

Foundation Energy Management, LLC

WELLBORE DIAGRAM

Well / Battery Columbine Spr Fed 16-2-5-104	Prospect Name Columbine Springs	Total Depth 7,210'	Current Status SI
Location NENE	Sec-Twn-Rng 2-5S-104W	Producing Horizon Mesaverde Sand	County & State Garfield, CO

WELLBORE DIAGRAM

Prepared Date: 12/3/2014
Prepared By: Austin Anderson

General Info

API #: 05-045-06281
KB Elevation:
GL Elevation: 6,753.88'
Spud Date: 10/08/1980
Completion Date: 06/23/1982

TVD: 6,843'
MD: 6,843'
Last PBTD: 3,014'

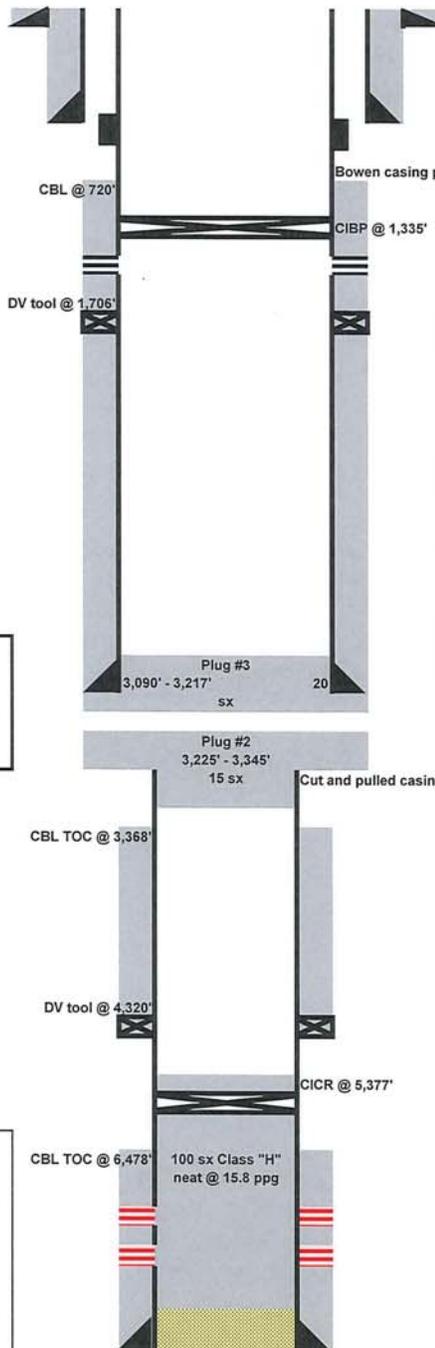
Tubing Detail

inch(OD)
(weight)
grade

Formation Tops:

Mancos	Base Mancos B
2,430'	3,970'
Castlegate	Dakota
2,670'	6,990'
Mancos B	
3,740'	

Well Notes:



Conductor Casing
16" inch (OD)
36 # (weight)
N-80 grade
23' depth from KB
Surface cement top
sacks of cement

Visual Returns

Surface Casing

9-5/8" inch (OD)
36 # (weight)
N-80 grade
214' depth from KB
cement top
110 sacks of cement

Calculated

Intermediate Casing

7" inch (OD)
20,23 # (weight)
K-55 grade
3,162' depth from KB
cement top
285 sacks of cement

CBL

Production Casing

4-1/2" inch (OD)
11.6 # (weight)
N-80 grade
6,891' depth from KB
cement top
285 sacks of cement

CBL

Mesaverde Perforations

1,404' - 1,424'
2 JSPF w/ 4" HCS 22 gm NL Newline RPS
41 - 0.5" holes

Mesaverde Stimulation

Pump 1,000 gals 7.5% HCl + CLA-STA + surfactant + iron seq. + 350 scf/bbl N2

Dakota Perforations

13-0.38" holes
6,542'; 6,544'; 6,546'; 6,604'; 6,606';
6,608'; 6,610'; 6,644'; 6,646'; 6,648';
6,680'; 6,682'

Dakota Stimulation

Breakdown pefs w/ 4% KCl water @ 4 bpm 3,800 psi. Screened out w/ 4 ppg going into formation. 26,000# 4 ppg 20/40. Total foam 88,000 gals. Total sand 143,300#.

