

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

1055438

Form ACO-1
June 2009
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
Address 2:	Feet from North / South Line of Section
City:	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	County:
Name:	Lease Name: Well #:
Wellsite Geologist:	Field Name:
Purchaser:	Producing Formation:
Designate Type of Completion:	Elevation: Ground: Kelly Bushing:
New Well Re-Entry Workover	Total Depth: Plug Back Total Depth:
Oil WSW SWD SIOW Gas D&A ENHR SIGW OG GSW Temp. Abd. CM (Coal Bed Methane) Cathodic Other (Core, Expl., etc.):	Amount of Surface Pipe Set and Cemented at: Feet  Multiple Stage Cementing Collar Used? Yes No  If yes, show depth set: Feet  If Alternate II completion, cement circulated from:  feet depth to: w/ sx cmt
Operator:	5 111 51 111
Well Name:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date: Original Total Depth: Deepening Re-perf. Conv. to ENHR Conv. to SWD	Chloride content: ppm Fluid volume: bbls  Dewatering method used:
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:
Commingled         Permit #:	Operator Name:
Dual Completion Permit #:	Lease Name: License #:
SWD Permit #:	Quarter Sec TwpS. R
ENHR Permit #:	County: Permit #:
GSW Permit #:	
Spud Date or Date Reached TD Completion Date or Recompletion Date	

#### **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
Letter of Confidentiality Received
Date:
Confidential Release Date:
Wireline Log Received
Geologist Report Received
UIC Distribution
ALT I I II Approved by: Date:

Side Two



Operator Name:			Lease Name	e:			_ Well #:	
Sec Twp	S. R	East West	County:					
time tool open and clos	sed, flowing and shut s if gas to surface tes	I base of formations per in pressures, whether set, along with final chart well site report.	shut-in pressure	reached s	static level,	hydrostatic press	sures, bottom h	ole temperature, fl
Orill Stem Tests Taken (Attach Additional S		Yes No		Log	Formatio	n (Top), Depth an	d Datum	Sample
Samples Sent to Geolo		☐ Yes ☐ No	N	lame			Тор	Datum
Cores Taken Electric Log Run Electric Log Submitted (If no, Submit Copy)	I Electronically	Yes No Yes No Yes No						
List All E. Logs Run:			RECORD [		Used			
	Size Hole	Report all strings set- Size Casing	-conductor, surface Weight		ate, producti Setting	on, etc.  Type of	# Sacks	Type and Percen
Purpose of String	Drilled	Set (In O.D.)	Lbs. / Ft.		Depth	Cement	Used	Additives
		ADDITIONA	L OFMENTING (	00115575	DECORD			
		ADDITIONA	L CEMENTING / :	SQUEEZE	RECORD			
Purpose:  Perforate Protect Casing Plug Back TD Plug Off Zone	Depth Top Bottom	Type of Cement	# Sacks Used	d		Type and F	Percent Additives	
Shots Per Foot		ON RECORD - Bridge Plu ootage of Each Interval Pe				cture, Shot, Cement mount and Kind of Ma	•	d Depth
TUBING RECORD:	Size:	Set At:	Packer At:	Line	r Run:	Yes No		
Date of First, Resumed I	Production, SWD or ENI	HR. Producing Me	thod:	Gas Li	ift C	Other (Explain)		
Estimated Production Per 24 Hours	Oil E	Bbls. Gas	Mcf	Water	В	bls. (	Gas-Oil Ratio	Gravity
DISPOSITIO	Used on Lease	Open Hole	METHOD OF COM Perf. D	MPLETION: ually Comp omit ACO-5)	. Cor	nmingled mit ACO-4)	PRODUCTIO	ON INTERVAL:
(If vented, Sub	mit ACO-18.)	Other (Specify) _						

Form	ACO1 - Well Completion
Operator	Kerr-McGee Oil & Gas Onshore LP
Well Name	Bird 21-2
Doc ID	1055438

## Tops

Name	Тор	Datum
Chase	2182	
Council Grove	2436	
Wabaunsee	2869	
Shawnee	3260	
Lansing	3707	
Cherokee	4459	
Morrow Group	4988	
Morrow "F"	5276	
Lower Morrow	5372	
St. Genevieve	5489	
St. Louis	5508	

