



# Job Summary

Ticket Number	Ticket Date
TN# FL2725	12/5/2017

COUNTY	COMPANY	API Number
Weld	Extraction Oil and Gas	05-123-19818
WELL NAME	RIG	JOB TYPE
King HA 23-10	Brigade #11	Nio Plug
SURFACE WELL LOCATION	O-TEX Field Supervisor	CUSTOMER REP
NESW 10 5N65W	Cheal, Sam	Craig East

EMPLOYEES
Field, Tony
Phillips, James

WELL PROFILE			
Max Treating Pressure (psi):	1500	Bottom Hole Static Temperature (°F):	0
Bottom Hole Circulating Temperature (°F):		Well Type:	Oil

## Open Hole

1	Size (in)	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
	N/A				

## Casing/Tubing/Drill Pipe

Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Production	4 1/2	11.6		0	6725	0	6725
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)
Tubing	2 3/8	4.7		0	6725	0	6725
Type	Size (in)	Weight (lb/ft)	Grade	TMD From (ft)	TMD to (ft)	TVD From (Ft)	TVD to (Ft)

## CEMENT DATA

Stage 1:	From Depth (ft):	6293	To Depth (ft):	6725
Type: Nio Plug	Volume (sacks):	25	Volume (bbls):	6.7

Cement & Additives:	Density (ppg)	Yield (ft³/sk)	Water Req.
100% Thermal 35+0.3% ASM-3+0.3% CFR-2	15.8	1.52	6.25

## SUMMARY

Preflushes:	5 bbls of	Fresh Water	Calculated Displacement (bbl):	24.3	
	bbls of		Actual Displacement (bbl):	24.3	
	bbls of				
Total Preflush/Spacer Volume (bbl):	5		Plug Bump (Y/N):	N/A	Bump Pressure (psi): N/A
Total Slurry Volume (bbl):	6.7		Lost Returns (Y/N):	No	(if Y, when)
Total Fluid Pumped	36				
Returns to Surface:	Mud				

Job Notes (fluids pumped / procedures / tools / etc.):

**Nio Plug** - Pumped 5bbls fresh water to establish circulation, mixed / pumped 6.7bbls of cement @ 15.8ppg, displaced with fresh water to balance. Estimated cement coverage **6,293 - 6,725ft** in 4 1/2" production casing. CIBP set @ **6,725ft**. Pumped job as per program / customers request. Detailed discription of events in Job Log.

Customer Representative Signature:

**Thank You For Using**  
**O-TEX Cementing**



[illegible]



TN #	FL2725
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Service Date:	12/5/2017	Well Name:	King HA 23-10	Job Type:	Nio Plug
Customer:	Extraction Oil and Gas				
Address:	370 17th Street Suite 5300	County:	Weld	Service Supervisor:	Cheal, Sam
City:	Denver	State:	Colorado		
St:	CO 80202	API #	05-123-19818		
Customer Rep:	Craig East	AFE #	17-237	Pump #1	740017
				Pump #2	N/A

[illegible]

**I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMERS AGENT.**

**Customer Authorized Agent:** \_\_\_\_\_

**DISCLAIMER OF LIABILITY:** With respect to this report, neither C&J Energy Services nor any of their employees, makes any warranty, express or implied, including the warranties of merchantability and fitness for a particular purpose, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.



## SERVICE ORDER CONTRACT

Customer: **Extraction Oil and Gas**

Ticket Number: **FL2725**

Lease & Well Number: **King HA 23-10**

Date: **12/5/2017**

In consideration of the services and materials to be sold and/or provided by C&J Spec-Rent Services, Inc. ("C&J") under this service order, the above-named customer ("Customer") agrees that:

The services and materials quoted under this service order are based on the best information available at the time that this quotation was prepared. When the actual work is performed the amounts and types of services and materials may require adjustments any pre-quoted items in service order. Actual amounts and types of services and materials will be charged at the time the work is performed. Unit prices from C&J's current price list and discounts quoted are applied as per this service order, unless otherwise noted. Except as otherwise provided for herein, this service order is only for the materials and services quoted hereunder.

The prices and discounts reflected herein are based on C&J being awarded the work on a first call basis. Prices may be adjusted if the work is not on a first call basis. Prices are valid for a period of thirty (30) days following this quotation. Taxes, if any, will be applied to the actual invoice.

