Form 3160-5 (June 2015)

NMOCD Rec'd: 9/22/2020

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2018

5. Lease Serial No.

SUNDRY NOTICES AND REPORTS ON WELLS				NMNM121949				
abandoned wei	s form for proposals to ii. Use form 3160-3 (API	arill or to re- D) for such p	enter an roposals.		6. If Indian, Allottee or	Tribe l	Name	
SUBMIT IN T	TRIPLICATE - Other inst	ructions on _i	page 2		7. If Unit or CA/Agreen	nent, N	lame and/or No.	
Type of Well ☐ Gas Well ☐ Oth	er				8. Well Name and No. HI BOB FEDERAL	3Н		
Name of Operator MARSHALL & WINSTON INC	Contact; ORPOR A W ail: sroberts@r	SHERRY L R nar-win.com	OBERTS		9. API Well No. 30-005-64347-00	-X1		
3a. Address 3b. Phone No. (in 6 DESTA DRIVE, SUITE 3100 Ph: 432-684-6 MIDLAND, TX 79705 Fx: 432-682-13					10. Field and Pool or Ex ROUND TANK-S	10. Field and Pool or Exploratory Area ROUND TANK-SAN ANDRES		
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)					11. County or Parish, St	ate	·	
Sec 8 T15S R29E SESE 660F 33.024567 N Lat, 104.044601					CHAVES COUNT	ΓY, N	M	
12. CHECK THE AP	PROPRIATE BOX(ES)	TO INDICAT	TE NATURE OI	F NOTICE,	REPORT, OR OTHI	ER D	ATA	
TYPE OF SUBMISSION			TYPE OF	ACTION				
Notice of Intent	☐ Acidize	□ Deep	en	□ Product	ion (Start/Resume)		ater Shut-Off	
_	Alter Casing	🗀 Hydi	aulic Fracturing	☐ Reclama	ation		ell Integrity	
☐ Subsequent Report	□ Casing Repair	□ New	Construction	☐ Recomp	lete	Ø O		
☐ Final Abandonment Notice	□ Change Plans	Plug	and Abandon	□ Tempor	arily Abandon	PD	nge to Original A	
	☐ Convert to Injection	Plug	Back	☐ Water D	Disposal			
If the proposal is to deepen directions Attach the Bond under which the wor following completion of the involved testing has been completed. Final Abdetermined that the site is ready for fit Marshall & Winston, Inc. respective Bob Fed 3H. With recent offs Winston requests to omit the part the Queen formation have been countered Marshall & Winst flow is encountered Marshall & requests to alter the permitted The 7" 26# P110 casing will be will be ran from X-O to TD. Compared the property of the property of the property of the permitted of the per	rk will be performed or provide operations. If the operation resonationment Notices must be file inal inspection. The extraction of the performed in the previous of the provided in the previous of the production casing to a 7" or an from the KOP to surpement will be circulated to OCD Accepted the operation of the performed in the production casing to a 7" or an from the KOP to surpement will be circulated to OCD Accepted the operation of the performance of the per	the Bond No. on sults in a multiple ed only after all remitted Int/P is and cost sawsing (9 5/8" 40 ffset wells in 1d then set 9 5/drill to TD. Mind in 2 x 5.5" tapereface and the posurface.	file with BLM/BIA completion or reco equirements, including the completion of recolution of the completion of the comple	Required submpletion in a ring reclamation of the Hi arshall & ter flows froter flow is If no water n also ng design.	osequent reports must be fi new interval, a Form 3160- n, have been completed an	iled wit	thin 30 days	
Com	# Electronic Submission # For MARSHALL & V mitted to AFMSS for proces	WINSTON INC	DRPORATE, sent	to the Rosy	velĺ			
Name (Printed/Typed) TODD PA	SSMORE		Title OPERA	TIONS MAN	NAGER			
	F		_					
Signature (Electronic S		i	Date 09/17/20	-				
	THIS SPACE FO	OR FEDERA	L OR STATE	OFFICE U	SE			
Approved By JENNIFER SANCHI	EZ		TitlePETROLE	UM ENGINI	EER		Date 09/18/2020	
Conditions of approval, if any, are attache certify that the applicant holds legal or equivalent would entitle the applicant to conduct the applicant the appli	uitable title to those rights in the		Office Roswell					
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent				willfully to m	ake to any department or a	gency	of the United	

