

Year	Reference ID	Date	Facility	State	Substance	Volume	Unit	Description
2010		2010-may-21	Carpenter PS	South Dakota	Crude	5	gallon	Failure of a 1½" below ground fitting connected to the mainline isolation valve.
2010		2010-jun-23	Rosewell PS	South Dakota	Crude	100	gallon	during maintenance from a small fitting attached to the sump pump
2010		2010-aug-10	Freeman PS	South Dakota	Crude	2	gallon	Failure of a 1" fitting attached to the pig trap receiver.
2010		2010-aug-19	Hartington PS	Nebraska	Crude	10	gallon	Failure of ½" above ground fitting.
2011	209437	2011-Jan-05	Ferney PS	South Dakota	Crude	5	gallon	Pump #2 casing and unit piping was found to be covered with a film of oil. Unit was isolated for further investigation on source of oil. Containment and remediation procedures implemented
2011	209521	2011-Jan-07	Severance_2_1 valve	Kansas	Crude	5	gallon	Downstream 6 inch riser on remote main line block valve developed a small leak around the valve packing. Oil was cleaned up on pipe and absorbent materials applied to valve and associated piping. Initial remediation actions were implemented and site was stabilized for the evening
2011	209562	2011-Jan-08	Freeman PS	South Dakota	Crude	1	gallon	OIL WAS DISCOVERED COMING OUT OF THE INSULATION OF THE PUMP BODY DRAIN VALVE ON THE OUTBOARD SIDE OF UNIT 4 AT FREEMAN PUMP/PIG STATION. UPON REMOVING THE INSULATION IT WAS DISCOVERED THAT THE INSIDE VALVE OF THE TWO DRAIN VALVES WAS LEAKING FROM THE UPSTREAM SIDE.
2011	210062	2011-Jan-26	Hope PS	Kansas	Crude	1.5	gallon	During Sump Commissioning a valve was opened to fill the sump tank. As the tank was being filled it was noticed that oil was backing up on the pump seal flush drains. Oil ran out of Unit 1 pump seal chamber onto the pump base and weeped over the front end of the base. Oil ran out of Unit 2 pump seal chambers onto the pump base and was contained. Oil backed up into the seal chambers on Unit 3 but not onto the base. We shut down the sump filling and identified the leak source and began clean up allowing the seal chambers to drain out we isolated the seal flush lines to continue the sump commissioning
2011	210233	2011-Jan-30	Turney PS	Missouri	Crude	10	gallon	Outboard seal on Pump #2 failed resulting in approximately 10 gallons of oil being discharged on the ground, the pump, pump base and associated piping. Unit was isolated for further investigation and clean up. Containment and remediation procedures implemented
2011	210615	2011-Feb-09	Hope PS	Kansas	Crude	4	gallon	On Final inspection before leaving the pump station I discovered oil on the pump skid of Unit 3 at Hope PS. Discovering the (pump suction side drain line) root valve to have oil on the pump side of the body. The amount of oil looks to be about 3 1/2 to 4 gallons with about 1 1/2 gallons leaving the pump skid.
2011	210697	2011-Feb-11	David City PS	Nebraska	Crude	75	gallon	after repacing mechanical seal on outboard of unit 3 at david city a start was put in unit. unit went down on a hi hi on outboard pressure transmitter. a technician then tried to bleed the transmitter of oil. there was no oil in the transmitter to bleed. the unit was reset and another start was put in the unit. the unit ran for 1 minute and the outboard seal failed releasing oil
2011	210803	2011-Feb-15	Hope PS	Kansas	Crude	2	gallon	Found oil underneath Hope Pump Unit 1 leaking from the discharge drain valve on the pump 1" bleed valve. This amounted to approximately 1 1/2 gallons of crude oil on the pump skid. Isolated the Unit pump and looking around the site discovered a 3" ball valve on Unit 1 suction side drain valve to have a small leak of crude oil from the bonnet and bolted body area not the piping flanges. Station Inlet first 3" drain valve to also have a leak from the bonnet area of the valve. This amounted to approximately 1 quart of crude oil on the site rock below the valve.
2011	210951	2011-Feb-17	Rock PS	Kansas	Crude	4.5	gallon	A Station drain valve was discovered leaking oil from the bolted body connection.
2011	211479	2011-Mar-09	Luvern PS	Nebraska	Crude	2	gallon	A leak occurred on the thermal relief pipe loop around the pump suction valve. The leak was at the downstream gasketed flange of the thermal relief device. Aproximately 2 gallons of oil in the immediate vacinity of the suction valve. surface rock and snow was wetted with oil
2011	211685	2011-Mar-16	Seneca PS	Kansas	Crude	504	gallon	Technician was dispatched to site to investgate SDL on Pump #4. Pump and unit piping were found to be covered in oil. Unit was isolated to investigate source of oil.
