Frailer Number	Occupant		Distance from Run Down Tank to Closest Point on Trailer (ft)	Distance from Run Down	Trailer Description	Metal or Wood Framing	Туре	Known Injuries	Personnel in Trailer at Time of Incident (TOI)	Detailed Description of Damage	Additional notes and observed internal hazards where applicable	Damage Characterization					
		Location		Tank to Center of Trailer (ft)								Walls	Roof	Floor	Windows	Contents	
kΤ-2	Technical/Clerical Contract Employees	Between NDU and ISOM	121	140	75' x 13' office trailer with 2x4 wall construction, 2' joists and phywood 3 floor, and wood roof. Floor beams The Trailer included a ridge beam built up out of a top and bottom wood cord with connecting interior vertical wood stiffeners and with both sides of the beam likely spanned the length of the building and is supported on the end walls. The center beam then supports wood joists and roofing.	8	trailer	of injuries including: blunt force trauma, broken arms, legs, backs, deep lacerations,	Contract and BP employees were in the trailer at TOI, including Contract Project Managers, BP lumaround representatives, maintenance spervisors, engineers, maintenance, and clerical Personnel (Total in trailer 22: 12 fatalities, 10 injuries).	bent in the middle toward the west, approximately 5 to 6 feet, with the west half having the greatest amount of deformation. The joists on both frames show a deformation pattern with the north end joists are pushed northward and the south end joist	Their observed resting place had the two frames 12 to 18 ft apart, varying due to deformed shapes. The east frame was translated to the west approx 13 ft on the north end and approx 1 ft on the south end based on relative position to ant/orts in the ground used to secure with staps. The entire north hal of the south the south end. The west frame was stated to secure with a similar pattern as the middle to 11 tat the south end. The west frame was slate translated westward in a similar pattern able east frame. The north hal is translated around 15 ft and the south varying from 15 in at the middle about 5 ft at the south end. Tree were burned. Bottom side of floor deck charred by fire. Most of the south end flooring was gone, some of the north end floor remained.	All Destroyed	All Destroyed	South Hal Destroyed	f All Destroyed	Damaged a thrown westw	
3	QA/QC Contract Employees	Between NDU and ISOM	136	150	30' x 8' office trailer with 2x4 wall construction, 2' joists and plywood floor, and wood roof. Floor beams sit on top of steel frame on 2 axles.	Wood		Three Fatalities, no surviving occupants of this trailer.	Three Q/A Q/C contract personnel assigned to trailer, no survivors	All floor joists pushed south with increasing severity to south, end beam ben to inside at south); thirds burner off, burned timber, lack of debris.	This trailer was totally destroyed by the explosion which left only the frame. All floorboard, walls, roof, and interior contents were thrown by the explosion off of the frame. The frame included metal joits, all of which were permanently deformed several inches toward the south, with increasing severity to the south. Both end beams were betrive toward the south approximately a inches. Further, the entire frame was moved to the south approximately 12 feet, as estimated from aerial photo and location relative to concrete blocks. The post-explosion position is clearly south of the concrete blocks. The post-explosion position is clearly south of the concrete blocks. The post-explosion position is clearly south of the concrete blocks.	All Destroyed	All Destroyed	All Destroyed	All Destroyed	All Destroy	
01	Maintenance Contract Employees	South of ISOM on Avenue G	349	349	Semi trailer with aluminum skin and wall reinforcing at 24° o.c., thickness of stiffener = 0.1 inch and skin = 0.055°			Two injuries. Both contractors knocked unconscious, by tool and other flying debris in trailer. Injuries included broken hip, lag injuries, ruptured disc in back, cuts, contusions and bruises.	Two contract employees in trailer at TOI two were injure Trailer was used to store and distribute tools.	wall pushed in, rear doors deformed in (1 1/2"), east side of	North wall facing blast - broardside. Contents of trailer (she/wing and equipment) thrown about and roof stiffener and lights delached and thrown to floor. The root of the trailer was buckled from in-plane wall reactions from transferred wall loads. Blast entered the trailer form the east end, which was open.	Deformed	Deformed	Intact	None	Significantl Dislodged	