Additional data for EC transaction #530583 that would not fit on the form

32. Additional remarks, continued

Marshall & Winston, Inc. also requests to adjust the 7" 26# P110 casing depth to an estimated 3200' and or 55 degrees for production purposes.

The following are attached: Wellbore Diagram Cement Program

Revisions to Operator-Submitted EC Data for Sundry Notice #530583

Operator Submitted

BLM Revised (AFMSS)

Sundry Type:

APDCH

NOI

NMNM121949

APDCH NOI

NMNM121949

Agreement:

Lease:

Operator:

MARSHALL & WINSTON, INC. P. O. BOX 50880 MIDLAND, TX 79710-0880

Ph: 432-684-6373

Admin Contact:

SHERRY L ROBERTS OPERATIONS SCRETARY E-Mail: sroberts@mar-win.com

Ph: 432-684-6373 Fx: 432-682-1316

Tech Contact:

TODD PASSMORE OPERATIONS MANAGER

E-Mail: tpassmore@mar-win.com Cell: 432-894-0165 Ph: 432-684-6373 Fx: 432-682-1316

Location:

State: County:

NM CHAVES

Field/Pool:

ROUND TANK; SAN ANDRES

Well/Facility:

HI BOB FEDERAL 3H Sec 8 T15S R29E Mer NMP SESE 660FSL 1040FEL 33.022784 N Lat, 104.051061 W Lon

MARSHALL & WINSTON INCORPORATE 6 DESTA DRIVE, SUITE 3100 MIDLAND, TX 79705 Ph: 4326846373

SHERRY L ROBERTS OPERATIONS SCRETARY E-Mail: sroberts@mar-win.com

Ph: 432-684-6373 Fx: 432-682-1316

TODD PASSMORE
OPERATIONS MANAGER
E-Mail: tpassmore@mar-win.com
Cell: 432-894-0165
Ph: 432-684-6373
Fx: 432-682-1316

NM CHAVES

ROUND TANK-SAN ANDRES

HI BOB FEDERAL 3H Sec 8 T15S R29E SESE 660FSL 1040FEL 33.024567 N Lat, 104.044601 W Lon

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: | Marshall & Winston Inc.

LEASE NO.: NMNM-132065

WELL NAME & NO.: | HI BOB FEDERAL 3H SURFACE HOLE FOOTAGE: | 0660' FSL & 1040' FEL

BOTTOM HOLE FOOTAGE | 0020' FSL & 1200' FEL Sec. 17, T. 15 S., R 29 E.

LOCATION: | Section 08, T. 15 S., R 29 E., NMPM

COUNTY: | Chaves County, New Mexico

Communitization Agreement

The operator will submit a Communitization Agreement to the Roswell Field Office, 2909 West 2nd St. Roswell, New Mexico 88201, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.

- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

Chaves and Roosevelt Counties

Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201. During office hours call (575) 627-0272.

- 1. Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.
- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.
- 3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.
- 4. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) for Water Basin:

After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possibility of lost circulation in the Queen and San Andres formations.

- 1. The 13-3/8 inch surface casing shall be set at approximately 225 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, set casing at least 25 feet above the salt.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Optional 9-5/8" casing . 9-5/8" casing will only be used if water flow is encountered.

2.	The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
	☐ Cement to surface. If cement does not circulate see B.1.a, c-d above.

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

3.	The minimum required fill of cement behind the 7 X 5-1/2 inch production casing is:
	Cement to surface. If cement does not circulate, contact the appropriate BLM office.

