

- Add product sale customer in the same way as a drilling company and also in the same way as a rig, it will allow dispatch to schedule load request in same way as regular jobs.

- Tweaking current product haul form in different format to fit different schedule needs.
    - Scenario 3, Schedule a blend for a job and load to a bin attached to bulk plant awaiting blend test (Has call sheet)
1. Schedule a product haul as usual

Door Code 332 - BP Code 332

JOB	DATE	PREFL	BLEND	DISPL	CREW
2-Stage Prod	Aug 6 20:00	3m <sup>3</sup>	13.75t		
		3m <sup>3</sup>	8t		
Liner	Aug 6 2:00	6m <sup>3</sup>	1t		
Whipstock Plug	Jul 31				

Need a haul

Schedule Product Haul

Re-schedule Product Haul

Cancel Product Haul

On Location

Update the Blend

2. You will see a new checkbox "Blend Test".

**Schedule Product Haul**

Call Sheet Number

1096698

Base Blend

Visweep DM IS

☒ Base Blend Tonnage ☐ Total Blend Tonnage

Amount

0

Mix Water

1.991

Blend Test

☐

Bulk Plant

GP Bulk Plant

Load to Bin

None

Load to An Existing Haul

☐

Go With Crew

☐

Estimated Load Time

5/26/2021 9:13

Expected On Location Time

5/26/2021 9:13

Estimated Travel Time

4

Third Party

☐

Crew

None

Comments

Save

3. If you check "Blend Test", it will hide the data fields for hauling product to rig. There bulk plant list will be defaulted by service point. The storages in this bulk plant will be listed. If you don't choose a Storage number. Bulk plant operation will

pick up one when he is doing blending in BPAVS.

The screenshot shows a web form titled "Schedule Product Haul" with a close button (X) in the top right corner. The form contains the following fields and options:

- Call Sheet Number:** A text input field containing "1096698".
- Base Blend:** A dropdown menu showing "Visweep DM IS".
- Tonnage Options:** Two radio buttons: "Base Blend Tonnage" (selected) and "Total Blend Tonnage".
- Amount:** A text input field containing "0".
- Mix Water:** A text input field containing "1.991".
- Blend Test:** A checkbox that is checked.
- Bulk Plant:** A dropdown menu showing "GP Bulk Plant".
- Load to Storage:** A dropdown menu showing "None".
- Comments:** A large text area for additional notes.
- Save:** A red button at the bottom of the form.

- Scenario 4/5, Schedule a haul to transfer pre-blended blend to a bin attached to a rig for a job (Has call sheet), or go with crew.

1. Once a blend is scheduled for testing, you can find it under "Re-schedule Product Haul", there will be a sub-menu called "Blend in Test".

The screenshot shows a product schedule interface with a context menu open over a product entry. The background interface includes:

- Product details: P1821: MT, P2042: MT, Pre-Job Testing on Productions - Cement / DMIS (Sanjel requirement).
- Status: Order confirmed May 22, Lead blended - awaiting results, Tail blended - awaiting results.
- Product name: EXPANDOMix PRO LT + Additives - 24t.
- Additional details: LAST FILL, P1827: MT, 745061 on location, Blend Testing for Ints/Liners (Customer Requirement).
- Bottom entry: 1827: OMT Unknown |

The context menu, which appears to be triggered by clicking on the product name, contains the following options:

- Need a haul
- Schedule Product Haul
- Re-schedule Product Haul (highlighted with a red arrow)
- Cancel Product Haul (highlighted with a red arrow)
- On Location (highlighted with a red arrow)
- Update the Blend

2. When you click on the product schedule, a schedule interface which is similar to classic schedule product haul interface. You can enter the amount will be haul away. It will take out the blend from bulk plant storage and load to bulker and ship to field job.




Call Sheet Number	1096698
Blend	Visweep DM IS + 1.5% SCA-6 + 2% SCA-7
Amount	0
Bulk Plant	GP Bulk Plant
From Storage	1974
Load to An Existing Haul	<input type="checkbox"/>
Load to Bin	None
Estimated Load Time	5/26/2021 9:13
Expected On Location Time	5/26/2021 9:13
Estimated Travel Time	4
Third Party	<input type="checkbox"/>
Crew	None
Comments	
Save	

- Scenario 6. Schedule a blend haul for a project to a storage attached to a rig (No call sheet).
  1. Start from a bin attached to customer project bulk plant, select "Schedule a blend".