**All services and materials sold and/or provided by C&J are subject to the terms of C&J's "Contractor's Standard Terms and Conditions" document (the "Terms and Conditions"), which contains provisions concerning risk allocation and warranties associated with C&J's services. The parties hereby agree that all materials and services will be furnished pursuant to the Terms and Conditions and this service order. A copy of the Terms and Conditions is attached to this proposal.**

**BY SIGNING IN THE SPACE PROVIDED BELOW, CUSTOMER (I) ACKNOWLEDGES RECEIPT OF A COPY OF THE TERMS AND CONDITIONS, AND (II) AGREES THAT THE TERMS AND CONDITIONS SHALL GOVERN ALL SERVICES AND MATERIALS SOLD AND/OR PROVIDED HEREUNDER. THE UNDERSIGNED FURTHER WARRANTS AND REPRESENTS THAT THE UNDERSIGNED IS AUTHORIZED TO EXECUTE THIS SERVICE ORDER AS CUSTOMER'S AGENT.**

**I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.**

**Customer Authorized Agent:** \_\_\_\_\_



## Field Cementing Water Analysis

Company: Extraction Oil and Gas  
 Well: King HA 23-10

Test Date: 12/5/2017  
 Ticket Number: FL2725

Ion	Sample Volume	Titer	Factor	Concentration	Units	Limit
pH				7		6 - 8
Calcium	50	190	0.801	152.19	mg/l	<300
Total Hardness				250	mg/l	<600
Chlorides				92	mg/l	<500
Alkalinity				350	mg/l CaCO <sup>3</sup>	<600
Slurry Temperature				84	°F	50-80°F

Water Analysis Limits		
	Limits	Potential Impact of Excess
pH	6 - 8	Accelerate or Retard Set Time, Short & Long Term Stability Issues
Calcium	<300	Accelerate Set Times and Higher Mixing Viscosities
Total Hardness	<600	Accelerate or Retard Set Time and Higher Mixing Viscosities
Chlorides	<500	Accelerate Set Time, Higher Mixing Visc, Interfere with fluid loss chemical
Alkalinity	<600	Accelerate or Retard Set Time, Lower Compressive Strength, Higher Visc
Slurry Temperature	50-80°F	Blend will not perform as designed

