

# CEMENT JOB REPORT



<b>CUSTOMER</b> CARRIZO OIL & GAS INC XML			<b>DATE</b> 24-FEB-13		<b>F.R. #</b> 1001967989			<b>SERV. SUPV.</b> STEVEN S ISCHE						
<b>LEASE &amp; WELL NAME</b> PERGAMOS 4-3-7-60 - API 05123363370000				<b>LOCATION</b> 3-7N-60W				<b>COUNTY-PARISH-BLOCK</b> Weld Colorado						
<b>DISTRICT</b> Brighton				<b>DRILLING CONTRACTOR RIG #</b> Xtreme Coil #17				<b>TYPE OF JOB</b> Intermediate						
<b>SIZE &amp; TYPE OF PLUGS</b>		<b>LIST-CSG-HARDWARE</b>			<b>MECHANICAL BARRIERS</b>			<b>MD</b>	<b>TVD</b>	<b>HANGER TYPES</b>		<b>MD</b>	<b>TVD</b>	
Cement Plug, Rubber, Bottom 7 in		Float Collar, Al Flap, 7 - 8rd												
Cement Plug, Rubber, Top 7 in		Float Shoe 7 - 8rd												
<b>MATERIALS FURNISHED BY BJ</b>				<b>LAB REPORT NO.</b>				<b>PHYSICAL SLURRY PROPERTIES</b>						
								<b>SACKS OF CEMENT</b>	<b>SLURRY WGT PPG</b>	<b>SLURRY YLD FT<sup>3</sup></b>	<b>WATER GPS</b>	<b>PUMP TIME HR:MIN</b>	<b>Bbl SLURRY</b>	<b>Bbl MIX WATER</b>
Drilling Mud + Biocide								8.9				68		
Fresh Water								8.33				10		
SealBond Spacer								8.4				40		
Premium Lite Cement + adds				411				12.5	1.94	10.65	03:30	142.14	104.18	
50/50 (Poz/Class G) + adds				141				13.5	1.71	8.30	03:00	43.01	27.87	
Drilling Mud								8.9				251.33		
<b>Available Mix Water</b> 400		<b>Bbl.</b>		<b>Available Displ. Fluid</b> 500		<b>Bbl.</b>		<b>TOTAL</b>		554.48	132.04			
<b>HOLE</b>			<b>TBG-CSG-D.P.</b>							<b>COLLAR DEPTHS</b>				
<b>SIZE</b>	<b>% EXCESS</b>	<b>DEPTH</b>	<b>ID</b>	<b>OD</b>	<b>WGT.</b>	<b>TYPE</b>	<b>MD</b>	<b>TVD</b>	<b>GRADE</b>	<b>SHOE</b>	<b>FLOAT</b>	<b>STAGE</b>		
8.75	0	6464	6.366	7	26	CSG	6374	6374	P-110	6281	6193	0		
<b>LAST CASING</b>			<b>PKR-CMT RET-BR PL-LINER</b>				<b>PERF. DEPTH</b>		<b>TOP CONN</b>		<b>WELL FLUID</b>			
<b>ID</b>	<b>OD</b>	<b>WGT</b>	<b>TYPE</b>	<b>MD</b>	<b>TVD</b>	<b>BRAND &amp; TYPE</b>		<b>DEPTH</b>	<b>TOP</b>	<b>BTM</b>	<b>SIZE</b>	<b>THREAD</b>	<b>TYPE</b>	<b>WGT.</b>
8.9	9.63	36	CSG	1396	1396				0	0	7	8RD	WATER BASED	9.6
<b>DISPL. VOLUME</b>		<b>DISPL. FLUID</b>		<b>CAL. PSI</b>	<b>CAL. MAX PSI</b>	<b>OP. MAX</b>	<b>MAX TBG PSI</b>		<b>MAX CSG PSI</b>		<b>MIX WATER</b>			
<b>VOLUME</b>	<b>UOM</b>	<b>TYPE</b>		<b>WGT.</b>	<b>BUMP PLUG</b>	<b>TO REV.</b>	<b>SQ. PSI</b>	<b>RATED</b>	<b>Operator</b>	<b>RATED</b>	<b>Operator</b>			
240.3	BBLS	Drilling Mud		8.9	1007	0	0	0	0	9960	7968	rig		
<b>Circulation Prior to Job</b>														
Circulated Well: Rig <input checked="" type="checkbox"/> BJ <input type="checkbox"/>				Circulation Time: 1				Circulation Rate: 7 BPM						
