

Daily Drilling Report

UNIVERSITY 7-43 114H				PERMIAN ASSET TEAM			
PATTERSON - UTI #802				Job:	ODR		
Accept: 8/22/2017				Report Date:	8/26/2017		
Days Since LTI: 757.00				Report #:	4		
Release:				DFS:			
Days Since RI: 757.00				AFE #:	043160		
				Total AFE + Sup:	\$3,455,484.27		
				Daily Field Est. (Cost):	\$77,754.95		

API/UWI 42-003-47568-0000		Well Profile HORIZONTAL		Open Formation LOWER SPRABERRY SHALE (SPBY L C1)		Field Name SPRABERRY (TREND AREA)									
SSN ID00003295	WellIDE	Property Sub	KB-Grd (ft) 29.00	Orig KB Elev (ft) 2,999.00	Ground Elevation (ft) 2,970.00	Spud Date	TD Date								
Safety Checks															
Time	Type	Des	Tour	Com											
06:15	MEETING	PRE-TOUR	DAY	PTSM with PNR Patterson Rig Crew, RDL Rig Movers & Edge Roustabout crew. Discussed Rig Up operations backyard and rig; Presented IADC ISP on Rig Up statistics. Discussed being 100% tied off while working at height, Crane Lift/ Forklift safety, using tag lines, dedicated flaggers, keeping safe distance from loads while making lifts. Being aware of other tasks being performed around you. Disscussed everyone's responsibility of using SWA. Use roustabouts as needed, keep them busy. Discussed warm weather, staying hydrated and proper eating. ♦ Ensure to follow PTEN's CFL & PNR policies, R2LB - Safe work permits ♦ ♦ We strive to exhibit & practice PNR Core Values & R2LB everyday on Patterson 802 ♦											
06:15	MEETING	PRE-TOUR	NIGHT	PTSM with PNR Patterson Rig Crew, RDL Rig Movers & Edge Roustabout crew. Discussed Rig Up operations backyard and rig; Presented IADC ISP on Rig Up statistics. Discussed being 100% tied off while working at height, Crane Lift/ Forklift safety, using tag lines, dedicated flaggers, keeping safe distance from loads while making lifts. Being aware of other tasks being performed around you. Disscussed everyone's responsibilty of using SWA. Use roustabouts as needed, keep them busy. Discussed warm weather, staying hydrated and proper eating. ♦ Ensure to follow PTEN's CFL & PNR policies, R2LB - Safe work permits ♦ ♦ We strive to exhibit & practice PNR Core Values & R2LB everyday on Patterson 802 ♦											
18:30	PROACTIVE MEASURES	STOP CARD - NON PNR	NIGHT	While forklift operator was lifting 4" hardline a cable became entangled with the load. RTM observed entanglement, stopped the forklift operator and untangled cable.											
20:00	MEETING	JSA	NIGHT	JSA with Patterson RTM & Meyers Roustabouts crew steps/hazards/mitigation of hazards for entering cellar to install foam sealant on Super Cellar dividing plate.											
20:00	PROACTIVE MEASURES	CONFINED SPACE PERMIT	NIGHT	Completed Patterson & Meyers confined entry PTW for entering cellar to install foam sealant on Super Cellar dividing plate.											
