

## EP WELLS DAILY OPERATIONS REPORT

Report 1

04/03/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19-10 LOV 1D
Wellbore	UNIVERSITY 19-10 LOV 1D
WBS No/API No	30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	0.63
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	0.00
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	BRYAN BOYLES	Measured Depth(ft)	150.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	150.00
Other Supervisor	NEEHAL MOORUTH / ROSS GRAHAM	24 Hr Progress(ft)	150.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	30.000
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	20.000in@150.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Auxiliary/Secondary Work(hr)	0.00	Lithology	0/0
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	0/1,585,627.97	Formation top MD	
Actual divided by AFE	0.00	Daily NPT(hr/%)	
Daily Cost	0	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	620	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	10 11

Safety Comments:

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	22
Last BOP function test	03/24/2016	10	Days Since Last Drill	86
Last BOP Test	03/24/2016	10		
Next BOP Test	04/14/2016			

## Operations Summary

24 Hour Summary
INSTALL THE BPV AND TA CAP AND PRESSURE TESTED SEALS. RIG RELEASED @ 9AM 4/3/2016. STARTED RIG DOWN. R/D: 35%, MOVED: 10%, R/U: 10%
Update Since Report Time
@2AM WAITING ON A REPLACEMENT HYDRAULIC CYLINDER TO LOWER THE DERRICK. CURRENT CYLINDER HAS A LEAKING GASKET.
24 Hour Forecast
LOWER THE DERRICK AND SEPARATE INTO THE CROWN AND LOWER SECTION. R/D AND MOVE THE SUBS AND OTHER ITEMS.

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04/03/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
9:00	3.00	RM	RUD		150.00	0		REMOVE BAILS AND ELEVATORS FROM TOP DRIVE. PIN-OFF THE THE TOP DRIVE, UNSPOOL THE DRAWWORKS AND CUT 10 WRAPS (86'). R/D MUD PUMPS AND PITS AND LOAD THEM OUT.
12:00	6.00	RM	RUD		150.00	0		R/D WATER & AIR LINES , RIG FLOOR AND UNWIRE. REMOVE FLOWLINE, IRON ROUGHNECK AND HYDRAULIC LINES. R/D CHOKE MANIFOLD AND GAS BUSTER. SPOT PUMPS AND PITS ON NEW LOCATION.
18:00	4.00	RM	RUD		150.00	0		LOWER THE RIG FLOOR
22:00	2.00	RM	RUD		150.00	0		BEGIN WORKING ON LOWERING THE DERRICK.
<b>Total</b>	<b>15.00</b>							

## 06.00 Update

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Description
0:00	0.50	RM	RUD		150.00	0	WHILE RAISING THE DRILLER SIDE HYDRAULIC RAISING CYLINDER, IT WAS NOTICED THAT IT WAS LEAKING HYDRAULIC OIL. RIG MANAGER DECIDED TO CHANGE IT OUT.
0:30	5.50	RM	RUD		150.00	0	C/O RAISING CYLINDER, SET SERVICE LOOP ON TOP OF DRAWWORKS. PRESSURE WAS THE DERRICK.

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	EPW MWD
30.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	EPW MWD

## Fluid Details

Mud type	Low Solids Non Disperse	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)		Sand (%)	Ca+ (ppm)
Vis (s/qt)			Cl- (ppm)
PV/YP (cp/lbf/100ft²)		MBT (lbm/bbl)	R600/300 (°)
Gels 10 s/m (lbf/100ft²)		LCM (lbm/bbl)	R200/100 (°)
API/HTHP WL (cc/30min)		ECD (ppg)	R6/3 (°)
FC/HTHP FC (32nd")		H2S (gas unit)	
FL temp. (°F)		KCl (%)	
		Ditch Magnet in Last 24hrs/Cum. (gm)	

## Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
1	12.250	BAKER HUGHES	DP506X			7157058	6x12	150.00	1,163.00	1-1-NO-A-X-I-NO-TD

## Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DP	1	115.96	4.000		3.340	XT 39	16.00		RIG
15 JTS 4" HWDP	15	462.10	4.500		3.000	XT 39	88.00		RIG
X/O	1	3.09	6.500		2.500	XT 39	142.00		SST 20889

## EP WELLS DAILY OPERATIONS REPORT

Report 1

04/03/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
15 JTS 6.5" DC	15	451.39	6.500		3.000	4-1/2 XH	142.00		RIG
X/O	1	2.26	7.875		2.750	4-1/2 XH	170.00		AWST 2816
FILTER SUB	1	4.57	8.250		3.500	6 5/8 REG	188.00		MST 814057
12' NM SPIRAL STAB	1	7.57	8.500		3.500	6 5/8 REG	200.00		SD27402
30' NM DC	1	30.97	8.125		3.500	6 5/8 REG	188.00		11958707
12' NM SPIRAL STAB	1	8.12	8.250		3.500	6 5/8 REG	200.00		SD 604798
NAVI TRACK	1	33.43	8.000		3.500	6 5/8 REG	188.00		907 STX
12' NM SPIRAL STAB	1	7.06	8.250		3.500	6 5/8 REG	200.00		SD 27954
M1XL (MOTOR), 0	1	34.98	8.000			6 5/8 REG	188.00		12616492
BIT#1 RUN#1 BAKER DP506X (6X12's) BIT GRADE:	1	1.50	12.250	12.250		6 5/8 REG	200.00		7157058

## Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
03/31/2016 22:00	05/03/2016 05:30	1	1,047.04	2.500	DRILL 12.25" SURFACE HOLE SECTION

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 2

04/04/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19-10 LOV 1D
Wellbore	UNIVERSITY 19-10 LOV 1D
WBS No/API No	30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	1.63
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	0.00
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	BRYAN BOYLES	Measured Depth(ft)	150.00
Engineer	POWER CHARLES / YERMEK TINYSHBAYEV	TVD(ft)	150.00
Other Supervisor	NEEHAL MOORUTH / ROSS GRAHAM	24 Hr Progress(ft)	0.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	20.000in@150.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Auxiliary/Secondary Work(hr)	0.00	Lithology	0/0
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	0/1,585,627.97	Formation top MD	
Actual divided by AFE	0.00	Daily NPT(hr/%)	
Daily Cost	0	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	621	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	10 11
Safety Comments:							

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection	03/24/2016	11	JSA's/Toolbox Talks Days Since Last Drill	23
Last BOP function test	03/24/2016	11		87
Last BOP Test	04/14/2016			
Next BOP Test				

## Operations Summary

24 Hour Summary
WHILE RAISING THE HYDRAULIC RAISING CYLINDER IT WAS NOTICED TO BE LEAKING. DECIDED TO C/O. WAITED ON REPLACEMENT @ 2AM. @ 12PM 4/4/16 RIG MOVE WAS SHUT DOWN. ALL EQUIPMENT R/D ON NEW LOCATION AND TRANSPORTED BACK. CONTINUE R/U ON NEELIE 1-85 LOV 1H.
Update Since Report Time
CONTINUE R/U AND PREPARE TO RUN WIRELINE.
24 Hour Forecast
CONTINUE R/U AND PREPARE TO RUN WIRELINE.

## EP WELLS DAILY OPERATIONS REPORT

Report 2

04/04/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	0.50	RM	RUD		150.00	0		WHILE RAISING THE DRILLER SIDE HYDRAULIC RAISING CYLINDER, IT WAS NOTICED THAT IT WAS LEAKING HYDRAULIC OIL. RIG MANAGER DECIDED TO CHANGE IT OUT.
0:30	5.50	RM	RUD		150.00	0		C/O RAISING CYLINDER, SET SERVICE LOOP ON TOP OF DRAWWORKS. PRESSURE WAS THE DERRICK.
6:00	6.00	RM	RUD		150.00	0		LOAD OUT MOTOR PACKAGE, VFD HOUSE AND SPOT ON NEW LOCATION. WHILE WAITING ON LIFTING CYLINDER SHUT-DOWN RIG MOVE. BEGIN MOVING BACK TO NEELIE 1-85 LOV 1H.
12:00	12.00	RM	RUD		150.00	0		R/D MUD PUMPS, PITS, MOTOR PACKAGE ON NEW LOCATION AND TRANSPORT BACK TO OLD LOCATION. ALL EQUIPMENT TRANSFERRED BACK TO NEELIE 1-85 LOV 1H. CONTINUE R/U. RAISE RIG FLOOR, WIRE UP RIG FLOOR AND HYDRAULIC LINES. SPOT THE MUD PUMPS, PITS AND BUSTER AND R/U.
<b>Total</b>	<b>24.00</b>							

## 06.00 Update

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Description
0:00	6.00	RM	RUD		150.00	0	WIRE UP RIG FLOOR AND HYDRAULIC LINES. R/U MUD PUMPS, PITS, BUSTER AND FLOWLINE. WIRE UP THE VFD HOUSE.

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	EPW MWD
30.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	EPW MWD

## Fluid Details

Mud type	Low Solids Non Disperse	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)		Sand (%)	Ca+ (ppm)
Vis (s/qt)			Cl- (ppm)
PV/YP (cp/lbf/100ft²)		MBT (lbm/bbl)	
Gels 10 s/m (lbf/100ft²)		LCM (lbm/bbl)	
API/HTHP WL (cc/30min)		ECD (ppg)	R600/300 (°)
FC/HTHP FC (32nd")		H2S (gas unit)	R200/100 (°)
		KCl (%)	R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

## Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
1	12.250	BAKER HUGHES	DP506X			7157058	6x12	150.00	1,163.00	1-1-NO-A-X-I-NO-TD

## Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DP	1	115.96	4.000		3.340	XT 39	16.00		RIG
15 JTS 4" HWDP	15	462.10	4.500		3.000	XT 39	88.00		RIG
X/O	1	3.09	6.500		2.500	XT 39	142.00		SST 20889

## EP WELLS DAILY OPERATIONS REPORT

Report 2

04/04/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
15 JTS 6.5" DC	15	451.39	6.500		3.000	4-1/2 XH	142.00		RIG
X/O	1	2.26	7.875		2.750	4-1/2 XH	170.00		AWST 2816
FILTER SUB	1	4.57	8.250		3.500	6 5/8 REG	188.00		MST 814057
12' NM SPIRAL STAB	1	7.57	8.500		3.500	6 5/8 REG	200.00		SD27402
30' NM DC	1	30.97	8.125		3.500	6 5/8 REG	188.00		11958707
12' NM SPIRAL STAB	1	8.12	8.250		3.500	6 5/8 REG	200.00		SD 604798
NAVI TRACK	1	33.43	8.000		3.500	6 5/8 REG	188.00		907 STX
12' NM SPIRAL STAB	1	7.06	8.250		3.500	6 5/8 REG	200.00		SD 27954
M1XL (MOTOR), 0	1	34.98	8.000			6 5/8 REG	188.00		12616492
BIT#1 RUN#1 BAKER DP506X (6X12's) BIT GRADE:	1	1.50	12.250	12.250		6 5/8 REG	200.00		7157058

## Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
03/31/2016 22:00	05/03/2016 05:30	1	1,047.04	2.500	DRILL 12.25" SURFACE HOLE SECTION

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 3

04/05/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19-10 LOV 1D
Wellbore	UNIVERSITY 19-10 LOV 1D
WBS No/API No	30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	2.63
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	0.00
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	BRYAN BOYLES	Measured Depth(ft)	150.00
Engineer	POWER CHARLES / YERMEK TINYSHBAYEV	TVD(ft)	150.00
Other Supervisor	NEEHAL MOORUTH / ROSS GRAHAM	24 Hr Progress(ft)	0.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	20.000in@150.00ft
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Auxiliary/Secondary Work(hr)	0.00	Lithology	
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	0/1,585,627.97	Formation top MD	
Actual divided by AFE	0.00	Daily NPT(hr/%)	0/0
Daily Cost	0	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	622	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	10 11

Safety Comments:

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection	03/24/2016	12	JSA's/Toolbox Talks	23
Last BOP function test	03/24/2016	12	Days Since Last Drill	88
Last BOP Test				
Next BOP Test	04/14/2016			

## Operations Summary

24 Hour Summary
CONTINUE R/U RIG FLOOR, VFD HOUSE, FLOWLINE, BUSTER AND TOP DRIVE. RAISE BOP, PULL BPV AND SET 2-WAY CHECK. PRESSURE TEST THE BREAK AGAINST THE BLINDS AND CHOKE LINE. THEN PULL THE 2-WAY CHECK AND PRESSURE TESTED THE LINER TOP PACKER AND CASING.
Update Since Report Time
@ 4AM RIH WITH PLUG TO SET IN 4.5" LINER TO PRESSURE TEST THE LINER TOP PACKER.
24 Hour Forecast

## EP WELLS DAILY OPERATIONS REPORT

Report 3

04/05/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	6.00	RM	RUD		150.00	0		WIRE UP RIG FLOOR AND HYDRAULIC LINES. R/U MUD PUMPS, PITS, BUSTER AND FLOWLINE. WIRE UP THE VFD HOUSE.
6:00	6.00	RM	RUD		150.00	0		R/U OVERBOARD LINE, PLUG-IN THE TOP DRIVE AND HYDRAULIC LINES. SPOOL UP DRILL LINE AND UNPIN TOP DRIVE.
12:00	2.00	RM	RUD		150.00	0		R/D TA CAP.
14:00	4.00	RM	RUD		150.00	0		RAISE BOPS AND SET ON TOP OF WELLHEAD. TORQUE UP AND L/D BOP WRANGLER. HOOK UP CHOKE, KILL AND KOOMEY LINES.
18:00	0.50	RM	RUD		150.00	0		POWER UP KOOMEY AND FUNCTION TEST.
18:30	1.00	RM	RUD		150.00	0		PULL BACK PRESSURE VALVE AND SET 2-WAY CHECK VALVE.
19:30	1.00	RM	RUD		150.00	0		FILLED THE STACK AND PRESSURE TESTED AGAINST THE BREAK, BLIND RAMS AND CHOKE LINE. @ 250 PSI AND 10000 PSI FOR 5 MINS EACH.
20:30	1.00	RM	RUD		150.00	0		bled the pressure off and pulled the 2-WAY CHECK VALVE OUT. BACK ON NEELIE 1-85 LOV 1H.
<b>Total</b>	<b>21.50</b>							

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	EPW MWD
30.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	EPW MWD

## Fluid Details

Mud type	Low Solids Non Disperse	Oil/Water (%)		pH/Pm (cc)	
MD (ft)		TS/HGS/LGS (%)		Pf/Mf (cc)	
Mud Density (ppg)		Sand (%)		Ca+ (ppm)	
Vis (s/qt)				Cl- (ppm)	
PV/YP (cp/lbf/100ft²)		MBT (lbm/bbl)			
Gels 10 s/m (lbf/100ft²)		LCM (lbm/bbl)			
API/HTHP WL (cc/30min)		ECD (ppg)		R600/300 (°)	
FC/HTHP FC (32nd")		H2S (gas unit)		R200/100 (°)	
		KCl (%)		R6/3 (°)	
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)			

## Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
1	12.250	BAKER HUGHES	DP506X			7157058	6x12	150.00	1,163.00	1-1-NO-A-X-I-NO-TD

## Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DP	1	115.96	4.000		3.340	XT 39	16.00		RIG
15 JTS 4" HWDP	15	462.10	4.500		3.000	XT 39	88.00		RIG
X/O	1	3.09	6.500		2.500	XT 39	142.00		SST 20889
15 JTS 6.5" DC	15	451.39	6.500		3.000	4-1/2 XH	142.00		RIG
X/O	1	2.26	7.875		2.750	4-1/2 XH	170.00		AWST 2816

## EP WELLS DAILY OPERATIONS REPORT

Report 3

04/05/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
FILTER SUB	1	4.57	8.250		3.500	6 5/8 REG	188.00		MST 814057
12' NM SPIRAL STAB	1	7.57	8.500		3.500	6 5/8 REG	200.00		SD27402
30' NM DC	1	30.97	8.125		3.500	6 5/8 REG	188.00		11958707
12' NM SPIRAL STAB	1	8.12	8.250		3.500	6 5/8 REG	200.00		SD 604798
NAVI TRACK	1	33.43	8.000		3.500	6 5/8 REG	188.00		907 STX
12' NM SPIRAL STAB	1	7.06	8.250		3.500	6 5/8 REG	200.00		SD 27954
M1XL (MOTOR), 0	1	34.98	8.000			6 5/8 REG	188.00		12616492
BIT#1 RUN#1 BAKER DP506X (6X12's) BIT GRADE:	1	1.50	12.250	12.250		6 5/8 REG	200.00		7157058

## Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
03/31/2016 22:00	05/03/2016 05:30	1	1,047.04	2.500	DRILL 12.25" SURFACE HOLE SECTION

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 4

04/06/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19-10 LOV 1D
Wellbore	UNIVERSITY 19-10 LOV 1D
WBS No/API No	30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	3.63
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	0.00
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	BRYAN BOYLES	Measured Depth(ft)	150.00
Engineer	POWER CHARLES / YERMEK TINYSHBAYEV	TVD(ft)	150.00
Other Supervisor	NEEHAL MOORUTH / ROSS GRAHAM	24 Hr Progress(ft)	0.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	
Rig Zero Rate(hr)	0.00	Next Casing MD	20.000in@150.00ft
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Auxiliary/Secondary Work(hr)	0.00	Lithology	
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	0/1,585,627.97	Formation top MD	
Actual divided by AFE	0.00	Daily NPT(hr/%)	0/0
Daily Cost	0	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	623	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	10 11
Safety Comments:							

## Drills

Drill Category	Drill Type	Detection (sec)	Complete (sec)	Crew drilled	Pass / Fail	PIC	Comments
HSE Drills	Muster Drill		180.00	Day	Pass		PERFORMED

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	15
Last BOP function test	03/24/2016	13	Days Since Last Drill	89
Last BOP Test	03/24/2016	13		
Next BOP Test	04/14/2016			

## Operations Summary

24 Hour Summary
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## EP WELLS DAILY OPERATIONS REPORT

Report 4

04/06/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

RIH WITH PACKER AND SET 9175'. PRESSURE TESTED TO 4000 PSI AND WAS DETERMINED THE LEAK WAS BELOW THE 4.5" LINER TOP PACKER. EVACUATED THE RIG @ 11:00 AM DUE TO BLOWOUT ON NEARBY WORKOVER RIG. CONTINUE R/D @ 16:00 RIG RELEASE.

