

## Application for Permit to Modify (APM)

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| <b>Lease</b> 00691                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Area</b> WD | <b>Block</b> 24                                     | <b>Well Name</b> 002 | <b>ST</b> 00                                   | <b>BP</b> 00 | <b>Type</b> Development |
| <b>Application Status</b> Approved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                | <b>Operator</b> 02312 McMoRan Oil & Gas LLC         |                      |                                                |              |                         |
| <b>Pay.gov</b><br><b>Amount:</b> \$125.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                | <b>Agency</b><br><b>Tracking ID:</b> EWL-APM-181256 |                      | <b>Pay.gov</b><br><b>Tracking ID:</b> 25NA8PJB |              |                         |
| <b>General Information</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                |                                                     |                      |                                                |              |                         |
| <b>API</b> 177190003800                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                | <b>Approval Dt</b> 23-OCT-2015                      |                      | <b>Approved By</b> Tom Meyer                   |              |                         |
| <b>Submitted Dt</b> 23-OCT-2015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                | <b>Well Status</b> Completed                        |                      | <b>Water Depth</b> 20                          |              |                         |
| <b>Surface Lease</b> 00691                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                | <b>Area</b> WD                                      |                      | <b>Block</b> 24                                |              |                         |
| <b>Approval Comments</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |                                                     |                      |                                                |              |                         |
| <p>A revised PE certification is needed if (1) the plug type changes in any way, (2) any plugs' setting depth changes on any plug, (4) less cement is to be pumped, (5) more cement is to be pumped in order to isolate a hydrocarbon zone that was not anticipated in the original permit, or (6) a remedial cement job is required that was not included in the original permit.</p> <p>Wireline Lubricator<br/>All wireline lubricator tests must be tested to the approved permitted pressure and recorded on the daily operations (even the ones that are not required per 250.1715), changes + or - 100' MD, (3) the pressure test report. If well pressures exceed the SITP/MASP stated in the approved permit, the equipment in use must be tested at a minimum to the new observed pressure. The appropriate District must be notified of this pressure change.</p> <p>Rig Move<br/>You must submit a Rig Move Report when utilizing a snubbing unit, coiled tubing unit, or wire-line unit used for non-routine operations, unless the unit is on a rig whose location has already been reported to BSEE via a Rig Move Report.</p> <p>Movement Between Wells<br/>Unit movements between wells on the same platform do not need to be reported as long as the movement between the wells is less than 72 hours (batch operations). You should include your anticipated movement schedule on form BSEE-0144.</p> <p>OCS Lands<br/>All operations must be conducted in accordance with the OCS Lands Act (OCSLA), the lease terms and stipulations, the regulations of 30 CFR Part 250, Notices to Lessees and Operators (NTLs), the approved (revised) Application for Permit to Modify (APM/RPM), and any written instructions or orders of the District Manager.</p> <p>Permit Copy<br/>A copy of this permit (including all attachments) must be kept on location and made available to inspectors upon request during the permitted operation.</p> <p>WAR Submittal<br/>From the time you begin workover, completion, recompletion, temporary abandonment, and/or permanent plugging operations until you complete the well work or suspend operations on the well, submit (on a weekly basis) an activity report to the appropriate BSEE GOMR District Office in the timeframe specified in NTL No. 2009-G20. Use Form BSEE-133, Well Activity Report (WAR), to make this progress report. On the final Well Activity Report, indicate the status of the well and the date you finished such operations.</p> <p>Test Pressures<br/>If you observe a pressure that exceeds the test pressures stated in the approved permit, the equipment in use must be tested to at or greater than the observed pressure and the</p> |                |                                                     |                      |                                                |              |                         |