O-Tex Supervisor Signature: \_\_\_\_\_

Company Supervisor Signature: \_\_\_\_\_

<b>Job Safety Analysis Worksheet</b>			DATE:	12/5/2017
LEASE NAME AND JOB TYPE:	King HA 23-10	Nio Plug	JOB NUMBER:	FL2725
EMPLOYEE NAME AND JOB TITLE:	Cheal, Sam	Supervisor	<b>"HAS YOUR IRON BEEN INSPECTED RECENTLY?"</b>	
<b>PERSONAL PROTECTIVE EQUIPMENT RECOMMENDED OR REQUIRED:</b>				
Hard Hat - Safety Toe Shoes/Boots - Safety Glasses - FR Apparel (worn on outer most layer) - Gloves - Hearing Protection				
SEQUENCE OF BASIC JOB STEPS	POTENTIAL ACCIDENTS OR HAZARDS	RECOMMENDED SAFE JOB PROCEDURES		
LOCATION HAZARD ASSESSMENT / SITE WALK AROUND	Slips, Trips, Falls - Driving or walking obstructions - Environmental conditions (Ice, snow, mud, water, etc.) - Emergency evacuation route.	Hold Pre Rig Up Safety meeting to discuss hazards. Be cautious of your surroundings. Avoid cluttered work/walk areas. Practice good "house keeping" in work areas. Keep walking and emergency routes clear of obstruction.		
SPOT EQUIPMENT	Over head obstructions - Running into or over unseen persons/items - Blind backing of equipment - Improper equipment placement	ALWAYS use designated spotters when moving any vehicle. Do not move equipment before a walk around. Do not spot equipment near high risk areas. Do not obstruct evacuation route or road ways. Remember to chock vehicle wheels and set fire extinguishers one equipment is parked.		
RIGGING UP IRON AND HOSES	Slips, trips, falls - Pinching, smashing, or crushing of body parts - Lifting injuries - Un safe condition of, or incorrect use of tools.	Keep work area as clean as reasonable. Avoid carrying hardware through hazardous walking conditions. ALWAYS team lift to avoid un necessary strains. Be continuously aware of pinch points/body placement. Use the proper tool for the job. Do not use excessively worn or damaged tools.		
RIGGING UP IRON AND HOSES (Cont'd)	Iron inspection up to date	Inspect tag on iron to assure the inspection date is within the last 12 months		
RAISING AND LOWERING HARDWARE AND EQUIPMENT TO RIG FLOOR	Falling or unsecured loads - Pinching or crushing injury - Damaged lifting equipment	Do not walk or work under any elevated load. Always inspect lifting straps, cables, hooks, etc. before and after use. Discard damaged items. Use a tag line when possible to control movement of lifted items. Be aware of body placement/pinch points in relation to moving lifted objects. Always ensure load is secure. Never leave lifted load unattended.		
CASING / WELL CONNECTIONS	Body placement - Congested work area - Raising/lowering items - Well control conditions	If working on rig floor, be cautious of slippery conditions (drilling mud, ice, etc.). Before removing any casing/well connections, ensure all pressure is released. When making a casing connection, watch pinch points. Use extra care when hoisting cement head onto casing. When working in cellar, have a spotter. Obey the same rules as on floor. Be cautious of poor footing, difficult walking or standing conditions.		
PRE JOB SAFETY MEETING	All potential job related hazards	Conduct a pre job safety meeting with rig crew and any other 3rd party contractors on location involved with the task at hand. Discuss operation procedures and safety hazards involved with pressure pumping operations. Set up a contingency plan incase of emergency, including muster points, first aid, safety vehicles, nearest hospital, safety contacts, etc.		
PRESSURE TESTING LINES AND HARDWARE	High Pressure - Loose connections - Lines separating - Hardware blow outs	Ensure ALL personnel are aware of testing operations. Clear everyone from working area. Keep open and clear communication while testing. Before beginning test, move all personnel to a safe zone at reasonable distance from iron and hardware. Do not attempt to access or repair any issues while equipment is under pressure. Confirm release of ALL pressure before continuing any operations.		
FLUID PUMPING	Blow outs - Hardware failure - Improper valve operations - Leaks or spills	Always be aware of your self and those around you. Do not interact with the iron while pumps are in operation. If you see an issue, make all personnel aware and stop operations before attempting corrections. Double check all valve positions and function. Be aware of what is being pumped and its direction of flow. Report and identify any spills immediately.		
WASHING UP / FLUID DISPOSAL	Loose connections - Lines blowing out of wash up tank - leaks/spills - Pumping into wrong disposal container - Over flowing pits	Have someone visually inspect lines and hardware before and during clean up. Check valve placement and fluid flow to ensure all are going in the proper direction. Make sure connection at disposal container is secure. Stop operation immediately and report to supervisor if a leak or spill occurs.		
RIGGING DOWN THE JOB	Slips, trips, falls - Pinching, smashing, or crushing of body parts - Lifting injuries - Un safe condition of, or incorrect use of tools.	Keep work area as clean as reasonable. Avoid carrying hardware through hazardous walking conditions. ALWAYS team lift to avoid un necessary strains. Be continuously aware of pinch points/body placement. Use the proper tool for the job. Do not use excessively worn or damaged tools.		
EXITING LOCATION AFTER JOB	Over head obstructions - Running into or over unseen persons/items - Blind backing of equipment - Improper equipment placement	Use a spotter when moving equipment. Do not move vehicles until you have completed a walk around. Be aware of direction travel and any obstacles along the way. Do NOT rush. Before leaving location, ensure good "house keeping" procedures. Clean any trash or unused items from work zone. Report and tend to any spills or damages that may occurred during operations.		
<p><i>Any and ALL personnel retain the right to "STOP JOB AUTHORITY". This means that it is not only your right, but your responsibility to warn others of any situation that you find to be a potential safety hazard. You have the right to request the shut down of operations at any time you see the safety of yourself or your fellow workers in jeopardy. It is the responsibility of everyone on location to ensure a safe, successful job and work environment. Safety first.</i></p>				

