

VERSATILE

ENERGY SERVICES

1-877-358-8853

Our Mission

To be focused on developing and implementing Quality Equipment and Personnel which address our customer requirements in Accuracy, Safety, and Environmental concerns.

Core Values

- Accountability • Teamwork
- Safety • Exceptional Service



We are committed to Customer Satisfaction.

We believe in Health, Safety and Environmental Excellence.

We value all Employees.

We strive for effective application of leading technologies.

We bring implementation of quality throughout the company.

Versatile Energy Services Ltd.

11 Erickson Crescent Sylvan Lake, Alberta, Canada T4S 1P5

Phone: 1-877-358-8853 • Fax: 403-887-0343

Email: info@versatileenergy.com

Versatile Energy Services Corp.

5000 7th Ave. SW, Minot, ND, 58701

Phone: 701-858-1869

Fax: 701-858-1892

Versatile Energy Services Ltd. would like to introduce our new Patent Pending flow back system.

We refer to it as an erosion mitigation package. This is because of our multiple chokes and immediate expansion downstream of the chokes. All our chokes are designed with a larger pipe ID downstream than upstream. The purpose for this is to allow for expansion of the sand enriched fluid after the pressure drop. Our goal is not to exceed 120 ft. per second in velocity. The purpose of multiple chokes is to reduce the pressure drop across each individual choke.

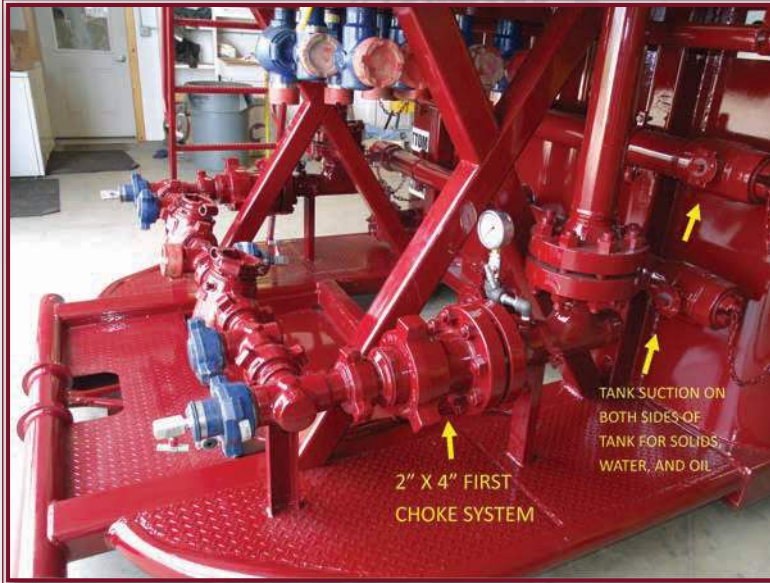
For example if we have the first choke at 32/64ths and a 3000 psi upstream pressure and we wanted to reduce the pressure to 1500 psi we would use a 46/64ths choke in the second drop. The gas volume would double and 2-32/64ths is equivalent to a 46/64ths. As the pressure drops if the pipe sizes and choke sizes are not increased proportionately the velocity will increase dramatically. It has been discovered in extensive tests that exceeding 120 ft. per second will result in damage relatively quickly. This relates to high costs and safety issues.

Our customers have seen significant cost savings in wash outs thus far.



Our systems are designed with the user in mind and their ultimate safety. In the current system we use 1502 x 2" pipe works to the unit and enter into a 1502 choke body. The custom designed choke stop for that body goes from 2" to 4" XXH pipe. The second choke is inserted into a 4" x 2500# flange. The choke bean exits into 6" XXH pipe. From there it would swadge up to 12"x 20' long slotted diffusers to atmospheric pressure into our open top tank.

We would be happy to discuss your needs so that we could design our system to accommodate your needs.



Primary chokes 2" x 1502 to 4" x 1502 cw/ choke stop. The inlet can be tied into the center point or direct into the chokes. Flow can go up one side at a time or you can split flow and go up both sides at once to further reduce velocity.

Secondary choke is 4" x 2500# flange choke to 6"XXH. The choke bean expels into 6"XXH pipe. Choke sizes are determined by anticipated flow rates. This can be altered to a quick change system.



The packages are custom built to meet the customer requirements and ensure high velocities are not reached. The systems we have out now for major players in the Bakken shale are being used by the frac crews and are rented by the operating company and assigned to the frac crew who move them with them and rig them in. The comments from the frac crews to date have been very positive. Screen outs and bleed downs are done very quickly and effectively. In fact they have asked for more inlets and are using the packages on pads where multiple operations are ongoing. We have several options available if this format would not be suitable for your application.



