

Calculated Textfields

New possibilities in existing schedules

Key take away

- Calculated Textfields can be:
 - Used to give new grouping options
 - Used to create new symbols
 - Used to filtering
 - Saved to database - Extract to third party programs, for example Power BI
 - Not limited to calculated textfields, but also regular textfields

- Minimum Requirements:
 - Fantasy – Different perspective to gather ideas.
- Recommended Requirements:
 - Unison userfieldset - availability on portfolio level.
 - Logical skills – For the advanced solutions



Example,
Small drilling package project, with approx. 250 activities

	Activity ID	Description
[-]	22-222	Small Drilling Package
[+]	HP00-A	HPU
[+]	GR00-A	Roughneck
[+]	HA00-A	Mounted Compensator
[+]	FE00-A	Dolly
[+]	FD00-A	Top Drive

What is calculated text fields

- CTF is text that is generated based on available data in the schedule
- Small example with High Impact Activities where Hours (Planned QTY > 1000)
- Demo later

Product		Description	Hours	Text 6 - High Impact Activities	2022 2023 2024											
					Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
[-]		Small Drilling Package	29 960,0													
[-]		1. High Impact Activities	16 545,0													
		HA00-A - Mounted Compensator	Engineering - EST (Structural)	1 120,0	1. High Impact Activities											
		HA00-A - Mounted Compensator	Engineering - EHY (Hydraulic)	1 680,0	1. High Impact Activities											
		HA00-A - Mounted Compensator	Engineering - EMD (Mechanical)	3 040,0	1. High Impact Activities											
		GR00-A - Roughneck	Engineering - EHY (Hydraulic)	1 760,0	1. High Impact Activities											
		GR00-A - Roughneck	Engineering - EST (Structural)	1 025,0	1. High Impact Activities											
		GR00-A - Roughneck	Engineering - EMD (Mechanical)	5 120,0	1. High Impact Activities											
		GR00-A - Roughneck	Engineering - EEL (Electrical)	1 040,0	1. High Impact Activities											
		HA00-A - Mounted Compensator	Engineering - EPR (Software)	1 760,0	1. High Impact Activities											
[-]		2. Low Impact Activities	13 415,0													
		HP00-A - HPU	Product kick-off		2. Low Impact Activities											
		GR00-A - Roughneck	Product kick-off		2. Low Impact Activities											
		HP00-A - HPU	Engineering - EEL (Electrical)	160,0	2. Low Impact Activities											
		HP00-A - HPU	Engineering - EHY (Hydraulic)	480,0	2. Low Impact Activities											
		HP00-A - HPU	Engineering - EST (Structural)	80,0	2. Low Impact Activities											
		HP00-A - HPU	Engineering - EMD (Mechanical)	320,0	2. Low Impact Activities											
		HP00-A - HPU	Purchasing	100,0	2. Low Impact Activities											
		HP00-A - HPU	Product Management	100,0	2. Low Impact Activities											
		GR00-A - Roughneck	Product Management	300,0	2. Low Impact Activities											