## Cementing Job Summary

The Road to Excellence Starts with Safety Sales Order #: 8021971 Quote #: Sold To #: 300466 Ship To #: 2841618 Customer: ANADARKO PETROLEUM CORP - EBUS Customer Rep: Almanza, Abraham Well #: 21-2 API/UWI #: 15-187-21192 Well Name: Bird County/Parish: Stanton State: Kansas Field: ARROYO City (SAP): JOHNSON Legal Description: Section 21 Township 29S Range 41W Lat: N 37,514 deg. OR N 37 deg. 30 min. 49.392 secs. Long: E 101.811 deg. OR E 101 deg. 48 min. 38,808 secs. Contractor: Murfin Rig/Platform Name/Num: #22 Job Purpose: Cement Surface Casing Well Type: Development Well Job Type: Cement Surface Casing Sales Person: HESTON, MYRON Srvc Supervisor: LISH, DEREK MBU ID Emp #: 295022 Job Personnel Exp Hrs Emp# Exp Hrs Emp# HES Emp Name HES Emp Name **HES Emp Name** Exp Hrs Emp# CHRISTENSEN. 476488 GOMEZ, OSCAR 490448 LISH, DEREK D 295022 6.5 6.5 6.5 STUART 344233 TORRES. **CLEMENTE** Equipment HES Unit # Distance-1 way HES Unit # Distance-1 way HES Unit# Distance-1 way **HES Unit #** Distance-1 way 10244148 85 mile 10286731 85 mile 10897843 85 mile 10924982 85 mile 11019295 85 mile 85 mile 11074742 85 mile 11212168 Job Hours Date On Location Operating Date On Location Operating Date On Location Operating Hours Hours Hours Hours Hours Hours 3-11-2011 6.5 3.0 TOTAL Total is the sum of each column separately Job Job Times Formation Name Time Zone Date Time 11 - Mar - 2011 Formation Depth (MD) Top Bottom Called Out 06:00 CST 11 - Mar - 2011 12:30 CST Form Type BHST On Location 16604000.11 Job Depth TVD | C/ 4605\_ft 11 - Mar - 2011 14:48 CST Job depth MD Job Started 11 - Mar - 2011 CST Water Depth Wk Ht Above Floor 4. ft Job Completed 17:36 11 - Mar - 2011 Perforation Depth (MD) From Departed Loc 19:00 CST To Well Data New / ID Weight Grade Top MD Bottom Bottom Description Max Size Thread Top Used pressure in lbm/ft ft MD TVD TVD in ft ft ft psig 12 1/4" Surface 12.25 1665. Hole 8 5/8" Surface Unknow 8.625 8.097 24. 8 RD (ST&C) .1-55 4674 1660 Casing Sales/Rental/3rd Party (HES) Qty Qty uom Depth Supplier Description PLUG, CMTG, TOP, 8 5/8, HWE, 7, 20 MIN/8, 09 MA EA SHOE,GID,8-5/8 8RD 1 EA CLR,FLT,TROPHY SEAL,8-5/8 8RD 1 EA AUTOFILL KIT, TROPHY SEAL 1 EΑ CENTRALIZER ASSY - API - 8-5/8 CSG X 5 EA CLP,LIM,8 5/8,FRICT,WTH DOGS 1 EA BASKET - CEMENT - 8 5/8 CSG X 12 1/4 1 EA KIT, HALL WELD-A 1 EA FILLUP ASSY - 1.500 ID - 7 IN. - 8-5/8 EΑ

Summit Version: 7.20.130 Friday, March 11, 2011 18:06:00

# Cementing Job Summary

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1	Wate	r Pre-	Flush						0.00	bbl	8	.33	.0		.0	6.0			
2	Lead	Slurr	y	VARICE	M (TM)	CEMENT (452	2009)		540.0	sacks	1	1.1	3.39	20	0.4	6.0		20.4	
	3 (	%		CALCIU	M CHLO	RIDE - HI TE	ST PE	ELLET (	100005	053)									
	0.1	%		WG-17,	50 LB SI	K (100003623	<u>)</u>		•••••										
	0.51	bm		POLY-E	-FLAKE	(101216940)													
	101	bm		KOL-SE	AL, BULI	K (100064233	<b>)</b>	***************************************											
	20.39	5 Gal	<del>-</del>	FRESH	WATER				······										
3	Tail S	lurry		HALCE	M (TM) S	YSTEM (452	(886		200.0	sacks	1	5.6	1.2	5.	.22	6.0		5.22	
-	2 (					RIDE - HI TE		ELLET (	100005	053)			•			<u> </u>			
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## Cementing Job Log