2011	212568	2011-Apr-11	Turney PS	Missouri	Crude	4	cups	Discovered leak out of the vent on mainline block valve at Turney station injected grease in the emergency fitting removed vent and installed 3/4" valve in place of vent

2011	219941	2011-Apr-26	Ludden PS	North Dakota	Crude	4	cups	Ludden station, discharge relief valve, 3/4" nipple leaking oil. 1" piping has seen vibration, possibly causing leak.
2011	220020	2011-Apr-28	Rock 2A Valve	Kansas	Crude	2	gallon	clouding of the rock around the inlet side blow down valve stinger. observed crude oil residue and oily rock just below the immediate grade. Reviewed the area valves and flanges but no signs of leaks.
2011	220309	2011-May-07	Ludden PS	North Dakota	Crude	16800	gallon	Oil release at Ludden pump station. Line shutdown after indication of station pressure loss and call from PDL.
2011	220877	2011-May-25	Rosewell PS	South Dakota	Crude	2	gallon	Rosewell station, A4 suction pressure transmitter, 1/2 inch nipple leaking where threaded into manifold
2011	220963	2011-May-28	Severance PS	Kansas	Crude	10	gallon	Oil release at Severance pump station. Station was ESD and isolated
2011	222206	2011-Jul-06	Turney PS	Kansas	Crude	0.5	gallon	At the start of a planned excavation around the 3 valve cluster at Turney PS a sheen of oil and droplets were witnessed in the excavation.
2011	222237	2011-Jul-07	Seneca PS	Kansas	Crude	7	gallon	On site to remove NP pump for retrim job. While draining down pump failed to open a valve to facilitate draining of pump piping. When crew cracked flange it allowed remaining oil to leak onto skid with approx. 3 reaching the ground (total of 7 gal.) before it could be contained.
2011	223197	2011-Aug-02	Turney PS	Kansas	Crude	5	teaspoons	Technician noticed small amount of oil (less than 2 tablespoons) had seeped from a gasket on the station discharge piping and dripped on the rocks below.
2011	223728	2011-Aug-12	Burns PS	Kansas	Crude	2	cups	Will draining water off the valve yoke at Burns Station on MOV 0204 the valve packing had leaked 2qt of crude oil into the yoke
2011	225968	2011-Mar-11	St Paul PS	Missouri	Crude	1	teaspoons	While performing facility check at St Paul Pump Station Unit 2 (A2-MPM-02) small oil stain on skid below discharge pump flange. crude oil has been weeping from Pump flange side. New Gasket installed
2011	229220	2011-Dec-06	Edinburg PS	North Dakota	Crude	4	cups	While inspecting the Rexa control valve, small amount of oil on the ground below less than a quart
2012	232758	2012-Mar-26	Rosewell PS	South Dakota	Crude	10	teaspoons	while doing routine morning walk around. crude oil on one of the vents of the discharge piping between the rexa and the check valve. seeping at certain harmonics from a threaded connection on the vent fabrication. A
2012	234766	2012-May-15	Cushing	Oklahoma	Crude	0.05	gallon	During a Routine Inspection of the Cushing Meter Station, the technician found that the upstream flange on the Pressure Control Valve was weeping oil onto the support for the valve. The volume of oil is minimal and has not left the base of the support. replace the gasket on the upstream side of the PCV.
2012	236179	2012-Jun-18	Seneca PS	Kansas	Crude	10	gallon	While bringing A4 back into service after bracing work there was a small amount of oil released onto the pump and skid. It is suspected that the release was due to oil backing up in the drain line and then coming up out the seal covers. All oil was recovered and station was returned to normal operations
2012	236542	2012-Jun-25	Carpenter PS	South Dakota	Crude Oil	4	cups	While performing a facility inspection at Carpenter pump station a leak was discovered on unit 4 suction pressure transmitter. Unit was placed in local and isolation valve was closed to stop fitting from dripping product. approximately 1 quart of oil had leaked onto ground. Oil was cleaned up and oily rock was placed into 55 gallon drum for disposal. Ralston fitting appeared to be OK but was replaced anyway then unit was turned back over to OCC.
2012	237402	2012-Jul-13	Carpenter PS	South Dakota	Crude	6	cups	OCC called stating that we had a seal Inboard seal HI HI pressure on unit 3 at Carpenter. Once onsite discovery that approximately 1 1/2 quarts of oil had leaked out and was totally contained on the pump skid. Oil was cleaned up and rags were placed in waste drums. Unit was placed into Local removing it from service until seal is replaced.
2012	238538	2012-Aug-08	FREMA + 12 Valve	South Dakota	Crude	4	cups	Vapor detection contractor was conducting testing on the valve body drain line through the use of their patented innoculent.
2012	238893	2012-Aug-15	Patoka	Illinois	Crude	3	gallon	After completing Vibration testing noticed oil on the relief skid between the upstream hand valve and the M&J relief valva south run. Isolated south run drained piping to sump. cleaned up piping and picked up some stained rock.
2012	241758	2012-Oct-10	Cushing	Oklahoma	Crude	2	gallon	Technician was doing a walk through of the facility, noticed a small amount of oil on MLV 104 and on the ground around it. Upon further investigation it was determined the the oil had came out of the condensate weep hole on the stem of the valve when the valve was opened to flow through Cushing.