## Application for Permit to Modify (APM)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                             |                    |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------|-----------------------------------------------------|---------------------------------------------------|
| <b>Lease</b> 00691                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Area</b> WD                                                                                              | <b>Block</b> 24    | <b>Well Name</b> 002                        | <b>ST</b> 00                                                                                                                                                                                                             | <b>BP</b> 00                           | <b>Type</b> Development |                                                     |                                                   |
| <b>Application Status</b> Approved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                             |                    | <b>Operator</b> 02312 McMoRan Oil & Gas LLC |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| <p>appropriate District must be notified of this pressure change. If your observed pressure exceeds the rated working pressure of the equipment in use, then you must stop operations immediately. In either case a RPM must be submitted for review and approval.</p> <p>OSFR Coverage (Except Cut and Pull)</p> <p>While conducting operations, you must have a current OSFR Coverage for the lease (if applicable). If the lease's OSFR coverage will expire during OCS operations, you must submit an RPM to include the OSFR coverage to BSEE prior to the expired date.</p> |                                                                                                             |                    |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| <b>Correction Narrative</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                             |                    |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;"><b>Permit Primary Type</b> Abandonment Of Well Bore</td> </tr> <tr> <td><b>Permit Subtype(s)</b><br/>Temporary Abandonment</td> </tr> </table>                                                                                                                                                                                                                                                                                                                                    |                                                                                                             |                    |                                             |                                                                                                                                                                                                                          |                                        |                         | <b>Permit Primary Type</b> Abandonment Of Well Bore | <b>Permit Subtype(s)</b><br>Temporary Abandonment |
| <b>Permit Primary Type</b> Abandonment Of Well Bore                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                             |                    |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| <b>Permit Subtype(s)</b><br>Temporary Abandonment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                             |                    |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| <b>Operation Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                             |                    |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| <b>Procedural Narrative</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                             |                    |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| Please refer to the attached procedures and WBS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                             |                    |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| <b>Subsurface Safety Valve</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                             |                    |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| <b>Type Installed</b> SCSSV<br><b>Feet below Mudline</b> 133<br><b>Maximum Anticipated Surface Pressure (psi)</b> 3000<br><b>Shut-In Tubing Pressure (psi)</b> 1050                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                             |                    |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| <b>Rig Information</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                             |                    |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| <b>Name</b><br>* WIRELINE UNIT (N.O.DIST)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                             | <b>Id</b><br>45100 | <b>Type</b>                                 | <b>ABS Date</b><br>31-DEC-2016                                                                                                                                                                                           | <b>Coast Guard Date</b><br>31-DEC-2016 |                         |                                                     |                                                   |
| <b>Blowout Preventers</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                             |                    |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| <b>Preventer</b><br>Wireline                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                             | <b>Size</b>        | <b>Working Pressure</b><br>5000             | <div style="display: flex; justify-content: space-between;"> <div>--- Test Pressure ---</div> <div>Low High</div> </div> <div style="display: flex; justify-content: space-between;"> <div></div> <div>2500</div> </div> |                                        |                         |                                                     |                                                   |
| <b>Date Commencing Work (mm/dd/yyyy)</b> 31-OCT-2015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                             |                    |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| <b>Estimated duration of the operation (days)</b> 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                             |                    |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| <b>Verbal Approval Information</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                             |                    |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| <b>official</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                             |                    |                                             | <b>Date (mm/dd/yyyy)</b>                                                                                                                                                                                                 |                                        |                         |                                                     |                                                   |
| <b>Questions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                             |                    |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| <b>Number</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Question</b>                                                                                             | <b>Response</b>    | <b>Response Text</b>                        |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Is H2S present in the well? If yes, then comment on the inclusion of a Contingency Plan for this operation. | NO                 |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Is this proposed operation the only lease holding activity for the subject lease? If yes, then comment.     | NO                 |                                             |                                                                                                                                                                                                                          |                                        |                         |                                                     |                                                   |

### Application for Permit to Modify (APM)

|                                    |                |                 |                                             |              |              |                         |
|------------------------------------|----------------|-----------------|---------------------------------------------|--------------|--------------|-------------------------|
| <b>Lease</b> 00691                 | <b>Area</b> WD | <b>Block</b> 24 | <b>Well Name</b> 002                        | <b>ST</b> 00 | <b>BP</b> 00 | <b>Type</b> Development |
| <b>Application Status</b> Approved |                |                 | <b>Operator</b> 02312 McMoRan Oil & Gas LLC |              |              |                         |

