

Confidentiality Requested:

Yes No

#### Kansas Corporation Commission Oil & Gas Conservation Division

1098284

Form ACO-1
August 2013
Form must be Typed
Form must be Signed
All blanks must be Filled

# WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #	API No. 15						
Name:	Spot Description:						
Address 1:	SecTwpS. R East						
Address 2:	Feet from North / South Line of Section						
City: State: Zip:+	Feet from East / West Line of Section						
Contact Person:	Footages Calculated from Nearest Outside Section Corner:						
Phone: ()	□NE □NW □SE □SW						
CONTRACTOR: License #	GPS Location: Lat:, Long:						
Name:	(e.g. xx.xxxxx) (e.gxxx.xxxxx)						
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84						
Purchaser:	County:						
Designate Type of Completion:	Lease Name: Well #:						
New Well Re-Entry Workover	Field Name:						
Oil WSW SWD SIOW  Gas D&A ENHR SIGW  OG GSW Temp. Abd.  CM (Coal Bed Methane)  Cathodic Other (Core, Expl., etc.):  If Workover/Re-entry: Old Well Info as follows:  Operator:  Well Name:	Producing Formation:  Elevation: Ground: Kelly Bushing: Feet  Total Vertical Depth: Plug Back Total Depth: Feet  Multiple Stage Cementing Collar Used? Yes No  If yes, show depth set: Feet  If Alternate II completion, cement circulated from: sx cmt.						
Original Comp. Date: Original Total Depth:							
□ Deepening       □ Re-perf.       □ Conv. to ENHR       □ Conv. to SWD         □ Plug Back       □ Conv. to GSW       □ Conv. to Producer	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)						
□ Commingled         Permit #:	Chloride content: ppm Fluid volume: bbls  Dewatering method used:  Location of fluid disposal if hauled offsite:						
☐ ENHR         Permit #:           ☐ GSW         Permit #:	Operator Name:						
Spud Date or Date Reached TD Completion Date or Recompletion Date	QuarterSec.         TwpS. R East West           County:         Permit #:						

#### **AFFIDAVIT**

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

**Submitted Electronically** 

KCC Office Use ONLY					
Confidentiality Requested					
Date:					
Confidential Release Date:					
Wireline Log Received					
Geologist Report Received					
UIC Distribution					
ALT I II Approved by: Date:					

Page Two



Operator Name:				_ Lease I	Name: _			Well #:	
Sec Twp	S. R	East	West	County	:				
INSTRUCTIONS: Shopen and closed, flow and flow rates if gas to	ring and shut-in press o surface test, along v	ures, whe	ther shut-in pre chart(s). Attach	ssure reac extra shee	hed stati	c level, hydrosta space is neede	tic pressures, b d.	ottom hole temp	erature, fluid recov
Final Radioactivity Lo files must be submitte						ogs must be ema	alled to kcc-well-	logs@kcc.ks.go	v. Digital electronic
Drill Stem Tests Taker (Attach Additional		Y	es No			J	on (Top), Depth		Sample
Samples Sent to Geo	logical Survey	Y	es No		Nam	е		Тор	Datum
Cores Taken Electric Log Run			es No						
List All E. Logs Run:									
				RECORD	Ne				
	0: 11.1					ermediate, product		" 0 1	T 15
Purpose of String	Size Hole Drilled		ze Casing t (In O.D.)	Weig Lbs.		Setting Depth	Type of Cement	# Sacks Used	Type and Percer Additives
			ADDITIONAL	CEMENTI	NG / SQL	JEEZE RECORD			
Purpose:	Depth Top Bottom	Туре	of Cement	# Sacks	Used		Type and	Percent Additives	
Perforate Protect Casing	Top Dottom								
Plug Back TD Plug Off Zone									
1 lug 0 li 20 lio									
Did you perform a hydrau	ulic fracturing treatment	on this well	?			Yes	No (If No, s	skip questions 2 a	nd 3)
Does the volume of the t			-		-			skip question 3)	
Was the hydraulic fractur	ing treatment informatio	n submitted	to the chemical of	disclosure re	gistry?	Yes	No (If No, i	ill out Page Three	of the ACO-1)
Shots Per Foot			RD - Bridge Plug Each Interval Perl				cture, Shot, Ceme	nt Squeeze Recor	rd Depth
						(* *			200
TUBING RECORD:	Size:	Set At:		Packer A	t·	Liner Run:			
		0017111				[	Yes N	o	
Date of First, Resumed	Production, SWD or EN	HR.	Producing Meth	nod:	g 🗌	Gas Lift (	Other (Explain)		
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Wat	er B	bls.	Gas-Oil Ratio	Gravity
DIODOCITI	01.05.040			4ETUOD 05	. 00145/	TION:		DDOD! ICT!	
DISPOSITION Solo	ON OF GAS:  Used on Lease		N Open Hole	∥ETHOD OF Perf.	_		mmingled	PRODUCTION	ON INTERVAL:
	bmit ACO-18.)		Other (Specify)		(Submit		mit ACO-4)		