<u>14</u>	Contract Employees	s North of cooling towers	479	479	35'x12' wood trailer with aluminum skin, 2 doors on east side, one window on east side, one window on north side, three windows on west side, no skirt, 30° above ground, 9' at eave.	Wood	Single-wide trailer	Worker received lacerations to face from flying glass. Second worker not injured.	Two employees in trailer at TOI, two were injured.	All windows broken except for one on east side, glass fragments embedded in east wall.	Southwest corner facing blast.	No Damage	No Damage	Intact	Broken, glass thrown	Dislodge	
	Contract Employees	s Northwest of Blowdown Stack	422	455	Metal semi trailer, aluminum skin, wall reinforcing at 24° o.c., Wall thickness =0.1°	Metal	Semi-trailer	One worker received back ann neck injuries, another experience a strained back, neck pain and a knee injury. Pressure wave forced one employee further into trailer, one was blown off steps used for access to trailer	Two employees were in the trailer at the TOI, two were injured	North elevation-severe admage, broken skin at rivets, south wall pushed in, rear doors deformed (1-1/27, east side of roof blown out, middle of roof deformed up, west side of roof deformed in, window and door blown in, all roof supports loose at north side.		Light Damage	Moderate Damage	Intact	Glass broken, but not thrown	Dislodged	
03	BP Engineers (Operations Trailer)	Northwest of Blowdown Stack Across Avenue F	413	413	Single wide trailer, wood 2x4 wall construction with metal siding. 3 window on each of east and west faces.	Wood	Single-wide trailer	One First Aid	Two BP engineers, one job rep and one operator were in trailer at TOI. One injury required first aid per OSHA 300 Log.	2 windows on west face (2 south windows) and all 3 windows on east face broken. Glass found throughout the trailer area. Walls had minor damage.	Southeast corner facing blast. Partially shielded by T-304.	No Damage	No Damage	Intact	Broken, glass thrown	Dislodg	
4	Contractor Tool Storage Trailer	6-pack, west of NDU and north of Catalys Warehouse	216 t	222	32' x 9' x 7-1/2' tall 5th wheel trailer (white), back door (ramp) facing south and side door on east face.	Metal	Semi-trailer	Unknown	Unknown	Ramp door (south end) was down, hence the trailer was open at TOI. The east side door was doeed at TOI and pushed in by blast approx 6 inch. East wall deformed 2.75 inch inward. The roof detached at the north end (front of trailer) and was peeled back toward the south about 1/3 of length and folded over. West side wall pushed in.	East face broadside to blast. Heavy tool cabinets were against the walls at TOL. No windows. Interior hazard included wall debris, roof debris, glazing, and dislodged contents.	Deformed	Severely Deformed	Intact	None	Significant Dislodge	
r-5	Contractor Tool Storage Trailer	6-pack, west of NDU and north of Catalys Warehouse	228 t	235	32' x 9' x 7-1/2' tall 5th wheel trailer (black), back (double doors) door facing south and side door on east face.	Metal	Semi-trailer	Unknown	Unknown	South side doors - after incident west leaf found open and eas leaf was shut build filingen and builded. Door on east face of trailer pushed in, east face paneling buckded, west face paneling rippled in some places. Stiffeners were originally arched up; however, were found pushed downward approx 12 inches and roof panel torn away.	set East face toward blast and shielded by T-4. Walls reinforced by the addition of hot-rolled steel angle framing used for hanging tools and equipment. Heavy tools hung on walls and tail tool cabinet. No windows. Interior hazard included wall debris, roof debris, glazing, and dislodged contents.	Deformed	Severely Deformed	Intact	None	Significant Dislodge	
