



Captiva Energy Partners

Surface Post-Job Report

Stillroven Farm 6 (API 05-123-45407)

S:5 T:3N R:68W Weld, CO

Quote #:

| Execution #:



Captiva Energy Partners, LLC

Josh Falls | (720) 420-5720 | josh.falls@iptenergyservices.com

Captiva Energy Partners | 1165 Delaware Street, Suite 160 | Denver, CO 80228

Dear Mr. Falls,

Thank you for the opportunity to provide cementing services on this well. BJ Services strives to achieve complete customer satisfaction. If you have any questions regarding the services or data provided, please contact BJ Services at any time.

Sincerely,
Karl Griesser
Field Engineer I | (713) 829-7498 | karl.griesser@bjsservices.com

Field Office 1716 East Allison Rd., Cheyenne WY, 82007
Phone: (307) 638-5585

Sales Office 999 18th St. Suite 1200 Denver, CO 80202
Phone: (281) 408-2361

Cementing Treatment



Start Date	2/16/2018	Well	Stillroven Farm 6
End Date	2/16/2018	County	Weld
Client	Captiva Energy Partners LLC	State/Province	CO
Client Field Rep	Josh Falls	API	05-123-45407
Service Supervisor	Brian Boyd	Rig	Ensign 153
Field Ticket No.	3150	Type of Job	Surface
District	Cheyenne, WY		

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)
Open Hole	13.50			1,557.00	1,557.00	25.00
Casing	8.92	9.63	36.00	1,546.5.00	1,546.5.00	

Shoe Length (ft): 45'

HARDWARE

Bottom Plug Used?	No
Top Plug Used?	Yes
Top Plug Provided By	IPT
Top Plug Size	9 5/8"
Centralizers Used	Yes
Landing Collar Depth (ft)	1,546.5'
Tool Type	Float Collar
Tool Depth (ft)	1501'
Max Casing Pressure - Rated (psi)	3520
Max Casing Pressure - Operated (psi)	1304
Pipe Movement	No
Job Pumped Through	Bj Cement Head
Top Connection Thread	LTC
Top Connection Size	9 5/8"

Cementing Treatment



CIRCULATION PRIOR TO JOB

Well Circulated By	Ensign 153	Solids Present at End of Circulation	No
Circulation Prior to Job	Yes	10 sec SGS	1
Circulation Time (min)	120	10 min SGS	1
Circulation Rate (bpm)	7	30 min SGS	1
Circulation Volume (bbls)	300	Flare Prior to/during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No
Mud Density In (ppg)	9.0		
Mud Density Out (ppg)	9.0		
PV Mud In	2.8		
YP Mud In	2		

TEMPERATURE

Ambient Temperature (°F)	22	Slurry Cement Temperature (°F)	59
Mix Water Temperature (°F)	52	Flow Line Temperature (°F)	60

BJ FLUID DETAILS

Fluid Type	Fluid Name	Density (ppg)	Yield (Cu Ft/sk)	H2O Req. (gals/sk)	Planned Top of Fluid (Ft)	Length (Ft)	Vol (sk)	Vol (Cu Ft)	Vol (bbls)
Spacer / Pre Flush / Flush	Fresh Water Pre-Flush	8.3300			0.00				20.0000
Lead Slurry	S100-12 (Lead)	12.0000	2.5298	14.86	0.00		242	611.0000	108.7000
Tail Slurry	S100-12 (Tail)	12.5000	2.2256	12.59	962.5		138	306.0000	54.3000
Top-Out / Scavenger Slurry	S100-12 (Top Out)	12.0000	2.5298	14.86			Not Pumped	253.0000	45.1000
Displacement Final	Displacement	8.3300			0.00				117.0000

Cementing Treatment



Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	Fresh Water Pre-Flush	Fresh Water	100.0000	PCT
Lead Slurry	S100-12 (Lead)	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	S100-12 (Lead)	CEMENT EXTENDER, SODIUM METASILICATE, A-2	2.0000	LBS/SK
Lead Slurry	S100-12 (Lead)	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A- 7P, PELLETS	2.0000	LBS/SK
Lead Slurry	S100-12 (Lead)	IntegraSeal CELLO	0.1300	LBS/SK
Lead Slurry	S100-12 (Lead)	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Lead Slurry	S100-12 (Lead)	Foam Preventer, FP-25	0.3000	BWOB
Tail Slurry	S100-12 (Tail)	IntegraSeal CELLO	0.1300	LBS/SK
Tail Slurry	S100-12 (Tail)	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Tail Slurry	S100-12 (Tail)	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A- 7P, PELLETS	2.0000	LBS/SK
Tail Slurry	S100-12 (Tail)	CEMENT, ASTM TYPE III	100.0000	PCT
Tail Slurry	S100-12 (Tail)	CEMENT EXTENDER, SODIUM METASILICATE, A-2	2.0000	LBS/SK
Tail Slurry	S100-12 (Tail)	Foam Preventer, FP-25	0.3000	BWOB
Top-Out / Scavenger Slurry	S100-12 (Top Out)	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Top-Out / Scavenger Slurry	S100-12 (Top Out)	IntegraSeal CELLO	0.1300	LBS/SK
Top-Out / Scavenger Slurry	S100-12 (Top Out)	Foam Preventer, FP-25	0.3000	BWOB
Top-Out / Scavenger Slurry	S100-12 (Top Out)	CEMENT EXTENDER, SODIUM METASILICATE, A-2	2.0000	LBS/SK
Top-Out / Scavenger Slurry	S100-12 (Top Out)	CEMENT, ASTM TYPE III	100.0000	PCT
Top-Out / Scavenger Slurry	S100-12 (Top Out)	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A- 7P, PELLETS	2.0000	LBS/SK
Displacement Final	Displacement	Fresh Water	100.0000	PCT