Form	ACO1 - Well Completion
Operator	EnCana Oil & Gas (USA) Inc.
Well Name	Nattier 16V 1 SWD
Doc ID	1098284

## All Electric Logs Run

Hole & Cmt Volume Gamma Ray
Microlog Tool
Platform Express Comp Neutron
Platform Express Array Induction
Spectral Gamma Ray

Form	ACO1 - Well Completion
Operator	EnCana Oil & Gas (USA) Inc.
Well Name	Nattier 16V 1 SWD
Doc ID	1098284

### Tops

Name	Тор	Datum
Topeka	1610	
Heebner	1968	
Lansing-Kansas City	2151	
A Marker	2570	
B Marker	2596	
Marmaton	2622	
D Marker	2717	
E Marker	2773	
F Marker	2800	
G Marker	2824	
H Marker	2854	
Burgess	2871	
Miss Lime	2935	
Kinderhook	3164	
Hunton	3255	
Maquoketa	3316	
Viola	3334	
Simpson	3398	
Arbuckle	3434	

Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichita, KS 67202-3802



Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Sam Brownback, Governor

Mark Sievers, Chairman Thomas E. Wright, Commissioner Shari Feist Albrecht, Commissioner

October 23, 2012

EnCana Oil & Gas (USA) Inc. 5851 LEGACY CIRCLE PLANO, TX 75024

Re: ACO1 API 15-079-20692-00-00 Nattier 16V 1 SWD SE/4 Sec.16-24S-02E Harvey County, Kansas

#### **Dear Production Department:**

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,

## Cementing Job Summary

The Road to Excellence Starts with Safety Sales Order #: 9753743 Sold To #: 340078 Ship To #: 2946223 Quote #: Customer: ENCANA OIL & GAS (USA) INC. - EBUS Customer Rep: Perry, Carey API/UWI #: 15-079-20692 Well Name: Nattier 16V Well #: 1 SWD State: Kansas Field: City (SAP): NEWTON County/Parish: Harvey Legal Description: Section 16 Township 24S Range 2E Rig/Platform Name/Num: Precicison 207 Contractor: Precision Job Purpose: Cement Surface Casing Well Type: Development Well Job Type: Cement Surface Casing Sales Person: DAIGLE, COLTER Srvc Supervisor: GALVAN, GEORGE MBU ID Emp #: 447816 Job Personnel **HES Emp Name** Emp# **HES Emp Name** Emp# Exp Hrs Exp Hrs Emp# **HES Emp Name** Exp Hrs BECERRA, JUAN 14 491933 GALVAN, GEORGE 447816 PROVINES, TYLER 14 523867 Carlos Wesley Equipment **HES Unit #** HES Unit # Distance-1 way **HES Unit #** Distance-1 way **HES Unit #** Distance-1 way Distance-1 way **Job Hours** Date On Location Operating Date On Location Operating Date On Location Operating Hours Hours Hours Hours Hours Hours 08-18-2012 14 TOTAL Total is the sum of each column separately Job Times Job Formation Name Date Time Time Zone 18 - Aug - 2012 Called Out CST Formation Depth (MD) Top Bottom 00:30 18 - Aug - 2012 09:30 CST Form Type BHST On Location 902.2 m Job Depth TVD CST Job depth MD 902.2 m Job Started 18 - Aug - 2012 20:07 Water Depth Wk Ht Above Floor 16.4 m Job Completed 18 - Aug - 2012 20:40 CST Perforation Depth (MD) From To Departed Loc 18 - Aug - 2012 23:45 CST Well Data Bottom Description New / Max Size ID Weight Thread Grade Top MD Bottom Top Used pressure kg/m MD TVD TVD mm mm m **MPa** m m m Surface Casing 12.25 60 250. Open Hole Preset Conductor Unknow 14. 13.344 50. J-55 60. J-55 Surface Casing Unknow 9.625 8.921 36. 250. n Tools and Accessories Qty Make Depth Make Type Size Type Size Qty Depth Type Size Qty Make **Guide Shoe** Packer Top Plug Float Shoe Bridge Plug **Bottom Plug** Float Collar Retainer SSR plug set Insert Float Plug Container Stage Tool Centralizers Miscellaneous Materials Gelling Agt Conc Surfactant Conc Acid Type Qty Conc % Treatment Fld Conc Inhibitor Conc Sand Type Size Qty