[-6	Contractor Office Trailer	6-pack, west of NDL and north of Catalys Warehouse	220	220	33' x 7-9' drag trailer (white), with the back door facing south and side door facing east.	Metal	Semi-trailer	Unknown	Unknown	East wall significantly deformed out of plane approx. (1 toot: plus). Approx. 50% of east wall area (area including that of doors and windows) detached and pushed into trailer. Roof framing pushed up into arch shape by blast and roof skin removed. West wall detached at north end and buckled westward elsewhere. Wall detached at northeeast corner of trailer and peled toward west. All doors and window blown in Significant movement of interior objects.	Eas face broadside to blast. Roof was arched by design but additional arching of the roof occurred from load transferred by walls and wall rotation. Interior hazard included wall debris, roof debris, glazing, and dislodged building contents.	Severely Deformed	Destroyed	Intact	All Destroyed	Significani Dislodge	
Г-7	Contractor Decontamination Trailer	6-pack, west of NDU and north of Catalys Warehouse	232 t	232	33' x 7'-9" drag trailer (white), with the back door facing south, side door facing east, and one window facing west.	Metal	Semi-trailer	Unknown	Unknown	East wall pushed out. Roof pushed down at south end and arched up at north end. North wall pushed out. West wall rippled in, east wall - permanent deformation - 10°. Door on south wall pushed in. Windows, including west wall, broken.	East face toward blast and shielded by T-6. Trailer located west of Isom. Shielded by T-6. Interior hazard included wall debris, roof debris, glazing, and dislodged building contents.	Severely Deformed	Severely Deformed	Intact	All Destroyed	Significan Dislodge	
T-8	Motorization Project Office Trailer	t 6-pack, west of NDU and north of Catalys Warehouse		235	36' x 10' x 10' tall office trailer with typical 2x4 wall with exterior plywood sheathing and metal siding, 2x6 and plywood floor, and wood roof. Floor beams sit on top of steel frame on 2 axles.	Wood	Single-wide trailer	Unknown	Unknown	Only portions of trailer walls remaining standing at time of inspection were most of the west and north walls. The roof was not present. There was fire damage on the interior of the north end (1/4 of trailer) but not the south 3/4 of trailer. Wall and roof debris and contents of trailers thrown mostly west inte NDU - some to south.		Destroyed	Destroyed	Intact	All Destroyed	Damaged a thrown west	
r-9	Motorization Project Break Trailer	t 6-pack, west of NDU and north of Catalys Warehouse		249	36' x 10' x 10' tall office trailer with 2x4 wall construction with exterior phywood sheathing metal siding, 2x6 and plywood floor, and wood roof. Floor beams sit on top of steel frame on 2 axles.	Wood	Single-wide trailer	Unknown	Unknown	Only portions of trailer walls remaining standing at time of inspection were the north quarter of the west wall and two interior walls. The root was not present. No evidence of fre in trailer. Wall and roof debris and contents of trailers thrown mostly west into NDU - some to south.	East face toward blast and shielded by T-E. Floorboard intact. Interior hazard included wall debris, roof debris, glazing, and dislodged building contents.	Destroyed	Destroyed	Intact	All Destroyed	Damaged thrown west	
-10	Unknown	Immediately west of trailer T7 near northeast end of NDU	242	242	6' x 10' metal drag trailer.	Not occupiable	•	L	Unknown	North and south walls are permanently deformed inward, east wall pushed out from roof pushing down.	t Trailer shielded by T-7	Deformed	Deformed	None	None	Dislodge	
-11	Unknown	Immediately west of trailer T2 Pre- explosion. In debris pile east of T-8 post- explosion		165	12' x 5' wood construction trailer.	Wood	Single-wide trailer	Unknown	Unknown	Only the deformed steel frame was found with approximately 1/3 of floor attached. This was found in debris pile east of trailer T8 after event, probably moved there during recovery. The plywood floor and floor framing was burnt and charred on the underside. Minimal evidence of burning on the top side of floor.		All Destroyed	All Destroyed	All Destroyed	All Destroyed	All Destro	
-12	Unknown	East of Catalyst Warehouse at the south end of the line of cars.		337	Seabox	Strong Metal (no windows)		Unknown	Unknown	pressure. Deformations are large relative to spans. Damage is greatest at the north end and reduces traveling southward.		Deformed	Deformed	Intact	None	Significar Dislodge	
