Partner - Drilling****Well Name: Fcu 4472****Date: 9/25/2015**

Well Name Fcu 4472	API/UWI 4200347087	State/Province Texas	County Andrews
Permit Number 804872	Spud Date 9/22/2015 04:00	Ground/Corrected Ground Elevation (ft) 3,293.00	KB-Ground Distance (ft) 13.00

**Mud Properties**

Dens (lb/gal)	Vis (s/qt)
10.00	29

**Rig Info**

Rig
Basic, 35

**Rig Release Date**

RR Date

**Survey Information**

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
9/21/2015	WLS	0.00	0.00	0.0	0.0	40.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
4,085.00	1.10	0.00	4,042.59	116.86	0.00	116.86	0.25
4,245.00	1.00	0.00	4,202.56	119.80	0.00	119.80	0.06
4,402.00	1.00	0.00	4,359.54	122.54	0.00	122.54	0.00
4,908.00	0.80	0.00	4,865.48	130.48	0.00	130.48	0.04
5,415.00	0.60	0.00	5,372.44	136.68	0.00	136.68	0.04

**Daily Summary**

Footage (ftKB)	End Depth (ftKB)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
2,026.00	5,898.0	15,520.00	185,453.93

Activity  
Drilling @ 5898'**24hr Activity**

Com
Drlg f/ 3872 - 4664, 792' @ 83.36' hr., w/ Surveys
Service Rig & Function test BOP's/ BOP Drill
Drlg f/ 4664 - 5898, 1234' @ 88.14' hr., w/ Surveys

**Partner - Drilling****Well Name: Fcu 4472****Date: 9/26/2015**

Well Name Fcu 4472	API/UWI 4200347087	State/Province Texas	County Andrews
Permit Number 804872	Spud Date 9/22/2015 04:00	Ground/Corrected Ground Elevation (ft) 3,293.00	KB-Ground Distance (ft) 13.00

**Mud Properties**

Dens (lb/gal)	Vis (s/qt)
10.10	32

**Rig Info**

Rig
Basic, 35

**Rig Release Date**

RR Date

**Survey Information**

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
9/21/2015	WLS	0.00	0.00	0.0	0.0	40.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
5,415.00	0.60	0.00	5,372.44	136.68	0.00	136.68	0.04
5,879.00	0.60	0.00	5,836.41	141.54	0.00	141.54	0.00
6,427.00	0.70	0.00	6,384.38	147.75	0.00	147.75	0.02
6,966.00	0.30	0.00	6,923.36	152.46	0.00	152.46	0.07
7,187.00	0.20	0.00	7,144.35	153.42	0.00	153.42	0.05

**Daily Summary**

Footage (ftKB)	End Depth (ftKB)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
1,360.00	7,258.0	15,280.00	200,733.93

Activity  
LD DP**24hr Activity**

Com
Drlg f/ 5898 - 6531, 633' @ 70.33' hr., w/ Surveys Service Rig & Function test BOP's/ BOP Drill Drlg f/ 6531 - 7258, 727' @ 69.23' hr., w/ Surveys, TD well. Pump sweep & circulate out, PJSM, RU Thompson LDM while circulating LD DP



## Partner - Drilling

Well Name: Fcu 4472

Date: 9/27/2015

Well Name Fcu 4472	API/UWI 4200347087	State/Province Texas	County Andrews
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### Mud Properties

Dens (lb/gal)	Vis (s/qt)

### Rig Info

Rig

### Rig Release Date

RR Date

### Survey Information

Date 9/21/2015	Description WLS	EW Tie In (ft) 0.00	NS Tie In (ft) 0.00	Azimuth Tie In (°) 0.0	Inclination Tie In (°) 0.0	MD Tie In (ftKB) 40.00	TVD Tie In (ftKB) 0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

### Daily Summary

Footage (ftKB)	End Depth (ftKB)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)

Activity

ND BOP's

### 24hr Activity

Com
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LDDP, Break Kelly, LDDC's, Layout Kelly, RD Thompson LDM

PJSM, Run Wireline E-Logs, Logger TD 7258'

PJSM: RU Thompson Casing Crew and LDM

Run 5 1/2" Casing as Follows: 1-5 1/2" Float Shoe (1.10'), 1 jt. 5 1/2" J-55 17# LTC ( 44.05') 1-5 1/2" Float Collar ( 1.15'), 36 ts. 5 1/2" J-55 17# LTC ( 1629.23'), 1 Marker Jt. 5 1/2" J-55 17# LTC ( 19.88'), 127 jts 5 1/2" J-55 17# LTC ( 5613.03'), Ran a Total of 165 jts. ( 7262.14') Set at 7258'

Circulate casing, RD Thompson Casing crew & LDM, Spot Basic pump truck & bulk trucks

Test Lines to 5000 psi, Pump 20 bbls FW Spacer Ahead of 800 sx of 50-50 Pozf Lead Cement Density 11.5 ppg, Yield 2.68 @ 7 bbls/m W/ 400 psi Followed by 800 sx of Class C Tail Cement Density 14.2 ppg, Yield 1.31 @ 7 bbls/m w/ 425 psi. Released Plug, Displace w/ 167 bbls 8.3 ppg FW @ 7.25 bbls/m @ 50-2250 psi. Bump Plug 500 psi Over @ 2.5 bbls/m. Final Bump Pressure 2750 psi. Release Plug, 1.5 bbls, Back. Floats Held. Circulated 497 sx / 237 bbls to Surface. Full Returns, RDMO Basic

ND BOP's