Group Properties

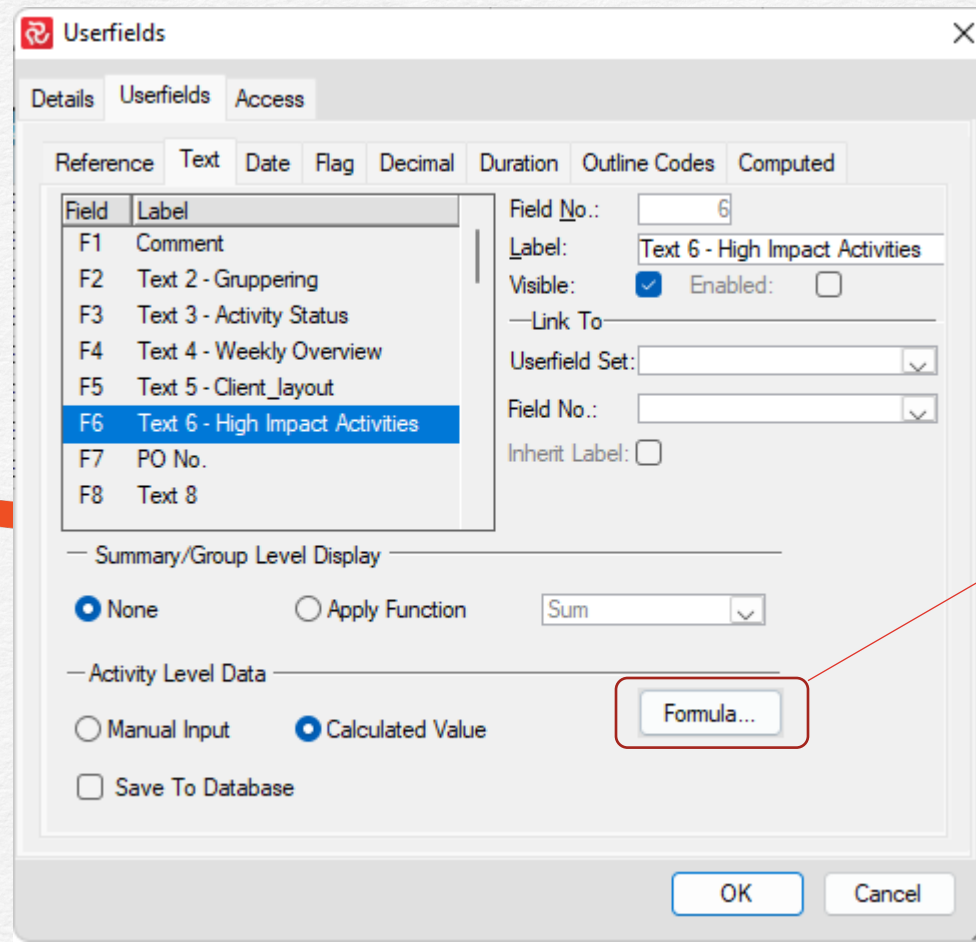
General Appearance Fonts

No	Group Field:	Level	Sort On	Page Break
1	Project (Reference 1)		Short	<input type="checkbox"/>
2	Text 6 - High Impact Activities (Text 6)		Text	<input type="checkbox"/>



How to create calculated text fields 1/2

- Go to Userfields → Text → Calculated → Formula
- Apply filter



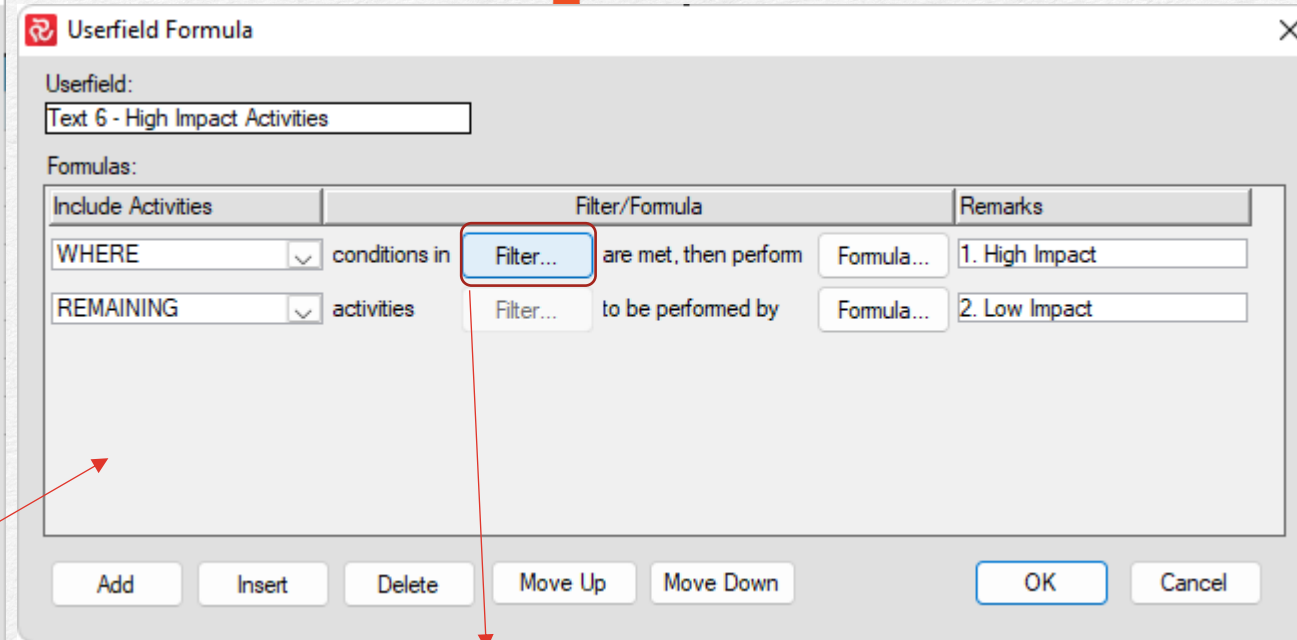
The 'Userfields' dialog box is shown with the 'Userfields' tab selected. The 'Text' sub-tab is active. A list of fields is shown on the left, with 'F6 Text 6 - High Impact Activities' selected. On the right, the 'Field No.' is set to 6, and the 'Label' is 'Text 6 - High Impact Activities'. The 'Visible' checkbox is checked, and 'Enabled' is unchecked. The 'Summary/Group Level Display' section has 'None' selected. The 'Activity Level Data' section has 'Calculated Value' selected. The 'Formula...' button is highlighted with a red box and an arrow pointing to the 'Userfield Formula' dialog.