-102	Unknown Unknown	East of Catalyst Warehouse North of cooling	283 499	283	Strong metal trailer (green) with plate stiffening. Used to store liquids. 8.5' wide small wood skid trailer, 16"		Not Occupiabl Single-wide	Unknown	None Unknown	The weak acid tank experienced heavy deformation of the stiffened wall panels. Stiffener mid-span deformations ~ 6 to 7 inches. East door found off hinges and leaning against opening on the	7	Deformed No Damage	Deformed Light Damage	Intact	None Unbroken	Contents cont Slightly Dislo	
		towers			off ground, no skirt, 8' tall to eave, wooden door at north side, 1/8" annealed glass with a window at south side.		trailer			bulbs down. South window was found open did not break.			J			5 . , 2.2.00	

Trailer Number	Occupant	Location	Distance from Run Down Tank to Closest Point on Trailer (ft)	Distance from Run Down Tank to Center of Trailer (ft)	Trailer Description	Metal or Wood Framing	General Damage Description	Known Injuries	Personnel in Trailer at TOI	Detailed Description of Damage	Additional notes and observed internal hazards where applicable	Walls	Roof	Floor	Windows	Contents
T-105	Unknown	North of cooling tower	461	461	15'x10'-3" wooden trailer, 16" above ground, no skirt, 8' at eave, 1/8" A.G. window on east face, wooden door at northwest corner on west face.	Wood	Single-wide trailer	Unknown	Unknown	Light bulbs blown out, east door blown in and frame cracked, east window broken out	Southwest corner facing blast.	No Damage	No Damage	Intact	Broken, glass thrown	Dislodged
T-106	Unknown	North of V10	272	272	White aluminum semi trailer with wooden door on east face and one window on the east face, two windows on south face, and one window on north face.	Metal	Semi-trailer	Unknown	Unknown	Roof pushed down significantly (up to 24*), south wall pushed out (4*), north wall and west wall- minor deformation. Door at east face found off and directly outside, all windows broken (1/8* glass), window on east face (1/4* poly) broken in - hanging open.	Southwest corner facing blast. Contents of trailer thrown about and roof stiffeners and lights detached and thrown to floor.	Deformed	Deformed	Intact	Broken, glass thrown	Dislodged
T-107	Unknown	North of ISOM	217	217	20'x10' trailer with typical wood trailer construction. Severely burned.	Wood	Semi-trailer	Unknown	Unknown	Burned to deck.	South face broadside to blast. Burned to ground	Destroyed	Destroyed	Destroyed	Destroyed	Dislodged
T-108	Unknown	North of ISOM	177	177	White 40'x12' insulated aluminum semi trailer.	Metal (no windows)	Semi-trailer	Unknown	Unknown	Burned inside, minor blast damage to walls and roof, door on ground, skirt panels damaged and some thrown northward.	South face broadside to blast. Interior burned.	Fire Damage	Fire Damage	Fire Damage	None	Dislodged
T-109	Unknown	North of CAT Warehouse	159	159	12x30' mobile trailer with typical wood trailer construction. Trailer frame in debris pile.	Wood	Drag-trailer	Unknown	Unknown	Destroyed		All Destroyed	All Destroyed	All Destroyed	All Destroyed	All Destroyed
T-110	Unknown	South of Ultra Cracker on Av F	289	289	Single wide wood trailer construction with four windows on south face, four windows and an entrance to the trailer located on north face. Notched 2x4s with metal skin and no plywood sheathing.	Wood	Single-wide trailer	Unknown	Unknown	Central part of trailer wall on south face is destroyed and generated debris that was pushed approximately half way into building. Approximately 50% of south wall open to axatior. At 4 windows on south face broken and glass thrown throughout trailer. All windows on north face are broken and few outside the trailer. Steps on the north face entrance pushed 16" north		Wall facing blast destroyed, others damaged	Damaged	Intact	Broken, glass thrown	Dislodged
T-111	Unknown	North of NDU	422	422	10x40° and 10° high trailer (gray) with 2x4 wood wall construction and plywood sheathing on outside face. Deck between this trailer and the adjacent trailer (T-112). Trailer is 30° above ground with no skirt. The wall has 3/8° thick plywood inside the metal panel.	Wood (Walls reinforced with plywood)	trailer	Unknown	Unknown		Southeast corner facing blast. South wall shielded by T-112. Interior hazards included falling ceiling tiles and lights, disturbed contents.	E Light Damage	Light Damage	Intact	Broken, not thrown	Dislodged
