Hilcorp Energy Company

Current Schematic

Well Name: HUERFANO UNIT #137

API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3004513030	031-026N-009W-J	BASIN DAKOTA (PRORATED GAS)		NEW MEXICO	VERTICAL

Ground Elevation (ft)	Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	KB-Casing Flange Distance (ft)	KB-Tubing Hanger Distance (ft)
6,643.00	6,653.00	10.00		

VERTICAL, Original Hole, 8/27/2018 3:10:01 PM

MD (ftKB)	TVD (ftKB)	Vertical schematic (actual)
9.8		Tubing Hanger; 7 1/16 in; 10.0 ftKB; 11.0 ftKB
11.2		Surface Casing Cement; 10.0-327.0; 10/25/1962; CEMENT WITH 210 SX CIRCULATED TO SURFACE
326.1		1; Surface; 9 5/8 in; 8.76 in; 10.0 ftKB; 327.0 ftKB
327.1		
1,162.1		Tubing YELLOW BAND; 2 3/8 in; 4.70 lb/ft; J-55; 11.0 ftKB; 2,059.8 ftKB
1,233.9		Cement; 1,234.0-2,250.0; 11/6/1962; CEMENT WITH 195 SX TOC CALC AT 75% EFF
1,321.9		KIRTLAND (final)
1,607.9		FRUITLAND (final)
1,939.0		FRUITLAND COAL (final)
2,049.9		Tubing Pup Joint; 2 3/8 in; 4.70 lb/ft; J-55; 2,059.8 ftKB; 2,061.9 ftKB
2,054.1		Tubing YELLOW BAND; 2 3/8 in; 4.70 lb/ft; J-55; 2,061.9 ftKB; 2,090.8 ftKB
2,059.7		
2,062.0		PERF - PICTURED CLIFFS; 2,054.0-2,126.0; 7/27/2018
2,090.9		Pump Seating Nipple; 2 3/8 in; 2,090.8 ftKB; 2,091.9 ftKB
2,091.9		Mule Shoe; 2 3/8 in; 2,091.9 ftKB; 2,092.4 ftKB
2,092.5		
2,126.0		
2,169.9		LEWIS (final)
2,190.0		Bridge Plug - Permanent; 2,190.0-2,192.0; SELECT OIL TOOLS 5.5" CIBP
2,191.9		
2,248.0		
2,250.0		
2,441.9		HUERFANITO BENTONITE (final)
2,924.9		CHACRA (final)
3,634.8		CLIFFHOUSE (final)
3,678.1		MENEFEE (final)
4,462.9		POINT LOOKOUT (final)
4,771.0		MANCOS (final)
5,181.1		
5,509.8		GALLUP (final)
6,425.9		GREENHORN (final)
6,481.0		GRANEROS (final)
6,506.9		TWO WELLS (final)
6,532.2		
6,584.0		PAGUATE (final)
6,657.2		PERF DAKOTA; 6,532.0-6,699.0; 11/7/1962
6,699.1		CUBERO (final)
6,720.1		PBTD; 6,720.0
6,768.0		
6,769.0		2; Production1; 5 1/2 in; 4.95 in; 10.0 ftKB; 6,769.0 ftKB
6,770.0		

Hydraulic Frac; 8/4/2018; PICTURED CLIFFS STIMULATION: (2,054' TO 2,126') SITP -650 PSI.

FRAC ZONE WITH 95,200 GALLONS OF 70 Q WATER GEL #20 AT 30 BPM. PROPPANT: 152,000 LBS. OF 20/40 ARIZONA SAND W/SANDWEDGE MAX ADDITIVE. TRACED SAND STAGES W/IRIDIUM-192. TOTAL N2: 859,274 SCF. FLUSH: 10 FLUID BBLS. MIN RATE: 30 BPM. MAX. RATE: 31 BPM. AVG. RATE: 30 BPM. MIN. PSI: 3,700 PSI. MAX. PSI: 5,000 PSI. AVG. PSI: 4,900 PSI. MAX. SAND CONC: 4.0 PSA DOWNHOLE. ISDP: 801 PSI. FRAC GRADIENT: .816 PSI/FT. (BASED OFF ISDP) 5 MIN: 757 PSI, 10 MIN: 729 PSI, 15 MIN: 709 PSI. FLUID TO RECOVER: 778 CLEAN BBLS. PUMPED 941 SLURRY BBLS.

Production Casing Cement; 5,181.0-6,769.0; 11/6/1962; CEMENT WITH 305 SX TOC CALC AT 75% EFF

Hydraulic Fracture; 11/7/1962; FRAC DAKOTA WITH 79990 GAL WATER AND 75000# SAND

Production Casing Cement (plug); 6,720.0-6,769.0; 11/6/1962; CEMENT WITH 305 SX TOC CALC AT 75% EFF

PLUGBACK; 6,769.0-6,770.0; 11/7/1962