Field	Label
F1	Comment
F2	Text 2 - Gruppering
F3	Text 3 - Activity Status
F4	Text 4 - Weekly Overview
F5	Text 5 - Client_layout
F6	Text 6 - High Impact Activities
F7	PO No.
F8	Text 8

Field No.: 6
Label: Text 6 - High Impact Activities
Visible: ☒ Enabled: ☐
—Link To—
Userfield Set:
Field No.:
Inherit Label: ☐

— Summary/Group Level Display —
☒ None ☐ Apply Function Sum
— Activity Level Data —
☐ Manual Input ☒ Calculated Value
☐ Save To Database

Formula...



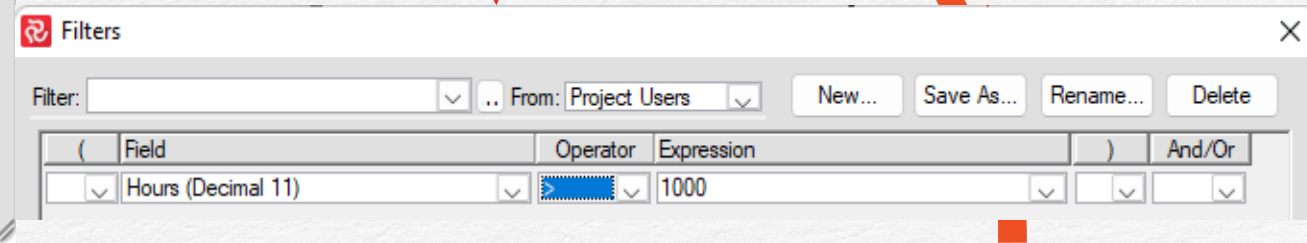
The 'Userfield Formula' dialog box is shown. The 'Userfield' is 'Text 6 - High Impact Activities'. The 'Formulas' section contains two rows. The first row has 'WHERE' in the 'Include Activities' column, 'conditions in' in the 'Filter/Formula' column, and 'are met, then perform' in the 'Remarks' column. The second row has 'REMAINING' in the 'Include Activities' column, 'activities' in the 'Filter/Formula' column, and 'to be performed by' in the 'Remarks' column. The 'Filter...' button in the first row is highlighted with a red box and an arrow pointing to the 'Filters' dialog.

Userfield: Text 6 - High Impact Activities

Formulas:

Include Activities	Filter/Formula	Remarks
WHERE	conditions in	are met, then perform
REMAINING	activities	to be performed by

Filter...



The 'Filters' dialog box is shown. The 'Filter' is 'Hours (Decimal 11)' and the 'From' is 'Project Users'. The 'Filter' field is highlighted with a red box and an arrow pointing to the 'Userfield Formula' dialog.

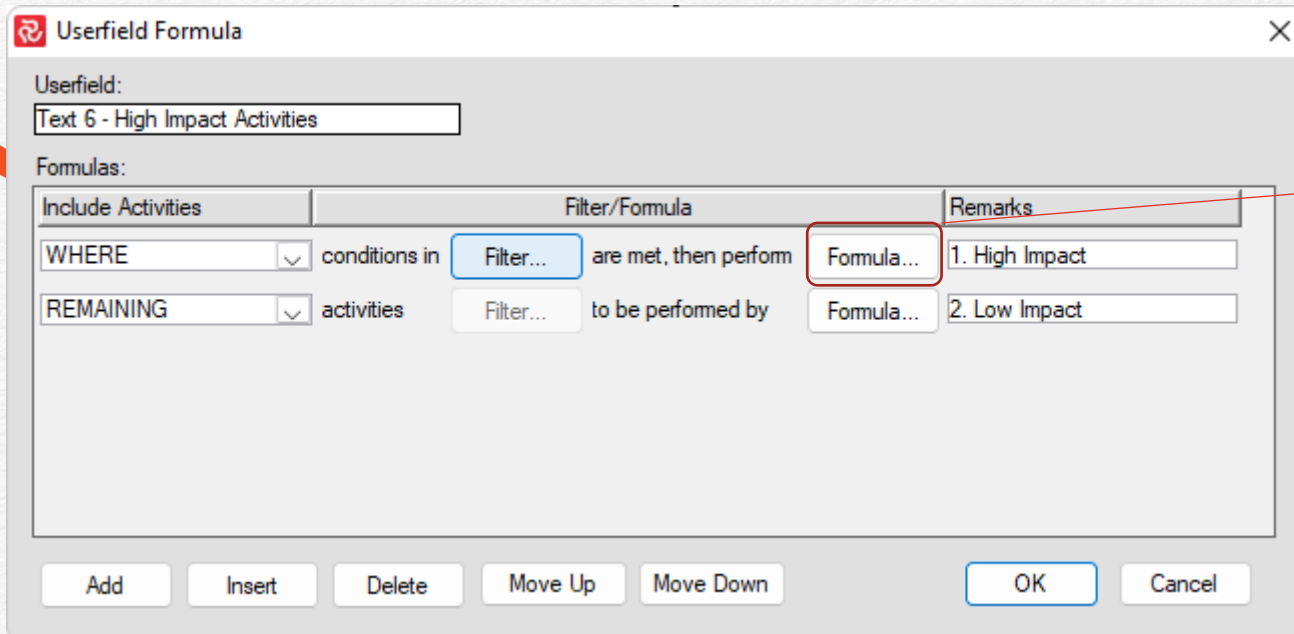
Filter: Hours (Decimal 11) .. From: Project Users