#### Questions

| Number | Question                                                                                                                                                                                   | Response | Response Text |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------|
| 3      | Will all wells in the well bay and related production equipment be shut-in when moving on to or off of an offshore platform, or from well to well on the platform? If not, please explain. | YES      |               |
| 4      | Are you downhole commingling two or more reservoirs?                                                                                                                                       | NO       |               |
| 5      | Will the completed interval be within 500 feet of a lease or unit boundary line? If yes, then comment.                                                                                     | NO       |               |
| 6      | For permanent abandonment, will casings be cut 15 feet below the mudline? If no, then comment.                                                                                             | N/A      |               |
| 7      | Will the proposed operation be covered by an EPA Discharge Permit? (Please provide permit number in comments for this question)                                                            | YES      | GMG 290163    |

#### ATTACHMENTS

| File Type | File Description            |
|-----------|-----------------------------|
| pdf       | Proposed Wellbore Schematic |
| pdf       | Current Wellbore Schematic  |
| pdf       | Procedures                  |

#### CONTACTS

|                            |                         |
|----------------------------|-------------------------|
| <b>Name</b>                | Nancy Rodriguez         |
| <b>Company</b>             | McMoRan Oil & Gas LLC   |
| <b>Phone Number</b>        | 281.539.7640            |
| <b>E-mail Address</b>      | nancy_rodriguez@fmi.com |
| <b>Contact Description</b> | Regulatory              |

CERTIFICATION: I certify that information submitted is complete and accurate to the best of my knowledge. I understand that making a false statement may subject me to criminal penalties under 18 U.S.C. 1001.

Name and Title

Nancy Rodriguez, Regulatory Technician

Date

23-OCT-2015

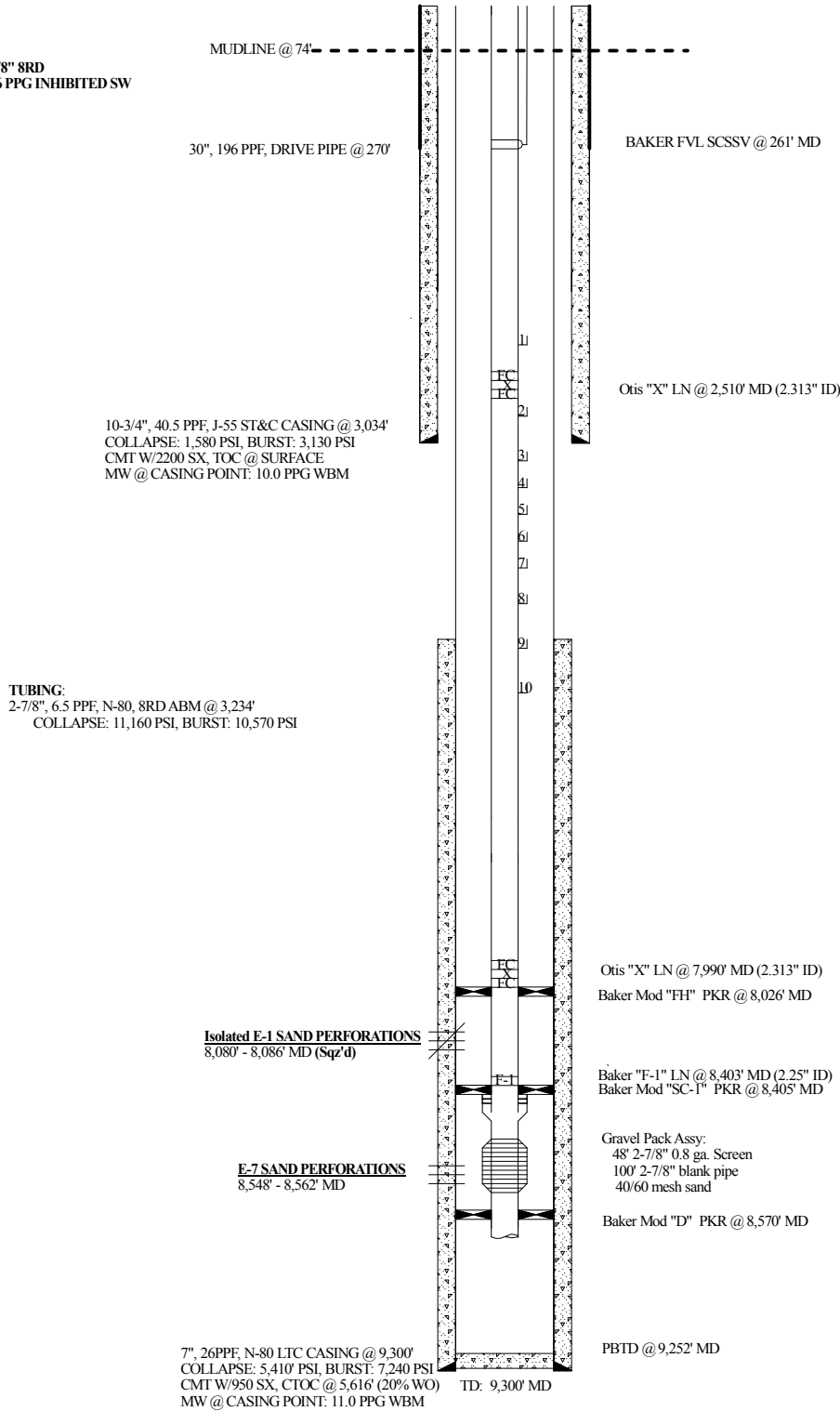
## Application for Permit to Modify (APM)