The Road to Excellence Starts with Safety

Ship To #: 2841618 Sales Order #: 8021971 Quote #: Sold To #: 300466 Customer: ANADARKO PETROLEUM CORP - EBUS Customer Rep: Almanza, Abraham API/UWI #: 15-187-21192 Well Name: Bird Well #: 21-2 City (SAP): JOHNSON County/Parish: Stanton State: Kansas Field: ARROYO Legal Description: Section 21 Township 29S Range 41W Long: E 101.811 deg. OR E 101 deg. 48 min. 38.808 secs. Lat: N 37.514 deg. OR N 37 deg. 30 min. 49.392 secs. Rig/Platform Name/Num: #22 Contractor: Murfin Ticket Amount: Job Purpose: Cement Surface Casing Job Type: Cement Surface Casing Well Type: Development Well

Sales Person: HESTON, MYRON Srvc Supervisor: LISH, DEREK MBU ID Emp #: 295022

Activity Description	Date/Time	Cht	Rate bbi/ min		ume bi		sure sig	Comments
		#		Stage	Total	Tubing	Casing	
Call Out	03/11/2011 06:00							ANADARKO BIRD 21- 2 8 5/8" SURFACE
Depart Yard Safety Meeting	03/11/2011 08:00							JOURNEY MANAGEMENT MEETING WITH CREW
Crew Leave Yard	03/11/2011 08:10							REQUESTED ON LOCATION @ 12:00
Other	03/11/2011 11:00							MET WITH BULK CREW IN HUGATON
Arrive At Loc	03/11/2011 12:30							RIG RUNNING CASING
Assessment Of Location Safety Meeting	03/11/2011 12:35							MEET WITH CUSTOMER, ASSESS LOCATION WITH CREW, SPOTTING EQUIPMENT, RIG UP PROCEDURES, HAZARDS ON LOCATION.
Rig-Up Equipment	03/11/2011 12:45							SPOT TRUCKS, RIG UP HES LINES TO THE RIG
Casing on Bottom	03/11/2011 14:00							8 5/8 24# J-55 CSG 1671 FT (TP) SJ-46.87, HOLE SIZE 12 1/4 1665 FT(TD)
Rig-Up Equipment	03/11/2011 14:05							STAB HEAD, RIG UP FLOOR
Circulate Well	03/11/2011 14:15							RIG CIRCULATE THROUGH CEMENT HEAD, CASING CREW RIGGING DOWN
Pre-Job Safety Meeting	03/11/2011 14:30							WITH RIG AND HES CREWS, JOB OPERATIONS AND HAZARDS

Sold To #: 300466

Ship To #:2841618

Quote #:

Sales Order #:

8021971

SUMMIT Version:

7.20.130

Friday, March 11, 2011 06:00:00

# Cementing Job Log

Activity Description	Date/Time	Cht	Rate bbl/ min	Voli b	ume bi	1	sure sig	Comments
		#	11814-	Stage	Total	Tubing	Casing	
Start Job	03/11/2011 14:48							
Test Lines	03/11/2011 14:49							PRESSURE TEST HES PUMPS AND LINES TO 2000 PSI
Pump Lead Cement	03/11/2011 15:00		4	326			125.0	540 SKS MIXED @ 11.1 PPG. (HOL-1121 FT) (TOL-SURFACE)
Pump Tail Cement	03/11/2011 16:55		4	43			210.0	200 SKS MIXED @ 15.6 PPG. (HOT-544 FT.) (TOT-1121 FT)
Drop Top Plug	03/11/2011 17:08							8 5/8" HWE
Pump Displacement	03/11/2011 17:09		4	103			456.0	FRESH WATER DISPLACEMENT ( 103 BBLS TOTAL)
Displ Reached Cmnt	03/11/2011 17:18		4	45			160.0	CAUGHT CMT AT 45 BBLS DISPLACEMENT AWAY
Cement Returns to Surface	03/11/2011 17:21		4	58			175.0	45 BBLS, 75 SKS OF CMT TO SURFACE
Slow Rate	03/11/2011 17:30		3	90			430.0	SLOW RATE TO BUMP PLUG
Bump Plug	03/11/2011 17:33		3	103			500.0	BUMPED PLUG W/500 PSI OVER
Check Floats	03/11/2011 17:35						1300. 0	FLOATS HELD, 1 BBL BACK
End Job	03/11/2011 17:36							HAD GOOD RETURNS AND LIFT PRESSURE THROUGH JOB
Pre-Rig Down Safety Meeting	03/11/2011 17:40							RIG DOWN PROCEDURE, HAZARDS ON LOCATION
Rig-Down Equipment	03/11/2011 17:45							RIG DOWN HES
Depart Location Safety Meeting	03/11/2011 18:50							JOURNEY MANAGEMENT MEETING WITH CREW
Crew Leave Location	03/11/2011 19:00							THANK YOU FROM HALLIBURTON CREW