The 440 bbl. tank has a rounded bottom and a frontward slope.

Twin 12" x 20' barrels with slotted bottoms on a 15 degree inward axis.





Custom built enclosed tops to further ensure liquid containment. The integrated splash guard on the screen out packages ensures all liquid returns stay in the tank thus preventing spills and protecting the environment.

The packages are designed to hold all the required pipe, fittings, beans and adjustable chokes that would be required however we can discuss your needs to ensure we have all that is going to be required. Everything is on 1 load to reduce costs. The tank is internally coated and the floor is rounded and sloped to the front for easy clean out. It comes with a bottom drain, a drain at about 1' and a high drain for oil skimming. It has a 20" man way on it for entry if necessary.



All pipe works and fittings come with lockable storage to protect assets when they are not being attended. All lines have safety cables and shackles provided.

We can offer this equipment on a daily, monthly or a very cost effective yearly lease and can provide operators if required. We feel we have the most cost effective and safest system on the market today and can provide terms for your perusal. Please call if you are interested in discussing this further.



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6 SEPARATE H.P.
INLETS AND 2
SURFACE CASING TIE INS

ALL LINE PIPE,
FITTINGS,
SECURITY CABLES,
BEANS AND
NECESSARY
EQUIPMENT FOR
STANDARD RIG UP

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TANK SUCTION ON
BOTH SIDES OF
TANK FOR SOLIDS,
WATER AND OIL

2" X 4" FIRST
CHOKE SYSTEM



SECONDARY CHOKE
BUILT INTO FLANGE
FROM 4" TO 6"