Mud Density In: 9.6 LBS/GAL Mud Density Out: 9.6 LBS/GAL				PV & YP Mud In: 13				PV & YP Mud Out: 13						
Gas Present: NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> Units: 0				Solids Present at End of Circulation: NO <input checked="" type="checkbox"/> YES <input type="checkbox"/>										
<b>Displacement And Mud Removal</b>														
Displaced By: Rig <input type="checkbox"/> BJ <input checked="" type="checkbox"/>				Amount Bled Back After Job: 2 BBLS										
Returns During Job: <input type="checkbox"/> NONE <input type="checkbox"/> PARTIAL <input checked="" type="checkbox"/> FULL				Method Used to Verify Returns: visual										
Cement Returns at Surface: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				Were Returns Planned at Surface: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES										
Pipe Movement: <input type="checkbox"/> ROTATION <input type="checkbox"/> RECIPROCATION <input checked="" type="checkbox"/> NONE <input type="checkbox"/> UNABLE DUE TO STUCK PIPE														
Centralizers: <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES				Quantity: 50				Type: <input type="checkbox"/> BOW <input type="checkbox"/> RIGID						
Job Pumped Through: <input type="checkbox"/> CHOKE MANIFOLD <input type="checkbox"/> SQUEEZE MANIFOLD <input checked="" type="checkbox"/> MANIFOLD <input type="checkbox"/> NO MANIFOLD														
<b>Plugs</b>														
Number of Attempts by BJ: 0				Competition: 1				Wiper Balls Used: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES Quantity:						
Plug Catcher Used: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES				Parabow Used: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES										
Was There a Bottom: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES				Top of Plug: 0 FT				Bottom of Plug: 0 FT						
<b>Squeezes (Update Original Treatment Report for Primary Job)</b>														
BLOCK SQUEEZE <input type="checkbox"/>				SHOE SQUEEZE <input type="checkbox"/>				TOP OF LINER SQUEEZE <input type="checkbox"/>				PLANNED <input type="checkbox"/>	UNPLANNED <input type="checkbox"/>	
Liner Packer: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES				Bond Log: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES				PSI Applied: 0		Fluid Weight: 0 LBS/GAL				
<b>Casing Test (Update Original Treatment Report for Primary Job)</b>														
Casing Test Pressure: 1538 PSI				With 9.6 LBS/GAL Mud				Time Held: 00 Hours 30 Minutes						
<b>EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING:</b>														