Sold To #: 300466

Ship To #:2841618

Quote # :

Sales Order #: 8021971

**SUMMIT Version:** 

7.20.130

Friday, March 11, 2011 06:00:00

#### Work Order Contract

Örder Number

021971	I

TO: HALLIBURTON ENERGY SERVICES, INC. - YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICE PERSONNEL TO DELIVER AND OPERATE THE SAME AS AN INDEPENDENT CONTRACTOR TO CUSTOMER LISTED BELOW AND DELIVER AND SELL PRODUCTS. SUPPLIES AND MATERIALS FOR THE PURPOSE OF SERVICING.

***************************************	11171717110 00010111111111111	THE PROPERTY OF PROPERTY OF THE PROPERTY OF TH	0010; 0011 E1E01111 N#11 E1111 E01 011 11 E1	STO COL OF OCITIONIO
Well No.	Farm or Lease	County	State	Well Permit Number
21-2	Bird	Stanton	Kansas	15-187-21192
Customer		Well Owner	Job Purpose	
ANADARKÓ PETR	OLEUM CORP - EBUS		Cement Surface Casing	
		THIS MADRIA ABORD MAIST OF SICHEO	DEED OF INDOM IS COMMITTION	

- CUSTOMER REPRESENTATION Customer warrants that the well is in proper condition to receive the services, equipment, products, and materials to be supplied by Halliburton Energy Services, Inc. (hereinafter "Halilburton").
- PRICE AND PAYMENT The services, equipment, products, and/or meterials to be supplied hereunder are priced in accordance with Halliburton's current price list. All prices of Halliburton are exclusive of any federal, state or municipal taxes which may be imposed on the sale or use of any materials, products or supplies furnished or services performed. Customer agrees to pay such taxes In addition to the prices in Halliburton's price list. If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If Customer has an approved open account, invoices are payable on the twentiath day after the date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Haliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, or Haliburton's actual attorney fees, whichever is greater, plus all collection and court costs. Customer agrees that the amount of attorney fees set out herein are reasonable and necessary.
- RELEASE AND INDEMNITY Customer agrees to RELEASE Halliburton Group from any and all damages whatsoever to property of any kind owned by, in the possession of, or lessed by Customer and those persons and entities Customer has the ability to bind by contract or which are co-interest owners or joint ventures with Customer. Customer also agrees to DEFEND, INDEMNIFY, AND HOLD Halliburton Group HARMLESS from and against any and all liability, claims, costs, expenses, attorney fees and damages whatsoever for personal injury, liness, death, property demage and loss resulting from loss of well control; services to control a wild well whether underground or above the surface, reservoir or underground demands, including loss of oil, gas, other mineral substances or water, surface demands grating from underground damage, damage to or loss of the well bore; subsurface trespass or any action in the nature thereof; firs; expliquion; subsurface pressure; radioactivity; and pollution and contamination and its cleanup and control.

