Hilcorp Energy Company

Current Schematic

Well Name: FRED FEASEL H #1F

API / UWI	Surface Legal Location	Field Name	Route	State/Province	Well Configuration Type
3004533367	T28N-R10W-S33	Basin Dakota	0708	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)
6,144.00	6,158.00	14.00		

Vertical, Original Hole, 11/8/2018 8:23:37 AM

MD (ftKB)	TVD (ftKB)	Vertical schematic (actual)
0.0		Tubing Hanger; 7 1/16 in; 0.0 ftKB; 14.0 ftKB
14.1		
15.4		Surface Casing Cement; 14.0-377.0; 7/21/2006
376.0		
377.0		1; Surface; 8 5/8 in; 8.10 in; 14.0 ftKB; 377.0 ftKB
379.9		
1,110.9		OJO ALAMO (final)
1,247.0		KIRTLAND (final)
1,748.0		FRUITLAND (final)
2,110.9		PICTURED CLIFFS (final)
2,306.1		LEWIS (final)
2,660.1		HUERFANITO BENTONITE (final)
2,793.3		
2,807.4		
3,044.0		Tubing; 2 3/8 in; 4.70 lb/ft; J-55; 14.0 ftKB; 6,686.1 ftKB
3,678.1		
3,770.0		MENEFEE (final)
4,003.9		
4,004.3		
4,006.6		
4,396.0		
4,455.1		POINT LOOKOUT (final)
4,901.9		MANCOS (final)
5,637.1		GALLUP (final)
6,237.9		
6,251.0		
6,403.9		GREEN
6,467.8		GRANE
6,498.0		PERF - DAKOTA; 6,498.0-6,748.0; 10/30/2018
6,686.0		Tubing Pup Joint; 2 3/8 in; 6,686.1 ftKB; 6,688.2 ftKB
6,688.3		Tubing; 2 3/8 in; 4.70 lb/ft; J-55; 6,688.3 ftKB; 6,719.7 ftKB
6,719.5		Pump Seating Nipple; 2 3/8 in; 6,719.7 ftKB; 6,720.7 ftKB
6,720.8		Expendable Check; 2 3/8 in; 6,720.7 ftKB; 6,721.6 ftKB
6,721.5		
6,748.0		NEW PBTD 6770'
6,770.0		Bridge Plug - Permanent; 6,770.0-6,772.0; SELECT OIL TOOLS 5 1/2" CIBP
6,772.0		
6,790.0		Perforated; 6,790.0-6,802.0; 8/21/2006
6,801.8		
7,089.9		Fish; 7,090.0-7,092.0
7,091.9		PBTD; 7,092.0
7,092.2		
7,092.8		
7,137.5		2; Production; 5 1/2 in; 0.00 in; 14.0 ftKB; 7,138.1 ftKB
7,138.1		
7,140.1		

Cement; 14.0-4,004.0; 8/2/2006

Production Casing Cement; 4,396.0-7,138.0; 8/2/2006

Hydraulic Frac; 11/1/2018; DAKOTA STIMULATION: (6,498' - 6,748').
SICP - 0 PSI.
FRAC ZONE WITH 500 GALS OF 15% HCL ACID & 157,080 FOAM GALS OF 70 QUALITY SLICK WATER AT 30 TO 60 BPM.
PROPPANT: 100,700 LBS. OF 20/40 ARIZONA SAND.
TOTAL N2: 2,581,414 SCF.
FLUSH: 150 FOAMED FLUID BBLS.
MIN RATE: 30 BPM. MAX RATE: 60 BPM.
AVG RATE: 60 BPM.
MIN PSI: 2,250 PSI. MAX PSI: 2,750 PSI.
AVG PSI: 2,660 PSI.
MAX SAND CONC: 1.5 PSA DOWNHOLE.
ISDP: 2,607 PSI. FRAC GRADIENT: .55 PSI/FT. (BASED OFF ISDP)
FLUID TO RECOVER: 1,348 CLEAN BBLS.
PUMPED 1,453 SLURRY BBLS.