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## 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

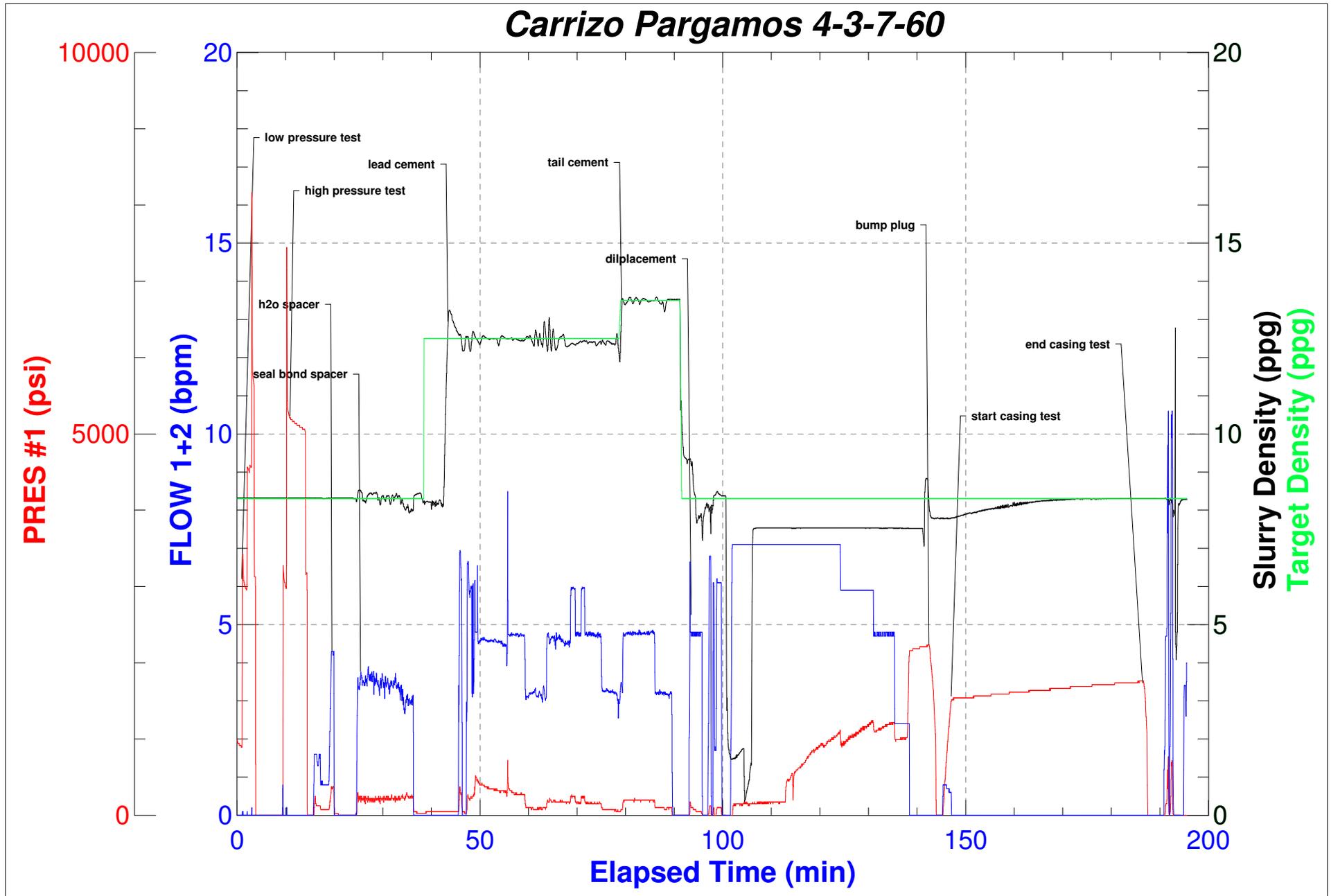
Problems During Job (I.E. Lost Returns, Equipment Failure, Bulk Delivery, Foaming, ETC)  
none

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

PRESSURE/RATE DETAIL						EXPLANATION	
TIME HR:MIN.	PRESSURE - PSI		RATE BPM	Bbl. FLUID PUMPED	FLUID TYPE	SAFETY MEETING: BJ CREW <input checked="" type="checkbox"/> CO. REP. <input checked="" type="checkbox"/>	
	PIPE	ANNULUS				TEST LINES	5000 PSI
						CIRCULATING WELL - RIG <input checked="" type="checkbox"/> BJ <input type="checkbox"/>	
16:45						arrive at location	
18:00						spot trucks	
18:08						pre rig up safty meating	
22:05						safty meating with crew	
22:54	5100					pressure test had to replace 0 ring	
23:02	376		4.8	10	WATER	water spacer	
23:15	385		4.8	40	SEAL BON	seal bond spacer	
23:40	145		4.6	145	12.5 CEME	batch up and send lead slurry	
00:12	199		4.8	42	13.5 CEME	tail slurry	
00:23						drop plug	
00:27	171		7	170	MUD	displacement	
00:57	968		6	40	MUD	rate change	
01:05	1092		4.8	25	MUD	rate change	
01:10	1182		2.4	7	MUD	rate change	
01:13	2159					bump plug	
01:16						bleed off 1 bbl back	
01:22	1538					start casing test	
01:56	1737					end casing test	
03:00						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:
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	2159	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	20	477	0	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	