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API 53.
- 2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) psi.
 - a. For surface casing only: If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.

BOP Spec sheet shall be on location for PET review if requested.

- 3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. The tests shall be done by an independent service company utilizing a test plug **not** a **cup** or **J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

- c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- d. The results of the test shall be reported to the appropriate BLM office.
- e. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

JAM 091820

		AFE No. API # 30-005-64347 Permit No. Project No.
7" 26# P110 from end of 3200' to surface XO 3200' - 3206' 7" set at 55" 7" 3206 at 55" Land Curve at 3560' MD & 3215' TVD. 5-1.	Spud with 17.5" bit. Surface CSG 225" - 13-3/8" 48# H40 Drill out of 13.375" w/ 8.75" Bit Kick off @ 2680" +/- Drill to 8.75" to TD	SHL: 860' FSL, 1040' FEL, Sec. 8, 175S, R29E HI Bob Fed 3H BHL: 20' FSL, 1200' FEL, Sec 17, T15S, R29E Chaves County, NM
5-1/2" P-110 17# BTC Casing To 8700' +/-	Contengency INT String will be reamed out with 12.25" bit	



Company: Marshall and Winston Inc.

Well Name: Hi Bob Federal #3H

Field: Round Tank; San Andres

County: Chaves

State: New Mexico

Date: 08-13-2020

Well Location: 17-15S-29E

API Number: 30-005-64347

Proposal Code: 1

Contact: Mr. Todd Passmore

Made By: Stephen Lowde

Service from District: Artesia, New Mexico

District Phone: 575-748-8610 Ext 2911

Objective: Cement casing strings per co-rep.

Par-Five Energy Services, LLC

Disclaimer Notice

This is a good faith estimate based significantly upon information provided by the client and, from that information, assumptions about the well, reservoir and treatment. The estimate was then prepared with Par-Five's proprietary computer modeling using that information. Unknown, undisclosed, and/or unusual conditions in or of the well may cause Par-Five's final bill to vary substantially from this estimate and, if this estimate is accepted, the client agrees to be fully and totally responsible for Par-Five's final bill based upon the actual work performed regardless of any variation from this estimate. No warranty is given by and Par-Five assumes no liability for advice or recommendations made concerning the use of any product or service. The quality of input data, and hence results, may be improved through the use of certain tests and procedures which Par-Five can assist in selecting if you so request. Freedoms from infringement of patents of Par-Five or others is not to be inferred nor are any such rights granted unless expressly agreed to in a separate writing assecuted by Par-Five.



Executive Summary

Enclosed are our recommendations for Par Five Energy intervention on the referenced well. The proposal includes well data, design data, materials and resources requirements and cost estimates. The purpose of our services is to perform a Casing Cement treatment.

Par Five Energy Services has established a safety policy to which Par Five personnel must adhere. A pre-job safety meeting will be held with customer representatives and other on location personnel to familiarize everyone with the existing hazards and safety procedures. It is essential to Par Five's ability to conduct a safe operation for there to be close cooperation between your representative and Par Five's representative on all safety matters.

The estimated total cost of services are as follows.

Surface: \$4,369.91

Production: \$34,453.87

All costs are estimates only. Actual costs will be determined by time, material, equipment used during treatment. Taxes are no included. All work will be subject to Par Five then-current General Terms and conditions or to the terms and conditions of a Master Service Agreement if one is in force between Par Five and customer. This quote is valid for a period of thirty (30) days from the date submitted.

Thank you for considering Par Five Energy Services.

Please do not hesitate to contact me with any questions or concerns.

Sincerely,

Stephen Lowde



Cement volumes were calculated using 50% excess in the open hole volume.