Update Since Report Time

24 Hour Forecast

CONTINUE R/D AND BEGIN RIG MOVE.

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
16:00	8.00	RM	RUD		150.00	0		****NEW WELL - UNIVERSITY 19-10 LOV 1D ****  CONTINUE R/D THE MUD PUMPS, PITS, BUSTER, FLOWLINE, CHOKE MANIFOLD AND CATWALK.
<b>Total</b>	<b>8.00</b>							

## 06.00 Update

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Description
0:00	6.00	RM	RUD		150.00	0	UNSPPOOL THE DRAWWORKS, UNWIRE THE RIG FLOOR AND DRILLERS CABIN. CONTINUE TO MONITOR WIND DIRECTION AND MOVEMENT OF GAS CLOUD FROM NEARBY BLOWOUT.

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	EPW MWD
30.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	EPW MWD

## Fluid Details

Mud type	Low Solids Non Disperse	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)		Sand (%)	Ca+ (ppm)
Vis (s/qt)			Cl- (ppm)
PV/YP (cp/lbf/100ft²)		MBT (lbm/bbl)	
Gels 10 s/m (lb/100ft²)		LCM (lbm/bbl)	
API/HTHP WL (cc/30min)		ECD (ppg)	R600/300 (°)
FC/HTHP FC (32nd")		H2S (gas unit)	R200/100 (°)
		KCl (%)	R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

## Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
1	12.250	BAKER HUGHES	DP506X			7157058	6x12	150.00	1,163.00	1-1-NO-A-X-I-NO-TD

## Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DP	1	115.96	4.000		3.340	XT 39	16.00		RIG
15 JTS 4" HWDP	15	462.10	4.500		3.000	XT 39	88.00		RIG
X/O	1	3.09	6.500		2.500	XT 39	142.00		SST 20889

## EP WELLS DAILY OPERATIONS REPORT

Report 4

04/06/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
15 JTS 6.5" DC	15	451.39	6.500		3.000	4-1/2 XH	142.00		RIG
X/O	1	2.26	7.875		2.750	4-1/2 XH	170.00		AWST 2816
FILTER SUB	1	4.57	8.250		3.500	6 5/8 REG	188.00		MST 814057
12' NM SPIRAL STAB	1	7.57	8.500		3.500	6 5/8 REG	200.00		SD27402
30' NM DC	1	30.97	8.125		3.500	6 5/8 REG	188.00		11958707
12' NM SPIRAL STAB	1	8.12	8.250		3.500	6 5/8 REG	200.00		SD 604798
NAVI TRACK	1	33.43	8.000		3.500	6 5/8 REG	188.00		907 STX
12' NM SPIRAL STAB	1	7.06	8.250		3.500	6 5/8 REG	200.00		SD 27954
M1XL (MOTOR), 0	1	34.98	8.000			6 5/8 REG	188.00		12616492
BIT#1 RUN#1 BAKER DP506X (6X12's) BIT GRADE:	1	1.50	12.250	12.250		6 5/8 REG	200.00		7157058

## Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
03/31/2016 22:00	05/03/2016 05:30	1	1,047.04	2.500	DRILL 12.25" SURFACE HOLE SECTION

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 5

04/07/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19-10 LOV 1D
Wellbore	UNIVERSITY 19-10 LOV 1D
WBS No/API No	30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	4.63
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	0.00
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	BRYAN BOYLES	Measured Depth(ft)	150.00
Engineer	POWER CHARLES / YERMEK TINYSHBAYEV	TVD(ft)	150.00
Other Supervisor	NEEHAL MOORUTH / ROSS GRAHAM	24 Hr Progress(ft)	0.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	20.000in@150.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Auxiliary/Secondary Work(hr)	0.00	Lithology	0/0
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	38,542/1,585,627.97	Formation top MD	
Actual divided by AFE	0.02	Daily NPT(hr/%)	
Daily Cost	38,542	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	624	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:	CONTINUE TO MONITOR NEAR BY BLOWOUT.						

## HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	90
Last Derrick Inspection	03/24/2016	14		
Last BOP function test	03/24/2016	14		
Last BOP Test	04/14/2016			

## Operations Summary

24 Hour Summary
RIG MOVE. CONTINUE TO MONITOR NEAR BY BLOWOUT.
Update Since Report Time
24 Hour Forecast
RIG MOVE.

## EP WELLS DAILY OPERATIONS REPORT

Report 5

04/07/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	6.00	RM	RUD		150.00	0		UNSPPOOL THE DRAWWORKS, UNWIRE THE RIG FLOOR AND DRILLERS CABIN. CONTINUE TO MONITOR WIND DIRECTION AND MOVEMENT OF GAS CLOUD FROM NEARBY BLOWOUT.
6:00	14.00	RM	RUD		150.00	0		LOAD OUT CATWALK, BOPS, MOTOR PACKAGE, MUD PUMPS AND PITS. SPOT ON NEW LOCATION. LOWER THE RIG FLOOR AND REMOVE DRILLERS CABIN AND SIDE RAILINGS. HELD PJSM PRIOR TO LOWERING THE DERRICK. UNSTRING THE BLOCKS, SPLIT THE BLOCKS AND PIN OFF TOP DRIVE. SPLIT THE DERRICK IN TO LOWER AND CROWN SECTIONS. *SHUT-DOWN FOR THE NIGHT @ 20::00.
<b>Total</b>	<b>20.00</b>							

## 06.00 Update

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Description
0:00	6.00	RM	IFO		150.00	0	WAITING ON DAYLIGHT

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	EPW MWD
30.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	EPW MWD

## Fluid Details

Mud type	Low Solids Non Disperse	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)		Sand (%)	Ca+ (ppm)
Vis (s/qt)			Cl- (ppm)
PV/YP (cp/lbf/100ft²)		MBT (lbm/bbl)	
Gels 10 s/m (lbf/100ft²)		LCM (lbm/bbl)	
API/HTHP WL (cc/30min)		ECD (ppg)	R600/300 (°)
FC/HTHP FC (32nd")		H2S (gas unit)	R200/100 (°)
		KCl (%)	R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

## Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
1	12.250	BAKER HUGHES	DP506X			7157058	6x12	150.00	1,163.00	1-1-NO-A-X-I-NO-TD

## Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DP	1	115.96	4.000		3.340	XT 39	16.00		RIG
15 JTS 4" HWDP	15	462.10	4.500		3.000	XT 39	88.00		RIG
X/O	1	3.09	6.500		2.500	XT 39	142.00		SST 20889
15 JTS 6.5" DC	15	451.39	6.500		3.000	4-1/2 XH	142.00		RIG
X/O	1	2.26	7.875		2.750	4-1/2 XH	170.00		AWST 2816

## EP WELLS DAILY OPERATIONS REPORT

Report 5

04/07/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
FILTER SUB	1	4.57	8.250		3.500	6 5/8 REG	188.00		MST 814057
12' NM SPIRAL STAB	1	7.57	8.500		3.500	6 5/8 REG	200.00		SD27402
30' NM DC	1	30.97	8.125		3.500	6 5/8 REG	188.00		11958707
12' NM SPIRAL STAB	1	8.12	8.250		3.500	6 5/8 REG	200.00		SD 604798
NAVI TRACK	1	33.43	8.000		3.500	6 5/8 REG	188.00		907 STX
12' NM SPIRAL STAB	1	7.06	8.250		3.500	6 5/8 REG	200.00		SD 27954
M1XL (MOTOR), 0	1	34.98	8.000			6 5/8 REG	188.00		12616492
BIT#1 RUN#1 BAKER DP506X (6X12's) BIT GRADE:	1	1.50	12.250	12.250		6 5/8 REG	200.00		7157058

## Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
03/31/2016 22:00	05/03/2016 05:30	1	1,047.04	2.500	DRILL 12.25" SURFACE HOLE SECTION

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 6

04/08/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19-10 LOV 1D
Wellbore	UNIVERSITY 19-10 LOV 1D
WBS No/API No	30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	5.63
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	0.00
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	BRYAN BOYLES	Measured Depth(ft)	150.00
Engineer	POWER CHARLES / YERMEK TINYSHBAYEV	TVD(ft)	150.00
Other Supervisor	NEEHAL MOORUTH / ROSS GRAHAM	24 Hr Progress(ft)	0.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	20.000in@150.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Auxiliary/Secondary Work(hr)	0.00	Lithology	0/0
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	69,163/1,585,627.97	Formation top MD	
Actual divided by AFE	0.04	Daily NPT(hr/%)	
Daily Cost	30,621	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	625	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	7 3 0
Safety Comments:							

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection	03/24/2016	15	JSA's/Toolbox Talks Days Since Last Drill	8
Last BOP function test	03/24/2016	15		91
Last BOP Test	04/14/2016			
Next BOP Test				

## Operations Summary

24 Hour Summary
RIG MOVE. SPOT SUBS, INSTALL DRAWWORKS, UNFOLD LOWER DERRICK SECTION, R/U BACKYARD.
Update Since Report Time
@05:00 - WAITING ON DAYLIGHT
24 Hour Forecast
PIN LOWER DERRICK TO FLOOR, PIN CROWN SECTION TO LOWER, STRING UP DRILL LINE, INSTALL DRILLERS CABIN, RAISE DERRICK AND SUBS.

## EP WELLS DAILY OPERATIONS REPORT

Report 6

04/08/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	6.00	RM	IFO		150.00	0		WAITING ON DAYLIGHT
6:00	14.50	RM	RUD		150.00	0		UNPIN LOWER DERRICK SECTION FROM FLOOR, FOLD, AND HAUL TO NEW LOCATION. SPLIT SUBS AND CENTER STEEL, LOAD AND HAUL TO NEW LOCATION. SET RIG MATS AND SPOT SUBS, INSTALL CENTER STEEL. INSTALL DRAWWORKS AND SET PARTS HOUSE. FINISH RIGGING UP BACK YARD. UNFOLD LOWER DERRICK SECTION.
20:30	3.50	RM	RUD		150.00	0		WASH DERRICK.
<b>Total</b>	<b>24.00</b>							

## 06.00 Update

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Description
0:00	4.00	C06	RUD		150.00	0	WASH DERRICK.
4:00	3.00	C06	NOA		150.00	0	WAITING ON DAYLIGHT.

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	EPW MWD
30.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	EPW MWD

## Fluid Details

Mud type	Low Solids Non Disperse	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)		Sand (%)	Ca+ (ppm)
Vis (s/qt)		MBT (lbm/bbl)	Cl- (ppm)
PV/YP (cp/lbf/100ft²)		LCM (lbm/bbl)	
Gels 10 s/m (lbf/100ft²)		ECD (ppg)	R600/300 (°)
API/HTHP WL (cc/30min)		H2S (gas unit)	R200/100 (°)
FC/HTHP FC (32nd")		KCl (%)	R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

## Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
1	12.250	BAKER HUGHES	DP506X			7157058	6x12	150.00	1,163.00	1-1-NO-A-X-I-NO-TD

## Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DP	1	115.96	4.000		3.340	XT 39	16.00		RIG
15 JTS 4" HWDP	15	462.10	4.500		3.000	XT 39	88.00		RIG
X/O	1	3.09	6.500		2.500	XT 39	142.00		SST 20889
15 JTS 6.5" DC	15	451.39	6.500		3.000	4-1/2 XH	142.00		RIG
X/O	1	2.26	7.875		2.750	4-1/2 XH	170.00		AWST 2816

## EP WELLS DAILY OPERATIONS REPORT

Report 6

04/08/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
FILTER SUB	1	4.57	8.250		3.500	6 5/8 REG	188.00		MST 814057
12' NM SPIRAL STAB	1	7.57	8.500		3.500	6 5/8 REG	200.00		SD27402
30' NM DC	1	30.97	8.125		3.500	6 5/8 REG	188.00		11958707
12' NM SPIRAL STAB	1	8.12	8.250		3.500	6 5/8 REG	200.00		SD 604798
NAVI TRACK	1	33.43	8.000		3.500	6 5/8 REG	188.00		907 STX
12' NM SPIRAL STAB	1	7.06	8.250		3.500	6 5/8 REG	200.00		SD 27954
M1XL (MOTOR), 0	1	34.98	8.000			6 5/8 REG	188.00		12616492
BIT#1 RUN#1 BAKER DP506X (6X12's) BIT GRADE:	1	1.50	12.250	12.250		6 5/8 REG	200.00		7157058

## Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
03/31/2016 22:00	05/03/2016 05:30	1	1,047.04	2.500	DRILL 12.25" SURFACE HOLE SECTION

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 7

04/09/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19-10 LOV 1D
Wellbore	UNIVERSITY 19-10 LOV 1D
WBS No/API No	30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	6.63
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	0.00
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	BRYAN BOYLES	Measured Depth(ft)	150.00
Engineer	POWER CHARLES / YERMEK TINYSHBAYEV	TVD(ft)	150.00
Other Supervisor	NEEHAL MOORUTH / ROSS GRAHAM	24 Hr Progress(ft)	0.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	20.000in@150.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Auxiliary/Secondary Work(hr)	0.00	Lithology	0/0
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	98,755/1,585,627.97	Formation top MD	
Actual divided by AFE	0.06	Daily NPT(hr/%)	
Daily Cost	29,592	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	626	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection	03/24/2016	16	JSA's/Toolbox Talks Days Since Last Drill	92
Last BOP function test	03/24/2016	16		
Last BOP Test	04/14/2016			
Next BOP Test				

## Operations Summary

24 Hour Summary
RAISE DERRICK AND FLOOR, MOVE CAMPS.
Update Since Report Time
@05:00 - WAITING ON DAYLIGHT.
24 Hour Forecast
DRESS FLOOR OUT, SPOT CAT WALK AND BOP WRANGLER, HANG FLOWLINE, WIRE UP FLOOR AND TOPDRIVE.

## EP WELLS DAILY OPERATIONS REPORT

Report 7

04/09/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	4.00	C06	RUD		150.00	0		WASH DERRICK.
4:00	3.00	C06	NOA		150.00	0		WAITING ON DAYLIGHT.
7:00	14.00	C06	RUD		150.00	0		PIN LOWER DERRICK SECTION TO FLOOR, PIN CROWN SECTION TO LOWER, STRING UP DRILL LINE, RUN CABLES, INSTALL MONKEY BOARD, INSPECT AND RAISE DERRICK. RE-POSITION LIFTING CYLINDERS, INSTALL DRILLER SHACK AND DOG HOUSE, RAISE FLOOR, INSTALL FLOOR PLATES AND HANDRAILS. MOVE CAMPS.
21:00	3.00	C06	NOA		150.00	0		WAITING ON DAYLIGHT.
<b>Total</b>	<b>24.00</b>							

## 06.00 Update

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Description
0:00	7.00	RM	NOA		150.00	0	WAITING ON DAYLIGHT.