[illegible]

2. Customer name will be carried in, customer's programs will be populated. Select one program, the needed blends will be populated. Select one blend to continue as usual without checking "Blend Test"

**Schedule Product Haul**

**Customer**

Ovinitive

**Program**

PRG2100791

**Base Blend**

Visweep DM IS

☒ Base Blend Tonnage

☐ Total Blend Tonnage

**Amount**

0

**Mix Water**

1.991

**Blend Test**

☐

**Bulk Plant**

GP Bulk Plant

**Load to Bin**

None


**Load to An Existing Haul**

☐


**Go With Crew**

☐

**Estimated Load Time**

5/26/2021 9:13

**Expected On Location Time**

5/26/2021 9:13

**Estimated Travel Time**

4

**Third Party**

☐

**Crew**

None

**Comments**

**Save**

- Scenario 7. Schedule a blend and transfer to a bin attached to bulk plant (No call sheet)
  1. Start from a bin attached to customer project bulk plant, select "Schedule a blend".



2. The information of blend will be loaded up from database, fill out transfer amount and product haul information. Call Sheet Number or Program Id will show up to indicate where the recipe was from

Schedule Blend Transfer

Call Sheet Number

1096698

Program

PRG2100279

Blend

Visweep DM IS + 1.5% SCA-6 + 2% SCA-7

Amount

0

From Storage

1974

Load to An Existing Haul

☐

Load to Bin

None

Estimated Load Time

5/26/2021 9:13

Expected On Location Time

5/26/2021 9:13

Estimated Travel Time

4

Third Party

☐

Crew

None

Comments

Save

## Design 2: Create separate dashboard for load request

- Create load request board and add new functions on this board. The list style is similar to current Product Haul page in eService Online. The UI design will be similar to Rig Board.



eService Online   Upcoming Jobs <b>Product Haul</b> Rig Board   Resource   Calendar									
Filters:		Service Points	ALL						
	Call Sheet#	Rig Name	Category	Base Blend	Amount	Primary Unit	Tractor Unit	Driver	BinNumber
▶	1096815	Nabors 77	Tail	IPrime (AB) + 0.5% CFL	30	446708L	746708	Racine, Eugene (1818)	1821
▶	1096844	Fox 1	Tail	1:1:0 'G' + 0.8% CFL-11	54.03				
▶	1096843	PD 540	Tail	IPrime (AB) + 0.3% CFL	26	446105	746105	Rikardsen, Kari (1499)	1862
▶	1096842	PD 535	Tail	PRODUCTIONmix HZ +	35	446708L	746708	Racine, Eugene (1818)	1950
▶	1096841	Ensign 438	Lead 1	LITEmix 1325 (AB) + 0.2	21	446136	746136	Van Laar, Gerrit (1878)	1819
▶	1096829	PD 529	Lead 1	Thermal 40 + 0.15% CFL	5	446096	746096		
▶	1096811	Horizon 30	Lead 1	SURFACEmix LW PRO G	16.5	446105	746105	Rikardsen, Kari (1499)	1953
▶	1096814	PD 546	Preflush	Visweep DM IS + 828.7	8	446107	745042	Penner, Cody (1848)	
▶	1096814	PD 546	Tail	ASC IV + 0.5% CFL-11	5	446107	745042	Penner, Cody (1848)	
▶	1096829	PD 529	Preflush	Visweep DM IS + 617.3	8	446096	746096		
▶	1096839	PD 199	Lead 1	Proteus Core + 0.2% CFL	38	446705L	746705	Alder, Cam (1570)	1948
▶	1096838	Concord 157	Lead 1	Thermal 40 + 0.1% CFL	6.8	746097	446097	Baron, Darcy (1115)	
<div> <span>◀</span> <span>1</span> <span>2</span> <span>3</span> <span>4</span> <span>5</span> <span>6</span> <span>7</span> <span>8</span> <span>...</span> <span>▶</span> <span>⌂</span> </div> <div>1 of 1296 pages (15543 items)</div>									

## Next step

The analysis and design have considered requirements in the same domain but not in the project scope. We are able to support followings down the road.

- Blend verification process. Load request will be fed into BPAVS for blending, sampling and loading, blend result with loaded destination can be posted back to server side.
- Blend Testing process. BPAVS will generate sample labels, test request will be able to generate and send to Lab Database app.
- Electronic MTS. MTS data will be accessible everywhere.
- Blend storage tracking. Tracking blend in and out for all storages on site to replace current spreadsheet tracker.