T-112	Unknown	North of NDU	418	418	10'x40' and 10' high trailer (gray) with 2x4 wood wall construction and plywood sheathing on outside face. Deck between this trailer and the adjacent trailer (F111). Trailer is 30" above ground with no skirt. The wall has 30° thick plywood inside the metal panel.	Wood (Walls reinforced with plywood)	trailer	Unknown	Unknown	All windows broken (south, north, and east face except unbroken an onthiwest corner on north face no windows con west wall). Tension cracks on south wall. Most ceiling tile down, ceiling rails hanging	Southeast corner facing blast. Interior hazard included falling ceiling tiles and lights, disturbed contents.	Light Damage	Light Damage	Intact	Broken, glass thrown	Dislodged
T-114	Operations trailer	North of AR2, Near Avenue F	632	632	12'x60' gray and green single wide wood trailer with 2x4 wall construction and metal siding	Wood	Single-wide trailer	Unknown	Unknown	Three windows on south face and 1 window on northwest end broken. Crack in interior wall underneath central window on south face	West end-wall facing blast has no windows. Glass fragments cleaned prior to inspection.	No Damage	No Damage	Intact	Broken, glass thrown	Dislodged
T-115	Unknown	South of Ultra Cracker on Avenue F	235	235	and mean standard and the standard s	Metal	Pull trailer		Unknown	Walls permanently deformed approximately 3 inches. Roof deformed and stiffeners bent approximately 3 inches.	Interior hazard from wall and roof contact from deformation.	Deformed	Deformed	Intact	None	Dislodged
T-201	Unknown	Southeast of Avenue F & West 6th St.	e 597	597	30'x80' gray double wide trailer with typical 2x4 wall construction with no plywood sheathing. Walls clad with metal siding. There are no windows on the east side and 2 doors and 2 windows on the west side.	Wood (Double wide)	e Double-wide trailer	Unknown	Unknown	studs some pushed inward but not detached and others rotated outward as a result of roof collapse. No windows on east face. Window broken on the west side. South wall	building and was supported on the end walls and one interior column. The interior column was under the west truss only and supported the east truss through the connection between the two trusses. Interior shazards included falling roof. Note: no windows on east wall facing blast. West wall windows facing	heavy damage, other	Collapsed at ridge s beam	Intact	Broken, glass thrown	Dislodged
T-202	Unknown	Southeast of Avenue F & West 6th St.	e 675	675	30'x60' gray double wide trailer with typical 2x4 wall construction and metal siding.	Wood	Double-wide trailer	Unknown	Unknown	but intact.	East wall broadside to blast. Ridge beam was built up out of a top and bottom wood cord with connectin interior vertical wood stiffeners and with both sides of the beam covered with plywood. The beam then supports wood joists and roofing. Glass cleaned prior to inspection - GSA not assigned. Fallen suspended ceiling.	g No Damage	No Damage	Intact	Broken, not thrown	Dislodged
T-203	Unknown	Southeast of Avenue F & West 6th St.	e 699	699	Wood 2x4 wall construction with wood panels. Trailer had one door and two windows on the east side, and one window on the west side.	Wood	Single-wide trailer	None	Unknown	Door blown in on east side. Windows not broken	East will broadside to blast.	No Damage	No Damage	Intact	Not Broken	Dislodged
T-204	Unknown	Southeast of Avenue F & West 6th St.	e 699	699	Wood 2x4 wall construction with wood panels. Trailer had one door and two windows on the east side, and one window on the west side.	Wood	Single-wide trailer	Unknown	Unknown	Door blown in, both windows on east face blown out. West window intact.	East wall broadside to blast.	No Damage	No Damage	Intact	Broken, not thrown	Dislodged
T-205	Unknown	Southeast of Avenue F & West 6th St.	e 683	683	Single wide trailer with wood 2x4 wall construction with plywood sheathing on outside face and metal siding. Trailer had four windows and two doors on south face and 4 windows on the north face.	Wood	Single-wide trailer	Unknown	Unknown	Lower lite gone on east most window on north side. All other windows intact.	East wall, end-on to blast but no windows.	Light Damage	No Damage	Intact	Broken, not thrown	Dislodged