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	EPW MWD
30.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	EPW MWD

## Fluid Details

Mud type	Low Solids Non Disperse	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)		Sand (%)	Ca+ (ppm)
Vis (s/qt)		MBT (lbm/bbl)	Cl- (ppm)
PV/YP (cp/lbf/100ft²)		LCM (lbm/bbl)	
Gels 10 s/m (lbf/100ft²)		ECD (ppg)	R600/300 (°)
API/HTHP WL (cc/30min)		H2S (gas unit)	R200/100 (°)
FC/HTHP FC (32nd")		KCl (%)	R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

## Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
1	12.250	BAKER HUGHES	DP506X			7157058	6x12	150.00	1,163.00	1-1-NO-A-X-I-NO-TD

## Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DP	1	115.96	4.000		3.340	XT 39	16.00		RIG
15 JTS 4" HWDP	15	462.10	4.500		3.000	XT 39	88.00		RIG
X/O	1	3.09	6.500		2.500	XT 39	142.00		SST 20889
15 JTS 6.5" DC	15	451.39	6.500		3.000	4-1/2 XH	142.00		RIG

## EP WELLS DAILY OPERATIONS REPORT

Report 7

04/09/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
X/O	1	2.26	7.875		2.750	4-1/2 XH	170.00		AWST 2816
FILTER SUB	1	4.57	8.250		3.500	6 5/8 REG	188.00		MST 814057
12' NM SPIRAL STAB	1	7.57	8.500		3.500	6 5/8 REG	200.00		SD27402
30' NM DC	1	30.97	8.125		3.500	6 5/8 REG	188.00		11958707
12' NM SPIRAL STAB	1	8.12	8.250		3.500	6 5/8 REG	200.00		SD 604798
NAVI TRACK	1	33.43	8.000		3.500	6 5/8 REG	188.00		907 STX
12' NM SPIRAL STAB	1	7.06	8.250		3.500	6 5/8 REG	200.00		SD 27954
M1XL (MOTOR), 0	1	34.98	8.000			6 5/8 REG	188.00		12616492
BIT#1 RUN#1 BAKER DP506X (6X12's) BIT GRADE:	1	1.50	12.250	12.250		6 5/8 REG	200.00		7157058

## Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
03/31/2016 22:00	05/03/2016 05:30	1	1,047.04	2.500	DRILL 12.25" SURFACE HOLE SECTION

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 8

04/10/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19-10 LOV 1D
Wellbore	UNIVERSITY 19-10 LOV 1D
WBS No/API No	30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	7.63
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	0.00
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	BRYAN BOYLES	Measured Depth(ft)	150.00
Engineer	POWER CHARLES / YERMEK TINYSHBAYEV	TVD(ft)	150.00
Other Supervisor	NEEHAL MOORUTH / ROSS GRAHAM	24 Hr Progress(ft)	0.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	20.000in@150.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Auxiliary/Secondary Work(hr)	0.00	Lithology	0/0
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	128,242/1,585,627.97	Formation top MD	
Actual divided by AFE	0.08	Daily NPT(hr/%)	
Daily Cost	29,487	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	627	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							
NO HSE INCIDENTS							

## HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	93
Last Derrick Inspection	03/24/2016	17		
Last BOP function test	03/24/2016	17		
Last BOP Test	04/14/2016			

## Operations Summary

24 Hour Summary
SPOT WRANGLER AND CATWALK, WIRE UP RIG FLOOR, RIG UP KOOMEY AND HPU UNIT, TEST EQUIPMENT
Update Since Report Time
@ 05:00 - WAITING ON DAYLIGHT
24 Hour Forecast
FINISH TESTING TOP DRIVE, FILL PITS WITH FRESH WATER AND TEST CIRCULATING EQUIPMENT, INSTALL OVERBOARD LINE AND SAND TRAP DUMP LINE

## EP WELLS DAILY OPERATIONS REPORT

Report 8

04/10/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	7.00	RM	NOA		150.00	0		WAITING ON DAYLIGHT.
7:00	12.00	RM	RUD		150.00	0		INSTALL IRON ROUGHNECK, SPOT WRANGLER AND CATWALK, INSTALL CUTTINGS TROUGH, HANG FLOWLINE, GO THROUGH BOTH PUMPS, SPOOL UP DRAWWORKS, RIG UP HPU UNIT AND KOOMEY, WIRE UP RIG FLOOR AND TEST EQUIPMENT, SET EQUIPMENT ON RIG FLOOR
19:00	5.00	RM	NOA		150.00	0		WAITING ON DAYLIGHT.
<b>Total</b>	<b>24.00</b>							

## 06.00 Update

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Description
0:00	6.00	RM	NOA		150.00	0	WAITING ON DAYLIGHT.

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	EPW MWD
30.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	EPW MWD

## Fluid Details

Mud type	Low Solids Non Disperse	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)		Sand (%)	Ca+ (ppm)
Vis (s/qt)			Cl- (ppm)
PV/YP (cp/lbf/100ft²)		MBT (lbm/bbl)	
Gels 10 s/m (lbf/100ft²)		LCM (lbm/bbl)	
API/HTHP WL (cc/30min)		ECD (ppg)	R600/300 (°)
FC/HTHP FC (32nd")		H2S (gas unit)	R200/100 (°)
		KCl (%)	R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

## Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
1	12.250	BAKER HUGHES	DP506X			7157058	6x12	150.00	1,163.00	1-1-NO-A-X-I-NO-TD

## Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DP	1	115.96	4.000		3.340	XT 39	16.00		RIG
15 JTS 4" HWDP	15	462.10	4.500		3.000	XT 39	88.00		RIG
X/O	1	3.09	6.500		2.500	XT 39	142.00		SST 20889
15 JTS 6.5" DC	15	451.39	6.500		3.000	4-1/2 XH	142.00		RIG
X/O	1	2.26	7.875		2.750	4-1/2 XH	170.00		AWST 2816
FILTER SUB	1	4.57	8.250		3.500	6 5/8 REG	188.00		MST 814057

## EP WELLS DAILY OPERATIONS REPORT

Report 8

04/10/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
12' NM SPIRAL STAB	1	7.57	8.500		3.500	6 5/8 REG	200.00		SD27402
30' NM DC	1	30.97	8.125		3.500	6 5/8 REG	188.00		11958707
12' NM SPIRAL STAB	1	8.12	8.250		3.500	6 5/8 REG	200.00		SD 604798
NAVI TRACK	1	33.43	8.000		3.500	6 5/8 REG	188.00		907 STX
12' NM SPIRAL STAB	1	7.06	8.250		3.500	6 5/8 REG	200.00		SD 27954
M1XL (MOTOR), 0	1	34.98	8.000			6 5/8 REG	188.00		12616492
BIT#1 RUN#1 BAKER DP506X (6X12's) BIT GRADE:	1	1.50	12.250	12.250		6 5/8 REG	200.00		7157058

## Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
03/31/2016 22:00	05/03/2016 05:30	1	1,047.04	2.500	DRILL 12.25" SURFACE HOLE SECTION

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 9

04/11/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19-10 LOV 1D
Wellbore	UNIVERSITY 19-10 LOV 1D
WBS No/API No	30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	8.63
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	0.00
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	BRYAN BOYLES	Measured Depth(ft)	150.00
Engineer	POWER CHARLES / YERMEK TINYSHBAYEV	TVD(ft)	150.00
Other Supervisor	NEEHAL MOORUTH / ROSS GRAHAM	24 Hr Progress(ft)	0.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	20.000in@150.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Auxiliary/Secondary Work(hr)	0.00	Lithology	0/0
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	157,730/1,585,627.97	Formation top MD	
Actual divided by AFE	0.10	Daily NPT(hr/%)	
Daily Cost	29,487	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	628	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	
Safety Comments:							

## HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	94
Last Derrick Inspection	03/24/2016	18		
Last BOP function test	03/24/2016	18		
Last BOP Test	04/14/2016			

## Operations Summary

24 Hour Summary
WAITED ON DAYLIGHT. CONTINUE R/U.
Update Since Report Time
24 Hour Forecast
NIPPLE UP CONDUCTOR AND GO ON HOT-STACK RIG RATE.

## EP WELLS DAILY OPERATIONS REPORT

Report 9

04/11/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	6.00	RM	NOA		150.00	0		WAITING ON DAYLIGHT.
6:00	12.00	RM	RUD		150.00	0		UNPIN THE TOP DRIVE, PERFORM SPIN AND TORQUE TEST AND CHANGED OUT SAVER SUB AND SWIVEL PACKING. R/U THE FLOWLINE AND OVERBOARD LINES. C/O VALVES AND SEATS ON MUD PUMPS. SPOOL UP THE DRAWWORKS.
18:00	6.00	RM	NOA		150.00	0		WAITING ON DAYLIGHT.
<b>Total</b>	<b>24.00</b>							

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	EPW MWD
30.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	EPW MWD

## Fluid Details

Mud type	Low Solids Non Disperse	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)		Sand (%)	Ca+ (ppm)
Vis (s/qt)			Cl- (ppm)
PV/YP (cp/lbf/100ft²)		MBT (lbm/bbl)	
Gels 10 s/m (lbf/100ft²)		LCM (lbm/bbl)	
API/HTHP WL (cc/30min)		ECD (ppg)	R600/300 (°)
FC/HTHP FC (32nd")		H2S (gas unit)	R200/100 (°)
		KCl (%)	R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

## Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
1	12.250	BAKER HUGHES	DP506X			7157058	6x12	150.00	1,163.00	1-1-NO-A-X-I-NO-TD

## Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DP	1	115.96	4.000		3.340	XT 39	16.00		RIG
15 JTS 4" HWDP	15	462.10	4.500		3.000	XT 39	88.00		RIG
X/O	1	3.09	6.500		2.500	XT 39	142.00		SST 20889
15 JTS 6.5" DC	15	451.39	6.500		3.000	4-1/2 XH	142.00		RIG
X/O	1	2.26	7.875		2.750	4-1/2 XH	170.00		AWST 2816
FILTER SUB	1	4.57	8.250		3.500	6 5/8 REG	188.00		MST 814057
12' NM SPIRAL STAB	1	7.57	8.500		3.500	6 5/8 REG	200.00		SD27402
30' NM DC	1	30.97	8.125		3.500	6 5/8 REG	188.00		11958707
12' NM SPIRAL STAB	1	8.12	8.250		3.500	6 5/8 REG	200.00		SD 604798
NAVI TRACK	1	33.43	8.000		3.500	6 5/8 REG	188.00		907 STX
12' NM SPIRAL STAB	1	7.06	8.250		3.500	6 5/8 REG	200.00		SD 27954

## EP WELLS DAILY OPERATIONS REPORT

Report 9

04/11/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
M1XL (MOTOR), 0	1	34.98	8.000			6 5/8 REG	188.00		12616492
BIT#1 RUN#1 BAKER DP506X (6X12's) BIT GRADE:	1	1.50	12.250	12.250		6 5/8 REG	200.00		7157058

## Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
03/31/2016 22:00	05/03/2016 05:30	1	1,047.04	2.500	DRILL 12.25" SURFACE HOLE SECTION

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 10

04/12/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19-10 LOV 1D
Wellbore	UNIVERSITY 19-10 LOV 1D
WBS No/API No	30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	9.63
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	0.00
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	KEVIN BERGERON	Measured Depth(ft)	150.00
Engineer	POWER CHARLES / YERMEK TINYSHBAYEV	TVD(ft)	150.00
Other Supervisor	NEEHAL MOORUTH / ROSS GRAHAM	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	20.000in@150.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Auxiliary/Secondary Work(hr)	0.00	Lithology	0/0
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	186,932/1,585,627.97	Formation top MD	
Actual divided by AFE	0.12	Daily NPT(hr/%)	
Daily Cost	29,202	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	629	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	

Safety Comments:

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection	03/24/2016	19	JSA's/Toolbox Talks Days Since Last Drill	95
Last BOP function test	03/24/2016	19		
Last BOP Test	04/14/2016			
Next BOP Test				

## Operations Summary

24 Hour Summary
FUNCTION TEST EQUIPMENT, GO ON STANDBY
Update Since Report Time
STANDBY
24 Hour Forecast
STANDBY

## EP WELLS DAILY OPERATIONS REPORT

Report 10

04/12/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	7.00	RM	NOA		150.00	0		WAITING ON DAYLIGHT.
7:00	5.00	RM	RUD		150.00	0		FUNCTION TEST EQUIPMENT, FINISH PREPARING RIG FOR SPUD, RELEASE CREWS.
<b>Total</b>	<b>12.00</b>							

## 06.00 Update

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Description
0:00	24.00	RM	NOA		150.00	0	STANDBY

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	EPW MWD
30.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	EPW MWD

## Fluid Details

Mud type	Low Solids Non Disperse	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)		Sand (%)	Ca+ (ppm)
Vis (s/qt)			Cl- (ppm)
PV/YP (cp/lbf/100ft²)		MBT (lbm/bbl)	
Gels 10 s/m (lbf/100ft²)		LCM (lbm/bbl)	
API/HTHP WL (cc/30min)		ECD (ppg)	R600/300 (°)
FC/HTHP FC (32nd")		H2S (gas unit)	R200/100 (°)
		KCl (%)	R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

## Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
1	12.250	BAKER HUGHES	DP506X			7157058	6x12	150.00	1,163.00	1-1-NO-A-X-I-NO-TD

## Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DP	1	115.96	4.000		3.340	XT 39	16.00		RIG
15 JTS 4" HWDP	15	462.10	4.500		3.000	XT 39	88.00		RIG
X/O	1	3.09	6.500		2.500	XT 39	142.00		SST 20889
15 JTS 6.5" DC	15	451.39	6.500		3.000	4-1/2 XH	142.00		RIG
X/O	1	2.26	7.875		2.750	4-1/2 XH	170.00		AWST 2816
FILTER SUB	1	4.57	8.250		3.500	6 5/8 REG	188.00		MST 814057
12' NM SPIRAL STAB	1	7.57	8.500		3.500	6 5/8 REG	200.00		SD27402
30' NM DC	1	30.97	8.125		3.500	6 5/8 REG	188.00		11958707
12' NM SPIRAL STAB	1	8.12	8.250		3.500	6 5/8 REG	200.00		SD 604798

## EP WELLS DAILY OPERATIONS REPORT

Report 10

04/12/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
NAVI TRACK	1	33.43	8.000		3.500	6 5/8 REG	188.00		907 STX
12' NM SPIRAL STAB	1	7.06	8.250		3.500	6 5/8 REG	200.00		SD 27954
M1XL (MOTOR), 0	1	34.98	8.000			6 5/8 REG	188.00		12616492
BIT#1 RUN#1 BAKER DP506X (6X12's) BIT GRADE:	1	1.50	12.250	12.250		6 5/8 REG	200.00		7157058

## Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
03/31/2016 22:00	05/03/2016 05:30	1	1,047.04	2.500	DRILL 12.25" SURFACE HOLE SECTION

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 11

05/02/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19-10 LOV 1D
Wellbore	UNIVERSITY 19-10 LOV 1D
WBS No/API No	30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	10.63
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	0.58
Est. Days	12.00	Contractor			
Work Unit		Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	JOHN DYKES	Measured Depth(ft)	1,163.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	1,163.00
Other Supervisor	ROSS GRAHAM / ARMANDO RAMIREZ	24 Hr Progress(ft)	1,013.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	12.250
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	20.000in@150.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	9.625in@1,075.00ft
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Auxiliary/Secondary Work(hr)	0.00	Lithology	
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	255,519/1,585,627.97	Formation top MD	
Actual divided by AFE	0.16	Daily NPT(hr/%)	0/0
Daily Cost	68,587	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	649	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	10 11 0

Safety Comments:

## Drills

Drill Category	Drill Type	Detection (sec)	Complete (sec)	Crew drilled	Pass / Fail	PIC	Comments
HSE Drills	H2S Drill		90.00	BOTH	Pass	JOHN DYKES	GOOD DRILL

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	20
Last BOP function test	03/24/2016	39	Days Since Last Drill	96
Last BOP Test	03/24/2016	39		
Next BOP Test	04/14/2016			

## Operations Summary

24 Hour Summary
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## EP WELLS DAILY OPERATIONS REPORT

Report 11

05/02/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

M/U BHA, TAG AT 150', DRILL FROM 150' TO TD AT 1163'.

Update Since Report Time

@0430 - L/D BHA

24 Hour Forecast

TOOH AND L/D BHA, R/U AND RUN 9 5/8" CASING, CEMENT SAME, P/U 8 3/4" BHA AND TIH.