(Field	Operator	Expression)	And/Or
(Hours (Decimal 11)	>	1000)	



How to create calculated text fields 2/2

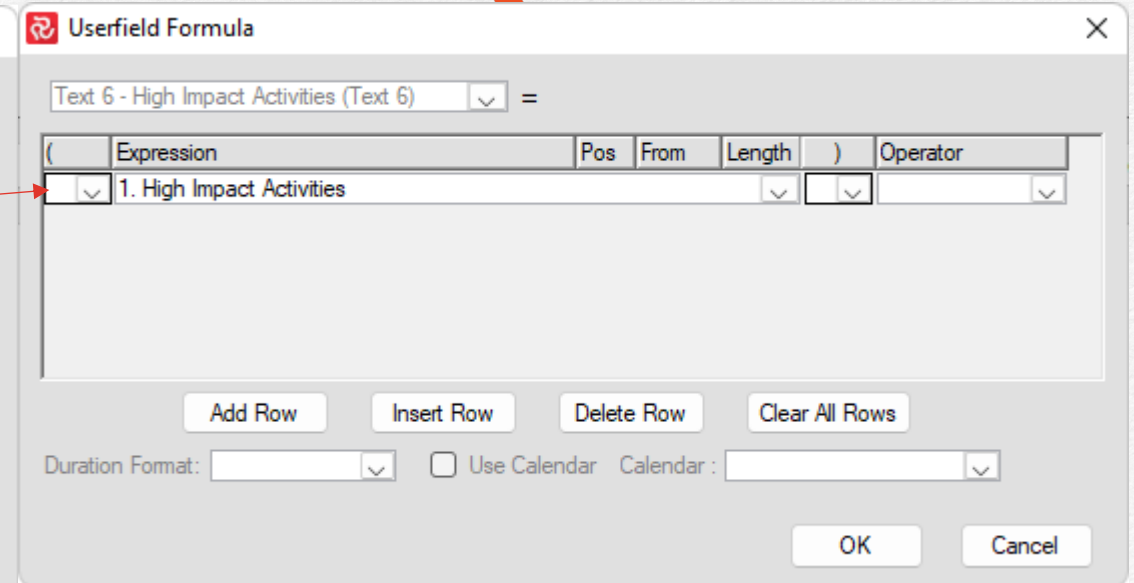
- The Formula defines what text you want to be shown in the text field
- Remarks can help to keep track of Filter and Formulas, especially in more complex setups



The 'Userfield Formula' dialog box shows the configuration for a text field. The 'Userfield:' section contains 'Text 6 - High Impact Activities'. The 'Formulas:' section is a table with columns for 'Include Activities', 'Filter/Formula', and 'Remarks'. The first row is for 'WHERE' conditions, and the second is for 'REMAINING' activities. A red box highlights the 'Formula...' button in the first row, and a red arrow points from it to the 'Remarks' column.

Include Activities	Filter/Formula	Remarks
WHERE	conditions in Filter... are met, then perform Formula...	1. High Impact
REMAINING	activities Filter... to be performed by Formula...	2. Low Impact

Buttons at the bottom: Add, Insert, Delete, Move Up, Move Down, OK, Cancel.