	Fluid Data	
Stage/Plug #: 1	r en la companya de l	

# Cementing Job Summary

Fluid #	Stage Ty	/pe	Fluid Name		Qty	Qty uom	Mixing Density kg/m3	Yield m3/sk	Mix Fluid m3/ tonne	Rate m3/min	Total Mix Fluid m3/ tonne		
1	STANDAR	D	HA	LCEM (TM) SYSTI	90.0	sacks	15.6	1.2	5.32		5.32		
	2 %	2 % CALCIUM CHLORIDE, PELLET, 50 LE					101509387	<b>'</b> )	•				
	0.125 lbm		PO	LY-E-FLAKE (1012	216940)			South-Service Com-					
	5.319 Gal		FRI	ESH WATER								1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
2	Standard Tout	CCC	CMT - STANDARD CEMENT (100003684)			107	200.0	sacks	15.6	1.18	5.25		5.25
	94 lbm		CM	T - STANDARD - C	CLASS A RE	G OR	TYPE I, BI	JLK (10	0003684)				
	5.245 Gal		FRE	SH WATER					III CANCELLO III				
Ca	Iculated V	alues	11.0	Pressur	es	t /58.2		3 14 11 6	V	olumes	4.14.7		
Displa	cement	19	1111-16	Shut In: Instant		Lost R	eturns		Cement S	Slurry	42	Pad	
Гор О	Cement	0		5 Min		Ceme	nt Returns	19	Actual Displacement		t 19	Treatm	ent
Frac G	radient			15 Min		Space	rs	20	Load and	Breakdow	n Total Job		ob
	والوقعينية وإرفاد المعتد	والمستوال والموا				Augusta a	Rates		غير المستوير حالي كيب رايا		والمراكزة والمرادر	ala calacia de el servicio	المناف والأربادا
Circu	lating			Mixing	3.	5	Displac	ement	3.	5	Avg. J	ob	3.5
Cem	ent Left In	Pipe	Am	ount 40 ft Rea	son Shoe	Joint							
Frac I	Ring # 1 @		ID	Frac ring # 2	@	D	Frac Rin	g#3@	7	D Fr	ac Ring	#4@	ID
Tł	ne Informa	ation	Sta	ted Herein Is C	Correct	Custor	mer Represe	nta)ive Si	ightature				

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## Cementing Job Log

The Road to Excellence Starts with Safety

Sold To #: 340078	Ship To #: 29462	223 Quote #:	Sales Order #: 9753743				
Customer: ENCANA OIL	& GAS (USA) INC El	C EBUS Customer Rep: Perry, Carey					
Well Name: Nattier 16V		Well #: 1 SWD	API/UWI #: 15-079-20692				
Field:	City (SAP): NEWTON	County/Parish: Harvey	State: Kansas				
Legal Description: Secti	on 16 Township 24S R	ange 2E					
Lat: N 0 deg. OR N 0 deg	g. 0 min. 0 secs.	Long: E 0 deg.	OR E 0 deg. 0 min. 0 secs.				
Contractor: Precision	Rig/Pla	tform Name/Num: Precicison	207				
Job Purpose: Cement S	urface Casing		Ticket Amount:				
Well Type: Development	Well Job Ty	pe: Cement Surface Casing					
Sales Person: DAIGLE,	COLTER Srvc S	upervisor: GALVAN, GEORG	E MBU ID Emp #: 447816				

