

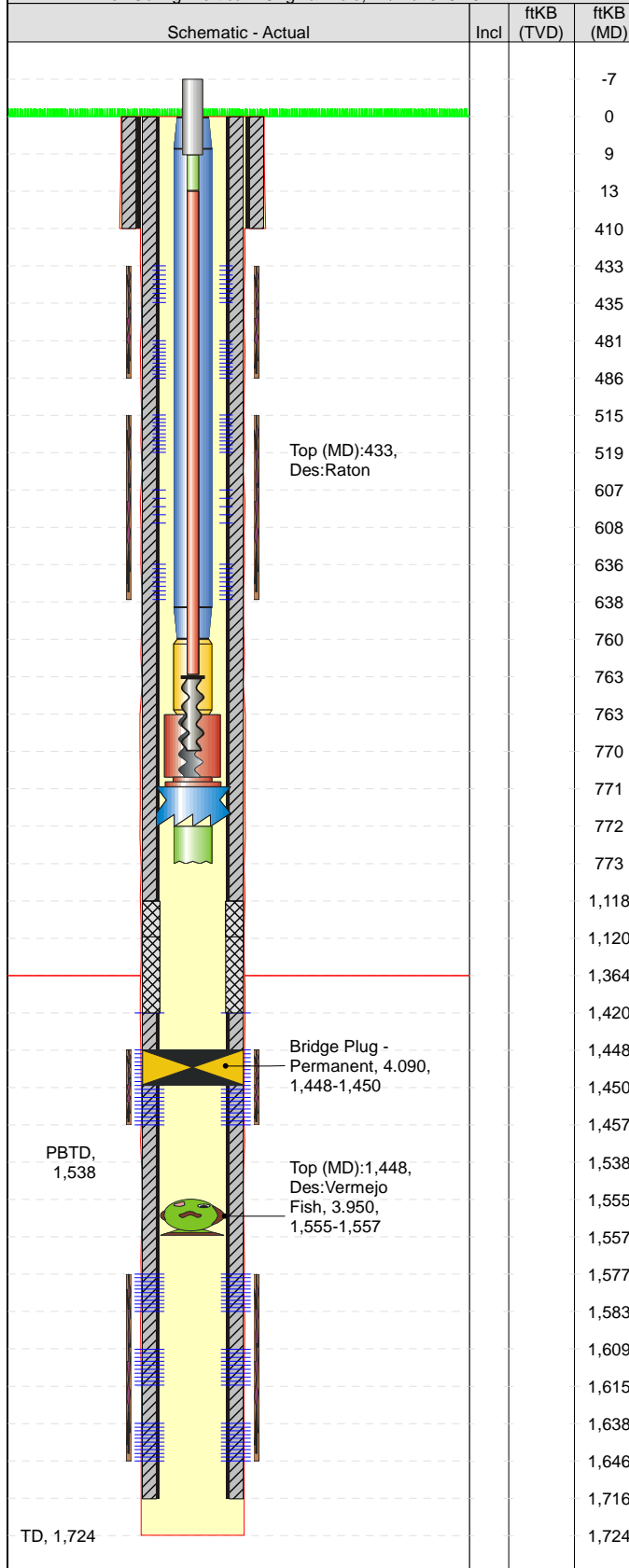


XTO - Wellbore Diagram

Well Name: Apache Canyon 17-13

API/UWI 05071063400000	E/W Dist (ft) 1,017.0	E/W Ref FWL	N/S Dist (ft) 1,105.0	N/S Ref FSL	Location T34S-R67W-S17	Field Name Purgatoire River	County Las Animas	State/Province Colorado
Well Configuration Type Vertical	XTO ID B 94549	Orig KB Elev (ft) 7,357.00	Gr Elev (ft) 7,357.00	KB-Grd (ft) 0.00	Spud Date 6/20/1996	PBTD (All) (ftKB) Original Hole - 1538.0	Total Depth (ftKB) 1,724.0	Method Of Production PCP

Well Config: Vertical - Original Hole, 12/17/2013 10:22:41 AM



Zones

Zone	Top (ftKB)	Btm (ftKB)
Raton	433.0	638.0
Vermejo	1,448.0	1,646.0

Casing Strings

Casing Description	OD (in)	Wt (lbs/ft)	String Grade	Top Connection	Set Depth (ftKB)
Surface	7	20.00	J-55		410.0
Production	4 1/2	9.50			1,716.0
Item Description	OD (in)	Wt (lbs/ft)	Grade	Top (ftKB)	Bottom (ftKB)
DV Tool	4 1/2			1,118.0	1,120.0