T-301	Unknown	Southwest substation Ultra Cracker	533	533	Single wide trailer with wood 2x4 walls and metal siding. Roof was constructed of arched wood truss.	Wood	Single-wide trailer	Unknown	Unknown	Center rail out of the north east window face. All windows broken (nw, sw, and se faces had windows - nw face had no windows )	Southeast wall, end-on to blast. Building aligned 45 deg to N-S Interior cleaned prior to inspection .	No Damage	No Damage	Intact	Broken, glass thrown	Dislodged
T-302	Unknown	West of Substation on Ultra Cracker	501	501	20'x6' gray and blue trailer with steel frame and metal panel construction.	Metal	Single-wide trailer	Unknown	Unknown	Window broken on northeast end	southeast corner facing blast.	No Damage	No Damage	Intact	Broken, not thrown	Dislodged
T-304	Maintenance Trailer	Northwest of Blowdown Stack Across Avenue F	401	401	Single wide trailer, wood 2x4 wall construction with metal siding.	Wood	Single-wide trailer	One occupant injured by flying glass sought treatment at hospital and released	One occupant at TOI	All 4 windows on west face and one window on south face broken.	southeast corner facing blast.	No Damage	No Damage	Intact	Broken, glass thrown	Dislodged
	Motorization Project	Cracker	622	622	Single wide trailer, wood 2x4 wall construction with metal siding.	Wood	Single-wide trailer	Unknown	Unknown	One window on the west face and 3 windows on the east face are broken		No Damage	No Damage	Intact	Broken, not thrown	Dislodged
T-306	Maintenance	Northeast of Ultra Cracker	637	637	Single wide 2x4 wood wall trailer with wood panel siding (brown). 3 doors and 4 windows on the east face and no openings on the west face. A wood deck connect between T-306 and T-305.	Wood	Single-wide trailer	Unknown	Unknown	A window is broken at the east face	Shielded by T-305. No interior access.	No Damage	No Damage	Intact	Broken, not thrown	Dislodged
T-401	Unknown	West of tank in ARU	458	458	Single wide trailer, wood 2x4 wall construction with no sheathing. Walls clad with metal siding. 20'x8' (7' high). Floor deck 30° above ground.	Wood	Single-wide trailer	Unknown	Unknown	Broken wood studs (2 1/2*x 1 1/2* @ 16°oc) on the south face next to notch with the 1*x2* girts and metal skin delaminated. Interior wall panel cracked. South wall close to failure.	South face broadside to blast.	Wall facing blast damaged	Light Damage	Intact	Broken, glass thrown throughout interior	Dislodged
T-402	Unknown	North of Blowdown Stack in ARU	695	695	Single wide trailer, wood 2x4 wall construction with metal siding.	Wood	Single-wide trailer	Unknown	Unknown	No Observable structural damage. Some windows broken.	South face broadside to blast.	No Damage	No Damage	Intact	Broken, not thrown	Dislodged
T-403	Unknown	North of Blowdown Stack in ARU	720	720	Short single wide trailer, wood 2x4 wall construction with metal siding.	Wood	Single-wide trailer	Unknown	Unknown	No Observable structural damage. Some windows broken.	South face broadside to blast.	No Damage	No Damage	Intact	Broken, not thrown	Dislodged
T-404	Unknown	North of Blowdown Stack in ARU	749	749	Single wide trailer, wood 2x4 wall construction with metal siding.	Wood	Single-wide trailer	Unknown	Unknown	No Observable structural damage. Some windows broken.	South face broadside to blast.	No Damage	No Damage	Intact	Broken, not thrown	Dislodged
T-501	Unknown	UU4 Turnaround Trailer East of J-75 Switchgear Bldg.	952	952	Single wide trailer, wood 2x4 wall construction with metal siding.	Wood	Single-wide trailer	Unknown	Unknown	No Observable structural damage. Some windows broken.	South face broadside to blast.	No Damage	No Damage	Intact	Broken, not thrown	Dislodged
T-502	Unknown	North of FRC Change House	1413	1413	Single wide trailer, wood 2x4 wall construction with metal siding.	Wood	Single-wide trailer	Unknown	Unknown		South face broadside to blast.	No Damage	No Damage	Intact	Not Broken	Dislodged
T-601	Unknown	South UU3 on Avenue F	927	927	Trailer orientation E-W. Porch covered and located on north face.	Wood	Single-wide trailer	Unknown	Unknown	One lite broken at window on northwest end and east face. Slight panel pull-away on east face	South face broadside to blast.	Light Damage	No Damage	Intact	Broken, not thrown	Dislodged