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PAPERWORK REDUCTION ACT OF 1995 (PRA) STATEMENT: The PRA (44 U.S.C. 3501 et seq. Requires us to inform you that we collect this information to obtain knowledge of equipment and procedures to be used in drilling operations. MMS uses the information to evaluate and approve or disapprove the adequacy of the equipment and/or procedures to safely perform the proposed drilling operation. Responses are mandatory (43 U.S.C. 1334). Proprietary data are covered under 30 CFR 250.196. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB Control Number. Public reporting burden for this form is estimated to average 11/4 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 4230, Minerals Management Service, 1849 C Street, N.W., Washington, DC 20240.

RKB-THF: 38.8  
 RKB - MSL: 54'  
 ORIG. RKB - ML: 74'  
 WATER DEPTH: 20'  
 TREE CONNECTION: 2-7/8" 8RD  
 COMPLETION FLUID: 8.6 PPG INHIBITED SW

SURF LOC: 4,179' FSL; 4,042' FWL OF WD 24  
 BHL: 4,179' FSL; 4,042' FWL OF WD 24



- GLM's :
1. 1,785'
  2. 2,701'
  3. 3,136'
  4. 3,604'
  5. 4,040'
  6. 4,508'
  7. 4,946'
  8. 5,416'
  9. 5,852'
  10. 6,288'

|                          |                   |                              |                                                                                       |                          |       |
|--------------------------|-------------------|------------------------------|---------------------------------------------------------------------------------------|--------------------------|-------|
| Designed by<br>ALN       | Checked by<br>ALN | Filename<br>WD 24 #2 CURRENT | Revision Date<br>10/20/2015                                                           | Printed On<br>10/20/2015 | Scale |
| MCMORAN OIL & GAS L.L.C. |                   |                              | WEST DELTA 24 #2<br>OCS-G 00691<br>API 17 719 00038 00<br><b>CURRENT WELL DIAGRAM</b> |                          |       |

RKB-THF: 38.8  
 RKB - MSL: 54'  
 ORIG. RKB - ML: 74'  
 WATER DEPTH: 20'  
 TREE CONNECTION: 2-7/8" 8RD  
 COMPLETION FLUID: 8.6 PPG INHIBITED SW

SURF LOC: 4,179' FSL; 4,042' FWL OF WD 24  
 BHL: 4,179' FSL; 4,042' FWL OF WD 24

MUDLINE @ 74' - - - - -

30", 196 PPF, DRIVE PIPE @ 270'

SPOT 305' OR 63 SACKS OF 16.4 PPG CLASS H CEMENT, ETOC @ 219' MD (145' BML)  
 SPOT 200' OF CEMENT IN THE 7" X 10-3/4" CASING ANNULUS FROM 550' MD TO  
 350' MD CONSISTING OF 60 SACKS OF 16.4 PPG CLASS H CEMENT  
 SET 7" CEMENT RETAINER @ 524' MD (450' BML) W/ CASING GUNS @ 550' MD  
 (476' BML), PERFORATE 7" CASING @ 550' MD (476' BML)  
 JET CUT & PULL TUBING @ 574' MD (500' BML)

