

US Treatment Report



Customer: PDC Energy
Rep: Brandon Young
Supervisor: Stephen Cardos
Job Type: US Primary

Rig: Ensign 152
Well: STOUT 10N
UWI: BHL 150'FSL, 2266'FEL,
 Sec. 19

Job #: JOB00081649
Job Date: 2/24/2020
Time Requested: 2/24/2020 16:00
Time Arrived: 2/24/2020 15:00

Casing-Production

Surface: 40.5809, -104.8224

Time Released: 43886

Scavenger

55.29 sk

Weight: 12lb/gal

Yield: 1.93 ft³/sk = 19bbls

Mix Water: 10.71 gal/sk = 592.08 gal

1886 sk MAG EV 13.7 + 0.50% MCA-2 + 0.35% MCR-H + 0.30% MCI-2 + 0.80% MCFL-7 + 0.30% MCFR-2 + 0.50% MCFW-1 + 0.50% MCGC-1 + 0.20% MCDF-P

Yield: 1.35ft³/sack = 453.46bbls

Mix Water: 6.40gal/sack = 12070.4gal

BHCT (F)	235	BHST (F)	235	Casing 1 Casing Size (in)	9.625
Casing 1 Grade	J-55	Casing 1 Weight (lb/ft)	36	Casing 2 Casing Size (in)	5.5
Casing 2 Grade	HCP-110	Casing 2 Weight (lb/ft)	20	Collapse Csg Pressure (psi)	11080
Float Depth (ft)	17682	Hole Size (in)	8.5 AND	Max Csg Pressure (psi)	12640
Max Pressure (psi)	5000		8.75	Mud Type	OBM
Plug Size (in)	5.5	Mud Density (lb/gal)	10.5	TMD (ft)	17713
Tool Depth (ft)	17682	Plug Type		Rig Supplied	
		TVD (ft)	7534		

Treatment Info: Sacks Used: 0 Sacks Not Used: 0

Preflush: 5bbls Fresh Water & 38bbls MAG Sweep-H + MAG Clean-1 & 19bbls MAG Sweep-H

Circulation Time: 4

Slurry Temp: 62 Bulk Sample: Yes

Water Temp: 58 Water Sample: Yes

Bulk Temp: Slurry Sample: Yes

Slurry Returns: Plug Bumped: Yes Pump Out Lines: Yes Float Held: Yes

Displace: 10bbls Fresh Water + MCR-3 & 392bbls Fresh Water & 5bbls Fresh Water

Time	Pressure psi	Annular Pressure psi	Volume Per Stage bbls	Total Stage Volume bbls	Rate bbls/min	Treatment Detail
15:00	0.00					Arrive on Location - ARRIVED ON LOCATION EARLY.REQUESTED ON LOCATION 16:00
17:30	0.00					Safety Meeting - PRE JOB SAFETY MEETING TO DISCUSSJOB PROCEDURES AND HAZARDS
18:28	0.00					Drop Plug - DROP FIRST BOTTOM PLUG
18:28	500.00		5		2	Fill Lines - DROP FIRST BOTTOM PLUG AND FILL LINES 5 BBLS FRESH WATER
18:29	5,080.00	5000				Start Pressure Test - PRESSURE TEST LINES TO 5000 PSI
18:35	550.00		38		3.5	Pump Preflush - PUMP 38 BBLS MAG SWEEP H+MAG-CLEAN 1 @11 PPG
18:49	639.00		19		5	Pump Preflush - PUMP 19 BBLS MAG SWEEP H @ 11.5 PPG

18:52	600.00		19		3.8	Pump Scavenger - PUMP 19 BBLs SCAVENGER @12 PPG (55SKS 1.93 YIELD)
18:59	0.00					Drop Plug - DROP SECOND BOTTOM PLUG
19:00	1,008.00		282		6.5	Pump Slurry - PUMP 282 BBLs MAG EV12.9PPG(1037SKS 1.53 YLD 7.72GPS)TOP OF LEAD 387'
19:48	550.00		453		6.5	Pump Slurry - PUMP 453 BBLs MAG EV 13.7#@13.7PPG(1885 SKS 1.35 YLD 6.40GPS)TOP OF TAIL 6585'
21:19	0.00					Stop Pumping - SHUTDOWN
21:23	0.00					Pump Out Treating Lines - WASH PUMP AND LINES TO THE PIT
21:39	0.00					Drop Plug - DROP TOP PLUG
21:41	100.00		100	100	8	Displace - PUMPED 100 BBL AT 8 BBL MINUTE
21:53	2,400.00		100	100	9	Displace - PUMPED 100 BBL AT 9 BBL
22:11	3,100.00		20	20	3	Decrease Rate - SLOW RATE LAST 20BBLs TO LAND PLUG TOTAL DISP 401
22:18	3,200.00		172	172	11	Displace - PUMP 172 BBLs FRESH WATER W/BIOCIDE DISPLACEMENT,FIRST 10BBLs WITH 100# SUGAR
22:19	2,900.00					Bump Plug - LAND PLUG 400PSI OVER FINAL CIRCULATING PRESSURE.GOT 47BBLs OF SPACER TO SURFACE
22:23	3,900.00		2	2	2	SHIFT TOOL
22:24	2,200.00		5	5	4	Displace - PUMPED 5 BBL WET SHOE
22:28	0.00					Check Floats - CHECK FLOATS,FLOATS HELD GOT 2.5 BBLs BACK TO PUMP
22:29	0.00					Rig Out - WASH STACK/RIG OUT LINES
01:00	0.00					Leave Location - DEPART LOCATION