TO FURTHER
REDUCE VELOCITY



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INTERNALLY COATED
WITH V BOTTOM FOR
EASY CLEANING



CLOSED TOP FOR SPLASH
PROTECTION AND
ENVIRONMENTAL CONTROL

12" X 20' SLOTTED DEFUSERS
DESIGNED FOR VELOCITY
REDUCTION

Pressure Vessels

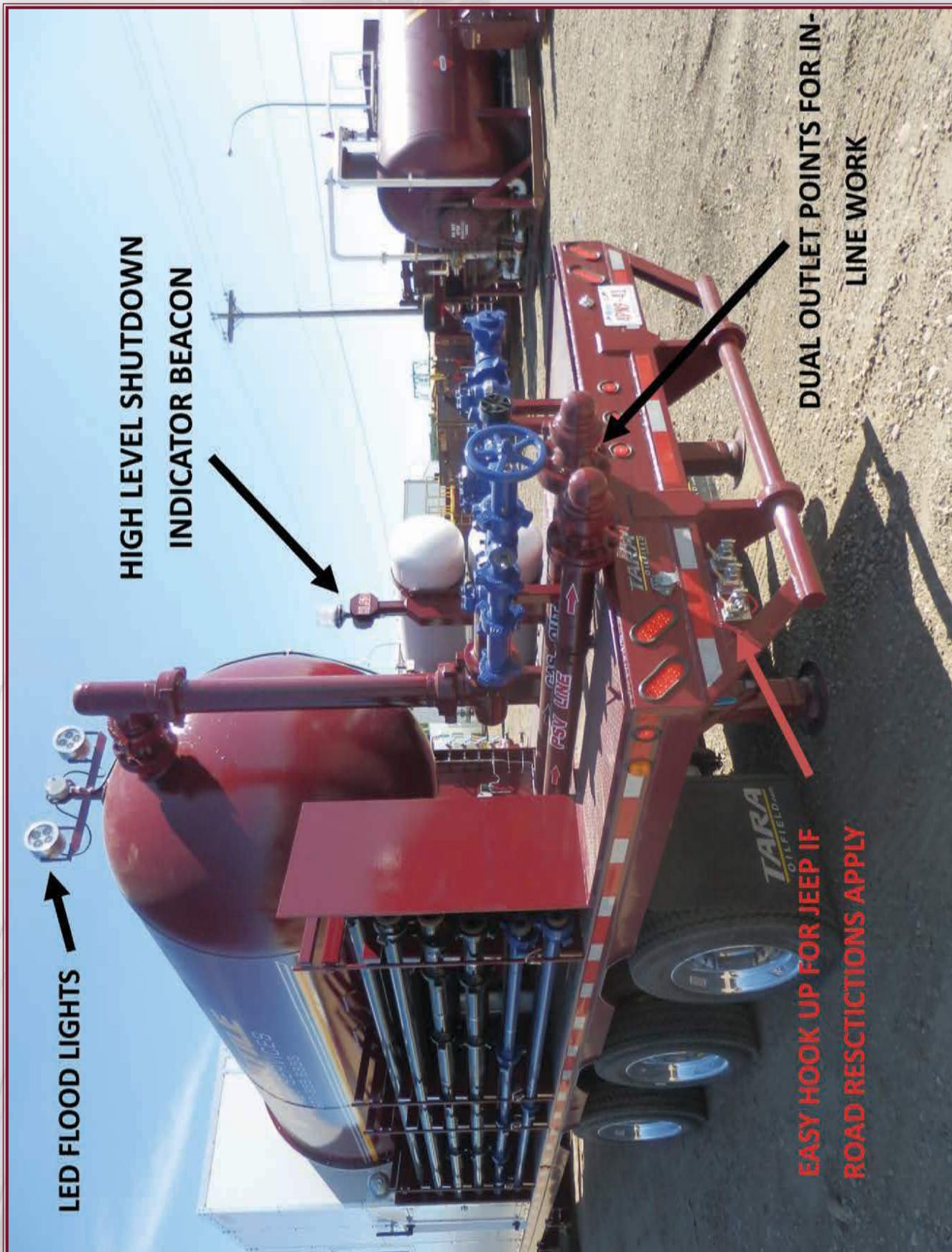


500 and 720 working pressure available



LEL AND H2S MONITORING SYSTEM
WITH ALARMS AND FLASHING BEACONS





HIGH LEVEL SHUTDOWN WITH ESD

FLUID TURBINES WITH
DIGITAL TOTALIZERS



CALIBRATED SITE GLASSES

DUAL CHEMICAL INJECTION

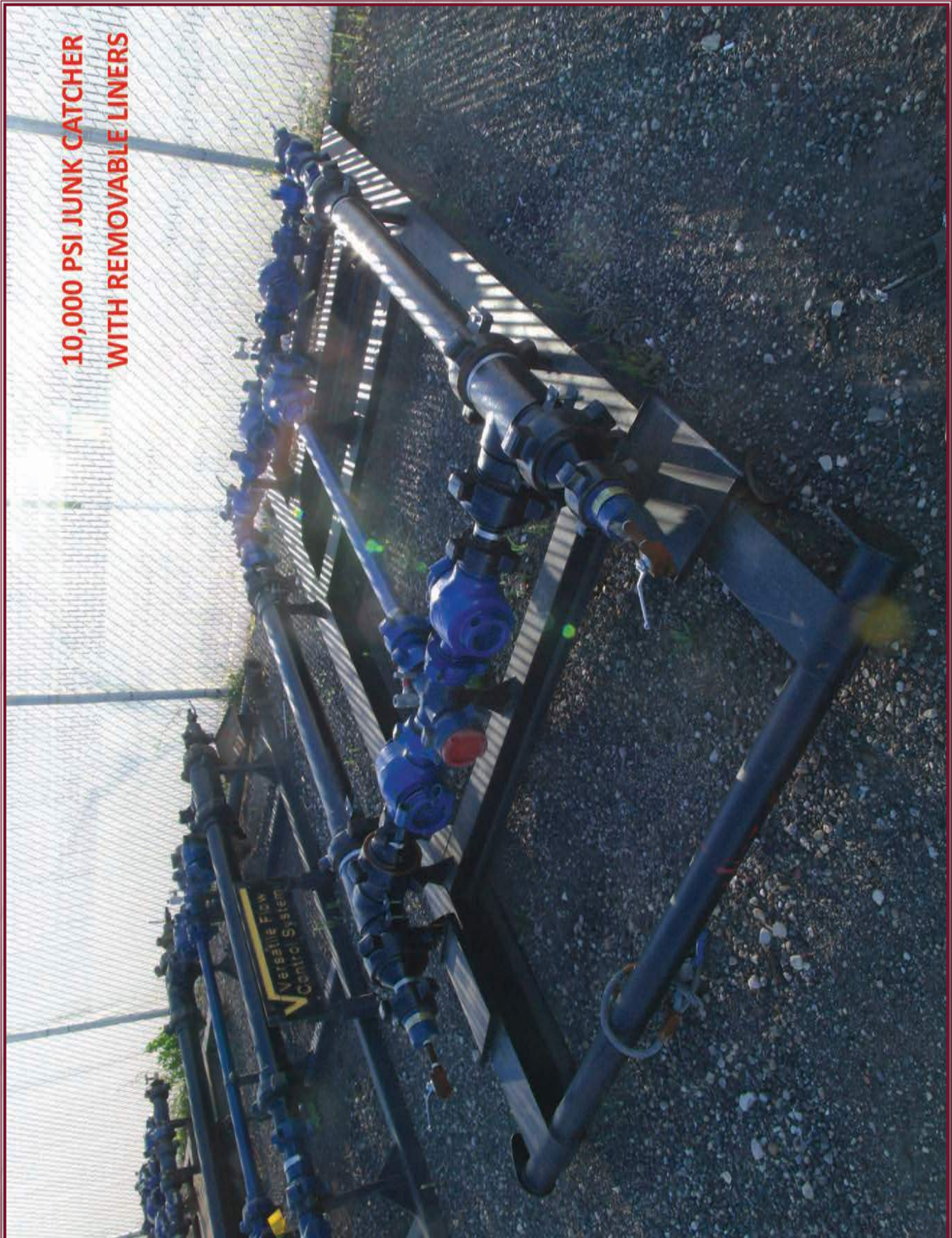
**5,000 PSI Sand
Separator**



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10,000 PSI JUNK CATCHER
WITH REMOVABLE LINERS



WATER FILTRATION UNIT

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FILTER UNIT FT 001

- Trailer mounted 40' Unit
- CW/ 2 - FSPN 2000/ 8 Sock Filter vessels
- Good for up to 22.5 BBLS per minute each
- Manifoldded to use in Tandem or Individually
- Runs on 480 V / 3 Phase Power
- CW/ 70 KVA Generator
- 1-10 HP Monarch pre charged pump @ 14 BBLS/M
- 1-20 HP Monarch Unit Pump from Filter pods to storage @ 20 BBLS/I/I
- 2-5HP Monarch Transfer Pumps to move fluid anywhere on location @ 7 BBLS/M each
- Pumping section of unit is Class I Div. I Electrical System
- Unit is insulated & heated for winter operations
- Unit has exhaust fans to evacuate any steam or potential gas break out
- Unit has storage room for spare parts & dry sock storage
- Unit comes with tandem axle manifold trailer capable of suction & discharge into 7 tanks simultaneously & used to haul 300' of 4" hose & fittings.
- **OUR FILTER DISPOSAL WILL CONFORM TO ALL STATE, FEDERAL & OPERATING CO. REGULATIONS**