# Carrizo Pargamos 4-3-7-60





**CEMENTING LABORATORY REPORT**  
Lab Report #C02-141-13

<b>COMPANY :</b>	Carrizo Oil & Gas Inc	<b>DATE:</b>	February 24, 2013
<b>WELL NAME:</b>	Pergamos 4-3-7-60	<b>LOCATION:</b>	Weld County, Colorado
<b>DISTRICT:</b>	Brighton	<b>TYPE JOB:</b>	Intermediate
<b>API #</b>	05-123-36337-0000	<b>TOC(md):</b>	
<b>DEPTH MD(ft):</b>	7 ft	<b>BHST(°F):</b>	205 °F
<b>CASING SIZE("):</b>		<b>BHCT(°F):</b>	134 °F
<b>TUBING SIZE("):</b>	8 3/4 in	<b>BHSqT(°F):</b>	167 °F
<b>HOLE SIZE("):</b>		<b>TOL (°F):</b>	Static      Circ

**SLURRY DESIGN DATA**

#1	Lead Slurry : Premium Lite Cement + 6% Bentonite + 0.4% FL-52 + 0.25% Cello Flake
#2	Tail Slurry : (50:50) Poz:Class G Cement + 20% Silica Flour + 3% Bentonite + 0.4% FL-52 + 0.1% Sodium Metasilicate
#3	

SLURRY PROPERTIES		#1	#2	#3
Density : ppg		12.50	13.50	
Yield :cu.ft./sk.		1.94	1.71	
Mixing Water: gal/sk.		10.65	8.30	
Water Type:		Fresh	Fresh	
Testing Temperature :		133 °F	133 °F	
Thickening Time: hrs:mins.		7:21	7:23	
Free Water: mls.				
Fluid Loss:ml/30min				
Compressive Strength:				
	hrs.			
	hrs.			
Rheologies	RPM			
	300			
	200			
	100			
	6			
	3			
	600			
	PV			
	YP			
Gel Strength : #/100sq.ft.	10 sec.			
	10 min.			

**REMARKS :**

**COMMENTS :** The above data is supplied solely for informational purposes and BHI makes no guarantees or warranties, either express or implied, with respect to the accuracy or use of this data. All product warranties and guarantees shall be governed by the standard contract terms at the time of sale.