Spacer 1: 20 bbls Gelled Water (110 lbs PF424)

Spacer 2: 20 bbls Fresh Water

200 sks C+2%PF001(Calcium Chloride)

Density 14.8 Yield 1.34 H2O 6.295



Service Order for Job: J00014014

Call Out Sheet Number: CALL00012528

Date of Job: 13-Aug-2020

District: Artesia

Time Well Ready: 12:17 pm

Ready to Pump: 12:17 pm State: New Mexico

Customer: Marshall and Winston

DV Tool: No Job Stage Number: 1

Treat Down: Casing

Head & Manifold 13.375" 8rd Surfacd

Hole Size: 17.5" Well MD: 225'

Well TVD: 225' BHST: 82°

BHP:

BHCT: 80°F

Max Allowed Pressure: 2000 psi

New Well; New Well

Well #: Hi Bob Federal #3H

County: Chaves

Legal Location: 17 15S 29E

Field: Round Tank; SanAndres

Description:

AP#: 30-005-64347

Salesman: Stephen Lowde

Contact Person/Companyman: Todd Passmore

Contact Number:

Email:

Rig Contractor:

Rig Number:

Rig Phone:

Max Allowed Ann Pressure:

Casing / Tubing					
String Type Casing	Depth 225'	Size 17.5"	Weight 48	Grade H40	Thread STC (8rd)

Job Type	Casing	Service Supervisor:		Ortega Diego
Sks/Gals.	Cement Type/Additives	Tractor	Trailer	Equipment Operators
200.00 Sack	Class C, per cu. ft. (94lb/cu ft)			
376.00 Pound	PF001 Calcium Chloride, per lb (50lb/cu ft)			
110.00 Pound	PF424 Water Gelling Agent, per lb			
6.00 Pound	PF25 Lost Circulation Fiber, per lb			

Cement Recipe

225' 13.375 48 ppf H40 8rd

Test Lines: 2000 psi

Spacer 1: 20bbls Gelled Water (110 lbs PF424)

Spacer 2: 20bbls Fresh Water

Tail: 200 sks C + 2% PF001 (Calcium Chloride)

Density: 14.80 ppg Yield: 1.34 CuFt/Sk Mix Water: 6.3 gps

PF903 - 94 PF1 - 1.88

13.375" H/M,8rd&BTC QC/S,TP, 200 lbs sugar, 110 lbs PF424,Take 6 lbs of PF025 Fiber and put in the 1st 100sks cement

Bring back 2 gallons of mix water to tes tthe production job. Label the jugs.

Description	Quantity	Net Amount
Field Support Work*	1.00	\$0.00
Mileage Charge, all other equipment, per mile*	90.00	\$174.63
Cars, pickups, monitoring vehicles round trip*	90.00	\$116.42
PF-999 - Sugar*	200.00	\$258.72
Casing - 0000 - 2000 ¹⁴	1.00	\$0.00
Top Plastic Plugs - 13.375*	1.00	\$422.03



Description Low Pressure Cement Plug Container* Circulation Equipment before job, per job* Delivery Charge - Ton mileage, per ton mile* (45 Miles pne way Service Charges - Land jobs* Class C, per cu. ft. (94lb/cu ft) PF001 Calcium Chloride, per lb (50lb/cu ft) PF25 Lost Circulation Fiber, per lb PF424 Water Gelling Agent, per lb	charge)	Quantity 1.00 1.00 450.00 208.00 200.00 376.00 6.00 110.00	Net Amount \$0.00 \$0.00 \$378.00 \$276.64 \$2,240.00 \$165.81 \$35.28 \$302.37
Service Instructions	Directions	Job Total:	\$4,369.90
225' 13.375 48 ppf H40 8rd			
Test Lines: 2000 psi			
Spacer 1: 20bbls Gelled Water (110 lbs PF424)			
Spacer 2: 20bbls Fresh Water			
Tail: 200 sks C + 2% PF001 (Calcium Chloride)			
Density: 14.80 ppg Yield: 1.34 CuFt/Sk Mix Water: 6.3 gps			
PF903 - 94 PF1 - 1.88			
13.375" H/M,8rd&BTC QC/S,TP, 200 lbs sugar, 110 lbs PF424,Take 6 lbs of PF025 Fiber and put in the 1st 100sks cement			

Bring back 2 gallons of mix water to tes tthe production job. Label the jugs.