GLM's :  
 1. 1,785'  
 2. 2,701'  
 3. 3,136'  
 4. 3,604'  
 5. 4,040'  
 6. 4,508'  
 7. 4,946'  
 8. 5,416'  
 9. 5,852'  
 10. 6,288'

10-3/4", 40.5 PPF, J-55 ST&C CASING @ 3,034'  
 COLLAPSE: 1,580 PSI, BURST: 3,130 PSI  
 CMT W/2200 SX, TOC @ SURFACE  
 MW @ CASING POINT: 10.0 PPG WBM

Otis "X" LN @ 2,510' MD (2.313" ID)

TUBING:  
 2-7/8", 6.5 PPF, N-80, 8RD ABM @ 3,234'  
 COLLAPSE: 11,160 PSI, BURST: 10,570 PSI

Otis "X" LN @ 7,990' MD (2.313" ID)

Isolated E-1 SAND PERFORATIONS  
 8,080' - 8,086' MD (Sqz'd)

SPOT A 500' BALANCED CEMENT PLUG CONSISTING OF 96 SACKS OF 16.4 PPG CLASS H  
 CEMENT, ETOC @ 7,500'  
 PERFORATE TUBING @ 8,000'  
 SET 1.906" TTS TTBP @ 8,026'

Baker Mod "FH" PKR @ 8,026' MD

PERFORATION SQUEEZE CONSISTING OF 21 SACKS OF 16.4 PPG CLASS H CEMENT,  
 ETOC @ 8,300'

Baker "F-1" LN @ 8,403' MD (2.25" ID)  
 Baker Mod "SC-1" PKR @ 8,405' MD

Gravel Pack Assy:  
 48' 2-7/8" 0.8 ga. Screen  
 100' 2-7/8" blank pipe  
 40/60 mesh sand

Baker Mod "D" PKR @ 8,570' MD

E-7 SAND PERFORATIONS  
 8,548' - 8,562' MD

PBTD @ 9,252' MD

7", 26PPF, N-80 LTC CASING @ 9,300'  
 COLLAPSE: 5,410' PSI, BURST: 7,240 PSI  
 CMT W/950 SX, CTC @ 5,616' (20% WO)  
 MW @ CASING POINT: 11.0 PPG WBM

TD: 9,300' MD

|                    |                   |                               |                             |                          |       |
|--------------------|-------------------|-------------------------------|-----------------------------|--------------------------|-------|
| Designed by<br>ALN | Checked by<br>ALN | Filename<br>WD 24 #2 PROP T&A | Revision Date<br>10/20/2015 | Printed On<br>10/20/2015 | Scale |
|--------------------|-------------------|-------------------------------|-----------------------------|--------------------------|-------|

MCMORAN OIL & GAS L.L.C.

WEST DELTA 24 #2  
 OCS-G 00691  
 API 17 719 00038 00  
**PROPOSED T&A WELL DIAGRAM**

**October 21, 2015**

Aaron Novy  
Freeport McMoRan Oil & Gas

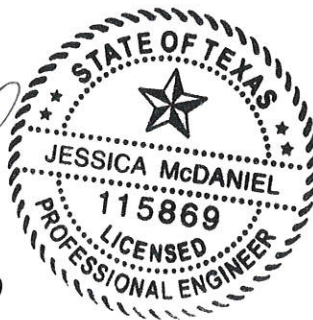
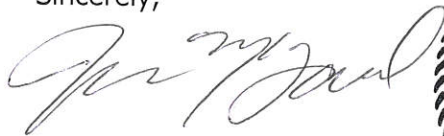
Subject: Temporary Abandonment Procedure  
OCS-G-0691, West Delta 24 #2

Mr. Novy,

I reviewed the plug and abandonment procedure for the above-referenced well (attached). I certify that this procedure meets temporary abandonment requirements as stated in 30 CFR 250.1721. If unable to establish injection into the perforations, an exception of 30 CFR 250.1715(a)(3) will be made due to wellbore construction. The alternate procedure outlined should provide the necessary isolation.

