

## DRILLING REPORT

WELL: UL Urad 1609-21 1H										CONTRACTOR: Cactus										RIG: Cactus 129											
RPT DATE: June 7, 2017										SPUD DATE: 5/28/17										CASING					OD	WT	GRD	MD	TVD		
API #: 42495338430000										DFS: 10										Conductor					20	94	J-55	110	110		
										REPORT NO: 11										Surface					13-3/8	55	J55	1,105	1,105		
FIELD: Phantom (Wolfcamp)										DOL: 16										Intermediate					10-3/4	46	J-55	5,090	5,065		
ELEV: 2,807					RKB: 31					LAST BOP TEST: 5/29/17																					
MD: 10,508					TVD: 10,482																										
24 HR FTG: 880					HRS DRLG: 21					CSGHD: 2,807																					
DRILLING FLUID																												SHOE TEST:			
TIME	MW	FV	WL	3RPM	6RPM	PH	CAKE	GELS (10s/10m/30m)				PV	YP	CL	K	Pf	Mf	Ca	OIL	LGS	HTH										
16:00	9.0	32.0		1	1	11.0	1	1	1	1	1	1	82,000			0.13	0.22				0.44										
														REDUCED PUMP RATES																	
														PUMP				SPM				PRESS				DEPTH					
														#1				30				130				10,339					
														#2				30				120				10,339					
BIT DATA																															
NO.		SIZE		MAKE		TYPE		SER NO.		NOZZLES		RE-RUN		IN		OUT		FEET		HRS		WOB		RPM		ROP					
5		9.88		Ulterra		PDC U513S		35676		7 x 12				9,628		10,508		880		21.0		35				42					
BIT NO.				INNER		OUTER				DULL		LOC		SEAL		GAUGE		OTHER		RP											
HYDRAULICS DATA																															
PUMP		MAKE		MODEL		LINER		STK		SPM		PSI		GPM		GPS		EFF %		ECD		AV DP		AV DC		BIT HHP		PUMP HHP			
1		Gardner Denver		PXL		5.500		11,000		86		3570		283		.0784		97		9.16		232.5		395.5		279.6		981			
2		Gardner Denver		PXL		5.500		11,000		86		3570		283		.0784		97		9.16		232.5		395.5		279.6		981			
BHA																															
DESCRIPTION:				9-7/8" Intermediate 2																											
LENGTH				2,121.73				BHA WT. AIR				176,550				BHA WT. MUD				165,000				HRS. ON JARS							
ROT. WT.				315,000				P.U. WT.				380,000				S.O. WT.				245,000				TORQUE				50,000			
TIME MADE UP				02:00				DATE MADE UP				6/6/2017				TIME PULLED								DATE PULLED							
SURVEY DATA																															
MD				ANGLE				AZIMUTH				TVD				N/S		COORDINATES				E/W		V. SECTION				DLS			
10,090				0.92				175.09				10,065				-251.0		196.3						-294.6				0.7			
10,185				1.32				171.49				10,160				-252.9		196.5						-296.4				0.4			
10,278				0.95				136.78				10,253				-254.5		197.2						-298.2				0.8			
10,373				0.46				116.02				10,348				-255.2		198.1						-299.1				0.6			
CONSUMABLES				DIESEL FUEL (gal) Rcvd/Used/On Hand:										DRILL H2O (gal) Rcvd/Used/On Hand:																	
OPERATIONS TIME LOG																															
FROM		TO		HRS		CODE																				Start MD		End MD			
06:00		07:00		1.0		Trips		Continue to TIH to 9,586'																		9628		9628			
07:00		07:30		0.5		Reaming		B/C, stage up pumps & wash 9,586' - 9,628'																		9628		9628			
07:30		16:30		9.0		Drilling		Drill 9.875" vertical hole - Rotate & Slide 9,628' - 9,963' (335' @ 37 FPH)  Rotate: WOB 34 * PP 4100 psi * SPM 258 * GPM 850 * Diff 200 - 265 * T.D RPM 55 * MM RPM 74 * Total RPM 129 Slide: WOB 24 * PP 4050 psi * SPM 258 * GPM 850 * Diff 40 - 100 * MM RPM 74  Rotating Hrs: 8 Ftg: 315' Slide Hrs: 1.0 Ftg: 20'																		9628		9963			
16:30		17:00		0.5		Lubricate Rig		Service Rig																		9963		9963			
17:00		05:00		12.0		Drilling		Drill 9.875" vertical hole - Rotate & Slide 9,963' - 10,508' (545' @ 45 FPH)  Rotate: WOB 34 * PP 3,570 psi * SPM 273 * GPM 899 * Diff 400 - 425 * T.D RPM 45 * MM RPM 78 * Total RPM 123 Slide: WOB 24 * PP 3,470 psi * SPM 258 * GPM 850 * Diff 70 - 120 * MM RPM 74  Rotating Hrs: 11 Ftg: 545' Slide Hrs: 1.0 Ftg: 20'																		9963		10508			
05:00		06:00		1.0		Other		Lost 500 psi pump pressure & 6,000 ft/lbs of torque while on bottom drilling - P/U & check string wt (Lost 15 - 20K string wt) Check all surface equipment - OK *All indications appear to be we lost part of the BHA around the bottom of the 8" DC's .																		10508		10508			