Job Dates (ex. Estimated Pad Release, TXRRC Calls)															
Type		Subtype		Date		Note									
MILESTONE		ESTIMATED PAD RELEASE		10/10/2017		Updated 8/25/17									
Type TXRRC CALL		Subtype SPUD		Date 8/25/2017		Note Spoke to Mary									
Type TXRRC CALL		Subtype CEMENT SURF		Date 8/25/2017		Note Spoke to Mary									
Daily Operations															
Footage/Meterage (ft)		Drilling Hours (hr)		% Rotating Time (%)		End Depth (ftKB) 0.0		Target Depth (ftKB) 19,750.0		Daily Field Est Total (Cost) 77,754.95		Cum Field Est To Date (Cost) 504,653.36			
24 HR ROP (ft/hr)		Circulating Hours (hr)		% Sliding Time (%)		End Depth (TVD) (ftKB)		Target Depth (TVD) (ftKB)		Daily Mud Field Est (Cost) 7,461.78		Cum Mud Field Est (Cost) 17,487.69		Total AFE + Sup (Cost) 3,455,484.27	
Daily Goal Description DRILLED FEET				Daily Goal - Last 24				Daily Goal - Next 24				Goal Comments Drill Surface to 1850'			
Backbuild	Lateral Incln	Vertical Length (ft)		Curve Length (ft)		Lateral Length (ft)		Last Casing String CONDUCTOR, 109.0ftKB				Next Casing String SURFACE, <depthbtm>ftKB			
Avg Connection Gas 1.00		Avg Trip Gas 1.00		Avg Background Gas 1.00		Max Connection Gas 1.00		Max Trip Gas 1.00		Max Drill Gas 1.00					
Operations Summary 100% RU, Performing CRI															
Operations Next Report Period Continue CRI. Set PU BHA, Spud, Drill Surf to 1850'															
Operations at Report Time RU PVC, Performing CRI															
Remarks No Accidents, Incidents or Spills NPT for August Patt; Past 24 hr - 2.75 Total - 5.5 hrs 3rd Par: Past 24 hr- 0 Total - 35.75 Gens #1 - 10 hrs #2 - 0 hrs #3 - 0 hrs Expected spud date 8/26/2017															
Time Log															
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com		Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs (hr)	Prob Ref #				
06:00	0.25	06:15	MOB, MOVE	SFTY	NORMAL	PTSM with PNR Patterson Rig Crew, RDL Rig Movers, Meyers & Edge Roustabout crews. ♦ 6th man on board		109.0	109.0						
06:15	11.75	18:00	MOB, MOVE	RU MIRU	NORMAL	Continue dressing out rig floor. Install walking catwalk, v-door, hang flowline, install ODS stairs, gas buster line. RU work platform on mast. Connect Festoon hydraulic, air, water and fiber optic service lines. Set climb assist, remove fastline and anchor deadline, Connect vibrator hoses. Spool up hoists.		109.0	109.0						
18:00	0.25	18:15	MOB, MOVE	SFTY	NORMAL	PTSM with PNR Patterson Rig Crew, RDL Rig Movers, Myers & Edge Roustabout crew.		109.0	109.0						
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Time Log												
Start Time	Dur (hr)	End Time	Phase	Operation	Ops Category	Com	Start Depth (ftKB)	End Depth (ftKB)	Prob Hrs (hr)	Prob Ref #		
18:15	2.25	20:30	MOB, MOVE	RU MIRU	NORMAL	Continue dressing out rig floor and rigging up backyard. Connect water, air, Hydraulic and fiber optic Festoon service lines. Install stairs on Koomey/ Drill line spool. Setup Float pumps in fresh water pond & reserve pit. Swapped from camp power to rig power. ♦ Recieved drft & tally 13 3/8" Surface casing	109.0	109.0				
20:30	3	23:30	MOB, MOVE	RIG_RPR	NORMAL	Troubleshoot Fiber optics service 24 pin service line. Technician was called out and resolved fiber optics connector problem.	109.0	109.0				
23:30	6.5	06:00	MOB, MOVE	RU MIRU	NORMAL	Power up DW & TD. Spool up drill line, Install wraps on horsehead and fasten anchor bolts to 360 ftlbs. Undock TD & lower to RF. RU overflow line from Slugging pit to Reserve Pit. Held JSA and RU Cellar Pumps system. Connect hydraulics & function test catwalk. RU bails/ elevators. Recalibrate Drawworks. Fil slugging tank with fresh water. Pump through Pop-offs & kelly hose. Close IBOP & test lines to 500 psi low. Perform CRI.	109.0	109.0				