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
5:00	5.00	RM	RUD		150.00	0		M/U 12 1/4" BHA AND TAG UP AT 150'.  CALLED TRRC ON 5/2/16 AND INFORMED OF SPUD AND CEMENT JOB. SPOKE WITH OPERATOR #21.
10:00	8.75	D12	DRR		767.00	0		DRILL F/ 150' T/767' ( 617' @ 71 FPH )  WOB: 10-20K RPM: SURFACE 50 MOTOR 110 BIT 160 PSI & FLOW: 1500 PSI @ 500 GPM TORQUE: 6-10K ON BOTTOM, 1K OFF BOTTOM STRING WEIGHT: P/U 90K S/O 90K ROT 90K MW: 8.8 PPG MOTOR RPG: 0.22 NO GAS OR FLARE
18:45	0.75	D12	RUD		767.00	0		INSTALL ROTATING HEAD
19:30	3.25	D12	DRR		1,163.00	0		DRILL F/ 767' T/1163' ( 396' @ 122 FPH )  WOB: 15-25K RPM: SURFACE 55 MOTOR 155 BIT 210 PSI & FLOW: 2650 PSI @ 700 GPM TORQUE: 6-12K ON BOTTOM, 1.2K OFF BOTTOM STRING WEIGHT: P/U 100K S/O 100K ROT 100K MW: 9.3 PPG MOTOR RPG: 0.22 NO GAS OR FLARE
22:45	1.25	D12	PCD		1,163.00	0		PERFORM C/U CYCLES, 80 RPM 800 GPM WORKING PIPE.
<b>Total</b>	<b>19.00</b>							

## Fluid Details

Mud type	Low Solids Non Disperse	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)		Sand (%)	Ca+ (ppm)
Vis (s/qt)			Cl- (ppm)
PV/YP (cp/lbf/100ft <sup>2</sup> )		MBT (lbm/bbl)	
Gels 10 s/m (lbf/100ft <sup>2</sup> )		LCM (lbm/bbl)	
API/HTHP WL (cc/30min)		ECD (ppg)	R600/300 (°)
FC/HTHP FC (32nd")		H2S (gas unit)	R200/100 (°)
		KCl (%)	R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

## EP WELLS DAILY OPERATIONS REPORT

Report 12

05/03/2016

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 19-10 LOV 1D  
 Wellbore UNIVERSITY 19-10 LOV 1D  
 WBS No/API No 30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	11.42
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	1.58
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	JOHN DYKES	Measured Depth(ft)	1,163.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	1,163.00
Other Supervisor	ROSS GRAHAM / ARMANDO RAMIREZ	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	12.250
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	20.000in@150.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	9.625in@1,075.00ft
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Auxiliary/Secondary Work(hr)	0.00	Lithology	
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	425,167/1,585,627.97	Formation top MD	
Actual divided by AFE	0.27	Daily NPT(hr/%)	0/0
Daily Cost	169,648	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> PS barrier bowtie review	07/23/2014	650	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	7 9 0

Safety Comments:

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	12
Last BOP function test	03/24/2016	40	Days Since Last Drill	97
Last BOP Test	03/24/2016	40		
Next BOP Test	04/14/2016			

## Operations Summary

24 Hour Summary
TOOH, L/D BHA, R/U AND RUN 9 5/8" CASING, CEMENT SAME. CUT CASING AND N/U CONDUCTOR.
Update Since Report Time
@ 04:30 - L/O OVER-TORQUED DRILL COLLARS
24 Hour Forecast
N/U CONDUCTOR, M/U BHA, TIH, DRILL AHEAD IN 8 3/4" HOLE.

## EP WELLS DAILY OPERATIONS REPORT

Report 12

05/03/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.00	D12	DRT		1,163.00	0		TOOH W/ HWDP AND RACK BACK.
1:00	3.00	D12	DRT		1,163.00	0		TOOH W/ 5 STANDS OF 6 1/2 DC'S. HAD TROUBLE BREAKING OUT 3 STANDS.
4:00	1.50	D12	RUD		1,163.00	0		L/D BHA. BIT GRADE 1-1-NO-A-X-I-NO-TD.
5:30	0.50	C12	RUD		1,163.00	0		CLEAN AND CLEAR RIG FLOOR.
6:00	1.00	C12	RUD		1,163.00	0		R/U CASING TOOLS.
7:00	3.00	C12	CLR		1,163.00	0		PJSM WITH EXPRESS. M/U SHOE TRACK AND TEST FLOATS. RUN 9 5/8" CASING TO 1163'. HOLE GIVING PROPER DISPLACEMENT.
10:00	1.50	C12	RUD		1,163.00	0		R/D EXPRESS AND R/U BAKER WHILE CIRCULATING.
11:30	2.50	C12	CLC		1,163.00	0		PJSM W/ BAKER. TEST LINES TO 3000 PSI. PUMP JOB AS FOLLOWS.  30 BBLS FW SPACER 156 BBLS 12.8 PPG LEAD CEMENT 57 BBLS 14.8 PPG TAIL CEMENT SHUT DOWN AND DROP PLUG DISPLACE WITH 85 BBLS OF FW  60 BBLS CEMENT BACK TO SURFACE **DID NOT BUMP PLUG** FLOATS HELD
14:00	3.00	C12	RUD		1,163.00	0		R/D BAKER, FLUSH THROUGH SURFACE LINES, N/D CONDUCTOR, WAIT ON CEMENT TO PERFORM CASING PRESSURE TEST.
17:00	0.50	C12	PRE		1,163.00	0		ATTEMPT TO TEST CASING TO 1200 PSI. PRESSURE BLED OFF TO 1040 PSI. CHECK ALL SURFACE LINES, NO LEAKS.
17:30	2.50	C12	RUD		1,163.00	0		L/O BHA, STRAP COLLARS, CHANGE DIES IN IRON ROUGHNECK AND RIG TONGS, WAIT ON CEMENT.
20:00	0.50	C12	PRE		1,163.00	0		PRESSURE TEST CASING TO 1200 PSI FOR 30 MINS, GOOD TEST.
20:30	3.00	C12	RUD		1,163.00	0		CUT 9 5/8" CASING, L/O SAME. REMOVE SPOOL OFF BOTTOM OF 20" CONDUCTOR. FINAL CUT 9 5/8" AND WELD SWEDGE ON.
23:30	0.50	C12	RUD		1,163.00	0		N/U CONDUCTOR.
<b>Total</b>	<b>24.00</b>							

## Fluid Details

Mud type	Low Solids Non Disperse	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)		Sand (%)	Ca+ (ppm)
Vis (s/qt)			Cl- (ppm)
PV/YP (cp/lbf/100ft <sup>2</sup> )		MBT (lbm/bbl)	
Gels 10 s/m (lbf/100ft <sup>2</sup> )		LCM (lbm/bbl)	
API/HTHP WL (cc/30min)		ECD (ppg)	R600/300 (°)
FC/HTHP FC (32nd")		H2S (gas unit)	R200/100 (°)
		KCl (%)	R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

## Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
1	12.250	BAKER HUGHES	DP506X			7157058	6x12	150.00	1,163.00	1-1-NO-A-X-I-NO-TD

## EP WELLS DAILY OPERATIONS REPORT

Report 12

05/03/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DP	1	115.96	4.000		3.340	XT 39	16.00		RIG
15 JTS 4" HWDP	15	462.10	4.500		3.000	XT 39	88.00		RIG
X/O	1	3.09	6.500		2.500	XT 39	142.00		SST 20889
15 JTS 6.5" DC	15	451.39	6.500		3.000	4-1/2 XH	142.00		RIG
X/O	1	2.26	7.875		2.750	4-1/2 XH	170.00		AWST 2816
FILTER SUB	1	4.57	8.250		3.500	6 5/8 REG	188.00		MST 814057
12' NM SPIRAL STAB	1	7.57	8.500		3.500	6 5/8 REG	200.00		SD27402
30' NM DC	1	30.97	8.125		3.500	6 5/8 REG	188.00		11958707
12' NM SPIRAL STAB	1	8.12	8.250		3.500	6 5/8 REG	200.00		SD 604798
NAVI TRACK	1	33.43	8.000		3.500	6 5/8 REG	188.00		907 STX
12' NM SPIRAL STAB	1	7.06	8.250		3.500	6 5/8 REG	200.00		SD 27954
M1XL (MOTOR), 0	1	34.98	8.000			6 5/8 REG	188.00		12616492
BIT#1 RUN#1 BAKER DP506X (6X12's) BIT GRADE:	1	1.50	12.250	12.250		6 5/8 REG	200.00		7157058

## Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
03/31/2016 22:00	05/03/2016 05:30	1	1,047.04	2.500	DRILL 12.25" SURFACE HOLE SECTION

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## Remarks

FUEL ON HAND : 12,386 GAL  
FUEL USED : 1180 GAL

## EP WELLS DAILY OPERATIONS REPORT

Report 13

05/04/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19-10 LOV 1D
Wellbore	UNIVERSITY 19-10 LOV 1D
WBS No/API No	30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	12.42
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	2.58
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	JOHN DYKES	Measured Depth(ft)	2,450.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	2,450.00
Other Supervisor	ROSS GRAHAM / ARMANDO RAMIREZ	24 Hr Progress(ft)	1,287.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	12.250
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	20.000in@150.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	9.625in@1,075.00ft
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Auxiliary/Secondary Work(hr)	0.00	Lithology	
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	467,765/1,585,627.97	Formation top MD	
Actual divided by AFE	0.30	Daily NPT(hr/%)	5.00/20.83
Daily Cost	45,565	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> PS barrier bowtie review	07/23/2014	651	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	10 3 0

Safety Comments:

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	17
Last BOP function test	03/24/2016	41	Days Since Last Drill	98
Last BOP Test	03/24/2016	41		
Next BOP Test	04/14/2016			

## Operations Summary

24 Hour Summary
N/U CONDUCTOR, M/U BHA, DRILL 8 3/4" HOLE FROM 1163' TO 2450'.
Update Since Report Time
@ 03:30 - DRILLING AHEAD AT 2850'.
24 Hour Forecast
DRILL TO TD AT 4990', PERFORM C/U CYCLES AND TOOH.

## EP WELLS DAILY OPERATIONS REPORT

Report 13

05/04/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	2.00	C12	RUD		1,163.00	0		N/U CONDUCTOR, FLOWLINE, TURNBUCKLES, KILL LINE, FILLUP LINE.
2:00	0.50	C12	RUD		1,163.00	0		R/D BAIL EXTENSIONS, CLEAR RIG FLOOR.
2:30	4.00	C12	REP		1,163.00	1		NPT - TIH WITH 5 STANDS OF COLLARS. TOOHP CHECKING TORQUE ON EACH BREAK. RACK BACK FIRST 2 STANDS, GOOD TORQUE AND THREADS. L/O LAST THREE STANDS DUE TO CONNECTIONS BEING OVER TORQUED AND THREADS BEING QUESTIONABLE.
6:30	0.50	C12	RUD		1,163.00	0		CLEAN AND CLEAR RIG FLOOR.
7:00	0.50	D09	RUD		1,163.00	0		P/U SUBS, X/O'S, AND STABS TO FLOOR.
7:30	2.00	D09	DRT		1,163.00	0		M/U 8 3/4" BHA.
9:30	2.00	D09	DRT		1,163.00	0		TIH WITH DC'S AND HWDP.
11:30	0.50	D09	RUD		1,163.00	0		INSTALL ROTATING HEAD.
12:00	1.00	D09	DCM		1,163.00	0		DRILL SHOE TRACK FROM 1115' TO 1163'.
13:00	9.00	D09	DRR		2,450.00	0		DRILL F/ 1163' T/2450' ( 1287' @ 143 FPH )  WOB: 10-20K RPM: SURFACE 80 MOTOR 215 BIT 295 PSI & FLOW: 3800 PSI @ 800 GPM TORQUE: 5-12K ON BOTTOM, 1-2K OFF BOTTOM STRING WEIGHT: P/U 120K S/O 120K ROT 120K MW: 9.9+ PPG MOTOR RPG: 0.27 NO GAS OR FLARE
22:00	1.00	D09	MNR		2,450.00	0		RIG SERVICE
23:00	1.00	D09	REP		2,450.00	1		NPT - REPLACE SWAB IN MP #1
<b>Total</b>	<b>24.00</b>							

## NPT Summary

Start Date/Time	Responsible Company	NPT Code	Failure MD (ft)	Ops Code	Type*	Equipment Type	Net time (hr)	Gross time (hr)	Severity	Status
05/04/2016 02:30	ENSIGN UNITED STATES DRILLING INC	Rig/Work Unit Misc	1,163.00	REP	N		4.00	4.00		OPEN
<b>Description:</b> TIH WITH 5 STANDS OF COLLARS. TOOHP CHECKING TORQUE ON EACH BREAK. RACK BACK FIRST 2 STANDS, GOOD TORQUE AND THREADS. L/O LAST THREE STANDS DUE TO CONNECTIONS BEING OVER TORQUED AND THREADS BEING QUESTIONABLE.						<b>Title:</b> OVER TORQ ON BHA.				
05/04/2016 23:00	ENSIGN UNITED STATES DRILLING INC	Rig/Work Unit Misc	2,450.00	REP	N		1.00	1.00		OPEN
<b>Description:</b> REPLACE SWAB IN MP #1						<b>Title:</b> REPLACE SWAB IN MP #1				
<b>Total</b>							<b>5.00</b>	<b>5.00</b>		

## EP WELLS DAILY OPERATIONS REPORT

Report 13

05/04/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Fluid Details

Mud type	Spud Mud	Oil/Water (%)		pH/Pm (cc)	
MD (ft)		TS/HGS/LGS (%)		Pf/Mf (cc)	
Mud Density (ppg)		Sand (%)		Ca+ (ppm)	
Vis (s/qt)				Cl- (ppm)	
PV/YP (cp/lbf/100ft²)		MBT (lbm/bbl)			
Gels 10 s/m (lbf/100ft²)		LCM (lbm/bbl)			
API/HTHP WL (cc/30min)		ECD (ppg)		R600/300 (°)	
FC/HTHP FC (32nd")		H2S (gas unit)		R200/100 (°)	
		KCl (%)		R6/3 (°)	
FL temp. (°F)	Ditch Magnet in Last 24hrs/Cum. (gm)				

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 14

05/05/2016

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 19-10 LOV 1D  
 Wellbore UNIVERSITY 19-10 LOV 1D  
 WBS No/API No 30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	13.42
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	3.58
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	JOHN DYKES	Measured Depth(ft)	4,684.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	4,679.59
Other Supervisor	ROSS GRAHAM / ARMANDO RAMIREZ	24 Hr Progress(ft)	2,234.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	12.250
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	20.000in@150.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	9.625in@1,075.00ft
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Auxiliary/Secondary Work(hr)	0.00	Lithology	
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	521,634/1,585,627.97	Formation top MD	
Actual divided by AFE	0.33	Daily NPT(hr/%)	0.50/2.08
Daily Cost	53,869	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> PS barrier bowtie review	07/23/2014	652	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	9 3 0

Safety Comments:

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	13
Last BOP function test	03/24/2016	42	Days Since Last Drill	99
Last BOP Test	03/24/2016	42		
Next BOP Test	04/14/2016			

## Operations Summary

24 Hour Summary
DRILL FROM 2450' TO 4684' IN 8 3/4" HOLE.
Update Since Report Time
@04:00 - TD'D WELL @ 5000' , PERFORMING C/U CYCLES
24 Hour Forecast
DRILL TO TD AT 5000', TOO, R/U AND RUN 7" CASING, CEMENT SAME.