The 'Userfield Formula' dialog box shows the configuration for a text field. The 'Userfield:' section contains 'Text 6 - High Impact Activities (Text 6)'. The 'Formulas:' section is a table with columns for 'Expression', 'Pos', 'From', 'Length', and 'Operator'. The first row is for '1. High Impact Activities'. Buttons at the bottom: Add Row, Insert Row, Delete Row, Clear All Rows, Duration Format, Use Calendar, Calendar, OK, Cancel.

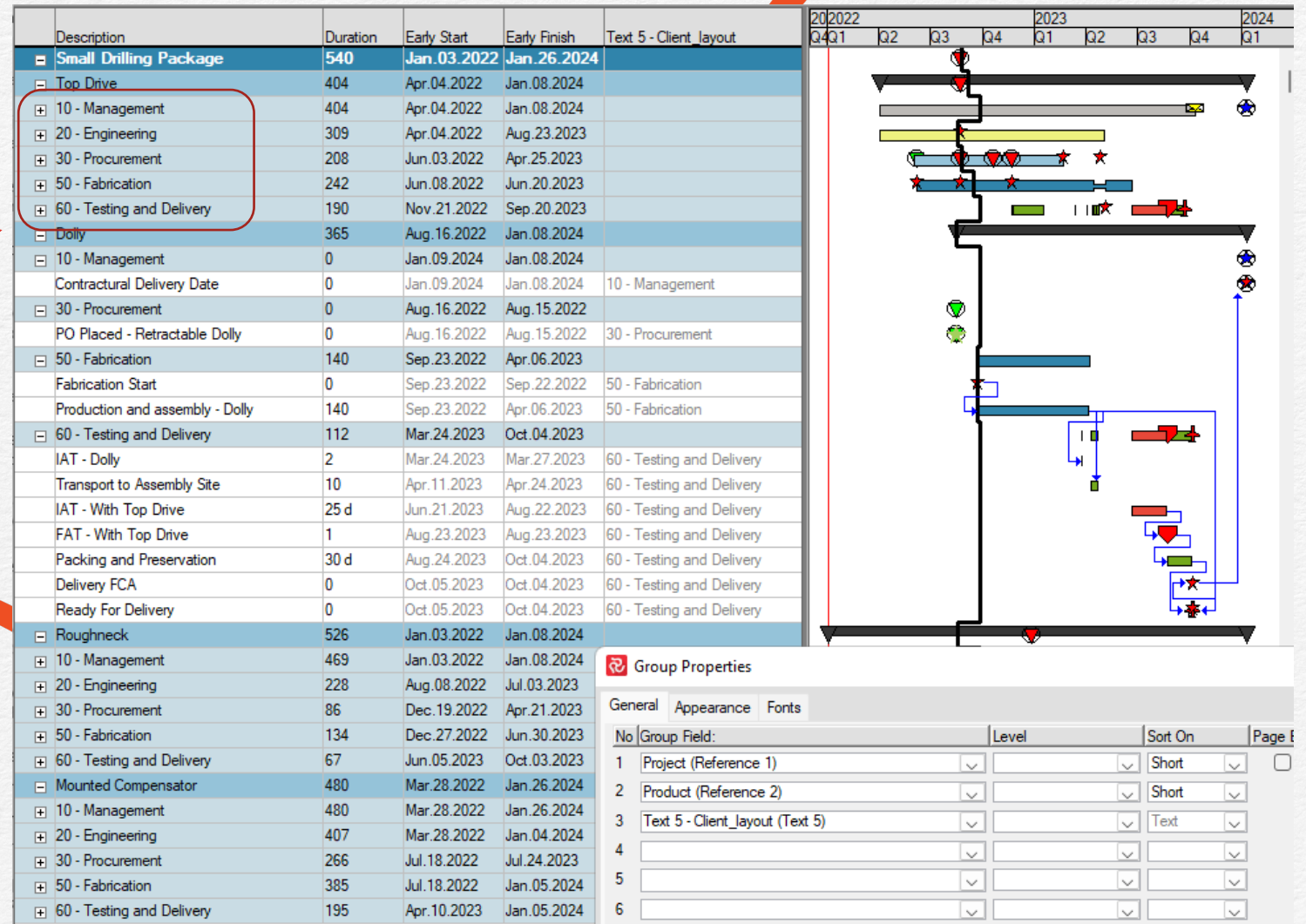
Expression	Pos	From	Length	Operator
1. High Impact Activities				

Buttons at the bottom: Add Row, Insert Row, Delete Row, Clear All Rows, Duration Format, Use Calendar, Calendar, OK, Cancel.