CUSTOMER'S RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS obligations will apply even if the Hability and claims are caused by the sole, concurrent, active or passive negligence, fault, or strict liability of one or more members of the Halliburton Group, the unseaworthiness of any vessel or any defect in the data, products, supplies, materials or aquipment furnished by any member or members of the Halliburton Group whether in the design, manufacture, maintenance or marketing thereof or from a failure to wern of such defect. "Halliburton Group" is defined as Halliburton Energy Services, Inc., its parent, subsidiary, and affiliated compenies, insurers and subcontractors and all its/hele officers, directors, employees, consultants and agents. <u>Customer's RELEASE. DEFENSE. INDEMNITY AND HOLD HARMLESS</u> obligations apply whether the personal injury, litness, death, property damage or loss is suffered by one or more members of the Halliburton Group, Customer, or any other person or entity. Customer agrees to support such obligations assumed herein with liability insurance with limits of not less than \$600,000. Customer agrees to name Halliburton Group as named additional insured on all of its general liability policy(s). Customer agrees that its liability under this Contract is not limited by the amounts of its insurance coverage, except where and as may be required by applicable local law for the provisions of this Contract to be enforceable.

- EQUIPMENT LIABILITY Customer shall at its risk and expense attempt to recover any Halliburton Group equipment lost or lodged in the well. If the equipment is recovered and repairable, Customer shall pay the repair costs, unlesse caused by Hallburton's sole negligence, if the equipment is not recovered or is irreparable, Customer shall pay the ournant published replacement rete, unless caused by Hallburton's sole negligence. If a radioactive source becomes tost or todged in the well, Customer shall meat all requirements of Section 39,15(s) of the Nuclear Regulatory Commission regulations and any other applicable laws or regulations concerning retrieval or abendonment and shall permit Halliburton to monitor the recovery or abendonment afforts all at no risk or liability to Halliburton Group. Customer shall be responsible for damage to or loss of Halliburton group equipment, products, and materials while in transit abound Customer-supplied transportation, even if such is arranged by Halliburton at Customer's request, and during loading and unloading from such transport. Customer will also pay for the repair or replacement of Halliburton group equipment damaged by compsion or abrasion due to well effluents.
- E. LIMITED WARRANTY Halliburton warrants only title to the equipment, products, and materials supplied under this Contract and that same are free from defects in workmanship and restertals for thirty (30) days from the date of delivery. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's sole Hability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) straing out of the sale, lease or use or any equipment, products, or materials is expressly limited to the replacement of such on their return to Halliburton's, at Halliburton's option, to the allowance to Customer of credit for the cost of such items. In no event shall Halliburton be flable for special, incidental, incidental, incidental, or punitive damages. Because of the uncertainty of verieble well conditions and the necessity of relying on facts and supporting services survished by others, HALLIBURTON IS UNABLE TO GUARANTEE THE EFFECTIVENESS OF THE EQUIPMENT, MATERIALS, OR SERVICE, NOR THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, JOB RECOMMENDATION OR OTHER DATA FURNISHED BY HALLIBURTON GROUP. Haliburton personnel will use their best efforts in gethering such information and their best judgment in interpreting E, but Customer agrees that Haliburton Group shall not be liable for and CUSTOMER SHALL INDEMNIFY HALLIBURTON GROUP AGAINST ANY DAMAGES ARISING FROM THE USE OF SUCH INFORMATION, even if such is contributed to or caused by the active or passive negligence, fault or strict liability of any member or members of Halliburton Group. Halliburton also does not warrant the accuracy of data transmitted by electronic process, and Hailiburton will not be responsible for accidental or intentional interception of such data by third parties.
- GOVERNING LAW The validity, interpretation and construction of this Contract shall be determined by the laws of the jurisdiction where the services are performed or the equipment or materiais are delivered
- DISPUTE RESOLUTION Except for Halliburton's statutory rights with regard to collection of past due invoices for services or materials, including the Contractor's statutory rights for perfection and enforcement of mechanics' and materialmen's' liens, Customer and Haliburton agree that any dispute that may arise out of the performance of this Contract shall be resolved by binding arbitration by a panel of three arbitrators under the rules or the American Arbitration Association. The arbitration will take place in Houston, TX.
- SEVERABILITY If any provision or part thereof of this Contract shall be held to be invalid, void, or of no effect for any reason, such holding shall not be deemed to affect the validity of the remaining provisions of this Contract which can be given effect, without the invalid provision or part thereof, and to this end, the provisions of this Contract are declared to be severeble. Customer and Halliburton agree that any provision of this Contract that is unenforceable or void under applicable law will be modified to achieve the intent of the parties hereunder to the greatest extent allowed by applicable lew
- MODIFICATIONS Customer agrees that Heliburton shall not be bound by any modifications to this Contract, except where such modification is made in writing by a duly authorized executive officer of Halliburton. Requests for modifications should be directed to the Vice President Legal, 10200 Belleire Blvd, Houston, TX 77072-5299.