Activity Description	Date/Time	Cht	Rate m3/		ume 13	Pressure MPa		Comments
		#	min	Stage	Total	Tubing	Casing	
Call Out	08/18/2012 00:30							CALLED OUT ON ENCANA OIL, NATTIER 16V 9 5/8 SUFACE CASING
Pre-Convoy Safety Meeting	08/18/2012 03:30							DISCUSS ROUTE TO LOCATION
Depart Yard Safety Meeting	08/18/2012 04:00							DEPART FROM HALLIBURTON YARD TO LOCATION
Arrive At Loc	08/18/2012 09:30							ARRIVED ON LOCATION
Pre-Rig Up Safety Meeting	08/18/2012 09:35							DISCUSS RIG UP PROCEDURE AND WHERE SAFETY AREA IS ON LOCATION
Rig-Up Equipment	08/18/2012 09:40							BEGAN RIGGING UP EQUIPTMENT
Rig-Up Completed	08/18/2012 10:20							RIG UP COMPLETED
Wait on Customer or Customer Sub-Contractor Equip	08/18/2012 10:25							RIG RIGGING UP TO START DRILLING HOLE
Other	08/18/2012 10:30							START RUNNING DRILL PIPE IN HOLE
Other	08/18/2012 15:50							ALL DRILL PIPE WAS RAN IN HOLE
Other	08/18/2012 16:15							RAN SURVEY TOOL DOWN HOLE
Other	08/18/2012 16:43							BEGAN PULLING DRILL PIPE OUT OF HOLE
Other	08/18/2012 17:15							PUT ON GUIDE SHOE
Running In Hole	08/18/2012 18:00							BEGAN RUNNING CASING IN HOL E

Sold To #: 340078 Ship To #:2946223 Quote #: Sales Order #: 9753743

# Cementing Job Log

Activity Description	Date/Time	Cht	Rate m3/	Volume m3		The state of the state of	sure Pa	Comments		
		#	min	Stage	Total	Tubing	Casing			
Casing on Bottom	08/18/2012 19:30	-			11.50			CASING ON BOTTOM		
Circulate Well	08/18/2012 19:35							RIG CIRCULATING WELL		
Safety Meeting	08/18/2012 20:00							DISCUSS J0B PROCEDURE		
Start Job	08/18/2012 20:07							START JOB		
Test Lines	08/18/2012 20:07		1				2000. 0	TEST LINES 2000PSI		
Pump Spacer	08/18/2012 20:09		3.5		20		90.0	PUMP FRESHWATER SPACER		
Pump Cement	08/18/2012 20:12		3.5		42		125.0	PUMP CEMENT @ 15.0 LBM/GAL		
Other	08/18/2012 20:14							WEIGHED CEMENT WITH CEMENT SCALES AND MEASURED 15.6 LBM/GAL		
Shutdown	08/18/2012 20:24							SHUTDOWN WASH UP TUB		
Drop Top Plug	08/18/2012 20:28							DROP TOP PLUG		
Pump Displacement	08/18/2012 20:29		2		19		70.0	PUMP FRESHWATER DISPLACEMENT		
Cement Returns to Surface	08/18/2012 20:29		2		19		70.0	GOT CEMENT RETURNS TO SURFACE AND GOT BACK TOTAL OF 19 BBL CEMENT BACK TO SURFACE		
Bump Plug	08/18/2012 20:37		2		19		1020. 0	BUMP PLUG 500PSI OVER		
Post-Job Safety Meeting (Pre Rig-Down)	08/18/2012 21:15							DISCUSS RIG DOWN PROCEDURE COMPANY MAN WANTS TO KEEP PLUG CONTAINER FOR FOUR HOURS		
Rig-Down Equipment	08/18/2012 22:00							BEGAN RIGGING DOWN EQUIPTMENT		
Rig-Down Completed	08/18/2012 23:20							ALL IRON BACK ON TRUCKS		
Depart Location Safety Meeting	08/18/2012 23:30							DISCUSS ROUTE TO HALLIBURTON LOCATION		
Activity Description	Date/Time	Cht	Rate m3/ min		Volume -m3		MPa			Comments