Calculated Text Fields – Some Ideas 1/3

- Contractual requirements on grouping/reporting parameters
- Reference fields may not support contractual requirements
 - Solved by calculated fields





Calculated Text Fields – Some Ideas 2/3

- Activity Status
 - 1. Completed
 - 2. Overdue
 - 3. Not Started
 - 4. Behind Schedule
 - 5. Ongoing
 - 6. Future Activities

Activity ID	No.	Description	Count	Text 3 - Activity Status	Early Start	Early Finish	Planned %	Actual %	Timeline											
									2022	2023	2024	2025	2026	2027	2028	2029	2030			
									Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1			
22-222		Small Drilling Package	247		Jan.03.2022	Jan.26.2024	18.5	11.0												
FD00-A		Top Drive	59		Apr.04.2022	Jan.08.2024	32.1	22.9												
1. Completed		1. Completed	4		Apr.04.2022	Jun.07.2022	100.0	100.0												
2. Overdue		2. Overdue	8		Jun.03.2022	Sep.02.2022	100.0	90.0												
3. Not Started		3. Not Started	1		Aug.22.2022	Apr.03.2023	15.6	0.0												
4. Behind Schedule		4. Behind Schedule	1		Apr.04.2022	Oct.19.2022	84.6	55.0												
5. Ongoing		5. Ongoing	8		Apr.04.2022	Oct.10.2023	36.9	27.4												
6. Future Activities		6. Future Activities	37		Oct.18.2022	Jan.08.2024	0.0	0.0												
FE00-A		Dolly	11		Aug.16.2022	Jan.08.2024	0.7	0.0												
1. Completed		1. Completed	1		Aug.16.2022	Aug.15.2022	100.0	100.0												
22-222 FE00-A.00PO.00	530	PO Placed - Retractable Dolly	1	1. Completed	Aug.16.2022	Aug.15.2022	100.0	100.0												
2. Overdue		2. Overdue	1		Sep.23.2022	Sep.22.2022	100.0	0.0												
22-222 FE00-A.00FS.00	531	Fabrication Start	1	2. Overdue	Sep.23.2022	Sep.22.2022	100.0													
3. Not Started		3. Not Started	1		Sep.23.2022	Apr.06.2023	0.7	0.0												
22-222 FE00-A.50FA.00	532	Production and assembly - Dolly	1	3. Not Started	Sep.23.2022	Apr.06.2023	0.7													
6. Future Activities		6. Future Activities	8		Mar.24.2023	Jan.08.2024	0.0	0.0												
22-222 FE00-A.61IA.00	533	IAT - Dolly	1	6. Future Activities	Mar.24.2023	Mar.27.2023														
22-222 FE00-A.70TR.00	534	Transport to Assembly Site	1	6. Future Activities	Apr.11.2023	Apr.24.2023														
22-222 FE00-A.61IA.01	610	IAT - With Top Drive	1	6. Future Activities	Jun.21.2023	Aug.22.2023														
22-222 FE00-A.61FA.00	620	FAT - With Top Drive	1	6. Future Activities	Aug.23.2023	Aug.23.2023														
22-222 FE00-A.75PP.00	650	Packing and Preservation	1	6. Future Activities	Aug.24.2023	Oct.04.2023														
22-222 FE00-A.00DC.00	710	Delivery FCA	1	6. Future Activities	Oct.05.2023	Oct.04.2023														
22-222 FE00-A.00RD.00	700	Ready For Delivery	1	6. Future Activities	Oct.05.2023	Oct.04.2023														
22-222 FE00-A.00CD.00	900	Contractual Delivery Date	1	6. Future Activities	Jan.09.2024	Jan.08.2024														
GR00-A		Roughneck	39		Jan.03.2022	Jan.08.2024	19.3	5.0												
1. Completed		1. Completed	1		Jan.03.2022	Dec.30.2021	100.0	100.0												
3. Not Started		3. Not Started	1		Sep.19.2022	Dec.23.2022	6.3	0.0												
4. Behind Schedule		4. Behind Schedule	3		Aug.08.2022	Nov.25.2022	43.8	10.0												
5. Ongoing		5. Ongoing	2		Jan.03.2022	Oct.23.2023	39.3	39.3												
6. Future Activities		6. Future Activities	32		Oct.31.2022	Jan.08.2024	0.0	0.0												
Mounted Compensator		Mounted Compensator	103		Mar.28.2022	Jan.26.2024	9.0	5.6												
1. Completed		1. Completed	4		Mar.28.2022	Jul.15.2022	100.0	100.0												
2. Overdue		2. Overdue	5		Jul.18.2022	Aug.05.2022	100.0	0.0												
3. Not Started		3. Not Started	2		Sep.19.2022	Nov.23.2023	2.5	0.0												
4. Behind Schedule		4. Behind Schedule	3		Mar.28.2022	May.05.2023	40.2	20.2												
5. Ongoing		5. Ongoing	4		Mar.28.2022	Jan.26.2024	19.8	19.8												