I HAVE READ AND UNDERSTAND THIS WORK ORDER CONTRACT WINCH CONTAINS RELEASE AND INDEMNITY LANGUAGE WHICH CUSTOMER ACKNOWLEDGES IS CONSPICUOUS AND AFFORDS FAIR AND ADEQUATE NOTICE AND I REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT. I AM SIGNING THIS WORK ORDER CONTRACT WITH THE UNDERSTANDING THAT ITS TERMS AND CONDITIONS WILL NOT APPLY TO THE EXTENT THEY CONFLICT WITH TERMS AND CONDITIONS OF A SIGNED MASTER SERVICE CONTRACT BETWEEN THE PARTIES.

**CUSTOMER Authorized Signatory** Date

Customer Acceptance of Terms and Conditions, Materials and Services



# Cementing Job Summary

Sold To #: 🖡	189	OUDIV BEATOF	₹Y	St	tp To	#: 2841	618		Q	uote #:					Sales	s Orde	r #: 803	344	43
Customer: /								3	Cı	ıstomer	R	ep: Alm	anza	a, Abra	aham				
Well Name:	Bird	1					Well	#: 21-2	2					API/U	WI #:	15-187	-21192		
Field: ARRO	OYC	)	C	ity (S	SAP):	OHNSC	N	Cou	nty/P	arish: S	tan	nton			State	: Kans	as		
Legal Descr	ipti	on: Sec	tion 2	21 To	wnshi	29S R	ange	41W											
Lat: N 37.51					30 min					ng: E 1	01.	811 de	g. O	R E 10	01 deg	g. 48 m	in. 38.8	308	secs.
Contractor:						Rig/Pla	atforr	n Nan	ne/Nu	m: 22									
Job Purpose					Casin									_					
Well Type: [										duction (	Cas	sing							
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HES Emp	Na		хр Н		mp #			Name	<b>e</b>	Exp Hrs		mp #		HES E			Exp H		Emp #
CARRILLO, EDUARDO C	arril		5.5	3/	1263	LOPEZ	, JUA			5.5	18	98514		DRIGU andro	EZ, EL	JGAR ———	5.5		442125
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Date	On	Locatio	on (	Opera	tina	Date		On Lo			erat	ting		Date	Q	n Locat	ion	On	erating
	Hou					ours	Hours			•			Hours	,		ours			
03-15-2011		5.5		3.5	5									-4					
TOTAL		<del>.</del>							Tota	l is the su	um	of each	colur		,- <del>*</del>				
		<u></u>		Jo	b								<del></del>		b Tim	<del></del>	,		
Formation Na Formation De		(MAD) T	ор			Bott		<del></del>				<b>.</b>	15	- Mar	_				e Zone
Form Type	pui	(MD) IT	op		BHST		iom	13	5 degl	Called On Lo		<del></del>	<del></del>	- Mar		11:			CST
Job depth MD	)	5645	<del>965.</del> f	t		Depth TV	D.576		355+ ft				<del></del>	- Mar		19:			CST
Water Depth						t Above			5. ft	Job C	om	pleted	15	- Mar	- 2011	20:			CST
Perforation De	epth	(MD) Fr	om			То				Depar	tec	Loc	15	- Mar	- 2011	21:	55	(	CST
		T				T			ell Da					<del></del>					
Description	n	New / Used	1	ax sure	Size in	ID in	Wei	-		Thread		G	rade	_   ·	p MD	Botto:			Botton TVD
		Oseu	1.	sig	ın	in.	IDII	1/11							ft	ft	TV	- 1	ft
7 7/8" Product Hole	ion			9		7.875								16	550.		- 56		
5 1/2" Product Casing		n			5.5	4.95	15			RD (ST&C			J-55				- 565	14	
8 5/8" Surface Casing	: .	Unknow n			8.625	8.097	24	-		RD (ST&C	•	Ì	l-55			1650			
					Deca-!		ales/	Kenta	₩3.~ F	arty (H	ES)				<u>~</u>	. 41.			
HOE,GID,5-1	/2 AL	30		i	Descrip	DUON						Qt	/ Q1	y uom EA	Dep	วเท	Su	ppli	er
LUG ASSY,3			NVI	5 1/2 (	asg							1	+	EA	<del> </del>		····-		
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ENTRALIZER						•						20	+-	EA	<del>                                     </del>				
LAMP - LIMIT									·····			1		EA					
IT,HALL WEL	D-Δ				<del> </del>							1		EA	1				