Cement volumes were calculated using 30% lead excess and 20% tail excess over open hole volume Top of tail at 2,680' and top of lead at surface.

20bbls Chemical Wash

20bbls Fresh Water

Lead: 370sks 50:50:10 Plite:C:PF020 + 5% BWOW PF044 (Salt) + 0.6% PF079 (Chemical Extender) + 0.3% PF013 (Retarder) + 0.125 pps PF029 (Celloflake) + 3 pps PF042 (Kolseal) + 0.4 pps PF045 (Defoamer)

Density 11.5

Yield 2.63

H2O 14.980

Tail: 1400 sks 50:50:2 Plite:C:PF020 + 5% BWOW PF044 (Salt) + 0.5% PF606 (Fluid Loss) + 0.3% PF013 (Retarder) + 3 pps PF042 (Kolseal) + 0.4 pps PF045 (Defoamer)

Density 14.0

Yield 1.31

H2O 5.533



Service Order for Job: J00014016 Call Out Sheet Number: CALL00012530

Date of Job: 13-Aug-2020 New Well: New Well:

District: Artesia Well #: Hi Bob Federal #3H

Time Well Ready: 12:23 pm County: Chaves
Ready to Pump: 12:23 pm State: New Mexico
Customer: Marshall and Winston Legal Location: 17:15S-29E

tustomer: Marshall and Winston Legal Location: 17 15S 29E

DV Tool: No Field: Round Tank;SanAndres

Job Stage Number: 1 Description:

Treat Down: Casing AP#: 30-005-64347

Head & Manifold 7" Production Casing Salesman: Stephen Lowde

Hole Size: 8.75" Contact Person/Companyman: Todd Passmore

Well MD: 8700'
Well TVD: 3215'
Email:
BHST: 106°
Rig Contractor:

BHST: 106° Rig Contractor:
BHP: Rig Number:
BHCT: 106°F Rig Phone:

Max Allowed Pressure: 5000 Max Allowed Ann Pressure:

Casing / Tubing					
String Type	Depth 8700'	Size 7"x5.5"	Weight	Grade	Thread
Casing	8700	/ "X3.5"	26/17	P110	BTC

Job Type Casing		Service S	upervisor:	Ortega Diego		
Sks/Gals.	Cement Type/Additives	Tractor	Trailer	Equip	ment Operators	
581.00 Pound	PF606 Fluid Loss Control, per lb	-			<u> </u>	
5.00 Gallon	PF803 Plexaid					
708.00 Pound	PF45 Defoamer Antifoam Agent, per lb					
885.00 Sack	PF57 Perl-Lite Ore, per cu ft (72lb/cu ft)					
184.00 Pound	PF79 Chemical Extender, per lb (70lb/ft3)					
5,395.00 Pound	PF20 Bentonite Extender, per lb (60lb/cu ft)					
5,535.00 Pound	PF-044 Granulated Salt, per lb (70lb/cu ft)					
5,310.00 Pound	PF42 KOL-SEAL LCA, per lb (50lb/cu ft)					
441.00 Pound	PF13 Retarder, per lb					
200.00 Pound	PFSAPP SAPP					
885.00 Sack	Class C. per cu. ft. (94lb/cu ft)					

Ver 2.1.0



Cement Recipe

8700' - 3206' of 5.5" 17 ppf P110 BTC 2516' to Surface 7' 26 ppfg P110 BTC

TVD +/- 3215'

Test Lines: 5000 psi

Spacer 1: 20bbls Chemical Wash (200 lbs SAPP and 5 gallons of Plexaid 803)