Remarks

1. Completed

2. Overdue

3. Not Started

Userfield Formula

Userfield:

Formulas:

Include Activities	Filter/Formula				Remarks
WHERE <input type="button" value="v"/>	conditions in	<input type="button" value="Filter..."/>	are met, then perform	<input type="button" value="Formula..."/>	<input type="text" value="1. Completed"/>
THEN WHERE <input type="button" value="v"/>	conditions in	<input type="button" value="Filter..."/>	are met, then perform	<input type="button" value="Formula..."/>	<input type="text" value="2. Overdue"/>
THEN WHERE <input type="button" value="v"/>	conditions in	<input type="button" value="Filter..."/>	are met, then perform	<input type="button" value="Formula..."/>	<input type="text" value="3. Not Started"/>
THEN WHERE <input type="button" value="v"/>	conditions in	<input type="button" value="Filter..."/>	are met, then perform	<input type="button" value="Formula..."/>	<input type="text" value="4. Behind Schedule"/>
THEN WHERE <input type="button" value="v"/>	conditions in	<input type="button" value="Filter..."/>	are met, then perform	<input type="button" value="Formula..."/>	<input type="text" value="6. Future Activities"/>



- | Text 4 - Weekly Overview | | | | | | | | No. | Description | Duration | Early Start | Early Finish | Planned % | Actual % |
|---------------------------------|--|--|--|--|--|--|--|-----|--|----------|-------------|--------------|-----------|----------|
| | | | | | | | | | Small Drilling Package | 540 | Jan.03.2022 | Jan.26.2024 | 13.2 | 5.6 |
| | | | | | | | | | 1. Completed | 161 | Jan.03.2022 | Aug.15.2022 | 100.0 | 100.0 |
| | | | | | | | | | 2. Overdue | 80 | Jun.03.2022 | Sep.22.2022 | 100.0 | 90.0 |
| | | | | | | | | | 3. Not Started | 329 | Aug.22.2022 | Nov.23.2023 | 8.5 | 0.0 |
| | | | | | | | | | 5. Ongoing | 259 | Mar.28.2022 | May.05.2023 | 42.2 | 14.3 |
| | | | | | | | | | 6. Future Activities | 322 | Nov.03.2022 | Jan.26.2024 | 0.0 | 0.0 |
| | | | | | | | | | Week 2022-39(09.26.22-10.02.22) | 175 | Sep.27.2022 | May.29.2023 | 0.0 | 0.0 |
| Week 2022-39(09.26.22-10.02.22) | | | | | | | | 413 | Fabrication Start - APV's | 0 | Sep.27.2022 | Sep.26.2022 | | |
| Week 2022-39(09.26.22-10.02.22) | | | | | | | | 410 | PO Placed - APV's | 0 | Sep.27.2022 | Sep.26.2022 | | |
| Week 2022-39(09.26.22-10.02.22) | | | | | | | | 414 | Production and assembly - APV's | 175 | Sep.27.2022 | May.29.2023 | | |
| | | | | | | | | | Week 2022-40(10.03.22-10.09.22) | 331 | Jan.03.2022 | May.25.2023 | 87.7 | 64.0 |
| Week 2022-40(10.03.22-10.09.22) | | | | | | | | 260 | Engineering - EEL (Electrical) | 170 d | Jan.03.2022 | Oct.03.2022 | 93.2 | 68.0 |
| Week 2022-40(10.03.22-10.09.22) | | | | | | | | 270 | Engineering - EEL (Electrical) Follow-Up | 161 | Oct.04.2022 | May.25.2023 | | |
| Week 2022-40(10.03.22-10.09.22) | | | | | | | | 500 | PO Placed - Steel production | 0 | Oct.06.2022 | Oct.05.2022 | | |
| | | | | | | | | | Week 2022-41(10.10.22-10.16.22) | 364 | Jan.03.2022 | May.25.2023 | 18.4 | 13.7 |
| Week 2022-41(10.10.22-10.16.22) | | | | | | | | 220 | Engineering - EMD (Mechanical) | 176 d | Jan.03.2022 | Oct.11.2022 | 93.2 | 68.0 |
| Week 2022-41(10.10.22-10.16.22) | | | | | | | | 200 | Engineering - EST (Structural) | 176 | Jan.03.2022 | Oct.11.2022 | 93.2 | 75.0 |
| Week 2022-41(10.10.22-10.16.22) | | | | | | | | 411 | ITP Received - APV's | 0 | Oct.11.2022 | Oct.10.2022 | | |
| Week 2022-41(10.10.22-10.16.22) | | | | | | | | 302 | BOM Released | 0 | Oct.12.2022 | Oct.11.2022 | | |
| Week 2022-41(10.10.22-10.16.22) | | | | | | | | 310 | Items | 75 | Oct.12.2022 | Jan.24.2023 | | |
| Week 2022-41(10.10.22-10.16.22) | | | | | | | | 580 | Fabrication and Assembly Follow-Up | 142 | Oct.12.2022 | May.04.2023 | | |
| Week 2022-41(10.10.22-10.16.22) | | | | | | | | 230 | Engineering - EMD (Mechanical) Follow-Up | 155 | Oct.12.2022 | May.25.2023 | | |
| Week 2022-41(10.10.22-10.16.22) | | | | | | | | 250 | Engineering - EHY (Hydraulic) Follow-Up | 155 | Oct.12.2022 | May.25.2023 | | |
| | | | | | | | | | Week 2022-42(10.17.22-10.23.22) | 397 | Apr.04.2022 | Oct.10.2023 | 25.6 | 16.6 |
| Week 2022-42(10.17.22-10.23.22) | | | | | | | | 200 | Engineering - EST (Structural) | 117 | Apr.04.2022 | Oct.19.2022 | 84.6 | 55.0 |
| Week 2022-42(10.17.22-10.23.22) | | | | | | | | 412 | Free Issued Items Need Date - APV's | 0 | Oct.18.2022 | Oct.17.2022 | | |
| Week 2022-42(10.17.22-10.23.22) | | | | | | | | 160 | Design Manual Ready For Submittal to DNV | 0 | | | | |
| Week 2022-42(10.17.22-10.23.22) | | | | | | | | 304 | GA Approved without comments | 0 | | | | |
| 7.22-10.23.22) | | | | | | | | 330 | PO Placed - Main Frame | 0 | | | | |
| 7.22-10.23.22) | | | | | | | | 510 | Fabrication Start | 0 | | | | |
| 7.22-10.23.22) | | | | | | | | 520 | Production steel work | 55 | | | | |
| 7.22-10.23.22) | | | | | | | | 332 | Fabrication Main Frame | 120 d | | | | |
| 7.22-10.23.22) | | | | | | | | 280 | Engineering - EPR (Software) | 126 | | | | |
| 7.22-10.23.22) | | | | | | | | 210 | Engineering - EST (Structural) Follow-Up | 226 d | | | | |
| | | | | | | | | | Week 2022-43(10.24.22-10.30.22) | 195 | | | | |
| 4.22-10.30.22) | | | | | | | | 503 | Fabrication Start - TMC | 0 | | | | |
| 4.22-10.30.22) | | | | | | | | 500 | PO Placed - TMC | 0 | | | | |
| 4.22-10.30.22) | | | | | | | | 504 | Steel Production - TMC | 195 | | | | |
- 2022