Cementing Treatment



TREATMENT SUMMARY

Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)
Fresh Water Pre-Flush	3.00	20.00	198
S100-12 (Lead)	6.00	108.70	249
S100-12 (Tail)	6.00	54.30	220
Displacement	6.00	117.00	660

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ Services	Amount of Cement Returned/Reversed	12 bbls
Calculated Displacement Volume (bbls)	116	Method Used to Verify Returns	Pheno/Visual
Actual Displacement Volume (bbls)	11	Amount of Spacer to Surface	20 bbls
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0
Bump Plug	Yes	Amount Bled Back After Job	.5
Bump Plug Pressure (psi)	1304	Total Volume Pumped (bbls)	300
Were Returns Planned at Surface	No	Top Out Cement Spotted	No
Cement returns During Job	Yes	Lost Circulation During Cement Job	No



Customer Name Captiva Energy Partners
 Well Name Stillroven Farms 6 05-123-45407
 Job Type Surface

District Cheyenne
 Supervisor Brian Boyd

Start Date/Time	Event	Event ID	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
2/15/2018 22:32	Call Out						Customer requested crew to be on location at 4:30
2/16/2018 2:00	Depart Shop						Crew has journey mangement and departs from shop
2/16/2018 3:15	Arrive On Location	48					Arrive on location and meet with customer to get numbers and mud report
2/16/2018 3:25	Steacs						Had steacs breifing with Bj crew over rigging up iron and hoses and where we were going to spot equimentg
2/16/2018 3:45	Rig Up Iron						Bj crew rigs up water hoses and wait for casing crew to finish to finish rest of rig up
2/16/2018 4:45	Other						Started pump up to work up and work vaules noticed a hydraulic leak, called mechanics and troubleshoot. After troubleshooting notified company man of sition and called coordintor and requested a new pump truck to location due to issues
2/16/18 6:02	Other						Coordinator inform me that pump truck was going to be heading to location
2/16/2018 7:15	Other						Got conformation from coordinator that pump truck was on the road and notified company man of the situation and new pump truck
2/16/2018 7:30	Rig Lands Casing						Rig lands casing and begins to circulate well
2/16/2018 8:17	Other						Troubleshooted more on pump truck that was on location we got the leak to stop called coordintor and mechanics notified them of the situation and company man made phone call to notifie his boss that we were confident that the pump truck would complete the job and have second pump truck stay on location to make sure of back up pump
2/16/2018 9:30	Steacs						Had steacs breifing with bj crew, rig crew and company man over job producere and hazards
2/16/2018 10:10	Fill Pumps and lines		8.33	3	5	78	Pump 5 bbls ahead to fill pumps and lines
2/16/2018 10:13	Pressure Test	54	8.33	0.5	0.5	4300	Pressure test iron and head to 3000 PSI
2/16/2018 10:16	Pump dye		8.33	3	20	198	Pump 20 bbls of red dye
2/16/2018 10:22	Pump Lead Cement	58	12	6	108	249	Pump Lead Cement At 12 PPG 6 bpm (242 SKS, 2.52 Yield, 14.86 Gals/Sks, PPC41311 BT, 85.62 Mix Water)
2/16/2018 10:46	Pump Tail Cement	60	12.5	6	54	220	Pump Tail Cement At 12.5 PPG 6 bpm (138 Sks, 2.22 Yield, 12.59 Gals/Sks, RP PPC41311, RP 504, 41 bbls Mix Water
2/16/2018 10:56	Shut Down						Shut Down pumping
2/16/2018 10:58	Drop Top Plug	63	8.33				Go to rig floor and drop top plug with company man to verify plug went down hole
2/16/2018 10:59	Pump Displacement	64	8.33	6	117	200	Pump 117 bbls of displacement of fresh water
2/16/2018 11:18	Cement To Surface		8.33	6	105	471	105 bbls into displacement got cement to surface for total of 12 bbls to surface
2/16/2018 11:19	Slow Rate		8.33	2.5	106	660	Last 10 bbls slow rate to 2.5 bpm
2/16/2018 11:24	Land plug	67	8.33		117	1304	Bump plug at 117 bbls FCP of 660 PSI and bump up to 1304 PSI
2/16/2018 11:27	Check Floats	68	8.33				Held for 3 mins and check floats and got . 5bbl back to pump trcuk
2/16/2018 11:35	Steacs						Held steacs with Bj crew over rigging down iron and hoses
2/16/2018 11:50	Rig Down Iron						Bj crew rigs down iron and hoses
2/16/2018 13:00	Depart Location						Crew has journey mangement and departs from shop