OUR BUT 17..... 7.0.000

OUR ## #17 1/- .- '- . 7 0 0000

## Cementing Job Log

		#	Stage	Total	Tubing	Casing	
Depart Location Safety Meeting	08/18/2012 23:45						THANK YOU FOR USING HALLIBURTON AND CREW

Ship To #:2946223 Quote #: Sold To #: 340078 Sales Order #: 9753743 

## Cementing Job Summary

The Road to Excellence Starts with Safety Sold To #: 340078 Ship To #: 2946223 Quote #: Sales Order #: 9770139 Customer: ENCANA OIL & GAS (USA) INC. - EBUS Customer Rep: Perry, Carey Well #: 1 SWD API/UWI #: 15-079-20692 Well Name: Nattier 16V City (SAP): NEWTON County/Parish: Harvey State: Kansas Field: Legal Description: Section 16 Township 24S Range 2E Contractor: Precision Rig/Platform Name/Num: Precicison 207 Job Purpose: Cement Intermediate Casing Well Type: Development Well Job Type: Cement Intermediate Casing Sales Person: DAIGLE, COLTER Srvc Supervisor: AGUILERA, FABIAN MBU ID Emp #: 442123 Job Personnel **HES Emp Name** Exp Hrs Emp# **HES Emp Name** Exp Hrs Emp# **HES Emp Name** Exp Hrs Emp# AGUILERA, FABIAN 442123 HEIDT, JAMES 517102 REEVES, SCOTT L 10 518947 Nicholas Equipment **HES Unit #** Distance-1 way HES Unit # Distance-1 way **HES Unit #** Distance-1 way HES Unit# Distance-1 way **Job Hours** On Location Operating Date On Location Operating Date On Location Operating Date Hours Hours Hours Hours Hours Hours 8/26/2012 10 1 TOTAL Total is the sum of each column separately Job **Job Times** Formation Name Date Time Time Zone Formation Depth (MD) Top Bottom Called Out 25 - Aug - 2012 20:00 CST 26 - Aug - 2012 BHST On Location 02:00 CST Form Type Job Depth TVD Job depth MD 3445.9 ft 3445.9 ft Job Started 26 - Aug - 2012 08:30 CST Wk Ht Above Floor 26 - Aug - 2012 09:33 CST Water Depth 5. ft Job Completed Perforation Depth (MD) From 26 - Aug - 2012 To Departed Loc 12:00 CST Well Data Description New / Max Size ID Weight Thread Grade Top MD **Bottom** Top **Bottom** Used pressure in lbm/ft ft MD TVD TVD in ft ft psig ft Intermediate 8.75 250. 3591. Open Hole 7. 6.366 23. N-80 3591. Intermediate Unknow 3000. Casing n 9.625 8.921 36. 250. Surface Casing Unknow J-55 **Tools and Accessories** Make Depth Type Size Qtv Make Depth Size Make Type Size Qty Type Qtv Guide Shoe Packer Top Plug Bridge Plug Float Shoe **Bottom Plug** Float Collar Retainer SSR plug set Insert Float Plug Container Stage Tool Centralizers **Miscellaneous Materials** Surfactant Acid Type Gelling Agt Conc Conc Conc % Qtv Inhibitor Conc Treatment Fld Conc Sand Type Size Qty

			Fluid Data	THE SECOND					
Sta	age/Plug #: 1			SI HOUSE				MA LIKE	
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density Ibm/gal	Yield ft3/sk	Mix Fluid Gal/sk	CONTRACTOR OF THE STATE OF THE	Total Mix Fluid Gal/sk