Cement

Description	Type	String
Production Casing Cement	casing	Production, 1,716.0ftKB
Comment		
Description	Type	String
Surface Casing Cement	casing	Surface, 410.0ftKB
Comment		
Description	Type	String
Cement Squeeze	squeeze	Production, 1,716.0ftKB
Comment		
Description	Type	String
	squeeze	Production, 1,716.0ftKB
Comment		

Perforations

Date	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Hole Diameter (in)	Phasing (°)	Curr... Status	Zone
6/21/2007	433.0	435.0			120		Raton
6/21/2007	481.0	486.0			120		Raton
6/20/2007	515.0	519.0			120		Raton
6/20/2007	606.5	607.5			120		Raton
6/20/2007	636.0	638.0			120		Raton
7/10/1996	1,420.0	1,420.0					
8/17/1996	1,448.0	1,457.0					Vermejo
8/16/1996	1,577.0	1,583.0					Vermejo
8/16/1996	1,609.0	1,615.0					Vermejo
8/5/1996	1,638.0	1,646.0					Vermejo

Tubing Strings

Tubing Description	Run Date	Set Depth (ftKB)
Tubing - Production	6/1/2010	772.8

Tubing Components

Item Description	Jts	Model	OD (in)	Wt (lbs/ft)	Grade	Top Thread	Len (ft)	Top (ftKB)	Btm (ftKB)
Tubing	23	T&C Upset	2 3/8	4.70	J-55		759.46	0.0	759.5
Tubing Sub	1	T&C Upset	2 3/8	4.70	J-55		4.10	759.5	763.6
Stator	1	30N0...	3 1/2				7.70	763.6	771.3
No Turn Tool	1		4 1/2				1.05	771.3	772.3
Notched Collar	1		2 3/8				0.44	772.3	772.8

Rods

Rod Description	Run Date	String Length (ft)	Set Depth (ftKB)
Rod - Rotor	6/1/2010	777.00	770.0

Rod Components

Item Description	Jts	Model	OD (in)	Grade	Len (ft)	Top (ftKB)	Btm (ftKB)
Polished Rod Sinker Bar	1		1 1/4		16.00	-7.0	9.0
Rod Sub	1		3/4	D	4.00	9.0	13.0
Sucker Rod w/Snap On Guides	30		3/4	D	750.00	13.0	763.0



XTO - Wellbore Diagram

Well Name: Apache Canyon 17-13

API/UWI 05071063400000	E/W Dist (ft) 1,017.0	E/W Ref FWL	N/S Dist (ft) 1,105.0	N/S Ref FSL	Location T34S-R67W-S17	Field Name Purgatoire River	County Las Animas	State/Province Colorado
Well Configuration Type Vertical	XTO ID B 94549	Orig KB Elev (ft) 7,357.00	Gr Elev (ft) 7,357.00	KB-Grd (ft) 0.00	Spud Date 6/20/1996	PBTD (All) (ftKB) Original Hole - 1538.0	Total Depth (ftKB) 1,724.0	Method Of Production PCP

Well Config: Vertical - Original Hole, 12/17/2013 10:22:41 AM

Schematic - Actual	Incl	ftKB (TVD)	ftKB (MD)	Rod Components								
			-7	Rotor	1	30N015	1 1/2		7.00	763.0	770.0	
			0	Stimulations & Treatments								
			9	Frac Start Date	Top Perf (ft...)	Bottom Pe...	V (slurry) (...)	Total Prop...	AIR (b...	ATP (psi)	MTP (psi)	ISIP (psi)
			13	8/16/1996	1577	1646						
			410	Comment								
			433	Frac Start Date	Top Perf (ft...)	Bottom Pe...	V (slurry) (...)	Total Prop...	AIR (b...	ATP (psi)	MTP (psi)	ISIP (psi)
			435	8/17/1996	1448	1457						638.0
			481	Comment								
			486	Frac Start Date	Top Perf (ft...)	Bottom Pe...	V (slurry) (...)	Total Prop...	AIR (b...	ATP (psi)	MTP (psi)	ISIP (psi)
			515	6/21/2007	433	486						662.0
			519	Comment								
			607									
			608									
			636									
			638									
			760									
			763									
			763									
			770									
			771									
		772										
		773										
		1,118										
		1,120										
		1,364										
		1,420										
		1,448										
		1,450										
		1,457										
		1,538										
		1,555										
		1,557										
		1,577										
		1,583										
		1,609										
		1,615										
		1,638										
		1,646										
		1,716										
		1,724										