TREATMENT REPORT

Date September 22, 2000 | District Brighton | F.Receipt 225116352 | Operator Petroleum Development Corp.
Lease LEAFGREN | Well No. 1-17 | Field Wattenberg | Location Sec 17-T6N-R66W
County Weld | State Colorado | Stage No. All Stages | Treatment Target(s) This zone & this well

WELL DATA

Well Type: ☒ New Well ☐ Old Well Well Class: ☐ Oil ☒ Gas ☐ Disposal ☐ Injection ☐ Misc.
Prev. Treatment N/A | Prev. Production N/A | Well Dep.TD/PB 7249.0 ft | Formation CODELL REFRAC
Perf.: Size 0.320 in | Total No. 20 | Interval 7125.0-7133.0(ft)

String/TypePacker/OpenHole Description	Size (in)	Weight (lbm/ft)	Set at (ft)	From (ft)	To (ft)	Length (ft)	Capacity (bbls/ft)	Total Capacity (bbls)
Tubing	2.875	6.40	6901.0			6901.0	0.0058	40.0
Retrievable Packer	2.875		6901.0					
CSG	4.400	11.60			7249.0		0.0155	3.5

TREATMENT DATA

Treating via: ☒ Tubing ☐ Casing ☐ Annulus ☐ Tubing & Annulus Fluid to load 34 bbls
Pad Used: ☒ Yes ☐ No Pad Type Claytreat Water/Vistar 22 Pad Volume 757.0 bbls Ball Sealers: in stages of
Treating Fluid Type: ☐ Foam ☒ Water ☐ Acid ☐ Oil ☐ Other Volume 1984.0 bbls Base Fluid Type: Greeley City Water Volume 2741.0 bbls
Foam Type: ☐ Mitchell Surface ☐ Mitchell Downhole ☐ Slurry Surface ☐ Slurry Downhole Foam Quality Hole Loaded with Claytreat Water

Proppant Type	Size	Quantity	(lbs)	Proppant Type	Size	Quantity	(lbs)	Proppant Type	Size	Quantity	(lbs)
White Sand	20/40	215240		White Sand	100 mesh	10040		Tempered DC	20/40	10000	

TOTAL LIQUID/GAS PUMPED

Pad Volume: 757.0 bbls Treating Fluid Volume: 1984.0 bbls Flush Volume: 42.0 bbls
Over Flush Volume: Fluid to Recover: 2741.0 bbls Total CO2: Total N2:
Pumps Used(Type/Number): 1 BL 2100 HHP Kodiaks, 2 TM 1300 HHP Pump
Auxiliary Material: GBW-23L, BF-9L, GS-1A, Claytreat 3C, FloBack 20, High Perm CRB-LT, GBW-5, NE-940
Procedure Summary: Frac as per Proposal No. 179952612A NOTE: API No. 05-123-13293-0000

TREATMENT SUMMARY

Treating Pressure: Min. 3366 psi Max. 5089 psi Ave. 3825 psi Operator's Max. 7000 psi
Injection Rate: Treating Fluid 14.10 bpm Flush 17.40 bpm Average 14.10 bpm Flush Fluid Density 8.40 ppg
ISDP: Pre-Job 1160 psi Post-Job 2918 psi Final Shut in Pressure 2623 psi in 1.0 min
Recommendation ID# 179952612A Job Number 79920 Customer Representative. Jeff Davis Service Representative Boyd Heckler
Distribution Petroleum Development Corp.; BJ Services Well File

TREATMENT LOG

Time	Treating Pressure		Stage Surface Fluid Pumped			Total Surface Fluid Pumped			Surface Fluid Pumping Rate			Comments
	STP	Annulus	Slurry	CO2	N2	Slurry	CO2	N2	Slurry	CO2	N2	
am/pm	psi	psi	bbls	bbls	scf	bbls	bbls	scf	bpm	bpm	scf/min	
8:25	1968	12	48.0						7.30			Start Claytreat Water Pump-in
8:32	1160	10				48.0						Shut Down: ISDP = 1160 psi
8:44	71	12	97.0			48.0			12.00			Start Pad [Vistar 22 LHT]
8:54	3882	12	249.0			145.0			12.40			Start 0.5 ppg 100 mesh
9:13	3734	20	126.0			394.0			12.40			Start 1 ppg 100 mesh
9:23	3736	12	248.0			520.0			12.40			Start Pad/Spacer
9:43	3711	12	314.0			768.0			12.40			Start 1 ppg 20/40
10:09	3493	12	561.0			1082.0			13.60			Start 2 ppg 20/40
10:50	3666	12	858.0			1643.0			15.70			Start 3 ppg 20/40
11:44	4377	9	362.0			2501.0			17.50			Start 4 ppg 20/40
12:05	4494	1	78.0			2863.0			17.40			Start 4 ppg Tempered DC 20/40
12:09	4550	1	42.0			2941.0			17.40			Start Claytreat Water Flush
12:12	3079	1				2983.0						Shut Down: ISDP = 2918 psi