CUSTOMER (COMPANY NAME) CARRIZO OIL & GAS INC XML					CREDIT APPROVAL NO.		PURCHASE ORDER NO. C212N6160-110		CUSTOMER NUMBER 0040003338 - 0040139		INVOICE NUMBER 1857984					
MAIL INVOICE TO		STREET OR BOX NUMBER 500 DALLAS STREET, SUITE 2499				CITY Houston		STATE Texas		ZIP CODE 77063						
DATE WORK COMPLETED	MO. 02	DAY 24	YEAR 2013	BHI REPRESENTATIVE STEVEN S ISCHE		WELL API NO 05123363370000		WELL TYPE : New Well								
DISTRICT BJS, BRIGHTON				JOB DEPTH (ft) 6,369			WELL CLASS : Oil									
WELL NAME AND NUMBER PERGAMOS 4-3-7-60				TD WELL DEPTH (ft) 6,374			GAS USED ON JOB : No Gas									
WELL		LEGAL DESCRIPTION 3-7N-60W			COUNTY/PARISH Weld		STATE Colorado		JOB TYPE CODE : Intermediate							
PRODUCT CODE	DESCRIPTION					UNIT OF MEASURE	QUANTITY	LIST PRICE UNIT	GROSS AMOUNT	% DISC.	NET AMOUNT					
100021	Class G Cement					sacks	71	31.800	2,257.80	65%	790.23					
100112	Calcium Chloride					lbs	300	1.290	387.00	100%	0.00					
100120	Bentonite					lbs	2502	0.530	1,326.06	65%	464.12					
100121	Silica Flour					lbs	2369	0.590	1,397.71	65%	489.20					
100275	Sodium Metasilicate					lbs	12	4.100	49.20	65%	17.22					
100295	Cello Flake					lbs	90	5.100	459.00	65%	160.65					
100317	Poz (Fly Ash)					sacks	71	14.200	1,008.20	65%	352.87					
100404	Sodium Chloride					lbs	100	0.520	52.00	100%	0.00					
398224	Premium Lite Cement					sacks	411	27.650	11,364.15	65%	3,977.45					
398416	SealBond Spacer (w/ 30lb pail)					bbls	40	277.200	11,088.00	65%	3,880.80					
488015	FL-52					lbs	192	26.900	5,164.80	65%	1,807.68					
488252	Magnacide 575					gals	1	307.000	307.00	65%	107.45					
488521	SealBond Plus					lbs	600	4.730	2,838.00	65%	993.30					
499632	Granulated Sugar					lbs	50	3.840	192.00	65%	67.20					
SUB-TOTAL FOR Product Material									37,890.92	65.41%	13,108.17					
A152	Personnel Per Diem Chrg - Cement Svc					ea	1	210.000	210.00	0%	210.00					
M100	Bulk Materials Blending Charge					cu ft	689	5.450	3,755.05	65%	1,314.27					
R798	Automatic Density System					job	1	1,990.000	1,990.00	65%	696.50					
ARRIVE LOCATION :	MO. 02	DAY 24	YEAR 2013	TIME 16:43	SERVICE ORDER: I AUTHORIZE WORK TO BEGIN PER SERVICE INSTRUCTIONS IN ACCORDANCE WITH THE TERMS AND CONDITIONS PRINTED ON THE FOLLOWING PAGES OF THIS FORM AND REPRESENT THAT I HAVE AUTHORITY TO ACCEPT AND SIGN THIS ORDER.				SERVICE RECEIPT: I CERTIFY THAT THE MATERIALS AND SERVICES LISTED WERE RECEIVED AND ALL SERVICES PERFORMED IN A WORKMANLIKE MANNER.							
CUSTOMER REP. Rob Thomas													CUSTOMER AUTHORIZED AGENT <b>X</b>			
SEE NEXT PAGES FOR GENERAL TERMS AND CONDITIONS													BHI APPROVED <b>X</b>			
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PRODUCT CODE	DESCRIPTION				UNIT OF MEASURE	QUANTITY	LIST PRICE UNIT	GROSS AMOUNT	% DISC.	NET AMOUNT		
	SUB-TOTAL FOR Service Charges							5,955.05	62.71%	2,220.77		
F065A	Cement Pumping, 6001 - 7000 ft				6hrs	1	8,300.000	8,300.00	65%	2,905.00		
F090	Fuel per pump charge - cement				pump/hr	12	70.250	843.00	0%	843.00		
J050	Cement Head				job	1	830.000	830.00	65%	290.50		
J390	Mileage, Heavy Vehicle				miles	160	11.850	1,896.00	65%	663.60		
J391	Mileage, Auto, Pick-Up or Treating Van				miles	160	6.700	1,072.00	65%	375.20		
	SUB-TOTAL FOR Equipment							12,941.00	60.77%	5,077.30		
J401	Bulk Delivery, Dry Products				ton-mi	2181	3.940	8,593.14	65%	3,007.60		
	SUB-TOTAL FOR Freight/Delivery Charges							8,593.14	65.00%	3,007.60		
	FIELD ESTIMATE							65,380.11	64.19%	23,413.84		
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