Summit Version: 7.3.0040 Tuesday, September 04, 2012 14:41:00

# Cementing Job Summary

1	MidCon- Standard	78 V		MIDCON-2 CEMENT STANDARD - SBM 15078)			100.0	sacks	11.4	2.89	1	7.84		17.84
	0.25 lbm		POLY-E-FLAKE (101216940)										111111111111111111111111111111111111111	
	17.838 Ga	al	FRE	RESH WATER										
2	STANDA	3/07-5/2/		T - STANDARD CE 003684)	ANDARD CEMENT			sacks	15.6	1.18		5.2		5.2
	94 lbm		CM	T - STANDARD - CI	LASS A RE	G OR T	YPE I, BL	JLK (100	003684)					
	0.25 lbm		POI	Y-E-FLAKE (1012)	16940)									
	5.204 Ga	1	FRE	SH WATER	•		5-04.10							
(	Calculated	Values		Pressure	es					Volumes				
ispl	lacement	131 B	BL	Shut In: Instant		Lost Returns		0	Cement	Cement Slurry		80 BBL	Pad	
op (	Of Cement	736.92	FT.	5 Min		Cemen	t Returns	0	Actual Displacement		130 BBL	Treatment		
rac	Gradient			15 Min		Spacer	s	0		d Breakdo			Total Job	
						R	ates				W S			
Circ	ulating	3		Mixing	5.5	5	Displac	cement	5.5			Avg. Job		4
Ce	ment Left Ir	n Pipe	Am	ount 40 ft Reas	son Shoe	Joint								
Frac	Ring # 1 @	2	ID	Frac ring # 2	@ 11	D	Frac Rin	g#3@		ID	Frac	Ring#	4@	ID
1	The Inform	nation	Sta	ted Herein Is C	orrect	Custom	ner Repres	entative S	Signature					

Summit Version: 7.3.0040

Tuesday, September 04, 2012 14:41:00

## Cementing Job Log

The Road to Excellence Starts with Safety

Sold To #: 340078 Sales Order #: 9770139 Ship To #: 2946223 Quote #: Customer: ENCANA OIL & GAS (USA) INC. - EBUS Customer Rep: Perry, Carey Well Name: Nattier 16V Well #: 1 SWD API/UWI #: 15-079-20692 County/Parish: Harvey State: Kansas Field: City (SAP): NEWTON Legal Description: Section 16 Township 24S Range 2E Long: E 0 deg. OR E 0 deg. 0 min. 0 secs. Lat: N 0 deg. OR N 0 deg. 0 min. 0 secs. Contractor: Precision Rig/Platform Name/Num: Precicison 207 Job Purpose: Cement Intermediate Casing Ticket Amount:

Well Type: Development Well Job Type: Cement Intermediate Casing

Sales Person: DAIGLE, COLTER Srvc Supervisor: AGUILERA, FABIAN MBU ID Emp #: 442123

Sales Person: DAIGLE, COLTI	ER Srvc S	upervis	sor: AGU	JILERA, I	MRO IT	MBU ID Emp #: 442123				
Activity Description	Date/Time	Cht	Rate bbl/ min	Volume bbl		Pressure psig		Comments		
		#		Stage	Total	Tubing	Casing			
Call Out	08/25/2012 20:00							CREW CALLED OUT FOR ECANA OIL AND GAS, NATTIER 16V, 1 SWD, 7" INTERMEDIATE		
Pre-Convoy Safety Meeting	08/25/2012 21:00							DISCUSSED ALL POTENTIAL ROAD HAZARDS WITH HES CREW		
Crew Leave Yard	08/25/2012 21:30							CALL IN JOURNEY MANAGEMENT, IN ROUTE TO ECANA OIL AND GAS, NATTIER 16V- 1 SWD		
Arrive At Loc	08/26/2012 02:00							ARRIVE AT LOCATION		
Assessment Of Location Safety Meeting	08/26/2012 02:10							ASSESSED THE LOCATION, SPOT IN EQUIPMENT, WATER TESTED GOOD, GOT WITH CM AND WENT OVER JOB DEPTH AND NUMBERS, AT THIS TIME RIG CREW STARTED RUNNING CASING DOWNHOLE		
Pre-Rig Up Safety Meeting	08/26/2012 02:15							DISCUSSED ALL POTENTIAL HAZARDS AND PINCH POINTS WITH HES CREW		
Rig-Up Equipment	08/26/2012 02:30							RIG UP IRON AND WATER HOSES		
Rig-Up Completed	08/26/2012 03:30							RIG UP WENT WELL AND SAFELY		
Activity Description	Date/Time	Cht	Rate bbl/ min	THE RESERVE SERVERS	ume bl	Pressure psig		Comments		