FILTER UNIT FT 002

- Skid mounted 40' High Top Unit
- CW/ 3- FSPM 1100/ 6 Sock Filter vessels
- Good for up to 16.9 BBLS/M each designed to be able to filter water & oil simultaneously. Water side manifolded to use in Tandem or Individually
- Runs on 480 V/ 3 Phase Power
- CW/ 70 KVA Generator
- 1-10 HP Monarch pre charged pump" @ 14 BBLS/M
- 1-20 HP Monarch Pump from Filter pods to storage @ 20 BBLS/M
- 2-5HP Monarch Transfer Pumps to move fluid anywhere on location @ 7 BBLS/M each
- Pumping section of unit is Class I Div. I Electrical System
- Unit is insulated & heated for winter operations
- Unit has exhaust fans to evacuate any steam or potential gas break out
- Unit has storage room for spare parts 84 dry sock storage
- Unit comes with tandem axle manifold trailer capable of suction & discharge into 7 tanks simultaneously & used to haul 300' of 4" hose & fittings.
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Standard FSPN Vessel Models

Model Number	FSPN 20	FSPN 35	FSPN 40	FSPN 85	FSPN 250	FSPN 355	FSPN 800	FSPN 1100	FSPN 2000	FSPN 2500	FSPN 3000	FSPN 3500	FSPN 4000	FSPN 4200	FSPN 4500	FSPN 4800	FSPN 5000
No. of Bags	1	1	1	1	2	3	4	6	8	10	12	14	16	18	20	22	24
Bag Size No.	3	4	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Surface Area per Bag, Ft ²	0.5	1.0	2.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Surface Area per Vessel, Ft ²	0.5	1.0	2.0	4.4	8.8	13.2	17.6	26.4	35.2	44.0	52.8	61.6	70.4	79.2	88.0	96.8	105.6
Inlet and Outlet Size	1"	1"	2"	2"	3-4"	3-4"	4-6"	4-6"	6-8"	8-10"	8-10"	10-12"	10-12"	10-14"	10-14"	10-14"	10-14"
Max Flow Rate, GPM	15	30	60	120	240	360	480	720	960	1200	1440	1680	1920	2160	2400	2640	2880