Summit Version: 7.20.130

# Cementing Job Summary

							Tools a	and Acc	essories	3						and the same of th
Ту	/pe	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Ī	Туре	Size	Q	ty	Make
Guide	Shoe					Packer					Top		5 1/2			h
Float	Shoe					Bridge Plug					·	om Plug	TO THE PARTY WE THEN STONE THE THE TAKE AND			
Float	Collar					Retainer				and the second s		plug set				
	Float											Containe	r 5½	1		h
Stage	Tool										Cent	ralizers	5 1/2	2	0	h
			· •					ineou <b>s</b> l	<b>Materi</b> al:							
	g Agt		1	Coi		Surfac	tant		Con	<b>:</b>	Acid	Туре		Qty	Cor	nc 9
<b>Freatn</b>	nent Fl	d	<u> </u>	Cor	10	Inhibit	or		Cond	3	Sand	1 Type		Size	Qty	,
							F	luid Dat	ta							
S	tage/P	lug #:	1												· · · · · · · · · · · · · · · · · · ·	
Fluid	Sta	ge Typ	е		Flu	id Name	********	Qty	Qty	Mix	ing	Yield	Mix Fluid	Rate	Tota	l Mix
#					•				uon	1 _		ft3/sk	Gal/sk	bbl/min		
										lbm						
1		r Pre-F						10.0	0 bbl	8.	33	.0	.0	6.0		
2	Scave	enger	F	OZ PRE	EMIUM 5	0/50 - SB <b>M</b> (*	2302)	25.0	sack	s 10	.5	4.22	25.99	6.0	25.	.99
	Slurry	· · · · · · · · · · · · · · · · · · ·		\ o=.	1 00 50									<u> </u>		
	. 5 %					LB BAG (101										
	5 %					ORIDE 5% (		85)								
	8 lb					K (100003700	<u></u>					<del>" - " - " - " - " - " - " - " - " - " -</del>				
	0.5					D LB (100003	646)									
	25.992			RESH V												
3	Tail S		P	OZ PRE	MIUM 5	0/50 - SB <b>M</b> (1	2302)	230.0	0 sack	в 13	.9	1.52	6.16	6.0	6.1	16
	5 %					LB BAG (101								·		
	5 %	6	P	OTASS	UM CHL	ORIDE 5% (1	000015	85)								
	8 lbr	m .	G	ILSONI	TE, BULI	< (100003700	)								• • • • • • • • • • • • • • • • • • • •	
	0.5	%	Н	ALAD(R	)-322, 50	LB (100003	346)									
	6.162			RESH V	VATER										· · · · · · · · · · · · · · · · · · ·	
4	4% CL	AFIX 3	3					139.0	0 bbl	8.3	3	.0	.0	6.0		
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	).125 ga			LAYFIX	3, 5 GAL	PAIL (10181	0105)									
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	ement		134		ln: Insta	nt	Lost	Returns	0	Ceme	nt Sl	ırry	81	Pad	T T	
	Cemer		2590	5 Min			Ceme	ent Retur	ns 0	Actua	l Dis	placemen	t 134	Treatm	ent	
rac G	radient			15 Mi	n		Space	ers	10	Load	and E	Breakdow	n	Total J	ob	225
<del></del>								Rates								
	ating 3				Mixing		3	Displ	acement	:	3		Avg. Jo	b	3	
	ent Left		<del></del>	mount			e Joint									***
Erac 🛭	ing # 1	ര	ID		rac ring	#20	ID	-	ling # 3 @	_	ID	T	ac Ring #		ID	<del></del>

# Cementing Job Log

The Road to Excellence Starts with Safety

Sold To #: 300466 | Ship To #: 2841618 | Quote #: | Sales Order #: 8034443 |
Customer: ANADARKO PETROLEUM CORP - EBUS | Customer Rep: Almanza, Abraham |
Well Name: Bird | Well #: 21-2 | API/UWI #: 15-187-21192 |
Field: ARROYO | City (SAP): JOHNSON | County/Parish: Stanton | State: Kansas |
Legal Description: Section 21 | Township 29S | Range 41W

 Lat: N 37.514 deg. OR N 37 deg. 30 min. 49.392 secs.
 Long: E 101.811 deg. OR E 101 deg. 48 min. 38.808 secs.