2013	254716	2013-Apr-23	Cushing	Oklahoma	Crude	5	gallon	During maintenance activity on meter bank2 meter. Approximate amount spilled is three to five gallons

2013	256402	2013-May-13	Ponca City PS	Oklahoma	Crude			During the US Keystone Sulzer Pump Drain removal project at Ponca City, Oklahoma, crews discovered a broken small bore clamp on Temperature Transmitter 101 & 102. These clamps were installed as part of the Bracing Reliability Program.
2013	258211	2013-Jun-06	Edinburg PS	North Dakota	Crude	1	gallon	While starting pump 4 noticed oil coming from out board seal area. Called OCC and ESDed the pump about 1 gallon of crude came out of outboard seal area.
2013		2013 Dec 20	Winnsboro	Texas	Crude	3	Ounces	Today during line filling of the Winnsboro Pump station a leak occurred on the threaded body bleed of a manual drain valve on the station discharge piping. Approximately 3 ounces leaked out. The leak was corrected by tightening the body bleed fitting and cleanup performed immediately. It was discovered during inspection of piping during the line fill operations.
2014		2014 Jan 07	Bryan PS	Oklahoma	Crude	0.5	Gallon	a minor leak was discovered. The pump station was wet commissioned on December 30, 2013 and the leak was not present when the facility was checked on January 6, 2014. A construction crew on site to complete punch list items discovered the approximately ½ gallon leak coming from a screwed body type 1 ½ inch valve. This valve is a body drain valve used to drain the gate valve body on the NPS 30 pig launcher valve. The screwed valve was tightened to stop the leak and cleanup commenced.
2014		2014 Jan 24	Cromwell PS	Oklahoma	Crude	2	Teaspoons	On January 24th 2014 a drip was discovered on the 1 ½ " body bleed valve at the Cromwell Pump Station 3-valve cluster. The estimated volume released was two teaspoons. All impacted gravel was picked up and placed in a containment bucket. The valve was tightened and is scheduled for replacement
2014		2014 Mar 19	Nederland	Texas	Crude	5	Gallon	Technician discovered a grease fitting dripping on a drain valve, at Nederland Delivery terminal. The 2" valve is the meter case isolation valve for draining meter #2300, meter bank #1
2014		2014 Mar 26	Nederland	Texas	Crude	1	Cup	Less than one cup oil was found seeping from packing gland FE-2320. This was realized on close of day walk around a 18:57 hrs Completed clean up 21:19 hrs.
2014		2014 Mar 27	Nederland	Texas	Crude	1	Cup	leak was found on meter (that is not in-service). Estimate leakage is around one cup or less released. The oil was seeping from the O-ring or gasket on the meter vent.
2014		2014 Apr 12	Cushing 01A valve	Oklahoma	Crude	1	Pint	small release at Cushing 01A. The oil escaped from around the indicator on one of the two riser valves. A small amount of oil ran down the side of the valve, riser and on the gravel.
2014		2014 Apr 15	Nederland	Texas	Crude	1	Ounce	Techs discovered a small release today Delta - 04A/downstream riser valve. The release came from around the stem on the needle valve assembly, below the pressure transmitter. The jam nut was found backed off and the stem packing nut was loose, allowing the oil to release around the valve stem
2014		2014 Jun 03	Cushing	Oklahoma	Crude	0.5	Gallon	a small release was notice at the downstream flange of PCV-7218 (Approximately .5 gallon). Product appeared to be relieving at the flange through the gasket. Most of the product was contained on the concrete support for this valve. A small amount ran down the side to the ground.
2014		2014 Jun 23	Cushing	Oklahoma	Crude	2	Gallons	a minor release at Cushing Terminal during wet commissioning activities.
2014		2014 Jun 26	Ponca City PS	Oklahoma	Crude	3	Gallons	mechanical failure occurred on Ponca City Pump Station Unit #3 outboard. Approximately 3 gallons of crude oil escaped onto the pump skid. No oil hit the ground.
2014	12499	2014 Jul 07	Nederland	Texas	Crude	1	Gallon	a small crude oil release at Nederland Delivery Terminal. The oil escaped from a meter run control valve on Meter Bank #1, run #4. The oil has ran down the valve, below the meter bank and onto the gravel/soil below.
2014	2657	2014 Jul 09	Bryan PS	Oklahoma	Crude	1	Pint	small crude oil release at Bryan Pump Station on MOV 103. The oil escaped from around the threads of a loose grease fitting and ran down the valve, onto the soil below.

2014	12819	2014 Jul 09	Nederland	Texas	Crude	<1	Gallon	small crude oil release at Nederland Delivery Terminal, on MOV 2201; pig receiver trap bypass valve. It appears the stem packing was leaking inside the valve stem cover and recent heavy rains floated the oil out of the valve stem cover. The oil ran down the side of the valve, with a very small amount dripping onto the soil below.