Spacer 2: 20bbls Fresh Water

Lead: 370sks 50:50:10 PLite:C:PF020 + 5% BWOW PF044 (Salt) + 0.6% PF079 (Chemical Extender) + 0.3%PF13 (Retarder) + 3 pps PF042 (Kolseal) + 0.4 pps PF045 (Defoamer)

Density: 11.50 ppg Yield: 2.63 CuFt/Sk Mix Water: 14.980 gps

PF903 - 47

PF057 - 36

PF044 - 6.237

PF020 - 8.3

PF079 - 0.498 PF013 - 0.249

PF042 - 3

PF045 - 0.4

Tail: 1400sks 50:50:2 PLite:C:PF020 + 5% BWOW PF044 (Salt) + 0.5% PF606 (Fluid Loss) + 0.3% PF013 (Retarder) + 3 pps PF042

(Kolseal) + 0.4 pps PF045 (Defoamer)

Density: 14.00 ppg Yield: 1.31 CuFt/Sk Mix Water: 5.533 gps

PF903 - 47

PF057 - 36

PF044 - 2.303

PF020 - 1.66

PF606 - 0.415

PF013 - 0.249

PF042 - 3

PF045 - 0.4

7" H/M, 8rd&BTC QC/S, 5.5" 8rd&BTC QC/S, 600 lbs Sugar for wet shoe, 200 lbs SAPP.5 gallons Plexaid 803

Description	Quantity	Net Amount
Field Support Work*	1.00	\$0.00
Mileage Charge, all other equipment, per mile* (Mileage on 2 pumps and 2 field bins)	360.00	\$698.54
Cars, pickups, monitoring vehicles round trip*	90.00	\$116.42
PF-999 - Sugar*	600.00	\$776.16
Casing - 8001' - 12000'*	1.00	\$0.00
Cement Field Bin Set Up Charge*	2.00	\$485.10
Cement Field Bin Set Up Charge*	2.00	\$0.00
Standby Cement Pumper, per 4 hrs or fraction of* (Charge in blocks of 4 hours each)	1.00	\$970.20
Low Pressure Cement Plug Container*	1.00	\$0.00
Circulation Equipment before job, per job*	1.00	\$0.00
Delivery Charge - Ton mileage, per ton mile* (45 Miles one way charge)	3,735.00	\$3,137.40
Service Charges - Land jobs*	2,049.00	\$2,725.17
Class C, per cu. ft. (94lb/cu ft)	885.00	\$9,912.00
PF57 Perl-Lite Ore, per cu ft (72lb/cu ft)	885.00	\$5,005.56
PF20 Bentonite Extender, per lb (60lb/cu ft)	5,395.00	\$840.64
PF-044 Granulated Salt, per lb (70lb/cu ft)	5,535.00	\$862.46
PF42 KOL-SEAL LCA, per lb (50lb/cu ft)	5,310.00	\$1,951.42
PF79 Chemical Extender, per lb (70lb/ft3)	184.00	\$208.26
PF13 Retarder, per lb	441.00	\$678.09
PF45 Defoamer Antifoam Agent, per lb	708.00	\$936.68
PF606 Fluid Loss Control, per lb	581.00	\$4,557.31
PF803 Plexaid	5.00	\$74.97
PFSAPP SAPP	200.00	\$517.44