**Job Safety Analysis (JSA) Form 1-A**

<b>Date</b>	12/5/2017	<b>Job Number</b>	FL2725
<b>Supervisor</b>	Cheal, Sam	<b>O-Tex Location</b>	Brighton, Colorado 303-857-7948
<b>Customer</b>	Extraction Oil and Gas	<b>Well Name &amp; Number</b>	King HA 23-10
<b>Job Type / Description of Work</b>	Cement Nio Plug	<b>"CHECK YOUR IRON INSPECTION DATE"</b>	
<b>Nearest Hospital</b>		<b>Emergency Contact Number</b>	911
<b>Emergency Muster Point #1</b>	Lease entrance	<b>Emergency Muster Point #2</b>	Wind depending

**Safety Equipment (PPE) Required For Job**

<input checked="" type="checkbox"/> Hard Hat	<input checked="" type="checkbox"/> Gloves	<input checked="" type="checkbox"/> Safety Chains	<input checked="" type="checkbox"/> Wheel Chocks
<input checked="" type="checkbox"/> Steel Toe Boots	<input checked="" type="checkbox"/> Hearing Protection	<input checked="" type="checkbox"/> Lifting Strap	<input checked="" type="checkbox"/> First Aid Kit
<input checked="" type="checkbox"/> Safety Glasses	<input type="checkbox"/> Safety Harness	<input checked="" type="checkbox"/> Fire Extinguisher	<input checked="" type="checkbox"/> MSDS
<input checked="" type="checkbox"/> FR Clothing	<input checked="" type="checkbox"/> Tag Line	<input type="checkbox"/> Ground Static Cable	<input checked="" type="checkbox"/> Other → <b>Full Face mask</b>

**Pre-Job Hazard Assessment**

**Access/Exit -Location, Equipment, Rig**

	Y	N
Driving/Moving Equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Barricades/Boundaries Indicated	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Safe Line of Travel	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Over Head Obstacles	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Restricted Areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Walkway/Work Areas Assessed	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ladder/Stair/Platform Hand Rails	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Secure Footing/Hand placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Designated Smoking Area	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Designated Muster Points	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Evacuation Routes Indicated	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Body Position / Movement**

	Y	N
Climbing	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Walking	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Crawling	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Stretching	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Reaching	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Over Extending	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bending/Twisting	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hand Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pushing/Pulling	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lifting/Carrying	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hearing Protection Required	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Lifting/ Lowering/Moving**

	Y	N
Manual Lifting	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mechanical Lifting	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Body Positioning	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Slip/Trip Potential	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Team/Group Lifting	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tag Lines	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Load Securement	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proper Rigging Practices	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Over Head Lifting	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Condition of Straps/Chains	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Working Hazards**

	Y	N
Proper Tool Use/Maintenance	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mechanical Equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pinch Points	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hand/Body Hazards	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hot/Cold Surfaces	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Inadequate Lighting	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Third Party Operations -	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Welding, Tankers, Rig Hands, etc	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper Container Labels/Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Adverse Environmental Conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Simultaneous Operations**

	Y	N
Are simultaneous operations occurring on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Have all other operations been notified of work to be performed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Working in close proximity to other operations	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Special Working Conditions**

	Y	N
Is Lifting permit required	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is Hot Work permit required	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is Confined Space permit required	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is H2S present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other adverse well conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Environmental Conditions**

**Complexity of Work**

	Y	N
Standard/Routine operation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-typical/Somewhat advanced	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Very complex/non-standard operation	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Work Area**

	Y	N
Open	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tight	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Congested	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Location**

	Y	N
Wet / Mud	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Snow covered / Ice	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Poor lighting / Visibility	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Excessive obstacles	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Weather**

	Y	N
Normal	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Severe (Lightening/Hail/etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Excessive tepm. (Hot/Cold)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Windy	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rain or snow	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Day time	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Night time	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Other Service Companies/Third Party Hands Involved:** \_\_\_\_\_

**Crew Members, Company Representatives & Third Party Signatures (Use back of page as needed)**

Print	Sign	Print	Sign
Tony Field			
James Phillips			
Gary St. John			

*I have personally inspected the worksite & confirm that it is safe for the work described (To be completed by job supervisor or field supervisor)*

**Authorized Signature:**

**Print Name:**

Sam Cheal