2014	14270	2014 Jul 24	Nederland	Texas	Crude	1.5	Barrels	Nederland Tank Terminal, Valve 2201, a bypass valve on the mainline receiver pig trap. OCC was contacted and closed an upstream mainline valve to stop the leak.
2014	14885	2014 Jul 29	Bryan PS	Oklahoma	Crude	20	Gallons	technician was performing an annual PM at Bryan pump station in Oklahoma on the sump tank levels which includes the rising of the level to test alarm set points, approximately 20 gallons estimated of oil was released out of unit #1 due to back up in the sump piping and the unit drain valve not being closed during the test.
2014	15770	2014 Aug 10	Nederland	Texas	Crude	1	Ounce	Nederland MOV-2205, a 36 inch ball valve inlet to meter bank 2. The amount released is less than one ounce. Due to the location of the release being downstream of the pig receiver
2014	15907	2014 Aug 12	Lufkin	Texas	Crude	4	Ounces	During Pigging Operations at Lufkin Pump Station, a small amount of Light Crude Oil constituting 3-4 ounces was released onto the soil immediately below the PIG Launcher Trap Closure Door. Pigging project team was in the process of the loading a PIG into the Receiver Trap. Construction team had laid plastic down underneath the Closure Door and the Catch Basin was positioned atop the plastic. Following the PIG Trap Drain and LO/TO Isolation, the Door was cracked open to let residual oil near the door fall into the Basin and be sucked up by a vacuum truck. The minor turbulence of the flow from the bottom of the door splashed some oil back behind onto the plastic sheeting. A small hole was torn in the plastic by the hook-up valve stem on the end of the Catch Basin. The oil made its' way thru the hole and onto the ground.
2014	17307	2014 Aug 26	Ferney PS	South Dakota	Crude	5	Ounces	6" discharge riser, 6" valve, button head grease fitting leaked 5 OZ oil on pipe, and ground.
2014	17183	2014 Aug 27	Cushing	Oklahoma	Crude	4	Ounces	Approx 4 ounces of crude oil seeped from a flange within the prover piping at Cushing Delivery Terminal. The oil escaped from the upstream flange of MOV control valve 2293.
2014	17312	2014 Aug 27	Centralia PS		Crude	2	Gallons	While working on unit three the inboard on unit 4 leaked enough oil past the mechanical seal to fill the piping from the closed seal drain valve to the bottom of the seal housing and spilled approx. 8 quarts of oil on the skid. Oil did not reach the ground.
2014	18358	2014 Sep 15	Cushing	Oklahoma	Crude	4	Ounces	The PSV on MOV 7291 had a plug that was not tight, and it caused a minor leak (4.oz) onto valve below. No oil touched the ground. The leak was stopped by tightening the plug
2014	18440	2014 Sep 15	Saint Paul PS	Missouri	Crude	1	Ounce	during a weekly inspection technician noticed a small oil streak coming from the high point vent on top of unit 3 suction piping
2014	18789	2014 Sep 18	Niagra PS	North Dakota	Crude	0.5	Gallons	During station reload, Immediately upon noticing oil coming out from seal cover the seal drain was opened and oil going on to skid was stopped.
2014	19869	2014 Oct 2	Lucas Terminal	Texas	Crude	3	Gallons	During morning inspection of Meter bank 2, a small leak coming from the packing gland on the top of the meter. Approximately 3 gallon of crude oil leaked onto the ground.
2014	21695	2014 Oct 29	Lufkin PS	Texas	Crude	0.5	Gallons	a release of approximately one-half gallons of crude occurred at a discharge Pressure Transmitter stainless flex pipe, which released at the bottom end of the loop;
2014	22385	2014 Nov 10	Nederland	Texas	Crude	<1	Cup	found oil on top of meter. No oil on the ground. One cup oil speep on equipment.
2015	25799	2015 Jan 02	Middletown PS	Missouri	Crude	3	Cups	During Weekly inspection a very small amount of oil was noticed on the station bypass valve. Further inspection revealed the oil was coming from the stem extension vent. Approximatly 3 cups of oil was on the ground.
2015	26018	2015 Jan 08	Salisbury PS	Missouri	Crude	0.5	Cups	1/2 cup of oil discovered under flange at Salisbury pump station on flange on MOV 0203.

2015	26404	2015 Jan 13	Cushing	Oklahoma	Crude	4	Gallons	During routine inspections it was discover MOV 204 had leaked oil onto the valve and surrounding piping. It was estimated 4.5 gallons was present with less than .5 on the ground.
2015	26690	2015 Jan 16	Cushing	Oklahoma	Crude	2	Ounces	2 inch drain ball valve experienced a leak from the valve body due to losen bolts on body of valve. Valve dripped approximately 2 oz of crude on the rocks below. Valve was not actively leaking when found.