 Contractor: MURFIN DRILLING
 Rig/Platform Name/Num: 22

Job Purpose: Cement Production Casing Ticket Amount:

Well Type: Development Well Job Type: Cement Production Casing

Sales Person: HESTON, MYRON Srvc Supervisor: CARRILLO, MBU ID Emp #: 371263

EDUARDO

EDUARDO								
Activity Description	Date/Time	Cht	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	• •
Call Out	03/15/2011 11:30							Dispach call out cement crew for Anadarko Job Bird # 21-2 5 1/2 Production
Pre-Convoy Safety Meeting	03/15/2011 12:30		,		·		·	Discuss Route to take and Hazards on the road and all stops pland
Arrive At Loc	03/15/2011 15:00							
Assessment Of Location Safety Meeting Other	03/15/2011 15:01 03/15/2011							Rig was ready to run casing waithing on float equipment waithing on halliburton. I was not informed to come deliver cirulating iron or float equipment last night or by e-mail at all. Customer was upset.
	15:10							Casing runing casing in hole
Wait on Customer or Customer Sub-Contractor Equip	03/15/2011 15:11							Waiting on casing crew to get dune
Pre-Rig Up Safety Meeting	03/15/2011 15:20				·			Discused all red zones and spoting in equipment have spoter at all times were to run iron and get water from.
Rig-Up Completed	03/15/2011 16:20							

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8034443

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# Cementing Job Log

Activity Description	Date/Time	Cht	Rate bbi/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Other	03/15/2011 16:25							Got numbers from customer rep Abraham Almanza Have Coustomer Sing Work
Dro. Joh Cofety Marstin								Order Contract // TD=5655//TP=5655//SJ= 46.20//Disp = 134 bbls. CAP 51/2 = .0238 // V&F OF 7 7/8 OH = 32.4066/. 5655 - 46.20 = 5608.9 = 134 BBLS DISP
Pre-Job Safety Meeting	03/15/2011 18:50							Discused job steps with all have rig crew sing safte sheet discused volums and pressers and how fast to pump job with company rep.
Start Job	03/15/2011 19:17							
Test Lines	03/15/2011 19:18						4000. 0	Test Lines @ 4000 psi heald relased prusser on the truck
Pump Spacer 1	03/15/2011 19:20		4	10	10		250.0	Pumped 10 bbls fresh water spacer
Pump Lead Cement	03/15/2011 19:21		4	19	29		300.0	Pumped 25 sks Scavenger cmt @ 10.5 ppg = 19 bbls cmt = 105.5 CU/FT
Pump Tail Cement	03/15/2011 19:26		3	62	91		200.0	Pumped 230 sks cmt @ 13.9 ppg = 62 bbls cmt = 349.6 CU/FT
Shutdown	03/15/2011 19:47							0.000001
Drop Top Plug	03/15/2011 19:47							Drop Top Plug
Pump Displacement	03/15/2011 19:53		6	134	225		100.0	Pumped Fresh water 134 bbls pumped at 6 bpm till we reach cmt and then slow down to 3 BPM Per coustomer rep.
Displ Reached Cmnt	03/15/2011 20:11		3	134	225		300.0	Displacment Reach cmt @ 85 bbls pumped slowd down to 3 bpm
Slow Rate	03/15/2011 20:26		2	134	225		850.0	Slowd down last 20 bbls to 2 bpm presser at 850
Bump Plug	03/15/2011 20:31						1200. 0	Went 500 Over Bumped at 1200 took to 1715 psi

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# Cementing Job Log

Activity Description	Date/Time	Cht	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Check Floats	03/15/2011 20:34	·						Floats held 2 bbl Back
End Job	03/15/2011 20:35							
Pre-Rig Down Safety Meeting	03/15/2011 20:40	·						Discuss Pinchpoint and Triping Hazards
Rig-Down Completed	03/15/2011 21:40							
Other	03/15/2011 21:54		,					THANK YOU FOR CHOOSING HALLIBURTON
Crew Leave Location	03/15/2011 21:55							

Sold To #: 300466

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