
20. Casing, Liner and Cement:

## CASING

| Casing Type | Size of Hole | Size of Casing | Wt／Ft | Csg／Liner Top | Setting Depth | Sacks Cmt | Cmt Top | Cmt Bot | Status |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CONDUCTOR | $26+0 / 0$ | $16+0 / 0$ | 42.05 | 0 | 93 | 72 | 0 | 93 |  |
| SURF | $13+3 / 4$ | $9+5 / 8$ | 36.00 | 0 | 950 | 477 | 0 | 950 |  |
| 1ST | $8+3 / 4$ | $7+0 / 0$ | 26.00 | 0 | 7,442 | 615 | 1,532 | 7,442 | CBL |
| 1ST LINER | $6+1 / 8$ | $4+1 / 2$ | 11.60 | 7332 | 11,147 |  |  |  |  |

STAGE／TOP OUT／REMEDIAL CEMENT
Cement work date：

| Method used | String | Cementing tool setting／perf depth | Cement volume | Cement top | Cement bottom |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

Details of work：
21．Formation log intervals and test zones：

| FORMATION LOG INTERVALS AND TEST ZONES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FORMATION NAME | Measured Depth |  | Check if applies |  | COMMENTS（All DST and Core Analyses must be submitted to COGCC） |
|  | Top | Bottom | DST | Cored |  |
| PARKMAN | 3，908 |  | $\square$ | $\square$ |  |
| SUSSEX | 4，277 |  | $\square$ | $\square$ |  |
| SHANNON | 4，868 |  | $\square$ | $\square$ |  |
| NIOBRARA | 6，888 |  | $\square$ |  |  |
| Comment： |  |  |  |  |  |
|  |  |  |  |  |  |
| I hereby certify all statements made in this form are，to the best of my knowledge，true，correct，and complete． |  |  |  |  |  |
| Signed： |  |  | Print Name：Eileen Roberts |  |  |
| Title：Regulatory Specialist | Date： |  |  | Email： | eroberts＠nobleenergyinc．com |

## Attachment Check List

| Att Doc Num | Document Name | attached ？ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Attachment Checklist |  |  |  |  |  |
| 400409976 | CMT Summary＊ | Yes | 区 | No | $\square$ |
|  | Core Analysis | Yes | $\square$ | No | 区 |
| 400409977 | Directional Survey＊＊ | Yes | 区 | No | $\square$ |
|  | DST Analysis | Yes | $\square$ | No | 区 |
|  | Logs | Yes | 区 | No | $\square$ |
|  | Other | Yes | $\square$ | No | 区 |
| Other Attachments |  |  |  |  |  |
| 400409972 | LAS－CEMENT BOND | Yes | 区 | No | ■ |
| 400409978 | DIRECTIONAL DATA | Yes | 区 | No | $\square$ |

## General Comments

| $\underline{\text { User Group }}$ | Comment | Comment Date |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |

Total： 0 comment（s）