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2010	200202	7-Jul-10	Pump Stn 25 (Portage La Prairie)	Crude
2010	200206	7-Jul-10	Pump Stn 25 (Portage La Prairie) + 25 km	Crude
2010	200363	10-Jul-10	Pump Stn 22 (Crandall) + 26.4 km	Crude
2010	200363	10-Jul-10	Pump Stn 22 (Crandall) + 39.7 km	Crude
2010	200363	10-Jul-10	Pump Stn 21 (Moosomin) + 31.8 km	Crude
2010	200363	10-Jul-10	Pump Stn 21 (Moosomin) + 42.5 km	Crude
2010	200400	12-Jul-10	Hardisty Terminal	Crude
2010	200793	16-Jul-10	Elm Creek Pigging Stn	Crude
2010	200795	16-Jul-10	Elm Creek Pigging Stn	Crude
2010	200798	16-Jul-10	Elm Creek Pigging Stn	Crude
2010	200891	19-Jul-10	Pump Stn 25 (Portage La Prairie)	Crude
2010	200963	20-Jul-10	Pump Stn 21 (Moosomin) + 30 km	Crude
2010	201342	26-Jul-10	Hardisty Terminal	Crude
2010	201709	27-Jul-10	Pump Stn 17 (Regina)	Crude
2010	203569	26-Aug-10	Pump Stn 7 (Monitor)	Crude
2010	206857	20-Oct-10	Pump Stn 25 (Portage La Prairie) + 9.9 km	Crude
2010	207727	8-Nov-10	Pump Stn 26 (Carmen)	Crude
2010	207980	12-Nov-10	Pump Station 18 (Kendal)	Crude
2010	208257	20-Nov-10	Pump Stn 11 (Cabri)	Crude
2010	208287	19-Nov-10	Pump Stn 6 (Lakesend)	Crude
2010	208332	22-Nov-10	Hardisty Terminal	Crude
2010	208514	30-Nov-10	Pump Stn 15 (Caron)	Crude
2010	208869	9-Dec-10	Pump Stn 17 (Regina)	Crude
2010	208914	10-Dec-10	Pump Stn 19 (Grenfell)	Crude
2010	209179	18-Dec-10	Pump Stn 9 (Bindloss)	Crude
2010	209184	18-Dec-10	Pump Stn 19 (Grenfell)	Crude
2010	209217	20-Dec-10	Pump Stn 14 (Chaplin)	Crude
2010	209246	21-Dec-10	Pump Station 17 (Regina)	Crude
2011	209466	6-Jan-11	Hardisty Terminal	Crude
2011	209519	7-Jan-11	Pump Station 18 (Kendal)	Crude
2011	210390	28-Jan-11	Hardisty Terminal	Crude
2011	210386	2-Feb-11	Hardisty Terminal	Crude
2011	210658	10-Feb-11	Pump Station 22 (Crandall)	Crude
2011	210462	9-Mar-11	Hardisty Terminal	Crude
2011	210464	9-Mar-11	Pump Station 10 (Liebenthal)	Crude
2011	212155	22-Mar-11	Pump Station 24 (Wellwood)	Crude
2011	212093	23-Mar-11	Pump Station 8 (Oyen)	Crude
2011	212094	23-Mar-11	Pump Station 8 (Oyen)	Crude
2011	212193	30-Mar-11	Pump Station 8 (Oyen)	Crude
2011	220515	13-May-11	Hardisty Terminal	Crude
2011	220538	15-May-11	Pump Station 15 (Caron)	Crude
2011	220571	16-May-11	Pump Station 20 (Whitewood)	Crude
2011	220640	17-May-11	Hardisty Terminal	Crude
2011	220922	26-May-11	Pump Station 9 (Bindloss)	Crude
2011	221265	5-Jun-11	Pump Station 17 (Regina)	Crude
2011	221270	7-Jun-11	Hardisty Terminal	Crude
2011	221381	9-Jun-11	Pump Stn 19 (Grenfell)	Crude
2011	223157	1-Aug-11	Hardisty Terminal	Crude
2011	223171	2-Aug-11	Pump Station 12 (Stewart Valley)	Crude
2011	223326	3-Aug-11	Pump Station 15 (Caron)	Crude
2011	223415	5-Aug-11	Pump Station 8 (Oyen)	Crude
2011	223448	7-Aug-11	Pump Station 8 (Oyen)	Crude

2011	223450	7-Aug-11	Pump Stn 6 (Lakesend)	Crude
2011	223472	7-Aug-11	Pump Station 20 (Whitewood)	Crude
2011	223530	9-Aug-11	Pump Station 11 (Cabri)	Crude
2011	224694	6-Sep-11	Hardisty Terminal	Crude
2011	224866	11-Sep-11	Pump Station 12 (Stewart Valley)	Crude
2011	225081	15-Sep-11	Pump Station 16 (Belle Plaine)	Crude
2011	225843	30-Sep-11	Pump Station 9 (Bindloss)	Crude
2011	226139	13-Oct-11	Pump Station 9 (Bindloss)	Crude
2011	226619	25-Oct-11	Pump Station 16 (Belle Plaine)	Crude
2011	227194	8-Nov-11	Hardisty Terminal	Crude
2011	227227	9-Nov-11	Hardisty Terminal	Crude
2011	227690	21-Nov-11	Hardisty Terminal	Crude
2011	227849	25-Nov-11	Burstall Control Valve/Pigging Station	Crude
2011	228047	30-Nov-11	Elm Creek Pigging Station	Crude
2011	228540	12-Dec-11	Hardisty Terminal	Crude
2011	228822	12-Dec-11	Pump Station 21 (Moosomin)	Crude