16.9 22.5 feet

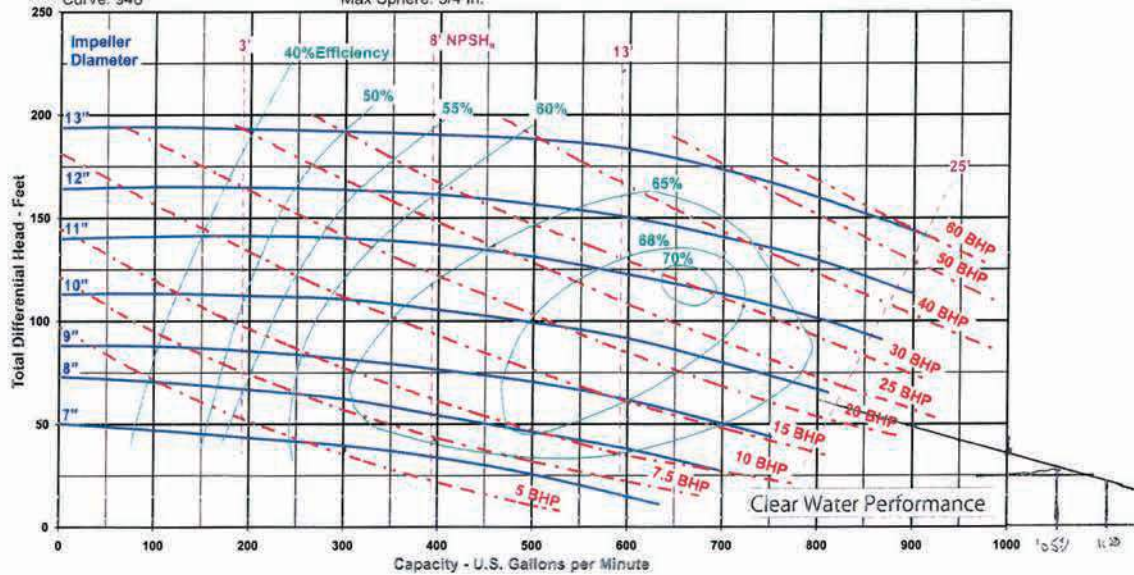
NOTE: The maximum flow rate GPM is the MAXIMUM FLOW RATE recommended through the vessel using a 10 micron felt filter bag (PONG10) filtering water. Any change in the micron rating, the type of filter, viscosity or specific gravity of the fluid may affect the maximum GPM calculation significantly. Please consult your FSI Representative when sizing these vessels.



NATIONAL OILWELL VARCO

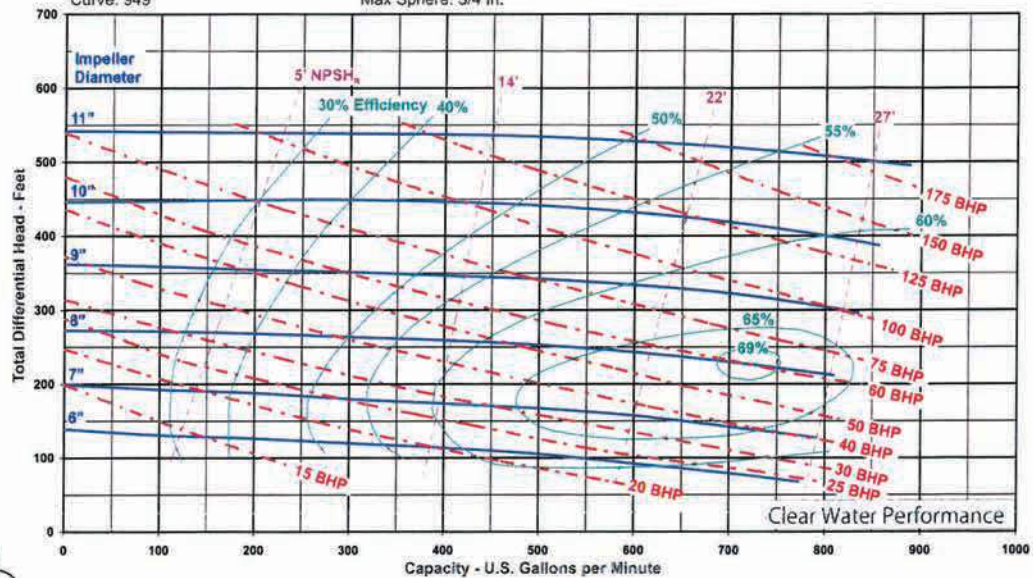
Magnum I
4X3X13
Speed: 1750 RPM
Curve: 948

Open Impeller
Dia: 7" to 13"
Eye Area: 12.5 Sq. In.
Max Sphere: 3/4 In.



Magnum I
4X3X13
Speed: 3500 RPM
Curve: 949

Open Impeller
Dia: 6" to 11"
Eye Area: 12.5 Sq. In.
Max Sphere: 3/4 In.



30