CEMENT JOB REPORT

BAKER HUGHES

CUSTOMER	DATE	F.R. #	SERV. SUPV.
WHITING PETROLEUM CORP	05-JUL-13	1001998995	RYAN SULLIVAN
LEASE & WELL NAME	**LOCATION**		**COUNTY-PARISH-BLOCK**
WILDHORSE #16-13L - API 05123373740000	16-9N-59W		Weld Colorado
DISTRICT	**DRILLING CONTRACTOR RIG #**		**TYPE OF JOB**
Brighton	CADE 21		Intermediate

SIZE & TYPE OF PLUGS	LIST-CSG-HARDWARE	MECHANICAL BARRIERS	MD	TVD	HANGER TYPES	MD	TVD
Cement Plug, Rubber, Top 5-1/2 in	Cement Basket, Slip On, 5-1/2 in						
	Centralizer, with Pins, 5-1/2 in						
	Stage Cementing Tool 5-1/2 - 8rd						
	Float Shoe 5-1/2 - 8rd						
	Float Collar, Auto Fill, 5-1/2 - 8rd						

MATERIALS FURNISHED BY BJ	LAB REPORT NO.	PHYSICAL SLURRY PROPERTIES: SACKS OF CEMENT	SLURRY WGT PPG	SLURRY YLD FT_3	WATER GPS	PUMP TIME HR:MIN	Bbl SLURRY	Bbl MIX WATER
SealBond Spacer	N/A	0	10	0	0	00:00	40	
Drilling Mud	N/A	0	9	0	0	00:00	231.5	
PLC + Adds		419	10.5	3.12	10.50	03:31	232.8	104.62
Fresh Water	N/A	0	8.34	0	0	00:00	20	
Fresh Water	N/A	0	8.34	0	0	00:00	20	
Sealbond Spacer	N/A	0	10	0	0	00:00	40	
PLC + LW6 + Adds		668	10.5	2.64	8.87	04:19	314.29	141.08
PLC + LW-6 + Adds		288	10.5	3.12	10.50	05:00	160.26	72.01
Drilling Mud	N/A	0	9	0	0	00:00	158.1	
						TOTAL	1216.95	317.71

Available Mix Water 500 Bbl. Available Displ. Fluid 500 Bbl.

HOLE SIZE	HOLE % EXCESS	HOLE DEPTH	TBG-CSG-D.P. ID	OD	WGT.	TYPE	MD	TVD	GRADE	COLLAR DEPTHS SHOE	FLOAT	STAGE
8.75	58	10060	4.892	5.5	17	CSG	10048	10048	L-80	10048	9956	6801

LAST CASING ID	OD	WGT	TYPE	MD	TVD	PKR-CMT RET-BR PL-LINER BRAND & TYPE	DEPTH	PERF. DEPTH TOP	BTM	TOP CONN SIZE	THREAD	WELL FLUID TYPE	WGT.
8.9	9.63	36	CSG	1550	1550	No packer	0	0	0	5.5	8RD	WATER BASED	9

DISPL. VOLUME VOLUME	UOM	DISPL. FLUID TYPE	WGT.	CAL. PSI BUMP PLUG	CAL. MAX PSI TO REV.	OP. MAX SQ. PSI	MAX TBG PSI RATED	Operator	MAX CSG PSI RATED	Operator	MIX WATER
231.5	BBLS	Drilling Mud	9	545	0	0	0	0	6192	3000	Frac tank
		Drilling Mud	9								

Circulation Prior to Job

Circulated Well: Rig [X] BJ [ ]
Circulation Time: 5 Circulation Rate: 4 BPM
Mud Density In: 9 LBS/GAL Mud Density Out: 9 LBS/GAL
PV & YP Mud In: 0 PV & YP Mud Out: 0
Gas Present: NO [X] YES [ ] Units:
Solids Present at End of Circulation: NO [X] YES [ ]

Displacement And Mud Removal

Displaced By: Rig [ ] BJ [X]
Amount Bled Back After Job: 1.3 BBLS
Returns During Job: [ ] NONE [ ] PARTIAL [X] FULL
Method Used to Verify Returns: Visually
Cement Returns at Surface: [X] YES [ ] NO
Were Returns Planned at Surface: [ ] NO [X] YES
Pipe Movement: [ ] ROTATION [ ] RECIPROCATION [X] NONE [ ] UNABLE DUE TO STUCK PIPE
Centralizers: [ ] NO [X] YES Quantity: 82 Type: [ ] BOW [ ] RIGID
Job Pumped Through: [ ] CHOKE MANIFOLD [ ] SQUEEZE MANIFOLD [X] MANIFOLD [ ] NO MANIFOLD

Plugs

Number of Attempts by BJ: 0 Competition: 0
Wiper Balls Used: [X] NO [ ] YES Quantity:
Plug Catcher Used: [X] NO [ ] YES
Parabow Used: [X] NO [ ] YES
Was There a Bottom: [X] NO [ ] YES
Top of Plug: 0 FT Bottom of Plug: 0 FT

EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING: None

Report Printed on: JUL-06-13 00:59:25

Jr8006

CEMENT JOB REPORT

BAKER HUGHES

Squeezes (Update Original Treatment Report for Primary Job)