Dec 04 | Jan 14 | Feb 24 | Mar 06 | Apr 17 | May 27 | Jun 07 | Jul 17 | Aug 28 | Sep 08 | Oct 18 | Nov 28 | Dec 08

2023

Jan 08 | Feb 18 | Mar 28 | Apr 08 | May 18 | Jun 28 | Jul 08 | Aug 18 | Sep 28 | Oct 08 | Nov 18 | Dec 08

Userfield Formula

Userfield:

Formulas:

Include Activities	Filter/Formula			Remarks
WHERE <input type="text" value=""/>	conditions in	<input type="button" value="Filter..."/>	are met, then perform <input type="text" value="Formula..."/>	<input type="text" value="1. Completed"/>
THEN WHERE <input type="text" value=""/>	conditions in	<input type="button" value="Filter..."/>	are met, then perform <input type="text" value="Formula..."/>	<input type="text" value="2. Overdue"/>
THEN WHERE <input type="text" value=""/>	conditions in	<input type="button" value="Filter..."/>	are met, then perform <input type="text" value="Formula..."/>	<input type="text" value="3. Not started"/>
THEN WHERE <input type="text" value=""/>	conditions in	<input type="button" value="Filter..."/>	are met, then perform <input type="text" value="Formula..."/>	<input type="text" value="4. Week 1 Start"/>
THEN WHERE <input type="text" value=""/>	conditions in	<input type="button" value="Filter..."/>	are met, then perform <input type="text" value="Formula..."/>	<input type="text" value="4. Week1 Finish"/>



Calculated Textfields

- Demo
 - How to create calculated text field
 - Weekly Overview



Thank You.