Job Total: \$34,453.82 Service Instructions Directions 8700' - 3206' of 5.5" 17 ppf P110 BTC 2516' to Surface 7' 26 ppfg P110 BTC TVD +/- 3215' Test Lines: 5000 psi Spacer 1: 20bbls Chemical Wash (200 lbs SAPP and 5 gallons of Plexaid 803) Spacer 2: 20bbls Fresh Water Lead: 370sks 50:50:10 PLite:C:PF020 + 5% BWOW PF044 (Salt) + 0.6% PF079 (Chemical Extender) + 0.3%PF13 (Retarder) + 3 pps PF042 (Kolseal) + 0.4 pps PF045 (Defoamer) Density: 11.50 ppg Yield 2.63 CuFt/Sk Mix Water: 14.980 gps PF903 - 47 PF057 - 36 PF044 - 6.237 PF020 - 8.3 PF079 - 0.498 PF013 - 0.249 PF042 - 3 PF045 - 0.4 Tail: 1400sks 50:50:2 PLite:C:PF020 + 5% BWOW PF044 (Salt) + 0.5% PF606 (Fluid Loss) + 0.3% PF013 (Retarder) + 3 pps PF042 (Kolseal) + 0.4 pps PF045 (Defoamer) Density: 14.00 ppg Yield: 1.31 CuFt/Sk Mix Water: 5.533 gps PF903 - 47 PF057 - 36 PF044 - 2.303 PF020 - 1.66 PF606 - 0.415 PF013 - 0.249 PF042 - 3 PF045 - 0.4 7" H/M, 8rd&BTC QC/S, 5.5" 8rd&BTC QC/S, 600 lbs Sugar for wet

shoe, 200 lbs SAPP,5 gallons Plexaid 803



PRICING AND TECHNICAL DETAILS and DISCLAMER

A minimum notice of 24 hours prior to job must be given to ensure quoted price.

For depths from <mark>Oft to 7000ft</mark>, the overtime charges are applicable after the <mark>first 6 hours on location</mark>.

For depths <mark>of 7001ft and deeper</mark>, the overtime charge are applicable after <mark>the first 8 hours on location</mark>.

- Sales price discount quoted is:
 - o 72% for primary cementing,
 - 30% for additional hours on primary jobs (Equipment & Personnel)
 - 30% for remedial cementing and additional hours on remedial jobs,
 - of for pump rentals and overtime on pump rentals
- Overtime charges on Cement Pump are \$1,097.25 per hour.
- Overtime charges on the Batch Mixer are \$577.70 per hour.
- Standby cement pump unit charge of \$3465.00 is required for every 4 hours block on location. Charges will be made to next full block.
- Charges on Centrifugal Booster Pump are \$500.00 per job.
- There is a derrick charge of \$866.25 if cement head is 10ft above rig floor.
- Bulk Cement Restocking, if applicable and returned to Par Five, will be charges at 25% of original price per CuFt.
- Any Laboratory support, for all remedial or other type of work that is not classified as primary and if it is not followed by the job,
 will be charged as per the Par Five price book in effect when the laboratory support is performed.
 - If extensive laboratory testing is needed, there will be an additional laboratory fee of \$2100.00.
- If oil-based mud used, it is recommended to use MUDPUSH as a spacer. If water-based mud used, chemical wash PF100 and water is recommended ahead of cement.
- If a crew is on location for more than 8 hours, then overtime charges will be applied to the personnel and bulk units on location.

 The charge for Service Supervisor is \$115.50/ hour, for Operators is \$92.40/ hour and for Bulk Units is \$173.25/ hour

This quote is valid, for a period of thirty days from the date submitted. These prices are estimated based on current price structure and will vary somewhat with the materials, equipment, and time actually required at the time of service. The discount shown will be applicable to the most current Par Five price book in effect at the time of service. Not included are the costs of fluid storage, oil, water, (or transportation thereof) except as listed. Par Five does not offer these services.

The cement slurry data presented are from systems previously tested in Par Five laboratories. Thickening time tests should be run when field mix water to be used on this job is available and final temperatures are known. Mud/Cement compatibility tests should be run when final mud systems are in use. Actual conditions could cause quantity variations of the materials recommended, and thereby affecting the price of the job. Such compatibility tests may assist you in better anticipating these variations.

In the interest of safety, a pre-job safety meeting will be held on location with your representative and other on-location personnel to familiarize everyone with existing hazards and safety procedures. During this meeting a designated wash-up area will be assigned for our cementing unit to dispose of our cement siurry and drilling mud displacement fluid. Thank you for considering Par Five Energy Services for this work. Please do not hesitate to call with any questions or concerns.