Work described in the procedure for this well entails isolating perforations, setting cement plugs, setting mechanical plugs, cutting tubing, and pressure testing. During abandonment activities there will be two independently tested barriers, including one mechanical barrier, across each flow path as per 30 CFR 250.1712(g)

Sincerely,



Jessica McDaniel P.E.  
Texas PE Registration: 115869  
Development Engineer  
CSI Technologies  
2202 Oil Center Court  
Houston, Texas 77073  
[jamcdaniel@csi-tech.net](mailto:jamcdaniel@csi-tech.net)  
Main 281-784-7990  
[www.csi-tech.net](http://www.csi-tech.net)

DEVELOPMENT DRIVEN. FIELD FOCUSED.

|                                                                                   |                                                             |                     |             |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------|-------------|
|  | General Information / Data Sheet<br>WD 24 #2<br>OCS-G-00691 | 10/23/2015<br>Final | Page 1 of 2 |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------|-------------|

**McMoRan Oil and Gas L.L.C**  
**WD 24 #2**  
**OCS-G00691**  
**Data Sheet**

**WELL TYPE:** ..... Single Oil      **KOP:**..... N/A  
**PLATFORM:** .....N/A      **MAX. DOG LEG:** ..... N/A  
**PLATFORM TYPE:** .....N/A      **MAX. DEV.:** ..... N/A  
**API NO.:** .....17-719-00038-00      **DEV. THRU. PERFS:** ..... N/A  
**TD:** ..... 9,300' MD/9,300' TVD      **RKB - THF:** .....38.8'  
**ORIGINAL PBTD:**.....9,252' MD      **WATER DEPTH:**.....20'  
**CURRENT PB DEPTH:** .....9,252' MD      **RKB-MSL:**.....54'  
**PACKER FLUID:**..... 8.6 ppg inhibited SW      **RKB-ML:**.....74'

**SURFACE LOCATION:** ..... 4,179' FSL; 4,042' FWL  
**BHL @ TD:** ..... 4,179' FSL; 4,042' FWL  
**TREE CONNECTION:**.....2-7/8" 8RD, 2-9/16" WKM 5M

**Casing Program (see schematic for burst and collapse ratings):**

| OD<br>Inches | Wt<br>#/ft | Grade | Conn | Depth<br>MD | Hole<br>Size (in) | Vol. Cmt<br>sx / ft3 | Top of Cement MD  | Mud Wt<br>@Csg Pt | FIT<br>PPG |
|--------------|------------|-------|------|-------------|-------------------|----------------------|-------------------|-------------------|------------|
| 30           | 196        |       |      | 270'        | 30                | Driven               |                   |                   |            |
| 10-3/4       | 40.5       | J-55  | ST&C | 3,034'      | 15                | 2200 sx              | TOC=Surface       | 10.0WBM           |            |
| 7            | 26         | N-80  | LT&C | 9,300'      | 9-7/8             | 950 sx               | CTOC=5,616' 20%WO | 11.0WBM           |            |

**Casing Issues:** ..... None

**Note:** The well was completed as Dual in 1960 from E-1 and E-7 but recompleted as Single oil well from E-7 in 1987.

**Tubing:**

| OD     | Wt    | Grade | Conn     | Depth  | Burst      | Collapse    | ID    | SCSSV            |
|--------|-------|-------|----------|--------|------------|-------------|-------|------------------|
| 2-7/8" | 6.5 # | N-80  | 8 RD ABM | 8,589' | 10,570 psi | 11,160' psi | 2.441 | BAKER FVL @ 261' |

Profiles..... SCSSV @ 261' MD; "X" LN @ 2,510', 7,990', and "F-1" LN @ 8,403' MD  
 Min ID in Tbg..... 2.25" @ "F-1" LN  
 Gas Lift Mandrels ..... 1,785', 2,701', 3,136', 3,604', 4,040', 4,508', 4,946', 5,416', 5,852', and 6,288' MD  
 Plug(s)..... N/A