## EP WELLS DAILY OPERATIONS REPORT

Report 14

05/05/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	14.00	D09	DRR		4,074.00	0		DRILL F/ 2450' T/4074' ( 1624' @ 116 FPH )  WOB: 11-22K RPM: SURFACE 85 MOTOR 215 BIT 300 PSI & FLOW: 4650 PSI @ 800 GPM TORQUE: 5-12K ON BOTTOM, 1-2K OFF BOTTOM STRING WEIGHT: P/U 135K S/O 135K ROT 135K MW: 10.0+ PPG MOTOR RPG: 0.27 NO GAS OR FLARE
14:00	1.50	D09	DRR		4,169.00	0		DRILL F/ 4074' T/ 4169' ( 95' @ 64 FPH )  WOB: 10K RPM: SURFACE 100 MOTOR 202 BIT 302 PSI & FLOW: 4000 PSI @ 750 GPM TORQUE: 2-4K ON BOTTOM, 1-2K OFF BOTTOM STRING WEIGHT: P/U 135K S/O 135K ROT 135K MW: 10.0+ PPG MOTOR RPG: 0.27 NO GAS OR FLARE
15:30	0.50	D09	MNR		4,169.00	0		RIG SERVICE
16:00	1.25	D09	DRR		4,310.00	0		DRILL F/ 4169' T/4310' ( 141' @ 113 FPH )  WOB: 15-22K RPM: SURFACE 85 MOTOR 190 BIT 275 PSI & FLOW: 4000 PSI @ 700 GPM TORQUE: 6-10K ON BOTTOM, 1-2K OFF BOTTOM STRING WEIGHT: P/U 140K S/O 140K ROT 140K MW: 10.0+ PPG MOTOR RPG: 0.27 NO GAS OR FLARE
17:15	3.25	D09	DRR		4,448.00	0		DRILL F/ 4310' T/4448' ( 138' @ 43 FPH )  WOB: 6K RPM: SURFACE 100 MOTOR 190 BIT 290 PSI & FLOW: 3500 PSI @ 700 GPM TORQUE: 2-4K ON BOTTOM, 1-2K OFF BOTTOM STRING WEIGHT: P/U 145K S/O 145K ROT 145K MW: 10.0+ PPG MOTOR RPG: 0.27 NO GAS OR FLARE
20:30	0.50	D09	REP		4,448.00	1		NPT - BLEW SWAB IN PUMP #2
21:00	3.00	D09	DRR		4,684.00	0		DRILL F/ 4448' T/4684' ( 236' @ 79 FPH )  WOB: 10-22K RPM: SURFACE 80 MOTOR 190 BIT 270 PSI & FLOW: 4100 PSI @ 700 GPM TORQUE: 4-12K ON BOTTOM, 1-2K OFF BOTTOM STRING WEIGHT: P/U 145K S/O 145K ROT 145K MW: 10.0+ PPG MOTOR RPG: 0.27 NO GAS OR FLARE
<b>Total</b>	<b>24.00</b>							

## EP WELLS DAILY OPERATIONS REPORT

Report 14

05/05/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## NPT Summary

Start Date/Time	Responsible Company	NPT Code	Failure MD (ft)	Ops Code	Type*	Equipment Type	Net time (hr)	Gross time (hr)	Severity	Status
05/05/2016 20:30	ENSIGN UNITED STATES DRILLING INC	Rig/Work Unit Misc	4,448.00	REP	N		0.50	0.50		OPEN
Description: BLEW SWAB IN PUMP #2						Title: BLEW SWAB IN PUMP #2				
Total							0.50	0.50		

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
2,324.00	1.84	40.22	2,323.80	-2.79	-2.25	-3.56	0.29	EPW MWD
2,796.00	3.23	42.47	2,795.33	12.80	11.62	17.26	0.30	EPW MWD
3,268.00	3.23	42.45	3,266.58	32.42	29.57	43.81	0.00	EPW MWD
3,457.00	3.12	50.07	3,455.29	39.65	37.11	54.25	0.23	EPW MWD
3,740.00	3.88	57.45	3,737.76	49.75	51.09	71.31	0.31	EPW MWD

## Fluid Details

Mud type	NaCl Brine	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	
Mud Density (ppg)		Sand (%)	
Vis (s/qt)		MBT (lbm/bbl)	
PV/YP (cp/lbf/100ft²)		LCM (lbm/bbl)	
Gels 10 s/m (lbf/100ft²)		ECD (ppg)	R600/300 (°)
API/HTHP WL (cc/30min)		H2S (gas unit)	R200/100 (°)
FC/HTHP FC (32nd")		KCl (%)	R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 15

05/06/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19-10 LOV 1D
Wellbore	UNIVERSITY 19-10 LOV 1D
WBS No/API No	30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	14.42
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	4.58
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	JOHN DYKES	Measured Depth(ft)	5,000.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	4,994.87
Other Supervisor	ROSS GRAHAM / ARMANDO RAMIREZ	24 Hr Progress(ft)	316.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	12.250
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	20.000in@150.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	9.625in@1,075.00ft
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Auxiliary/Secondary Work(hr)	0.00	Lithology	
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	841,144/1,585,627.97	Formation top MD	
Actual divided by AFE	0.53	Daily NPT(hr/%)	1.00/4.17
Daily Cost	197,533	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> PS barrier bowtie review	07/23/2014	653	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	5 3 0

Safety Comments:

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	20
Last BOP function test	03/24/2016	43	Days Since Last Drill	100
Last BOP Test	03/24/2016	43		
Next BOP Test	04/14/2016			

## Operations Summary

24 Hour Summary
DRILL FROM 4684' TO TD AT 5000', TOOHO AND L/D BHA, R/U AND RUN 7" CASING, CEMENT SAME.
Update Since Report Time
@ 04:00 - CUTTING CASING AND INSTALLING WELLHEAD.
24 Hour Forecast
CUT CASING, INSTALL WELLHEAD, N/U STACK, TEST SAME. M/U 6 1/8" BHA.

## EP WELLS DAILY OPERATIONS REPORT

Report 15

05/06/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	4.00	D09	DRR		5,000.00	0		DRILL F/ 4684' T/5000' ( 316' @ 79 FPH )  WOB: 10-22K RPM: SURFACE 80 MOTOR 190 BIT 270 PSI & FLOW: 4100 PSI @ 700 GPM TORQUE: 4-12K ON BOTTOM, 1-2K OFF BOTTOM STRING WEIGHT: P/U 150K S/O 150K ROT 150K MW: 10.0+ PPG MOTOR RPG: 0.27 NO GAS OR FLARE
4:00	1.50	D09	PCD		5,000.00	0		PERFORM C/U CYCLES AND PUMP SLUG.
5:30	2.00	D09	DRT		5,000.00	0		TOOH F/5000' T/590' , HOLE TAKING PROPER FILL.
7:30	0.50	D09	RUD		5,000.00	0		REMOVE ROTATING HEAD.
8:00	2.50	D09	DRT		5,000.00	0		L/D DC'S F/590' T/131'.
10:30	1.00	D09	DRT		5,000.00	0		L/D BHA.
11:30	0.50	D09	RUD		5,000.00	0		CLEAN AND CLEAR RIG FLOOR.
12:00	0.50	C09	RUD		5,000.00	0		PJSM AND R/U TESCO.
12:30	0.50	C09	CLR		5,000.00	0		P/U SHOE TRACK AND TEST SAME.
13:00	1.00	C09	REP		5,000.00	1		NPT - TESCO - SWAP OUT POWER UNIT AND POWER TONGS.
14:00	5.50	C09	CLR		5,000.00	0		RUN 7" CASING FROM SURFACE TO 5000' , HOLE GIVING PROPER DISPLACEMENT.
19:30	1.50	C09	RUD		5,000.00	0		R/U CEMENT HEAD A CIRCULATE WHILE R/D TESCO AND R/U BAKER.
21:00	3.00	C09	CLC		5,000.00	0		PJSM, TEST LINES, PUMP JOB AS FOLLOWS:  DROP BOTTOM PLUG 20 BBL FRESH WATER 398 BBL 12.8 PPG LEAD 57 BBL 14.8 PPG TAIL DROP TOP PLUG DISPLACE WITH 178 BBLS OF FRESH WATER  BUMPED PLUG, PRESSURED UP TO 3000 PSI AND HELD FOR 30 MINUTES, GOOD TEST. BLED BACK 2 BBLS, FLOATS HELD. GOT 80 BBLS OF CEMENT BACK TO SURFACE.  TRRC WAS NOTIFIED OF CASING RUN AND CEMENT JOB. TALKED TO SHANNON (OPERATOR #6)
<b>Total</b>	<b>24.00</b>							

## NPT Summary

Start Date/Time	Responsible Company	NPT Code	Failure MD (ft)	Ops Code	Type*	Equipment Type	Net time (hr)	Gross time (hr)	Severity	Status
05/06/2016 13:00	TESCO CORPORATION US	Casing/Lin er/Hanger	5,000.00	REP	EN	Casing Handling Equipment	1.00	1.00		OPEN
<b>Description:</b> TESCO - SWAP OUT POWER UNIT AND POWER TONGS.						<b>Title:</b> TONGS NOT OPERATING				
<b>Total</b>							<b>1.00</b>	<b>1.00</b>		

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
2,324.00	1.84	40.22	2,323.80	-2.79	-2.25	-3.56	0.29	EPW MWD

## EP WELLS DAILY OPERATIONS REPORT

Report 15

05/06/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
2,796.00	3.23	42.47	2,795.33	12.80	11.62	17.26	0.30	EPW MWD
3,268.00	3.23	42.45	3,266.58	32.42	29.57	43.81	0.00	EPW MWD
3,457.00	3.12	50.07	3,455.29	39.65	37.11	54.25	0.23	EPW MWD
3,740.00	3.88	57.45	3,737.76	49.75	51.09	71.31	0.31	EPW MWD

## Fluid Details

Mud type	NaCl Brine	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)		Sand (%)	Ca+ (ppm)
Vis (s/qt)			Cl- (ppm)
PV/YP (cp/lbf/100ft²)		MBT (lbm/bbl)	
Gels 10 s/m (lbf/100ft²)		LCM (lbm/bbl)	
API/HTHP WL (cc/30min)		ECD (ppg)	R600/300 (°)
FC/HTHP FC (32nd")		H2S (gas unit)	R200/100 (°)
		KCl (%)	R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

## Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
2	8.750	NATIONAL OILW	SK716M			A222302	7x12	1,163.00	5,000.00	1-1-NO-A-X-I-NO-TD

## Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)
5,000.00	10.0/22.0	80	700.0	4,100.00	755.00	18.41	308.29	4.00	316.00	79.0	36.00	3,837.00	106.6

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DP	1	3,976.78	4.000		3.340	XT39	48.00		R
15 JTS 4" HWDP	15	462.10	4.500		3.000	XT39	48.00		RIG
X/O	1	4.36	6.250		2.500	4 1/2 XH	80.00		SST36919
15 JTS 6.5" DC	15	454.37	6.500		3.000	4 1/2 XH	80.00		RIG
X/O	1	2.22	6.250		2.625	4 1/2 IF	80.00		BHI 708X
FILTER SUB	1	5.72	6.500		2.500	4 1/2 IF	80.00		11836353
NM Spiral Stab	1	4.77	6.750		2.250	4 1/2 IF	100.00		SD28505
NMDC	1	3.09	6.750		3.125	4 1/2 IF	80.00		12537863
NM Spiral Stab	1	6.70	6.750		2.250	4 1/2 IF	100.00		SD28244
MWD - LCP	1	42.11	6.750		2.750	4 1/2 IF	80.00		605 SEA
NM Sprial Stab	1	5.19	6.750		2.250	4 1/2 IF	100.00		SD19006
M1XL/MS (MOTOR) 0	1	31.64	6.750			4 1/2 IF	88.00		11988936
BIT#2 RUN#1 8.75" NOV SK716M (7X12's) BIT GRADE:	1	0.95	8.750	8.750		4 1/2 IF	188.00		A222302

## Drillstring Details

Date/Time in		Date/Time out		BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
05/03/2016 05:30		05/06/2016 11:30		2	1,023.22	2.250	DRILL 8.75" INTERMEDIATE HOLE SECTION
MD (ft)	SW Up (kip)	SW Down (kip)	SW Rotn (kip)	Drag (kip)	Tq On Btm (ft-lbf)	Tq Off Btm (ft-lbf)	Footage (ft)
5,000.00	150.0	150.00	150.00	0.00	12,000.0	2,000.0	316.00

EP WELLS DAILY OPERATIONS REPORT

Report 15 05/06/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 16

05/07/2016

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 19-10 LOV 1D  
 Wellbore UNIVERSITY 19-10 LOV 1D  
 WBS No/API No 30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	15.42
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	5.58
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	JOHN DYKES	Measured Depth(ft)	5,000.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	4,994.87
Other Supervisor	ROSS GRAHAM / ARMANDO RAMIREZ	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	20.000in@150.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	9.625in@1,075.00ft
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Auxiliary/Secondary Work(hr)	0.00	Lithology	
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	877,576/1,585,627.97	Formation top MD	
Actual divided by AFE	0.55	Daily NPT(hr/%)	3.50/14.58
Daily Cost	36,432	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> PS barrier bowtie review	07/23/2014	654	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	0 10 0

Safety Comments:

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	17
Last BOP function test	03/24/2016	44	Days Since Last Drill	101
Last BOP Test	03/24/2016	44		
Next BOP Test	04/14/2016			

## Operations Summary

24 Hour Summary
R/D CEMENTERS, INSTALL WELLHEAD, N/U STACK, TEST BOP'S, REBUILD LOWER PIPE RAMS.
Update Since Report Time
@ 04:00 - N/U FLOWLINE AND TURNBUCKLES.
24 Hour Forecast
TEST LOWER PIPE RAMS, R/D TESTERS, N/U FLOWLINE, M/U 6 1/8" BHA, TIH.

## EP WELLS DAILY OPERATIONS REPORT

Report 16

05/07/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.00	C09	CLC		5,000.00	0		R/D CEMENTERS.
1:00	1.50	C09	RUD		5,000.00	0		N/D CONDUCTOR, FLOWLINE, TURNBUCKLES, FILLUP LINE, AND KILL LINE. PULL MOUSEHOLE.
2:30	1.00	C09	RUD		5,000.00	0		CUT 7" CASING AND L/O SAME. L/O CONDUCTOR.
3:30	3.00	C09	WHN		5,000.00	0		CUT 20" CASING AND ADD SHORT SECTION. FINAL CUT 20", 9 5/8", AND 7" CASING. INSTALL AND WELD WELLHEAD. TEST TO 1500 PSI FOR 10 MINS, GOOD TEST.
6:30	6.00	C09	BPR		5,000.00	0		RAISE STACK AND SET ON WELLHEAD, TORQUE SAME. N/U KILL LINE AND CHOKE LINE, TORQUE SAME. INSTALL KOOMEY LINES. TESTING CHOKE MANIFOLD OFFLINE DURING PREVIOUS OPERATIONS.
12:30	8.00	C09	PRE		5,000.00	0		TEST BOPE ACCORDING TO PROCEDURE. 250 PSI LOW, 5000 PSI HIGH. BOTTOM PIPE RAMS FAILED TO TEST.
20:30	2.00	C09	REP		5,000.00	1		NPT - PULL TEST PLUG AND WASH AROUND BOTTOM RAMS. SET TEST PLUG, FILL STACK, ATTEMPT TO TEST BOTTOM RAMS, NO TEST.
22:30	1.50	C09	REP		5,000.00	1		NPT - PULL TEST PLUG, BREAK BONNET BOLTS, REMOVE AND REBUILD LOWER VBR'S WITH NEW TOP SEALS AND PACKERS, INSTALL RAMS, M/U BONNET BOLTS AND TORQUE SAME.
<b>Total</b>	<b>24.00</b>							

## NPT Summary

Start Date/Time	Responsible Company	NPT Code	Failure MD (ft)	Ops Code	Type*	Equipment Type	Net time (hr)	Gross time (hr)	Severity	Status
05/07/2016 20:30		BOP & Pressure Control Equipment	5,000.00	REP	N		0.00	0.00		OPEN
<b>Description:</b> PULL TEST PLUG AND WASH AROUND BOTTOM RAMS. SET TEST PLUG, FILL STACK, ATTEMPT TO TEST BOTTOM RAMS, NO TEST.						<b>Title:</b> BOP TEST FAILED.				
<b>Total</b>							<b>0.00</b>	<b>0.00</b>		

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
2,324.00	1.84	40.22	2,323.80	-2.79	-2.25	-3.56	0.29	EPW MWD
2,796.00	3.23	42.47	2,795.33	12.80	11.62	17.26	0.30	EPW MWD
3,268.00	3.23	42.45	3,266.58	32.42	29.57	43.81	0.00	EPW MWD
3,457.00	3.12	50.07	3,455.29	39.65	37.11	54.25	0.23	EPW MWD
3,740.00	3.88	57.45	3,737.76	49.75	51.09	71.31	0.31	EPW MWD

## Fluid Details

Mud type	NaCl Brine	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	Pf/Mf (cc)
Mud Density (ppg)		Sand (%)	Ca+ (ppm)
Vis (s/qt)			Cl- (ppm)
PV/YP (cp/lbf/100ft²)		MBT (lbm/bbl)	
Gels 10 s/m (lbf/100ft²)		LCM (lbm/bbl)	
API/HTHP WL (cc/30min)		ECD (ppg)	R600/300 (°)
FC/HTHP FC (32nd")		H2S (gas unit)	R200/100 (°)
		KCl (%)	R6/3 (°)
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

EP WELLS DAILY OPERATIONS REPORT

Report 16 05/07/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 17

05/08/2016

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 19-10 LOV 1D  
 Wellbore UNIVERSITY 19-10 LOV 1D  
 WBS No/API No 30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	16.42
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	6.58
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	JOHN DYKES	Measured Depth(ft)	5,874.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	5,866.87
Other Supervisor	ROSS GRAHAM	24 Hr Progress(ft)	874.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	6.125
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	7.000in@5,000.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	4.500in@8,755.00ft
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	
Auxiliary/Secondary Work(hr)	0.00	Lithology	
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	935,828/1,585,627.97	Formation top MD	
Actual divided by AFE	0.59	Daily NPT(hr/%)	2.50/10.42
Daily Cost	58,252	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	655	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	0 10 0

Safety Comments:

## Drills

Drill Category	Drill Type	Detection (sec)	Complete (sec)	Crew drilled	Pass / Fail	PIC	Comments
Well Control Crew	Choke			Day	Pass	JOHN DYKES	

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	13
Last BOP function test	05/08/2016	0	Days Since Last Drill	102
Last BOP Test	05/08/2016	0		
Next BOP Test	05/29/2016			

## Operations Summary

24 Hour Summary
FINISH TESTING BOP, M/U BHA, TIH, DRILL SHOETRACK, PERFORM FIT, DRILL FROM 5000' TO 5874' IN 6 1/8" HOLE.