2011	229075	22-Dec-11	Pump Station 16 (Belle Plaine)	Crude
2011	229190	30-Dec-11	Hardisty Terminal	Crude
2012	229303	5-Jan-12	Pump Station 13 (Herbert)	Crude
2012	229382	9-Jan-12	Hardisty Terminal	Crude
2012	229384	9-Jan-12	Elm Creek Pigging Station	Crude
2012	230096	24-Jan-12	Pump Station 16 (Belle Plaine)	Crude
2012	230577	3-Feb-12	Pump Station 21 (Mossomin)	Crude
2012	231183	16-Feb-12	Pump Station 24 (Wellwood)	Crude
2012	231361	21-Feb-12	Pump Station 8 (Oyen)	Crude
2012	232166	9-Mar-12	Pump Station 16 (Belle Plaine)	Crude
2012	232266	12-Mar-12	Pump Station 15 (Caron)	Crude
2012	232304	13-Mar-12	Hardisty Terminal	Crude
2012	232335	14-Mar-12	Portage La Prairie (PS 25) + 9.9 km	Crude
2012	232412	15-Mar-12	Stewart Valley (PS 12) + 31.2 km	Crude
2012	232516	19-Mar-12	Chaplin Pump Station (PS 14) + 32.8 km	Crude
2012	232517	19-Mar-12	Belle Plaine Pump Station (PS 16) + 6.4 km	Crude
2012	232518	19-Mar-12	Belle Plaine Pump Station (PS 16) + 33.1 km	Crude
2012	232519	19-Mar-12	Regina Pump Station (PS 17) + 26.4 km	Crude
2012	232520	19-Mar-12	Kendal Pump Station (PS 18) + 8.2 km	Crude
2012	232521	19-Mar-12	Kendal Pump Station (PS 18) + 32.8 km	Crude
2012	232552	20-Mar-12	Grenfell Pump Station (PS 19) + 26.2 km	Crude
2012	232554	20-Mar-12	Whitewood Pump Station (PS 20) + 24.7 km	Crude
2012	232641	20-Mar-12	Hardisty Terminal	Crude
2012	232807	27-Mar-12	Pump Station 17 (Regina)	Crude
2012	233236	9-Apr-12	Hardisty Terminal	Crude
2012	233337	12-Apr-12	Pump Station 15 (Caron)	Crude
2012	233389	13-Apr-12	Pump Station 17 (Regina)	Crude
2012	233400	13-Apr-12	Pump Station 22 (Crandall)	Crude
2012	233459	16-Apr-12	Pump Station 15 (Caron)	Crude
2012	233533	17-Apr-12	Hardisty Terminal	Crude
2012	235221	28-May-12	Pump Station PS 25 (Portage La Prairie)	Crude
2012	235242	29-May-12	Hardisty Terminal	Crude
2012	235401	31-May-12	Pump Station 15 (Caron)	Crude
2012	235599	5-Jun-12	Pump Station 21 (Moosomin)	Crude
2012	235890	11-Jun-12	Pump Station 15 (Caron)	Crude
2012	235917	12-Jun-12	Hardisty Terminal	Crude
2012	235968	12-Jun-12	Hardisty Terminal	Crude
2012	235968	12-Jun-12	Hardisty Terminal	Crude
2012	236186	18-Jun-12	Pump Station 19 (Grenfell)	Crude

2012	237375	12-Jul-12	Hardisty Terminal	Crude
2012	238775	14-Aug-12	Hardisty Terminal	Crude
2012	242789	25-Oct-12	Hardisty Terminal	Crude
2012	243627	13-Nov-12	Pump Station 6 (Lakesend)	Crude
2012	244020	20-Nov-12	Hardisty Terminal	Crude
2012	244020	20-Nov-12	Hardisty Terminal	Crude
2012	244020	20-Nov-12	Hardisty Terminal	Crude
2013	246824	10-Jan-13	Grenfell Pump Station 19	Crude
2013	247846	24-Jan-13	Belle Plaine Pump Station 16	Crude
2013	248429	1-Feb-13	Hardisty Terminal	Crude
2013	249250	11-Feb-13	Whitewood Pump Station 20	Crude
2013	252227	20-Mar-13	Hardisty Interconnects	Crude
2013	253639	9-Apr-13	Carman Pump Station 26	Crude
2013	255059	26-Apr-13	Hardisty Terminal	Crude
2013	257282	24-May-13	Hardisty Terminal	Crude
2013	260408	26-Jun-13	Hardisty Terminal	Crude
2013	259849	2-Jul-13	Monitor Pump Station 7	Crude
				Crude
2013	259937	2-Jul-13	Hardisty Terminal	
2013	260161	6-Jul-13	Caron Pump Station 15	Crude
				Crude
2013	260507	10-Jul-13	Grenfell Pump Station 19	
2013	266865	17-Sep-13	Lakesend Pump Station 6	Crude
2013	268880	6-Oct-13	Hakett Pump Station 27	Crude
2013	271558	29-Oct-13	Hardisty Terminal	Crude
2013	272095	6-Nov-13	Kendall Pump Station 18	Crude
2013	273490	24-Nov-13	Chaplain Pump Station 14	Crude
2013	274596	5-Dec-13	Cabri Pump Station 11	Crude
2013	275632	19-Dec-13	Hardisty Interconnects	Crude
2014	917	30-Jan-14	Hardisty Terminal	Crude
2014	1970	18-Feb-14	Kendall Pump Station 18	Crude
2014	3598	17-Mar-14	Hardisty Terminal	Crude