**Capacity Facts:**

| Category<br>(Pipe/Annulus) | Inner Pipe |           | Outer Pipe (if an annulus) |           | Cap<br>(bbls/ft) | Cap<br>(ft3/ft) |
|----------------------------|------------|-----------|----------------------------|-----------|------------------|-----------------|
|                            | OD (in)    | Wt (#/ft) | OD (in)                    | Wt (#/ft) |                  |                 |
| 2-7/8"                     | 2-7/8"     | 6.5       |                            |           | 0.00058          | 0.03250         |
| 7"                         | 7"         | 26        |                            |           | 0.03830          | 0.21480         |
| 10-3/4"                    | 10-3/4"    | 40.5      |                            |           | 0.98100          | 0.55090         |
| 2-7/8" x 7"                | 2-7/8"     | 6.5       | 7"                         | 26        | 0.03020          | 0.16970         |
| 7" x 10-3/4"               | 7"         | 26        | 10-3/4"                    | 40.5      | 0.50500          | 0.28360         |

|                                                                                   |                                                             |                     |             |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------|-------------|
|  | General Information / Data Sheet<br>WD 24 #2<br>OCS-G-00691 | 10/23/2015<br>Final | Page 2 of 2 |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------|-------------|

### Current Completion Detail:

Zone(s) ..... E-7 SAND  
 Perforation Interval ..... 8,546' – 8,562' MD  
 Completion Type ..... Gravel Packed  
 Current Status ..... Shut in  
 Initial BHP ..... 3,900 psi (3/6/1979)  
 SITP ..... 1,050 psi (12/21/2014)  
 Max Antic. Surf Press ..... 3,000 psi  
 BHT ..... 176° F

### **Crane Specifications:**

(See attached loading chart)

### **Problem Areas / Fish in hole:**

**Hard Paraffin problems.**

**Sand out from E-7 (11/1987)**

### **Brief History with Recent Wireline Entry:**

|                   |                                                                                                                                                                                              |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 04/18/60-04/24/60 | Spud & TD the well.                                                                                                                                                                          |
| 04/60-05/60       | Initially Completed as a dual. (SS)Perforated at E-1 Sand from 8,080'-8,086' MD and completed as a Oil well.<br>(LS)Perforated at E-7 Sand from 8,555'-8,562' MD and completed as a Oil well |
| 7/1979            | Re-perforated E-7 Sand from 8,548'-8,562' MD.                                                                                                                                                |
| 11/1987-02/1988   | Recompleted this well from a dual E-7/E-1 completion to a gravel packed single well in the E-7 Sand. Perforations at E-7 Sand from 8,546' - 8,560' MD and E-1 Sand was squeezed.             |
| 10/2001           | Wood Group Wireline Service pulled G/L valves from 2,701', 3,136', 3,604', 4,040', 4,308', 4,946', 5,416', 5,852', and 6,288'.                                                               |
|                   | The well is currently shut in.                                                                                                                                                               |

## McMoRan Oil & Gas

WD 24 #2, OCS-G-0691

API #17 719 00038 00

### Proposed Temporary Abandonment Procedure

This operation will temporarily abandon the WD 24 #2 wellbore from the WD 24 #2 Platform as outlined by McMoRan policy and procedures. **NOTE:** Per existing drilling records cement does not exist in the production casing / surface casing annuli.

SL Liftboat MOB #1:

1. MOL and RU on WD 24 #2.
2. Hold pre-job safety and operational meeting with all crew.
3. Perform tree and casing valve repair as needed.
4. Record initial SITP and casing pressures on report.
5. Inspect production tree and casing valves. Ensure production tree and casing valves function properly. Note any valve not functioning properly. Call office to discuss any necessary valve replacement.
  - a. Test tubing x production casing annulus to 1,000 psi for 30 minutes. Record the test on a chart. Bubble test the annulus for 30 minutes. Record on results on morning report.
  - b. Test 7" x 10-3/4" casing annulus to 1,000 psi for 30 minutes. Record the test on a chart. Bubble test the annulus for 30 minutes. Record on results on morning report.
6. RU SL. Test lubricator to 250/2,500 psi.
7. Make 2.25" gauge ring run to 8,548' or as deep as possible. Note any obstruction in the well. POOH. Note any obstructions in the tubing. RD SL.
8. RU pump lines. Test pump lines to 250/5,000 psi. Attempt to establish injection with seawater, if successful, squeeze the perforations with 21 sacks of 16.4 ppg Class H Cement and displace with seawater until a squeeze pressure of 1,000 psi over final injection is achieved or the ETOC is at 8,300' RKB. If unable to establish injection go to Zonal Isolation Alternate Compliance.