Hydraulic Calculations												
Dens Mud (lb/gal)	ECD End (lb/gal)	Bit Hydraulic Power (hp)	HP/Area (hp/in²)	Jet Vel (ft/s)	Bit dP (psi)	Min Open Hole AV (ft/min)	Max Open Hole AV (ft/min)	Vol DrillString (bbl)	Vol Bit to Shoe (bbl)	Vol Shoe to Top (bbl)		
Mud Checks												
Time 01:00		Mud Company DWM CONSULTING LLC			Type WATER BASE		Depth (ftKB) 0.0	Density (lb/gal) 8.30	Funnel Viscosity (s/qt) 27	T Flowline (°F) 0.0		
PV (cP) 1.0	YP (lb/100ft²) 1.000	Vis 3rpm 1	Vis 6rpm 1	Filtrate (mL/30min)		HTHP Filtrate (mL/30min)		HTHP Temperature (°F)		HTHP Pressure (psi)		
Solids (%)		Low Gravity Solids (%)		Sand (%)		MBT (lb/bbl) 0.0		Pm (mL/mL) 0.100		Pf (mL/mL)		
Chlorides (ppm)		Calcium (ppm)		CaCl (ppm)	Oil Water Ratio 0/100		Electric Stab (V)		Lime (lb/bbl)		pH 8.7	
Gel 10 sec (lb/100ft²) 1.000				Gel 10 min (lb/100ft²) 1.000				Gel 30 min (lb/100ft²) 1.000				
Comment												
Remarks: Rigging up on University well. Drilling Fluid: Mud checks are reserve pit. Sensors on frac tanks checked and all are as installed by Rental Express. Daily Diesel Usage: 0 bbls (0 gal) Cumulative Diesel Used: 0 bbls (0 gal) Daily Water Usage: 0 bbls Cumulative Water Used: 0 bbls OBM Lost Shakers: 0 bbls OBM Lost Centrifuge: 0 bbls OBM Lost Hole: 0 bbls OBM Cumulative Lost: 0 bbls												
Jobs												
Responsible Grp 2			Job Type		Start Date		End Date		Job Status			
			ODR		8/22/2017 16:00				AFE APPROVED			
Last BOP Test												
Date		Test Type		Item Tested		Next Test Date		Com				
		BOP										
Leak Off and Formation Integrity Tests												
Test Type				Depth (ftKB)				Dens Fluid (lb/gal)				
Casing Pressure Test												
Test Type		Test Subtype			Date		Item Tested		Failed?	Time (min)	P (psi)	
Kick Offs & Key Depths												
Date					Type				Top Depth (ftKB)			
					HEEL							
					TOE							
					KICK OFF							
Casing Strings												
Description		Set Depth (ftKB)		Set Depth (TVD) (ftKB)		OD (in)		Grade	Wt/Len (lb/ft)		Top Thread	
CONDUCTOR		109.0				20		H40	78.67			
Job Supply Amounts												
Supply Item Des				Type		Unit Label		Received	Consumed		Cum On Loc	
DIESEL				FUEL		GAL		3,193			3,193	
DIESEL				FUEL		GAL		7,114			10,307	
Mud Additive Amounts												
Des		Type		Units		Rec		Consumed		On Loc		Cum Cons
BULK TANK BLOWER				1 EA		2		2		0.0		6
BULK TANK RENTAL				1 EA		1		1		0.0		4
ENGINEERING - 24 HOUR				1 EA		2		2		0.0		7
FORKLIFT				1 EA		1		1		0.0		1
PER DIEM				1 EACH		2		2		0.0		6
SCALE CHARGE				1 EA		3		3		0.0		3
SHRINK WRAP				1 EA		23		23		0.0		23
TECH SERVICE SUPPORT				1 EACH		1		1		0.0		3
TESTING EQUIPMENT				1 EA		1		1		0.0		3
TRANSPORTATION				1 EA		5		5		0.0		5
Pump Operations												
Pump #	Make				Model		Liner Size (in)	Stroke (in)		Vol/Stk (bbl/stk)		P Max (psi)
1	BAOJI PETROLEUM MACH				TRIPLEX 1600 HP		6	12.00		0.105		4,500.0
2	BAOJI PETROLEUM MACH				TRIPLEX 1600 HP		6	12.00		0.105		4,500.0
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Deviation Surveys		
Date	Description AS DRILL SURVEY	Job ODR, 8/22/2017 16:00
Date	Description FINAL SURVEY	Job

Personnel Log	
Company	Count
PIONEER NATURAL RESOURCES USA INC	4
PATTERSON-UTI DRILLING COMPANY LLC	13
MILLER & ASSOCIATES DFC INC	2
NOV FLUIDS SERVICES	2
TRICORPS SECURITY	2
MAVERICK FIELD SERVICES	10
CST DRILLING FLUIDS INC	4
MEYER ENERGY SERVICES LLC	4
RDL TRANSPORTATION INC	10
MEYER ENERGY SERVICES LLC	4