## EP WELLS DAILY OPERATIONS REPORT

Report 17

05/08/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Update Since Report Time

@ 04:00 - DRILLING AHEAD AT 6422'

## 24 Hour Forecast

DRILL AHEAD IN 6 1/8" HOLE SECTION.

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	1.50	C09	REP		5,000.00	1		NPT - PULL TEST PLUG, BREAK BONNET BOLTS, REMOVE AND REBUILD LOWER VBR'S WITH NEW TOP SEALS AND PACKERS, INSTALL RAMS, M/U BONNET BOLTS AND TORQUE SAME.
1:30	1.00	C09	BPT		5,000.00	1		FILL STACK, RE-TEST LOWER RAMS, GOOD TEST. TEST TIW AND IBOP.
2:30	1.00	C09	RUD		5,000.00	0		PULL TEST PLUG, SET WEAR BUSHING, R/D TESTERS.
3:30	2.50	C09	RUD		5,000.00	0		N/U FLOWLINE, INSTALL TURNBUCKLES AND CENTER STACK, HOOK UP FILLUP LINE AND ORBIT VALVE.
6:00	1.00	C09	RUD		5,000.00	0		HOOK UP NEW HOSES TO ROTATING HEAD CLAMP AND WEATHERFORD UNIT. INSTALL MOUSEHOLE.
7:00	3.00	D06	DRT		5,000.00	0		P/U SUBS AND STABS TO FLOOR. M/U 6 1/8" BHA. TIH WITH DC'S AND HWDP.
10:00	2.00	D06	DRT		5,000.00	0		TIH F/1054' TO 4830'.
12:00	0.50	D06	RUD		5,000.00	0		INSTALL ROTATING HEAD.
12:30	1.50	D06	DRT		5,000.00	0		TIH F/ 4830' T/4860'. WASH AND REAM FROM 4860' TO 4953', TAG FLOAT COLLAR. DRILL SHOETRACK FROM 4953' TO 5000'.
14:00	1.00	D06	PCD		5,011.00	0		DRILL 11' OF NEW FORMATION F/5000' T/5011'. CBU AND ENSURE MW IS 9.0 PPG IN/OUT.
15:00	1.50	D06	FST		5,011.00	0		PERFORM FIT TO 19.0 PPG EMW. 2600 PSI AT SURFACE, 9.0 PPG MUD IN HOLE, TVD = 5000'. GOOD TEST.
16:30	2.50	D06	DRR		5,139.00	0		DRILL F/ 5011' T/5139' ( 128' @ 52 FPH )  WOB: 12K RPM: SURFACE 30 MOTOR 100 BIT 130 PSI & FLOW: 1200 PSI @ 200 GPM TORQUE: 5.5K ON BOTTOM, 1-1.5K OFF BOTTOM STRING WEIGHT: P/U 140K S/O 130K ROT 135K MW: 9.0 PPG MOTOR RPG: 0.49 NO GAS OR FLARE
19:00	5.00	D06	DRR		5,874.00	0		DRILL F/ 5139' T/5874' ( 735' @ 147 FPH )  WOB: 15-25K RPM: SURFACE 70 MOTOR 150 BIT 220 PSI & FLOW: 1750 PSI @ 300 GPM TORQUE: 7.5K ON BOTTOM, 1-1.5K OFF BOTTOM STRING WEIGHT: P/U 150K S/O 140K ROT 145K MW: 9.0 PPG MOTOR RPG: 0.49 NO GAS OR FLARE
<b>Total</b>	<b>24.00</b>							

## 06.00 Update

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Description
0:00	3.00	C09			6,276.00	1	DRILL F/ 5874' T/6276' ( 402' @ 134 FPH )  WOB: 15-25K RPM: SURFACE 70 MOTOR 150 BIT 220 PSI & FLOW: 1850 PSI @ 300 GPM TORQUE: 8K ON BOTTOM, 1-2K OFF BOTTOM STRING WEIGHT: P/U 155K S/O 145K ROT 150K MW: 9.0 PPG MOTOR RPG: 0.49 NO GAS OR FLARE

## EP WELLS DAILY OPERATIONS REPORT

Report 17

05/08/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
2,324.00	1.84	40.22	2,323.80	-2.79	-2.25	-3.56	0.29	EPW MWD
2,796.00	3.23	42.47	2,795.33	12.80	11.62	17.26	0.30	EPW MWD
3,268.00	3.23	42.45	3,266.58	32.42	29.57	43.81	0.00	EPW MWD
3,457.00	3.12	50.07	3,455.29	39.65	37.11	54.25	0.23	EPW MWD
3,740.00	3.88	57.45	3,737.76	49.75	51.09	71.31	0.31	EPW MWD

## Fluid Details

Mud type	NaCl Brine	Oil/Water (%)	pH/Pm (cc)
MD (ft)		TS/HGS/LGS (%)	
Mud Density (ppg)		Sand (%)	
Vis (s/qt)			
PV/YP (cp/lbf/100ft²)		MBT (lbm/bbl)	
Gels 10 s/m (lbf/100ft²)		LCM (lbm/bbl)	
API/HTHP WL (cc/30min)		ECD (ppg)	
FC/HTHP FC (32nd")		H2S (gas unit)	R600/300 (°)
		KCl (%)	R200/100 (°)
FL temp. (°F)			R6/3 (°)
		Ditch Magnet in Last 24hrs/Cum. (gm)	

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## Remarks

FUEL ON HAND : 12189 GAL  
FUEL USED : 787 GAL

## EP WELLS DAILY OPERATIONS REPORT

Report 18

05/09/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19-10 LOV 1D
Wellbore	UNIVERSITY 19-10 LOV 1D
WBS No/API No	30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	17.42
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	7.58
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	JOHN DYKES	Measured Depth(ft)	8,211.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	8,203.22
Other Supervisor	ROSS GRAHAM	24 Hr Progress(ft)	2,337.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	6.125
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	7.000in@5,000.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	4.500in@8,755.00ft
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	9.05
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	18.998
Auxiliary/Secondary Work(hr)	0.00	Lithology	
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	1,044,551/1,585,627.97	Formation top MD	
Actual divided by AFE	0.66	Daily NPT(hr/%)	0/0
Daily Cost	108,723	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	656	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	4 6 0

Safety Comments:

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	15
Last BOP function test	03/24/2016	46	Days Since Last Drill	103
Last BOP Test	03/24/2016	46		
Next BOP Test	04/14/2016			

## Operations Summary

24 Hour Summary
DRILL FROM 5874' TO 8211' IN 6 1/8" HOLE.
Update Since Report Time
@ 05:00 -
24 Hour Forecast
DRILL TO TD AT 8725', PUMP C/U CYCLES, TOOHP L/D 2700' OF DP, DROP RABBIT, TOOHP R/B DP, L/D HHWDPA AND DC'S, L/D BHA.

## EP WELLS DAILY OPERATIONS REPORT

Report 18

05/09/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	3.00	D06	DRR		6,276.00	0		DRILL F/ 5874' T/ 6276' ( 402' @ 134 FPH )  WOB: 15-25K RPM: SURFACE 70 MOTOR 150 BIT 220 PSI & FLOW: 1850 PSI @ 300 GPM TORQUE: 8K ON BOTTOM, 1-2K OFF BOTTOM STRING WEIGHT: P/U 155K S/O 145K ROT 150K MW: 9.0 PPG MOTOR RPG: 0.49 NO GAS OR FLARE
3:00	8.00	D06	DRR		7,252.00	0		DRILL F/ 6276' T/ 7252' ( 976' @ 122 FPH )  WOB: 15-25K RPM: SURFACE 70 MOTOR 150 BIT 220 PSI & FLOW: 2100 PSI @ 300 GPM TORQUE: 8.5K ON BOTTOM, 1-2K OFF BOTTOM STRING WEIGHT: P/U 160K S/O 150K ROT 155K MW: 9.0 PPG MOTOR RPG: 0.49 NO GAS OR FLARE
11:00	2.00	D06	DRR		7,376.00	0		DRILL F/ 7252' T/ 7376' ( 124' @ 62 FPH )  WOB: 10K RPM: SURFACE 20 MOTOR 123 BIT 143 PSI & FLOW: 1450 PSI @ 250 GPM TORQUE: 4-5K ON BOTTOM, 1-2K OFF BOTTOM STRING WEIGHT: P/U 170K S/O 155K ROT 160K MW: 9.0 PPG MOTOR RPG: 0.49 NO GAS OR FLARE
13:00	8.00	D06	DRR		8,046.00	0		DRILL F/ 7376' T/ 8046' ( 670' @ 84 FPH )  WOB: 16-22K RPM: SURFACE 20 MOTOR 123 BIT 143 PSI & FLOW: 1850 PSI @ 250 GPM TORQUE: 6-7K ON BOTTOM, 1-2K OFF BOTTOM STRING WEIGHT: P/U 180K S/O 165K ROT 170K MW: 9.1 PPG MOTOR RPG: 0.49 NO GAS OR FLARE
21:00	0.50	D06	MNR		8,046.00	0		RIG SERVICE.
21:30	2.50	D06	DRR		8,211.00	0		DRILL F/ 8046' T/ 8211' ( 165' @ 66 FPH )  WOB: 16-22K RPM: SURFACE 20 MOTOR 123 BIT 143 PSI & FLOW: 1850 PSI @ 250 GPM TORQUE: 6-7K ON BOTTOM, 1-2K OFF BOTTOM STRING WEIGHT: P/U 180K S/O 165K ROT 170K MW: 9.1 PPG MOTOR RPG: 0.49 NO GAS OR FLARE
<b>Total</b>	<b>24.00</b>							

## 06.00 Update

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Description
0:00	4.00	C09			8,487.00	1	DRILL F/ 8211' T/ 8487' ( 276' @ 70 FPH )  WOB: 16-22K RPM: SURFACE 20 MOTOR 123 BIT 143 PSI & FLOW: 1850 PSI @ 250 GPM TORQUE: 6-7K ON BOTTOM, 1-2K OFF BOTTOM STRING WEIGHT: P/U 185K S/O 170K ROT 175K MW: 9.1 PPG

## EP WELLS DAILY OPERATIONS REPORT

Report 18

05/09/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## 06.00 Update

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Description
							MOTOR RPG: 0.49 NO GAS OR FLARE

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
6,471.00	1.25	55.37	6,463.51	103.21	200.28	225.30	0.19	EPW MWD
6,944.00	0.34	40.64	6,936.45	107.20	205.43	231.72	0.20	EPW MWD
6,944.00	0.34	40.64	6,936.45	107.06	205.41	231.63	0.20	EPW MWD
7,416.00	1.06	224.82	7,408.43	105.02	203.24	228.77	0.30	EPW MWD
7,889.00	1.76	148.14	7,881.32	95.75	203.99	225.15	0.39	EPW MWD

## Fluid Details

Mud type	NaCl Brine	Oil/Water (%)	0.00/95.70	pH/Pm (cc)	9.50/0.15
MD (ft)	7,761.00	TS/HGS/LGS (%)	2.90//	Pf/Mf (cc)	0.10/0.15
Mud Density (ppg)	9.05	Sand (%)	0.10	Ca+ (ppm)	
Vis (s/qt)	28.00			Cl- (ppm)	25,000
PV/YP (cp/lbf/100ft²)	1.00/4.000	MBT (lbm/bbl)			
Gels 10 s/m (lbf/100ft²)	1.000/1.000	LCM (lbm/bbl)			
API/HTHP WL (cc/30min)	100.0/	ECD (ppg)	9.540	R600/300 (°)	
FC/HTHP FC (32nd")	1.0/	H2S (gas unit)		R200/100 (°)	
		KCl (%)		R6/3 (°)	
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)			

## Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
3	6.125	BAKER HUGHES	MM64D			12736627	6x12	5,000.00		-----

## Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)
6,276.00	15.0/25.0	70	300.0	1,850.00	169.87	9.18	29.73	3.00	402.00	134.0	10.50	1,265.00	120.5
7,252.00	15.0/25.0	70	300.0	2,100.00	169.87	8.09	29.73	8.00	976.00	122.0	18.50	2,241.00	121.1
7,376.00	10.0/10.0	20	250.0	1,450.00	117.97	8.14	17.20	2.00	124.00	62.0	20.50	2,365.00	115.4
8,046.00	16.0/22.0	20	250.0	1,850.00	119.28	6.45	17.39	8.00	670.00	83.7	28.50	3,035.00	106.5
8,211.00	16.0/22.0	20	250.0	1,850.00	119.28	6.45	17.39	2.50	165.00	66.0	31.00	3,200.00	103.2

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DP	228	7,153.16	4.000		3.340	XT39	16.00		RIG
15 jts 4" HWDP	15	462.10	4.500		3.000	XT39	27.00		RIG
X/O	1	4.00	4.750		25.000	3 1/2 IF	42.00		32976
15 Jts 4 3/4 DC's	15	460.43	4.750		2.500	3 1/2 IF	42.00		RIG
Filter Sub	1	5.48	4.875		2.625	3 1/2 IF	42.00		12985616
Spiral Stab	1	5.96	4.750		2.812	3 1/2 IF	48.00		26987
NMDC	1	29.90	4.500		2.188	3 1/2 IF	42.00		475-30-1467
Spiral Stab	1	5.88	4.750		2.188	3 1/2 IF	48.00		25868
MWD - LCP	1	46.49	4.750		2.188	3 1/2 IF	48.00		420SEA
Spiral Stab	1	5.77	4.750		2.187	3 1/2 IF	48.00		23286

## EP WELLS DAILY OPERATIONS REPORT

Report 18

05/09/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
M1XL/LS (motor), 0	1	30.88	4.750			3 1/2 IF	48.00		13669064
BIT# 3 RUN# 16.125" BAKER MM64D (6X12)	1	0.95	6.125	6.125		3 1/2 IF	80.00		12736627

## Drillstring Details

Date/Time in		Date/Time out		BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
05/09/2016 08:56				3	1,057.84	2.187	DRILL 6.125" PRODUCTION HOLE SECTION
MD (ft)	SW Up (kip)	SW Down (kip)	SW Rotn (kip)	Drag (kip)	Tq On Btm (ft-lbf)	Tq Off Btm (ft-lbf)	Footage (ft)
6,276.00	155.0	145.00	150.00	5.00	8,000.0	2,000.0	402.00
7,252.00	160.0	150.00	155.00	5.00	8,500.0	2,000.0	976.00
7,376.00	170.0	155.00	160.00	10.00	5,000.0	2,000.0	124.00
8,046.00	180.0	165.00	170.00	10.00	7,000.0	2,000.0	670.00
8,211.00	180.0	165.00	170.00	10.00	7,000.0	2,000.0	165.00

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 19

05/10/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19-10 LOV 1D
Wellbore	UNIVERSITY 19-10 LOV 1D
WBS No/API No	30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	18.42
Objective	Drill - Upper Avalon Carbonate	Original Spud Date		Days Since Spud	8.58
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	JOHN DYKES	Measured Depth(ft)	8,528.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	8,520.19
Other Supervisor	ROSS GRAHAM	24 Hr Progress(ft)	317.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	6.125
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	7.000in@5,000.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	4.500in@8,755.00ft
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	9.30
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	18.998
Auxiliary/Secondary Work(hr)	0.00	Lithology	
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	1,062,646/1,585,627.97	Formation top MD	
Actual divided by AFE	0.67	Daily NPT(hr/%)	19.00/79.17
Daily Cost	41,174	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	657	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	5 6 0

Safety Comments:

SAVER SUB PARTED, 1-2 BBLs OF CLEAR FLUID FELL TO RIG FLOOR.