#### Zonal Isolation Alternate Compliance

- A. RU EL. Test lubricator to 250/2,500 psi. RIH and set a 1.906" TTS Tubing Bridge Plug (Series 4200) at +/- 8,403'. **NOTE:** If this step is performed skip step 11 and move to step 12.
- B. Dump 50' of high shear bond cement from 8,403' to 8,353'.
- C. Test dumped cement to 1,000 psi for 30 minutes. Record the test on a chart. Bubble test the dumped cement for 30 minutes. Record on results on morning report.
- D. Tag and verify top of cement.
- E. Perforate tubing at 8,000'. **NOTE:** If this step is performed skip step 12 and move to step 13.
- F. RD and DEMOB off of WD 24#2.

**NOTE:** McMoRan requests an Alternate Compliance to CFR 250.1715.a.3.i in the event that a satisfactory injection rate cannot be established into the production perforations. Due to wellbore construction, the Zonal Isolation Alternate Compliance meets the intent of CFR 250.1715.a.3.iii.B.

9. Test cement squeeze to 1,000 psi for 30 minutes. Record the test on a chart. Bubble test the cement squeeze for 30 minutes. Record on results on morning report.
10. RU SL. Test lubricator to 250/2,500 psi. Tag and verify top of cement.
11. RIH and set a 1.906" TTS Tubing Bridge Plug (Series 4200) at +/- 8,026'. **NOTE:** If Step A of the Zonal Isolation Contingency was performed, skip to Step #12.

12. RIH and perforate tubing at 8,000'. **NOTE:** If Step E of the Zonal Isolation Contingency was performed, skip to Step #13. RD SL.
13. RU pump lines. Test pump line to 250/5,000 psi. Break circulation.
14. RD pump lines.
15. RD and DEMOB off of WD 24 #2.

Liftboat MOB #2:

1. MOL and RU on WD 24 #2.
2. Hold pre-job safety and operational meeting with all crew.
3. RU pump lines. Test pump lines to 250/5,000 psi.
4. Spot a 500' balanced plug in the tubing and 7" casing with 96 sacks of 16.4 ppg Class H Cement. Balanced plug from 8,000' – 7,500' RKB.
5. Pressure test the balanced plug independently on the tubing and 7" casing to 1,000 psi for 30 minutes. Record the test on a chart. Bubble test Balanced Plug for 30 minutes on tubing and production casing. Record results on morning report.
6. RU EL. Test lubricator to 250/2,500 psi. RIH w/ 2.25" GR and tag top of cement. Record on the morning report.
7. Jet cut 2-7/8" tubing at 574' MD (500' BML). RD EL.
8. Perform 15 minute Bubble Test prior to ND tree and record. Bleed off tubing hanger void prior to ND tree. ND tree.
9. Pull and LD tubing.
10. RU EL. RIH and set 7" cement retainer with 7" casing gun at 524' MD (450' BML). RD EL.
11. RU and RIH with workstring and sting into 7" cement retainer at 524' MD. Fire gun, at 550', and attempt to establish circulation down the tubing and up the 10-3/4" casing.

**NOTE:** The workstring will have an IBOP run in the workstring prior to perforating the 7" casing. Additionally, the workstring will have a TIW valve run in the workstring prior to perforating the 7" casing.

12. Spot a 200' annular cement plug in the 7" x 10-3/4" casing annulus consisting of 60 sacks (63.6 ft<sup>3</sup>) of 16.4 ppg Class H Cement, leaving cement from 550' to 350'.
13. Un-sting from the 7" cement retainer.
14. WOC 8 hours.
15. Test 7" x 10-3/4" casing annulus to 1,000 psi for 30 minutes. Chart results.
16. Spot a 305' surface cement plug consisting of 63 sacks (66.8 ft<sup>3</sup>) of 16.4 ppg Class H Cement, leaving ETOC at 219' MD (145' BML).
17. Circulate out with seawater at 214' MD (140' BML).
18. POOH and LD workstring
19. WOC at least 8 hours.
20. Test Surface Plug to 1,000 psi for 30 minutes in 7" casing. Chart results. Perform 15 minute Bubble Test and record.
21. RIH and tag top of cement at +/- 219' MD (145' BML) and record.
22. NU dry hole tree with 1,000 psi gauge.
23. RD and DEMOB off of WD 24 #2.