2014	5129	8-Apr-14	Portage La Prairie-Carman OP/L / ID: 3111	Crude
2014	5614	15-Apr-14	Oyen Pump Station	Crude
2014	7565	12-May-14	Hardisty Terminal	Crude
2014	9078	2-Jun-14	Carman Pump Station 26	Crude
2014	9204	3-Jun-14	Hardisty Terminal	Crude
2014	10849	19-Jun-14	Hardisty Terminal	Crude

Volume	Unit	Comments
0.01	Litres	Body Bleed Leak
0.01	Litres	Body Bleed Leak
0.5	Litres	Body Bleed Leak
	Litres	Body Bleed Leak
	Litres	Body Bleed Leak
	Litres	Body Bleed Leak
10	Litres	Spray during water draw operation
1	Litres	Drain Line Leak
0.5	Litres	Body Bleed Leak
0.5	Litres	Body Bleed Leak
0.01	Litres	Body Bleed Leak
1	Litres	Body Bleed Leak
1	Litres	Valve Stem leak
0.1	Litres	Loose threaded PSV
20	Litres	Release during bypass line removal
0.25	Litres	Threaded Pleeco fitting leak
0.01	Litres	Valve Stem Leak
0.01	Litres	Leak from the valve stem o-ring on Pump #3
1	Litres	Seal Failure
0.5	Litres	Body Bleed Leak
200	Litres	Line pressure caused thermal relief to open into sump with subsequent sump overflow
0.25	Litres	Leak on Coupling end from a 1/2 SS drain pipe on Pump #1
0.02	Litres	Drain Pipe Leak under Pump #1
0.11	Litres	Leaks on Drive-end & Non-drive end (Pump #1) and Drive-end (Pump #2)
0.1	Litres	Swagelok fitting Leak on pump
0.02	Litres	Swagelok fitting Leak on pressure transmitter
0.5	Litres	Bearing Housing Leak
0.005	Litres	Swagelok fitting Leak on Drain Pipe on Pump
22.7	Litres	Valve stem packing leak on Valve MOV-2040
0.01	Litres	Leak from the valve stem o-ring on Pump #3
0.47	Litres	Threaded connection between pressure transmitter and pipe
1	Litres	Valve stem packing leak on Valve MOV-2040
1	Litres	Unit 1 & 2 leaks into pump housing drain area
2	Litres	Valve stem packing leak on Valve MOV-2040
0.25	Litres	Fitting leak at end of closed body vent valve
2	Litres	Leak from undersized drain line below pump
2	Litres	Bearing isolator leaking on non-drive end of pump 5
2	Litres	Bearing isolator leaking on non-drive end of pump 4
0.5	Litres	Missing case temperature thermowell
40	Litres	Valve stem packing leak on Valve MOV-2040
10	Litres	Failed gauge on the pig receiver
0.005	Litres	Body bleed leak on #2 discharge valve
2	Litres	Valve stem packing leak on Valve MOV-2030
0.01	Litres	Improper tubing installation
0.02	Litres	Leak on suction side valve riser
0.01	Litres	Cracked weld on NPS 3/4 pipe below the MP#4 pump
0.01	Litres	Seepage of unit 2 pressure transmitter flange gasket
4	Litres	Packing stem leak on MOV-2231
40	Litres	Mechanical seal failure resulted in a release of 100 litres
1	Litres	Leak from cracked NPS 1 cam lock fitting
0.1	Litres	High nitrogen purge cause oil to overspray secondary containment
0.24	Litres	Premature removal of injection line while reflooding the station

0.35	Litres	Release from 1/4" vent line while plico valve was marginally open
5	Litres	Loose hose sprayed oil during refilling operation
4	Litres	High point vent hose end came out of sump
250	Litres	Stem packing leak on MOV 2014
0.05	Litres	Unit #2 body bleed nipple thread leak
2	Litres	Leak on the non-drive end of the pump skid
0.01	Litres	Weeping PSV after removing its bracing
0.2	Litres	Grease fitting ball check did not hold after re-lubrication
0.5	Litres	Body bleed leak on station suction MOV 101
0.06	Litres	Oil dripping from NPS 10 flange on the BP-03 recycle line
0.01	Litres	4 of 6 NPS 3/4 valves on NPS 2 bypass are weeping
3	Litres	Stem packing leak on MOV-2211
0.6	Litres	NPS 4 drain valve oil release because of missing NPS 1/4 plug
0.25	Litres	Receiver Barrel Door Dripped Oil onto concrete
0.1	Litres	Stem packing leak on MOV-2211 and MOV-2231
