



Bison Oil Well Cementing Tail & Lead

Date: 4/21/2020
Invoice # 200594
API# 05-123-48575
Foreman: Matthew Rosales

Customer: Noble Energy Inc.
Well Name: Guttersen D34-729

County: Weld
State: Colorado

Sec: 22
Twp: 3N
Range: 64W

Consultant: Gary
Rig Name & Number: H&P 517
Distance To Location: 24
Units On Location: 4047/4024/4034
Time Requested: 1000pm
Time Arrived On Location: 900pm
Time Left Location:

WELL DATA

Casing Size (in) : 9.625
Casing Weight (lb) : 36
Casing Depth (ft.) : 1,879
Total Depth (ft) : 1924
Open Hole Diameter (in) : 13.50
Conductor Length (ft) : 110
Conductor ID : 15.15
Shoe Joint Length (ft) : 36
Landing Joint (ft) : 3

Sacks of Tail Requested 100
HOC Tail (ft): 0

One or the other, cannot have quantity in both

Max Rate: 8
Max Pressure: 2500

Cement Data

Lead

Cement Name: BFN III
Cement Density (lb/gal) : 13.5
Cement Yield (cuft) : 1.68
Gallons Per Sack 8.90
% Excess 10%

Tail Type III

Cement Name:
Cement Density (lb/gal) : 15.2
Cement Yield (cuft) : 1.27
Gallons Per Sack: 5.80
% Excess: 0%

Fluid Ahead (bbls) 30.0
H2O Wash Up (bbls) 20.0

Spacer Ahead Makeup

30 BBL ahead with Die in 2nd 10

Casing ID

8.921

Casing Grade

J-55 only used

Lead Calculated Results

HOC of Lead 1538.52 ft
Casing Depth - HOC Tail
Volume of Lead Cement 751.92 cuft
HOC of Lead X Open Hole Ann
Volume of Conductor 82.12 cuft
(Conductor ID Squared) - (Casing Size OD Squared) X (.005454) X
(Conductor Length ft)
Total Volume of Lead Cement 834.04 cuft
(cuft of Lead Cement) + (Cuft of Conductor)
bbls of Lead Cement 163.40 bbls
(Total cuft of Lead Cement) X (.1781) X (1+%Lead Excess)
Sacks of Lead Cement 546.10 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
bbls of Lead Mix Water 115.72 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42
Displacement 142.73 bbls
(Casing ID Squared) X (.0009714) X (Casing Depth) + (Landing Joint) - (Shoe Length)
Total Water Needed: 322.26 bbls

Tail Calculated Results

Tail Cement Volume In Ann 127.00 cuft
(HOC Tail) X (OH Ann)
Total Volume of Tail Cement 111.37 Cuft
(HOC Tail X OH Ann) - (Shoe Length X Shoe Joint Ann)
bbls of Tail Cement 22.62 bbls
(HOC of Tail) X (OH Ann) + (Cement Yield) X (Shoe Joint Ann) X (.1781) X (% Excess)
HOC Tail 227.88 ft
(Tail Cement Volume) ÷ (OH Ann)
Sacks of Tail Cement 100.00 sk
(Total Volume of Tail Cement) ÷ (Cement Yield)
bbls of Tail Mix Water 13.81 bbls
(Sacks of Tail Cement X Gallons Per Sack) ÷ 42
Pressure of cement in annulus
Hydrostatic Pressure 585.23 PSI
Collapse PSI: 2020.00 psi
Burst PSI: 3520.00 psi

X

Authorization To Proceed



Customer
Well Name

Noble Energy Inc.
Guttersen D34-729

Date _____
INVOICE # _____
LOCATION _____
FOREMAN _____

4/21/2020
200594
Weld
Matthew Rosales

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X	Work Preformed
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X	Title
1	1. The first title
2	2. The second title
3	3. The third title
4	4. The fourth title
5	5. The fifth title
6	6. The sixth title
7	7. The seventh title
8	8. The eighth title
9	9. The ninth title
10	10. The tenth title
11	11. The eleventh title
12	12. The twelfth title
13	13. The thirteenth title
14	14. The fourteenth title
15	15. The fifteenth title
16	16. The sixteenth title
17	17. The seventeenth title
18	18. The eighteenth title
19	19. The nineteenth title
20	20. The twentieth title
21	21. The twenty-first title
22	22. The twenty-second title
23	23. The twenty-third title
24	24. The twenty-fourth title
25	25. The twenty-fifth title
26	26. The twenty-sixth title
27	27. The twenty-seventh title
28	28. The twenty-eighth title
29	29. The twenty-ninth title
30	30. The thirtieth title
31	31. The thirty-first title
32	32. The thirty-second title
33	33. The thirty-third title
34	34. The thirty-fourth title
35	35. The thirty-fifth title
36	36. The thirty-sixth title
37	37. The thirty-seventh title
38	38. The thirty-eighth title
39	39. The thirty-ninth title
40	40. The fortieth title
41	41. The forty-first title
42	42. The forty-second title
43	43. The forty-third title
44	44. The forty-fourth title
45	45. The forty-fifth title
46	46. The forty-sixth title
47	47. The forty-seventh title
48	48. The forty-eighth title
49	49. The forty-ninth title
50	50. The fiftieth title
51	51. The fifty-first title
52	52. The fifty-second title
53	53. The fifty-third title
54	54. The fifty-fourth title
55	55. The fifty-fifth title
56	56. The fifty-sixth title
57	57. The fifty-seventh title
58	58. The fifty-eighth title
59	59. The fifty-ninth title
60	60. The sixtieth title
61	61. The sixty-first title
62	62. The sixty-second title
63	63. The sixty-third title
64	64. The sixty-fourth title
65	65. The sixty-fifth title
66	66. The sixty-sixth title
67	67. The sixty-seventh title
68	68. The sixty-eighth title
69	69. The sixty-ninth title
70	70. The seventieth title
71	71. The seventy-first title
72	72. The seventy-second title
73	73. The seventy-third title
74	74. The seventy-fourth title
75	75. The seventy-fifth title
76	76. The seventy-sixth title
77	77. The seventy-seventh title
78	78. The seventy-eighth title
79	79. The seventy-ninth title
80	80. The eightieth title
81	81. The eighty-first title
82	82. The eighty-second title
83	83. The eighty-third title
84	84. The eighty-fourth title
85	85. The eighty-fifth title
86	86. The eighty-sixth title
87	87. The eighty-seventh title
88	88. The eighty-eighth title
89	89. The eighty-ninth title
90	90. The ninetieth title
91	91. The ninety-first title
92	92. The ninety-second title
93	93. The ninety-third title
94	94. The ninety-fourth title
95	95. The ninety-fifth title
96	96. The ninety-sixth title
97	97. The ninety-seventh title
98	98. The ninety-eighth title
99	99. The ninety-ninth title
100	100. The hundredth title

X _____
Date _____

Noble Guttersen D34-729 Surface