Sold To #: 340078 Ship To #:2946223 Quote #: Sales Order #: 9770139

SUMMIT Version: 7.3.0040 Tuesday, September 04, 2012 02:41:00

# Cementing Job Log

		#		Stage	Total	Tubing	Casing	
Other	08/26/2012 03:40							AT THIS TIME RIG CREW IS STILL RUNNING CASING DOWNHOLE
Other	08/26/2012 07:00							AT THIS TIME RIG CREW IS DONE RUNNING CASING
Pre-Job Safety Meeting	08/26/2012 08:00							DISCUSSED ALL POTENTIAL HAZARDS WHEN PRESSURE IS PRESENT WITH HES AND RIG CREW, WENT OVER JOB SCHEDULE AND NUMBERS WITH CM, AT THIS TIME CM REQUESTED TO CIRCULATE FOR ABOUT 45 MINUTES BOTTOMS UP AND THEY HAVE GOOD RETURNS
Start Job	08/26/2012 08:30							
Test Lines	08/26/2012 08:33							TEST LINES TO 4000 PSI
Pump Lead Cement	08/26/2012 08:39		5	51			282.0	PUMP LEAD CEMENT= 100 SKS = 51 BBL @ 11.4#
Pump Tail Cement	08/26/2012 08:48		5	23			350.0	PUMP TAIL CEMENT = 110 SKS = 23 BBL @ 15.6#
Clean Lines	08/26/2012 08:55							STOP CLEAN LINES AND TUB
Drop Top Plug	08/26/2012 08:57							DROP TOP PLUG
Pump Displacement	08/26/2012 08:59		5	130			300.0	PUMP DISPLACEMENT OF 130 BBL FW
Displ Reached Cmnt	08/26/2012 09:21		5		70		250.0	DISPLACEMENT REACH CEMENT AT 70 BBL AT 250 PSI
Slow Rate	08/26/2012 09:26		2		120		750.0	SLOW RATE TO 2 BPM TO BUMP PLUG AT 120 BBL GONE
Bump Plug	08/26/2012 09:30						900.0	BUMP PLUG AT 900 PSI
Check Floats	08/26/2012 09:31						1125. 0	FLOATS HELD GOOD, RELEASE PRESSURE AND GOT BACK 1/2 BBL
End Job	08/26/2012 09:33							

Sold To #: 340078 Ship To #:2946223 Quote #: Sales Order #: 9770139

SUMMIT Version: 7.3.0040 Tuesday, September 04, 2012 02:41:00

## Cementing Job Log

Activity Description	Date/Time	Cht	Rate bbl/ min		ume bl		sure sig	Comments	
		#		Stage	Total	Tubing	Casing		
Pre-Rig Down Safety Meeting	08/26/2012 09:45							DISCUSSED ALL POTENTIAL HAZARDS AND PINCH POINTS WITH HES CREW	
Rig-Down Equipment	08/26/2012 10:00							RIG DOWN IRON AND WATER HOSES	
Rig-Down Completed	08/26/2012 11:00							RIG DOWN WENT WELL AND SAFELY	
Pre-Convoy Safety Meeting	08/26/2012 11:30							DISCUSSED ALL POTENTIAL ROAD HAZARDS WITH HES CREW	
Crew Leave Location	08/26/2012 12:00							THANK YOU FOR CHOOSING HALLIBURTON, FABIAN AND CREW	

Sold To #: 340078

Ship To #:2946223

Quote #:

Sales Order #:

9770139

SUMMIT Version: 7.3.0040

Tuesday, September 04, 2012 02:41:00