BLOCK SQUEEZE [ ] SHOE SQUEEZE [ ] TOP OF LINER SQUEEZE [ ] PLANNED [ ] UNPLANNED [ ]

Liner Packer: [X] NO [ ] YES | Bond Log: [X] NO [ ] YES PSI Applied: 0 Fluid Weight: 0 LBS/GAL

Casing Test (Update Original Treatment Report for Primary Job)

Casing Test Pressure: 0 PSI With 0 LBS/GAL Mud | Time Held: 00 Hours 00 Minutes

Shoe Test (Update Original Treatment Report for Primary Job)

Depth Drilled out of Shoe: 0 FT | Target EMW: 0 LBS/GAL Actual EMW: 0 LBS/GAL

Number of Times Tests Conducted: 0 | Mud Weight When Test was Conducted: 0 LBS/GAL

Problems Before Job (I.E. Running Casing, Circulating Well, ETC)
None

Problems During Job (I.E. Lost Returns, Equipment Failure, Bulk Delivery, Foaming, ETC)
Counters on pump off during 1st stage.

Problems After Job (I.E. Gas at Surface, Float Equipment Failed, ETC)
None

PRESSURE/RATE DETAIL						EXPLANATION
TIME HR:MIN.	PRESSURE - PSI PIPE	PRESSURE - PSI ANNULUS	RATE BPM	Bbl. FLUID PUMPED	FLUID TYPE	SAFETY MEETING: BJ CREW [X] CO. REP. [X] TEST LINES 4425 PSI CIRCULATING WELL - RIG [X] BJ [ ]
10:20	0	0	0	0	N/A	Arrive on location, 90 miles, rig circulating
10:22	0	0	0	0	N/A	Spot trucks on location, pre-rig up safety meeting
12:30	0	0	0	0	N/A	Wait on rig to run mud lines from yellow dog to pump
13:30	0	0	0	0	N/A	Pre-job safety meeting, wait for new elevators to arrive on location
14:29	0	0	0	1	WATER	Load lines
14:32	4425	0	0	0	WATER	Pressure test
14:34	100	0	4.7	20	WATER	Freshwater spacer
14:42	125	0	2.5	40	SEAL BON	Seal bond spacer
15:20	50	0	4.8	330	CEMENT	Batch-up, weigh, & pump 419 sx of Ultra-light weight cement w/ LW-6 @ 10.5 ppg
16:58	0	0	0	0	N/A	Drop plug & wash-up pumps & lines
17:04	100	0	4.8	100	WATER	Displace
17:26	125	0	4.8	43	MUD	Switch to mud
17:38	125	0	3.6	22	MUD	Slow down for plug to pass through dv tool
17:47	450	0	4.9	55	MUD	Rate change
17:57	925	0	3.6	14	MUD	Rate change
18:01	1100	0	3.6	234	MUD	Bump plug to 1641 psi, 1.3 bbls bled back, floats held
18:14	0	0	0	0	N/A	Drop bomb
18:44	2000	0	0	0	WATER	Attempt to open dv tool
18:50	1111	0	0	0	WATER	Open dv tool
18:51	328	0	4.7	12	WATER	Establish circulation & switch to rig to circulate well - 50 bbls cement to surface
21:05	0	0	0	0	N/A	Pre-job safety meeting
21:25	450	0	5.9	20	WATER	Freshwater
21:31	300	0	4	40	SEAL BON	Seal bond spacer
21:50	250	0	5.2	320	CEMENT	Batch-up, weigh, & pump 668 sx of Ultra-light weight cement w/ LW-6 @ 10.5 ppg
22:49	450	0	7.3	159	CEMENT	Mix & pump 288 sx of Ultra-light weight cement w/ LW-6 @ 10.5 ppg
23:14	0	0	0	0	N/A	Drop plug
23:18	675	0	7.1	100	WATER	Displace
23:33	1475	0	5.9	35	WATER	Rate change
23:38	1565	0	4.8	11	WATER	Rate change

CEMENT JOB REPORT

BAKER HUGHES

PRESSURE/RATE DETAIL						EXPLANATION
TIME HR:MIN.	PRESSURE - PSI		RATE BPM	Bbl. FLUID PUMPED	FLUID TYPE	SAFETY MEETING: BJ CREW [X] CO. REP. [X]
	PIPE	ANNULUS				TEST LINES 4425 PSI
						CIRCULATING WELL - RIG [X] BJ [ ]
23:42	0	0	0	0	N/A	Shut-down for rig to redirect returns & fill water tank
23:54	1700	0	3.6	1	WATER	Rate change
23:55	0	0	0	0	N/A	Shut-down for rig to resolve issues with cement returns
00:08	1825	0	3.5	12	WATER	Rate change
00:10	1875	0	3.5	159	WATER	Bump plug to 2975 psi, 1.7 bbls bled back, dv tool closed, 13 bbls cement to surface
00:15	0	0	0	0	N/A	Pre-rig down safety meeting
01:15	0	0	0	0	N/A	Leave location

BUMPED PLUG	PSI TO BUMP PLUG	TEST FLOAT EQUIP.	BBL.CMT RETURNS/ REVERSED	TOTAL BBL. PUMPED	PSI LEFT ON CSG	SPOT TOP OUT CEMENT	Service Supervisor Signature:
[Y] N	1100	[Y] N	63	1334	0	Y [N]	