0.005	Litres	Pig launcher door seal leak
40	Litres	Lube Line Units Valves failed to seal
0.01	Litres	Stem packing leak on MOV-2281
0.01	Litres	Threading plug is leaking
3	Litres	Packing leak on Gibson Inlet Valve
0.25	Litres	Oil leaking from bottom of pig launcher door
0.5	Litres	Outboard pump seal failure
30	Litres	Leak from pig receiver door
0.5	Litres	Oil seeping from discharge piping connection
5	Litres	Oil seeping from drain line connector
0.1	Litres	Oil seeping from pleco plug
0.02	Litres	Trace oil seeping Unit A3 IB pump seal leakage housing
6	Litres	Gibsons Valve stem packing leak
0.25	Litres	Leaking blowdown valve
0.13	Litres	Leaking blowdown valve
0.5	Litres	Leaking blowdown valve
0.25	Litres	Leaking blowdown valve
0.25	Litres	Leaking blowdown valve
0.5	Litres	Leaking blowdown valve
0.25	Litres	Leaking blowdown valve
0.5	Litres	Leaking blowdown valve
0.5	Litres	Leaking blowdown valve
0.25	Litres	Leaking blowdown valve
2	Litres	Booster Pump # 3 Seal Leak
0.05	Litres	Loose fitting on NPS 4 drain line
2	Litres	Stem packing leak on MOV-2281
136	Litres	Oil from pig receiver overflowed the catch tray
0.2	Litres	leaks on three sulzer pump drive end drains
0.1	Litres	Stem leak fro NPS 1/2 swagelok valve
0.2	Litres	Trace oil leaking from NPS 2 drain pipe mod
0.25	Litres	Oil leaked flange due to thermal expansion
2	Litres	Stem seal vent leak
4	Litres	Valve packing leak on MOV-2040
0.01	Litres	Leak on launcher kicker valve #2
0.002	Litres	Body bleed leak on Unit A3 suction valve
0.01	Litres	Valve stem leak on MOV-203
2	Litres	Valve packing leak on MOV-2291
1.5	Litres	Valve packing leak on MOV-2521
1.5	Litres	Valve packing leak on MOV-2522
0.002	Litres	MLV 1011 - leak on NPS 1/2 pipe nipple

0.06	Litres	Oil Mist on Suction line to Mainline Pumps
0.5	Litres	Valve packing leak on MOV-2042
1	Litres	Accidental valve opening prior to full isolation
9	Litres	Both seal housings on LKSND #5 overflowed
1	Litres	Check vlave cover leaks on boosters 2
1	Litres	Check vlave cover leaks on boosters 3
1	Litres	Check vlave cover leaks on boosters 3
0.01	Litres	Valve stem leak
0.02	Litres	Leaking outboard seal
1	Litres	Valve stem leak due to thermal expansion
0.125	Litres	Injection pump discharge piping thread leak
3.78	Litres	Suction header maintenance leak
1000	Litres	Inboard and outboard seal failure on Unit #3
19	Litres	Oily water spillage during water draw callibration
19	Litres	Unpressurized leak on the pump discharge flange
7.6	Litres	Body bleed pleco plug located at the bottom of the valve.
0.05	Litres	Minor crude oil leak on 1 inch threaded fitting.
2000	Litres	Oil Release during tie-in preparation between Hardisty A and Hardisty B
0.125	Litres	Leak from the threaded base of the injection skid PSV.
0.1	Litres	1/2 swagelock fitting on the tubing on unit #1 MOV 1011 suction valve
0.5	Litres	Leak from inboard seal housing
0.05	Litres	Pin hole leak in the weld on a 90 degree NPS 1 fitting
0.001	Litres	Loose bolt on flow meter allowed oil to seep from the meter body
0.5	Litres	Leak from A2 inboard pump
0.015	Litres	Leak from stem
1	Litres	Suction Valve Thermal Relief Leak
1	Litres	Leak from gate valve body relief on MOV 2010
15	Litres	Plug leak
0.5	Litres	Seal on pump 3 failed
0.5	Litres	Leak path through the mounting base o-ring on 3 of 4 vertical pumps
5	Litres	Body bleed leak from a cracked valve under the launcher
0.1	Litres	Removal of boroscope while cleaning sump drain system
50	Litres	Leak from a loosening union
0.25	Litres	Body bleed leak from "Pieco" Mainline bypass valve MOV-0102.
0.015	Litres	Drip on pump #5 base
0.05	Litres	Drip on pump skid no. 1