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	13
Last BOP function test	05/07/2016	3	Days Since Last Drill	104
Last BOP Test	05/07/2016	3		
Next BOP Test	05/28/2016			

## Operations Summary

24 Hour Summary
DRILL FROM 8211' TO 8528', SAVER SUB PARTED, TOO H TO SHOE TO REPLACE. PERFORM TORQUE TEST.
Update Since Report Time
@ 04:00 - TROUBLESHOOTING ENCODERS.
24 Hour Forecast
FIX ENCODER ISSUE, TIH, DRILL FROM 8548' TO 8735', TOO H, RUN 4 1/2" PERFORATED LINER.

## EP WELLS DAILY OPERATIONS REPORT

Report 19

05/10/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	4.00	D06	DRR		8,487.00	0		DRILL F/ 8211' T/ 8487' ( 276' @ 70 FPH )  WOB: 16-22K RPM: SURFACE 20 MOTOR 123 BIT 143 PSI & FLOW: 1850 PSI @ 250 GPM TORQUE: 6-7K ON BOTTOM, 1-2K OFF BOTTOM STRING WEIGHT: P/U 185K S/O 170K ROT 175K MW: 9.1 PPG MOTOR RPG: 0.49 NO GAS OR FLARE
4:00	1.00	D06	DRR		8,528.00	0		DRILL F/ 8487' T/ 8528' ( 41' @ 41 FPH )  WOB: 16-22K RPM: SURFACE 20 MOTOR 123 BIT 143 PSI & FLOW: 1850 PSI @ 250 GPM TORQUE: 6-7K ON BOTTOM, 1-2K OFF BOTTOM STRING WEIGHT: P/U 185K S/O 170K ROT 175K MW: 9.1 PPG MOTOR RPG: 0.49 NO GAS OR FLARE
5:00	3.50	D06	REP		8,528.00	1		NPT - MADE A HOOK, DRILLED 5' AND NOTICED A LEAK ON THE TOPDRIVE. STARTED TO P/U OFF BOTTOM AND SAVER SUB PARTED. TOOH TO SHOE TO REPLACE SAVER SUB.
8:30	6.50	D06	REP		8,528.00	1		NPT - REMOVE BAIL GUIDES, FEDER RINGS, CHANGE DIES IN GRABBER. REMOVE UPPER AND LOWER IBOPS AND SAVER SUB. INSTALL NEW UPPER AND LOWER IBOPS AND SAVER SUB, INSTALL AND TIE WIRE NEW FEDER RINGS. INSTALL IBOP ACUATOR, CHANGE OUT GRABBER BOX HEADS, INSTALL BAIL GUIDES.
15:00	9.00	D06	REP		8,528.00	1		NPT - R/U FOR TORQUE TEST. TESTED TOP DRIVE AGAINST TONGS AGAINST IRON ROUGHNECK. WAIT ON NEW LOAD CELL AND LINE PULL GAUGE, INSTALL SAME, STILL READING THE SAME AS OLD, THEREFORE ENCODERS SEEM TO BE THE ISSUE. TOPDRIVE READING 4-6K MORE TORQUE THAN TONGS. CHECK ENCODERS, ATTEMPT TO ADJUSTED TOPDRIVE TORQUE IN VFD HOUSE. TROUBLE SHOOT ENCODERS.
<b>Total</b>	<b>24.00</b>							

## NPT Summary

Start Date/Time	Responsible Company	NPT Code	Failure MD (ft)	Ops Code	Type*	Equipment Type	Net time (hr)	Gross time (hr)	Severity	Status
05/10/2016 05:00	PRECISION DRILLING COMPANY LP	Rig/Work Unit Misc	8,528.00	REP	EN	Top Drive/Power Swivel	0.00	0.00		OPEN
<b>Description:</b> MADE A HOOK, DRILLED 5' AND NOTICED A LEAK ON THE TOPDRIVE. STARTED TO P/U OFF BOTTOM AND SAVER SUB PARTED. TOOH TO SHOE TO REPLACE SAVER SUB.						<b>Title:</b> CHANGE OUT SAVER SUB				
<b>Total</b>							<b>0.00</b>	<b>0.00</b>		

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
7,416.00	1.06	224.82	7,408.43	105.17	203.27	228.10	0.30	EPW MWD
7,889.00	1.76	148.14	7,881.32	95.90	204.02	225.22	0.39	EPW MWD
7,889.00	1.76	148.14	7,881.32	95.75	203.99	225.14	0.39	EPW MWD
8,362.00	0.71	134.88	8,354.21	87.66	209.93	227.50	0.23	EPW MWD
8,362.00	0.71	134.88	8,354.21	87.51	209.90	227.42	0.23	EPW MWD

## EP WELLS DAILY OPERATIONS REPORT

Report 19

05/10/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Fluid Details

Mud type	NaCl Brine	Oil/Water (%)	0.00/94.00	pH/Pm (cc)	10.00/0.20
MD (ft)	8,529.00	TS/HGS/LGS (%)	2.60//	Pf/Mf (cc)	0.10/0.15
Mud Density (ppg)	9.30	Sand (%)	0.10	Ca+ (ppm)	
Vis (s/qt)	28.00			Cl- (ppm)	62,000
PV/YP (cp/lbf/100ft²)	1.00/4.000	MBT (lbm/bbl)			
Gels 10 s/m (lbf/100ft²)	1.000/1.000	LCM (lbm/bbl)			
API/HTHP WL (cc/30min)	100.0/	ECD (ppg)	9.300	R600/300 (°)	
FC/HTHP FC (32nd")	1.0/	H2S (gas unit)		R200/100 (°)	
		KCl (%)		R6/3 (°)	
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)			

## Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
3	6.125	BAKER HUGHES	MM64D			12736627	6x12	5,000.00		-----

## Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)
8,487.00	16.0/22.0	20	250.0	1,850.00	119.28	6.45	17.39	4.00	276.00	69.0	35.00	3,476.00	99.3
8,528.00	16.0/22.0	20	250.0	1,850.00	119.28	6.45	17.39	1.00	41.00	41.0	36.00	3,517.00	97.7

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DP	238	7,470.16	4.000		3.340	XT39	16.00		RIG
15 jts 4" HWDP	15	462.10	4.500		3.000	XT39	27.00		RIG
X/O	1	4.00	4.750		25.000	3 1/2 IF	42.00		32976
15 Jts 4 3/4 DC's	15	460.43	4.750		2.500	3 1/2 IF	42.00		RIG
Filter Sub	1	5.48	4.875		2.625	3 1/2 IF	42.00		12985616
Spiral Stab	1	5.96	4.750		2.812	3 1/2 IF	48.00		26987
NMDC	1	29.90	4.500		2.188	3 1/2 IF	42.00		475-30-1467
Spiral Stab	1	5.88	4.750		2.188	3 1/2 IF	48.00		25868
MWD - LCP	1	46.49	4.750		2.188	3 1/2 IF	48.00		420SEA
Spiral Stab	1	5.77	4.750		2.187	3 1/2 IF	48.00		23286
M1XL/LS (motor), 0	1	30.88	4.750			3 1/2 IF	48.00		13669064
BIT# 3 RUN# 16.125" BAKER MM64D (6X12)	1	0.95	6.125	6.125		3 1/2 IF	80.00		12736627

## Drillstring Details

Date/Time in		Date/Time out		BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
05/08/2016 07:00				3	1,057.84	2.187	DRILL 6.125" PRODUCTION HOLE SECTION
MD (ft)	SW Up (kip)	SW Down (kip)	SW Rotn (kip)	Drag (kip)	Tq On Btm (ft-lbf)	Tq Off Btm (ft-lbf)	Footage (ft)
8,487.00	185.0	170.00	175.00	10.00	7,000.0	2,000.0	276.00
8,528.00	185.0	170.00	175.00	10.00	7,000.0	2,000.0	41.00

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 20

05/11/2016

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 19-10 LOV 1D  
 Wellbore UNIVERSITY 19-10 LOV 1D  
 WBS No/API No 30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	19.42
Objective	Drill - Upper Avalon Carbonate	Original Spud Date	05/02/2016	Days Since Spud	9.58
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	JOHN DYKES	Measured Depth(ft)	8,529.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	8,521.19
Other Supervisor	ROSS GRAHAM	24 Hr Progress(ft)	0.00
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	6.125
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	7.000in@5,000.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	4.500in@8,755.00ft
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	9.10
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	18.998
Auxiliary/Secondary Work(hr)	0.00	Lithology	
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	1,104,980/1,585,627.97	Formation top MD	
Actual divided by AFE	0.70	Daily NPT(hr/%)	11.00/45.83
Daily Cost	45,956	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	658	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	5 6 0

Safety Comments:

## Drills

Drill Category	Drill Type	Detection (sec)	Complete (sec)	Crew drilled	Pass / Fail	PIC	Comments
Well Control Crew	Trip		47.00	BOTH	Pass	JOHN DYKES	FOSV AND BOP SHUT

## HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	15 105
Last Derrick Inspection	05/07/2016	4		
Last BOP function test	05/07/2016	4		
Last BOP Test	05/28/2016			
Next BOP Test				

## Operations Summary

24 Hour Summary
TROUBLESHOOT ENCODERS, TIH TO 8529', PERFORM C/U CYCLES, TOOH, L/D BHA.

## EP WELLS DAILY OPERATIONS REPORT

Report 20

05/11/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Update Since Report Time

@ 02:00 - RUNNING LINER AT 1944'.

## 24 Hour Forecast

R/U AND RUN 4 1/2" LINER, SET HANGER AND PACKER, TOO H L/D DP, RUN TIEBACK STRING.

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	9.00	D06	REP		8,529.00	1		NPT - TROUBLESHOOTING ENCODERS  **DECISION MADE TO CALL TD SHORT**
9:00	2.00	D06	DRT		8,529.00	1		TIH F/ 5000' TO TD AT 8529'.
11:00	2.00	D06	BHC		8,529.00	0		PERFORM C/U CYCLES.
13:00	3.00	D06	DRT		8,529.00	0		TOOH L/D DRILLPIPE FROM 8529' TO 6254'.
16:00	3.00	D06	DRT		8,529.00	0		DROP RABBIT, TOO H RACKING BACK DRILLPIPE FROM 6254' TO 1057'.
19:00	2.50	D06	DRT		8,529.00	0		L/D 4" HWDP AND 4 7/8" DC'S F/1057' TO 131'
21:30	2.00	D06	DRT		8,529.00	0		L/D BHA. P/U JOINT OF DRILLPIPE WITH SAVER SUB PIN IN IT, BREAK OUT SAME, L/D JOINT.
23:30	0.50	D06	SAF		8,529.00	0		PJSM W/ EXPRESS. R/U CASING TOOLS.
<b>Total</b>	<b>24.00</b>							

## 06.00 Update

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Description
0:00	2.00	D06			8,529.00	1	RIH WITH PERFORATED 4 1/2" LINER FROM SURFACE TO 1944'.

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
7,416.00	1.06	224.82	7,408.43	105.17	203.27	228.10	0.30	EPW MWD
7,889.00	1.76	148.14	7,881.32	95.90	204.02	225.22	0.39	EPW MWD
7,889.00	1.76	148.14	7,881.32	95.75	203.99	225.14	0.39	EPW MWD
8,362.00	0.71	134.88	8,354.21	87.66	209.93	227.50	0.23	EPW MWD
8,362.00	0.71	134.88	8,354.21	87.51	209.90	227.42	0.23	EPW MWD

## Fluid Details

Mud type	NaCl Brine	Oil/Water (%)	0.00/95.20	pH/Pm (cc)	9.00/0.15
MD (ft)	8,529.00	TS/HGS/LGS (%)	0.80//	Pf/Mf (cc)	0.10/0.15
Mud Density (ppg)	9.10	Sand (%)	0.10	Ca+ (ppm)	
Vis (s/qt)	28.00			Cl- (ppm)	71,000
PV/YP (cp/lbf/100ft²)	1.00/4.000	MBT (lbm/bbl)			
Gels 10 s/m (lbf/100ft²)	1.000/1.000	LCM (lbm/bbl)			
API/HTHP WL (cc/30min)	100.0/	ECD (ppg)	9.100	R600/300 (°)	
FC/HTHP FC (32nd")	1.0/	H2S (gas unit)		R200/100 (°)	
		KCl (%)		R6/3 (°)	
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)			

## Bit Details

Bit no.	Size (in)	Manufacturer	Model no.	Class	IADC code	Serial no.	Size (32nd")	MD in (ft)	MD out (ft)	IADC Dull Grade
3	6.125	HALLIBURTON	MM64D			12736627	6x12	5,000.00	8,529.00	-----

## Bit Operations

MD (ft)	WOB Min/Max (kip)	Current RPM (rpm)	Flow rate (gpm)	SPP (psi)	P bit (psi)	% @ Bit	HHP (hp)	Hours (hr)	Footage (ft)	ROP (ft/hr)	Hours cum (hr)	Footage cum. (ft)	ROP cum. (ft/hr)

## EP WELLS DAILY OPERATIONS REPORT

Report 20

05/11/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Drillstring Components

Item description	# Jts	Length (ft)	OD (in)	Max OD (in)	ID (in)	Connection Name	Weight (ppf)	Grade	Serial no.
4" DP	238	7,471.16	4.000		3.340	XT39	16.00		RIG
15 jts 4" HWDP	15	462.10	4.500		3.000	XT39	27.00		RIG
X/O	1	4.00	4.750		25.000	3 1/2 IF	42.00		32976
15 Jts 4 3/4 DC's	15	460.43	4.750		2.500	3 1/2 IF	42.00		RIG
Filter Sub	1	5.48	4.875		2.625	3 1/2 IF	42.00		12985616
Spiral Stab	1	5.96	4.750		2.812	3 1/2 IF	48.00		26987
NMDC	1	29.90	4.500		2.188	3 1/2 IF	42.00		475-30-1467
Spiral Stab	1	5.88	4.750		2.188	3 1/2 IF	48.00		25868
MWD - LCP	1	46.49	4.750		2.188	3 1/2 IF	48.00		420SEA
Spiral Stab	1	5.77	4.750		2.187	3 1/2 IF	48.00		23286
M1XL/LS (motor), 0	1	30.88	4.750			3 1/2 IF	48.00		13669064
BIT# 3 RUN# 16.125" BAKER MM64D (6X12)	1	0.95	6.125	6.125		3 1/2 IF	80.00		12736627

## Drillstring Details

Date/Time in	Date/Time out	BHA no.	BHA Length (ft)	Min. ID (in)	Purpose
05/08/2016 07:00	05/11/2016 23:30	3	1,057.84	2.187	DRILL 6.125" PRODUCTION HOLE SECTION

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 21

05/12/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19-10 LOV 1D
Wellbore	UNIVERSITY 19-10 LOV 1D
WBS No/API No	30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	20.42
Objective	Drill - Upper Avalon Carbonate	Original Spud Date	05/02/2016	Days Since Spud	10.58
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	SKYLAR PEARSON	Measured Depth(ft)	8,529.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	8,521.19
Other Supervisor	SEAN WU	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	6.125
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	7.000in@5,000.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	4.500in@8,755.00ft
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	9.25
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	18.998
Auxiliary/Secondary Work(hr)	0.00	Lithology	
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	1,154,049/1,585,627.97	Formation top MD	
Actual divided by AFE	0.73	Daily NPT(hr/%)	0/0
Daily Cost	66,791	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	659	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	10 0 0

Safety Comments:

## HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	17 106
Last Derrick Inspection	05/07/2016	5		
Last BOP function test	05/07/2016	5		
Last BOP Test	05/07/2016			
Next BOP Test	05/28/2016			

## Operations Summary

24 Hour Summary
Run 4 1/2" liner to 8495'. P/U running tool and packer. TIH on DP, set hanger and packer, TRIP OUT AND LAY DOWN DP. Well started flowing with 3023' DP in the hole. Pump 10 ppg heavy mud into DP and annular. Well became static. Continue to TOO H AND LD DP.
Update Since Report Time
Run in hole with 4 1/2" tubing.
24 Hour Forecast
Run 4 1/2" tubing, tag packer, space out, circulate packer fluid, land tubing hanger, pressure test down annular. Install BPV.