Foundation Energy Management, LLC

WELLBORE DIAGRAM

Well / Battery Columbine Spr Fed 16-2-5-104	Prospect Name Columbine Springs	Total Depth 7,210'	Current Status SI
Location NENE	Sec-Twn-Rng 2-5S-104W	Producing Horizon Mesaverde Sand	County & State Garfield, CO

WELLBORE DIAGRAM

Prepared Date: 12/3/2014
Prepared By: Austin Anderson

General Info

API #: 05-045-06281
KB Elevation:
GL Elevation: 6,753.88'
Spud Date: 10/08/1980
Completion Date: 06/23/1982
TVD: 6,843'
MD: 6,843'
Last PBTD: 3,014'

Tubing Detail

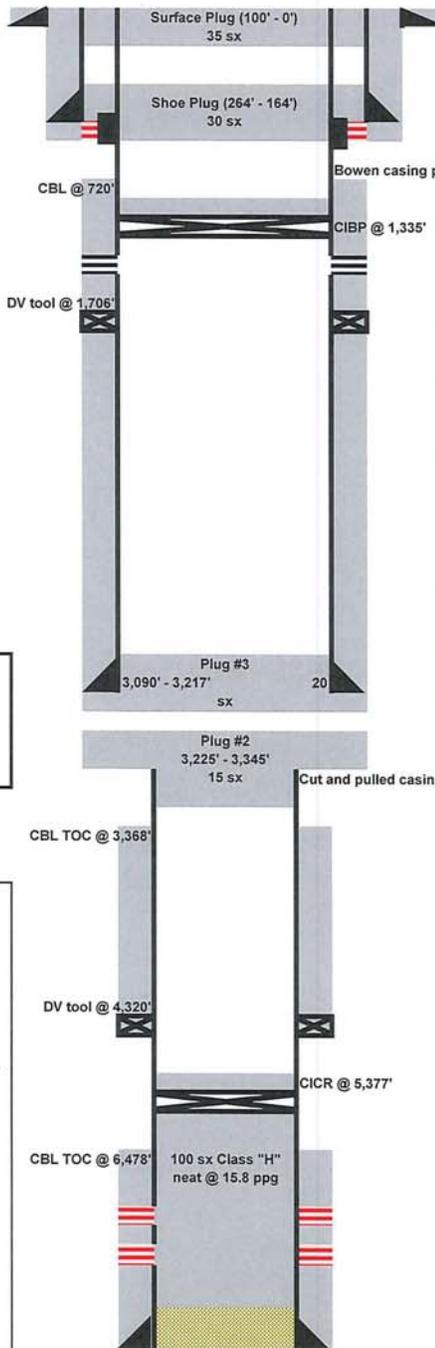
inch(OD)
(weight)
grade

Formation Tops:	
Mancos	Base Mancos B
2,430'	3,970'
Castlegate	Dakota
2,670'	6,990'
Mancos B	
3,740'	

Well Notes:

Intermediate Casing Detail

41 jts 32# special drift K-55 STC 8rd
1,675.97'
55 jts 24# K-55 STC 8rd
2,398.42'
1 jt 32# special drift K-55 STV 8rd
92.62'
Float Collar @ 4,074.95'
5 centralizers @ 4,102', 4,017', 3,897', 3,773',
and 3,691'.



Conductor Casing

16" inch (OD)
(weight)
grade
23' depth from KB
Surface cement top
sacks of cement

Visual Returns

Surface Casing

9-5/8" inch (OD)
36 # (weight)
N-80 grade
214' depth from KB
cement top
110 sacks of cement

Calculated

Intermediate Casing

7" inch (OD)
20,23 # (weight)
K-55 grade
3,162' depth from KB
cement top
285 sacks of cement

CBL

Production Casing

4-1/2" inch (OD)
11.6 # (weight)
N-80 grade
6,891' depth from KB
cement top
285 sacks of cement

CBL

Mesaverde Perforations

1,404' - 1,424'
2 JSPF w/ 4" HCS 22 gm NL Newline RPS
41 - 0.5" holes

Mesaverde Stimulation

Pump 1,000 gals 7.5% HCl + CLA-STA +
surfactant + iron seq. + 350 scf/bbl N2

Dakota Perforations

13-0.38" holes
6,542'; 6,544'; 6,546'; 6,604'; 6,606';
6,608'; 6,610'; 6,644'; 6,646'; 6,648';
6,680'; 6,682'

Dakota Stimulation

Breakdown pefs w/ 4% KCl water @ 4 bpm 3,800 psi. Screened
out w/ 4 ppg going into formation. 26,000# 4 ppg 20/40. Total
foam 88,000 gals. Total sand 143,300#.