## EP WELLS DAILY OPERATIONS REPORT

Report 21

05/12/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	10.00	C06	CLR		8,529.00	0		RIH WITH PERFORATED 4 1/2" LINER FROM SURFACE TO 4940'.  STRAPPED IN HOLE WHILE RUNNING THE PACKER. 3.21 FT LONGER ON STRAP TAPE Vs PIPE TALLY.
10:00	2.50	C06	CLR		8,529.00	0		CIRCULATE BOTTOM UP, DROP BALL, SET PACKER @4940', TEST LINER TOP @3500 PSI FOR 5 MIN
12:30	2.50	C06	DRT		8,529.00	0		PUMP SLUG. LAY DOWN DRILL PIPES F/4914' T/3023'.
15:00	2.00	C06	PCD		8,529.00	0		WELL FLOWING WHEN DP @3023'. FORCE FILL BACK SIDE WITH 10 BBLs AND BLEED BACK 10 BBL TO TRIP TANK. MONITOR PRESSURE ON CHOKE.
17:00	1.00	C06	PCD		8,529.00	0		CIRCULATE BOTTOM UP @3023'. MONITOR FLOW ON TRIP TANK.
18:00	0.50	C06	PCD		8,529.00	0		CONTINUE TO MONITOR WELL ON TRIP TANK.
18:30	0.50	C06	PCD		8,529.00	0		PUMP 40 BBL OF 10 PPG MUD AND DISPLACED WITH 21 BBL OF ACTIVE MUD.
19:00	0.50	C06	PCD		8,529.00	0		PIPE U-TUBING. PUMP ANOTHER 10 BBL OF 10 PPG MUD.
19:30	1.00	C06	PCD		8,529.00	0		PUMP 90 BBL OF 10 PPG MUD. WELL BECOMES STATIC.
20:30	3.50	C06	DRT		8,529.00	0		TRIP OUT DRILL PIPE F/3023' T/SURFACE AND LAY DOWN THE SAME.
<b>Total</b>	<b>24.00</b>							

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
7,416.00	1.06	224.82	7,408.43	105.17	203.27	228.10	0.30	EPW MWD
7,889.00	1.76	148.14	7,881.32	95.90	204.02	225.22	0.39	EPW MWD
7,889.00	1.76	148.14	7,881.32	95.75	203.99	225.14	0.39	EPW MWD
8,362.00	0.71	134.88	8,354.21	87.66	209.93	227.50	0.23	EPW MWD
8,362.00	0.71	134.88	8,354.21	87.51	209.90	227.42	0.23	EPW MWD

## Fluid Details

Mud type	NaCl Brine	Oil/Water (%)	0.00/94.80	pH/Pm (cc)	8.00/0.10
MD (ft)	8,529.00	TS/HGS/LGS (%)	1.00//	Pf/Mf (cc)	0.05/0.10
Mud Density (ppg)	9.25	Sand (%)	0.10	Ca+ (ppm)	
Vis (s/qt)	28.00			Cl- (ppm)	75,000
PV/YP (cp/lbf/100ft²)	1.00/4.000	MBT (lbm/bbl)			
Gels 10 s/m (lbf/100ft²)	1.000/1.000	LCM (lbm/bbl)			
API/HTHP WL (cc/30min)	100.0/	ECD (ppg)	9.250	R600/300 (°)	
FC/HTHP FC (32nd")	1.0/	H2S (gas unit)		R200/100 (°)	
		KCl (%)		R6/3 (°)	
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)			

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## Remarks

On 5/11/2016 notified Becky w/TRRC of intent to run liner and set packer @ 4940 ft.

## EP WELLS DAILY OPERATIONS REPORT

Report 22

05/13/2016

Company	PERMIAN
Well Type	Development
Well	UNIVERSITY 19-10 LOV 1D
Wellbore	UNIVERSITY 19-10 LOV 1D
WBS No/API No	30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	21.42
Objective	Drill - Upper Avalon Carbonate	Original Spud Date	05/02/2016	Days Since Spud	11.58
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	SKYLAR PEARSON	Measured Depth(ft)	8,529.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	8,521.19
Other Supervisor	KEVIN BERGERON, SEAN WU	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	6.125
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	7.000in@5,000.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	4.500in@8,755.00ft
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	9.25
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	18.998
Auxiliary/Secondary Work(hr)	0.00	Lithology	
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	1,250,269/1,585,627.97	Formation top MD	
Actual divided by AFE	0.79	Daily NPT(hr/%)	9.00/37.50
Daily Cost	88,904	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	660	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	9 0 0

Safety Comments:

## HSE Drills

Drills/Tests	Date	Days Since Last	JSA's/Toolbox Talks Days Since Last Drill	12 107
Last Derrick Inspection	05/07/2016	6		
Last BOP function test	05/07/2016	6		
Last BOP Test	05/28/2016			
Next BOP Test				

## Operations Summary

24 Hour Summary
Run 4 1/2" tubing from surface to 4,950'. Wait 5 hrs on additional pup joint for space out. Circulate packer fluid and land tubing hanger. Install BPV. Pressure test annular failed due to damaged O-ring. Change out O-ring and re-test. Good tests.
Update Since Report Time
Nipple down BOP. Clean mud pits.
24 Hour Forecast
Rig move.

## EP WELLS DAILY OPERATIONS REPORT

Report 22

05/13/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	2.00	C06	DRT		8,529.00	0		L/D DRILL PIPE. PULL WEAR BUSHING. R/U TUBING RUNNING TOOLS.
2:00	4.00	C06	CLR		8,529.00	0		RUN 4 1/2" TUBING FROM SURFACE TO 2,627'.
6:00	2.00	C06	CLR		8,529.00	0		RUN 4 1/2" TUBING FROM 2,627' TO 4,834'.
8:00	1.00	C06	RUD		8,529.00	0		INSTALL FLANGE WITH 1502 TO WELLHEAD AND CONNECT KILL LINE TO THE SAME.
9:00	1.50	C06	CLR		8,529.00	0		RUN 4 1/2" TUBING FROM 4,834' TO 4,950'. TAG PACKER. BACK OUT OF PACKER. LAY OUT 3 TAG JOINTS AND SWEGE.
10:30	5.00	C06	IFO		8,529.00	1		NPT: WAIT ON ADDITIONAL PUP JOINT TO SPACE OUT.
15:30	1.50	C06	CLR		8,529.00	0		MAKE UP PUP JOINTS, TUBING HANGER AND LANDING JOINT.
17:00	1.00	C06	CLR		8,529.00	0		DISPLACE HOLE WITH PACKER FLUID. LAND TUBING HANGER.
18:00	1.50	C06	PRE		8,529.00	0		PRESSURE TEST ANNULAR WITH FRONTIER WELL TESTERS AND PRESSURE (250 AND 2400 PSI) DID NOT HOLD. FIND O-RING DAMAGED AFTER PULL OUT TUBING HANGER.
19:30	2.50	C06	REP		8,529.00	1		NPT: MONITOR WELL WHILE SHUT IN. WAIT ON REPLACEMENT O-RING.
22:00	0.50	C06	REP		8,529.00	1		NPT:REPLACE O-RING. LAND TUBING HANGER.
22:30	1.00	C06	PRE		8,529.00	1		NPT:PRESSURE TEST ANNULAR (250, 2400 AND 3500 PSI FOR 10 MIN). GOOD TESTS.
23:30	0.50	C06	RUD		8,529.00	0		LAY OUT LANDING JOINT. RIG DOWN TUBING RUNNING TOOLS.
<b>Total</b>	<b>24.00</b>							

## NPT Summary

Start Date/Time	Responsible Company	NPT Code	Failure MD (ft)	Ops Code	Type*	Equipment Type	Net time (hr)	Gross time (hr)	Severity	Status
05/13/2016 10:30	SHELL	Wait On Equipment	8,529.00	IFO	N		5.00	5.00		OPEN
<b>Description:</b> WAIT ON ADDITIONAL PUP JOINT TO SPACE OUT.						<b>Title:</b> WAIT ON ADDITIONAL PUP JOINT TO SPACE OUT.				
05/13/2016 19:30	ENSIGN UNITED STATES DRILLING INC	BOP & Pressure Control Equipment	8,529.00	REP	EN	BOP Ram's/Annular's	4.00	4.00		OPEN
<b>Description:</b> MONITOR WELL WHILE SHUT IN. WAIT ON REPLACEMENT O-RING. REPLACE O-RING. TESTED GOOD						<b>Title:</b> REPLACE O-RING				
<b>Total</b>							<b>9.00</b>	<b>9.00</b>		

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
7,416.00	1.06	224.82	7,408.43	105.17	203.27	228.10	0.30	EPW MWD
7,889.00	1.76	148.14	7,881.32	95.90	204.02	225.22	0.39	EPW MWD
7,889.00	1.76	148.14	7,881.32	95.75	203.99	225.14	0.39	EPW MWD
8,362.00	0.71	134.88	8,354.21	87.66	209.93	227.50	0.23	EPW MWD
8,362.00	0.71	134.88	8,354.21	87.51	209.90	227.42	0.23	EPW MWD

## EP WELLS DAILY OPERATIONS REPORT

Report 22

05/13/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Fluid Details

Mud type	NaCl Brine	Oil/Water (%)	0.00/94.80	pH/Pm (cc)	8.00/0.05
MD (ft)	8,529.00	TS/HGS/LGS (%)	1.00//	Pf/Mf (cc)	0.00/0.05
Mud Density (ppg)	9.25	Sand (%)	0.10	Ca+ (ppm)	
Vis (s/qt)	28.00			Cl- (ppm)	75,000
PV/YP (cp/lbf/100ft <sup>2</sup> )	1.00/4.000	MBT (lbm/bbl)			
Gels 10 s/m (lbf/100ft <sup>2</sup> )	1.000/1.000	LCM (lbm/bbl)			
API/HTHP WL (cc/30min)	100.0/	ECD (ppg)	9.250	R600/300 (°)	
FC/HTHP FC (32nd")	1.0/	H2S (gas unit)		R200/100 (°)	
		KCl (%)		R6/3 (°)	
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)			

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						

## EP WELLS DAILY OPERATIONS REPORT

Report 23

05/14/2016

Company PERMIAN  
 Well Type Development  
 Well UNIVERSITY 19-10 LOV 1D  
 Wellbore UNIVERSITY 19-10 LOV 1D  
 WBS No/API No 30246103 / 4230132766.00

## Event Summary

Event Type	Drilling only	Event Start Date	04/03/2016	Days on Location	22.42
Objective	Drill - Upper Avalon Carbonate	Original Spud Date	05/02/2016	Days Since Spud	12.58
Est. Days	12.00	Contractor	ENSIGN		
Work Unit	ENSIGN 776	Days To Release			
		Rig Phone/FAX No.			

## Well Status

Supervisor	SKYLAR PEARSON	Measured Depth(ft)	8,529.00
Engineer	YERMEK TYNYSHBAYEV	TVD(ft)	8,521.19
Other Supervisor	KEVIN BERGERON, SEAN WU	24 Hr Progress(ft)	
Depth Ref/Grd Elev/Water Depth(ft)	DFE: 2,850.80 / 2,820.80	Hole size(in)	
THF Datum			
Rig Operating Rate(hr)	0.00	Last Casing MD	7.000in@5,000.00ft
Rig Zero Rate(hr)	0.00	Next Casing MD	4.500in@8,755.00ft
Rig Reduced Rate(hr)	0.00	Current Fluid Density(ppg)	
Rig Repair Rate(hr)	0.00	LOT/FIT EMW(ppg)	18.998
Auxiliary/Secondary Work(hr)	0.00	Lithology	
NX Auxiliary Floor Not Available(hr)	0.00	Formation	
Actual cost to date/AFE	1,322,706/1,585,627.97	Formation top MD	
Actual divided by AFE	0.83	Daily NPT(hr/%)	0/0
Daily Cost	64,665	Days Ahd(-) Bhnd(+)(50/50)	

## HSE Summary

Last Incident	Date	Days	Last Incident	Date	Days	KPI's	
LWC RWC MTC FAC Last casing pressure test			PSI NII HPI <b>GOAL ZERO DAYS</b> <b>PS BARRIER EVENT</b> <b>PS barrier bowtie review</b>	07/23/2014	661	TRCF LWCF Safety Cards - Safe Safety Card - Unsafe SSE% Last casing pressure(psi)	8 0 0

Safety Comments:

## HSE Drills

Drills/Tests	Date	Days Since Last		
Last Derrick Inspection			JSA's/Toolbox Talks	14
Last BOP function test	05/07/2016	7	Days Since Last Drill	108
Last BOP Test	05/07/2016	7		
Next BOP Test	05/28/2016			

## Operations Summary

24 Hour Summary
Nipple down BOP. Nipple up lower master valve and test the same. Well flows after pulling BPV. Pump 55 bbl of 10 ppg brine and well still flows. Rig up lubricator. Good tests (250, 5000 psi) after changing out leaking parts in two way check valve.
Update Since Report Time
Lay down derrick. Load out miscellaneous loads.
24 Hour Forecast
Continue rig down at University 19-10 LOV 1D. Move derrick and miscellaneous loads to new location at University 19-22 LOV 1D.

## EP WELLS DAILY OPERATIONS REPORT

Report 23

05/14/2016

Well UNIVERSITY 19-10 LOV 1D  
Wellbore UNIVERSITY 19-10 LOV 1D

## Time Summary

Start	Hours	PH	OPN	WS OPN	Drilled Depth (ft)	NPT level	Rig Rate	Description
0:00	3.50	C06	BPR		8,529.00	0		NIPPLE DOWN BOP.
3:30	2.50	C06	WHN		8,529.00	0		NIPPLE UP LOWER MASTER VALVE. PRESSURE TESTS AT 250 PSI FOR 5 MIN AND 5000 PSI FOR 10 MIN. GOOD TESTS.
6:00	0.50	C06	WHN		8,529.00	0		PRESSURE TEST DRILLER SIDE BLANK ON TUBING HEAD AT 250 PSI FOR 5 MIN AND 5000 PSI FOR 10 MIN. GOOD TESTS.
6:30	1.50	C06	WHN		8,529.00	0		WELL FLOWS WHEN PULLING BPV. CLOSE BPV AND INSTALL CAP AND KILL LINE. FILL UP SLUGGING PIT WITH 10 PPG BRINE.
8:00	1.00	C06	PCD		8,529.00	0		PUMP 55 BBL OF 10 PPG BRINE DOWN TUBING.
9:00	0.50	C06	WHN		8,529.00	0		REMOVE CAP. WELL STILL FLOWS WHEN PULLING BPV.
9:30	4.00	C06	RUD		8,529.00	0		LOAD OUT MISCELLANEOUS LOADS WHILE WAITING ON LUBRICATOR.
13:30	1.50	C06	WHN		8,529.00	0		RIG UP LUBRICATOR. PULL BPV AND INSTALL TWO WAY CHECK VALVE. PRESSURE TEST FAILED AT 5000 PSI TEST.
15:00	3.00	C06	WHN		8,529.00	0		CHANGE OUT LEAKING PARTS IN TWO WAY CHECK VALVE. RETEST AT 250 PSI FOR 5 MIN AND 5000 PSI FOR 10 MIN. GOOD TESTS. PULL TWO WAY CHECK VALVE. INSTALL BPV. RIG DOWN LUBRICATOR.
18:00	6.00	C06	PMO		8,529.00	0		LAY DOWN DERRICK. LOAD OUT MISCELLANEOUS LOADS FROM UNIVERSITY 19-10 LOV 1D TO UNIVERSITY 19-22 LOV 1D.
<b>Total</b>	<b>24.00</b>							

## Deepest 5 Surveys

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V.Sec (ft)	DLeg (°/100ft)	Tool
7,416.00	1.06	224.82	7,408.43	105.17	203.27	228.10	0.30	EPW MWD
7,889.00	1.76	148.14	7,881.32	95.90	204.02	225.22	0.39	EPW MWD
7,889.00	1.76	148.14	7,881.32	95.75	203.99	225.14	0.39	EPW MWD
8,362.00	0.71	134.88	8,354.21	87.66	209.93	227.50	0.23	EPW MWD
8,362.00	0.71	134.88	8,354.21	87.51	209.90	227.42	0.23	EPW MWD

## Fluid Details

Mud type	NaCl Brine	Oil/Water (%)	pH/Pm (cc) Pf/Mf (cc) Ca+ (ppm) Cl- (ppm)  R600/300 (°) R200/100 (°) R6/3 (°)
MD (ft)		TS/HGS/LGS (%)	
Mud Density (ppg)		Sand (%)	
Vis (s/qt)		MBT (lbm/bbl)	
PV/YP (cp/lbf/100ft²)		LCM (lbm/bbl)	
Gels 10 s/m (lbf/100ft²)		ECD (ppg)	
API/HTHP WL (cc/30min)		H2S (gas unit)	
FC/HTHP FC (32nd")		KCl (%)	
FL temp. (°F)		Ditch Magnet in Last 24hrs/Cum. (gm)	

## PUMP/HYDRAULIC DATA

Pump No.	Type	Make/Model	Stroke (in)	Liner size (in)	Efficiency (%)	Pressure (psi)	SPM (spm)	Output (gpm)	Kill SPM/Pressure/Depth (spm/psi/ft)
1		GARDENER-DENVER / PZ-11-1600	11.00						
2		GARDENER-DENVER / PZ-11-1600	11.00						