

<div>Form 5500</div> <div>Department of the Treasury Internal Revenue Service</div> <div>Department of Labor Employee Benefits Security Administration</div> <div>Pension Benefit Guaranty Corporation</div>	<div>Annual Return/Report of Employee Benefit Plan</div> <div>This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code).</div> <div>▶ Complete all entries in accordance with the instructions to the Form 5500.</div>	<div>OMB Nos. 1210-0110 1210-0089</div> <div>2022</div> <div>This Form is Open to Public Inspection</div>
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Part I	Annual Report Identification Information
For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022	
A	This return/report is for: <div>☐ a multiemployer plan</div> <div>☐ a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)</div> <div>☒ a single-employer plan</div> <div>☐ a DFE (specify) _____</div>
B	This return/report is: <div>☐ the first return/report</div> <div>☐ the final return/report</div> <div>☐ an amended return/report</div> <div>☐ a short plan year return/report (less than 12 months)</div>
C	If the plan is a collectively-bargained plan, check here.▶ ☒
D	Check box if filing under: <div>☒ Form 5558</div> <div>☐ automatic extension</div> <div>☐ the DFVC program</div> <div>☐ special extension (enter description)</div>
E	If this is a retroactively adopted plan permitted by SECURE Act section 201, check here.▶ ☐

Part II	Basic Plan Information—enter all requested information
1a	Name of plan HOUSTON REFINING LP RETIREMENT PLAN FOR REPRESENTED EMPLOYEES
1b	Three-digit plan number (PN) ▶ 061
1c	Effective date of plan 04/01/1989
2a	Plan sponsor's name (employer, if for a single-employer plan) Mailing address (include room, apt., suite no. and street, or P.O. Box) City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions) HOUSTON REFINING LP 1221 MCKINNEY, SUITE 300 HOUSTON, TX 77010-2006
2b	Employer Identification Number (EIN) 76-0395303
2c	Plan Sponsor's telephone number 713-309-7200
2d	Business code (see instructions) 324110

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE	Filed with authorized/valid electronic signature.	10/02/2023	REBECCA PATTERSON HOLMES
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE			
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE

For Paperwork Reduction Act Notice, see the Instructions for Form 5500.

Form 5500 (2022)
v. 220413

3a Plan administrator's name and address ☐ Same as Plan Sponsor BENEFITS ADMINISTRATIVE COMMITTEE 1221 MCKINNEY, SUITE 300 HOUSTON, TX 77010-2006		3b Administrator's EIN 20-3443655 3c Administrator's telephone number 713-309-7200
4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report: a Sponsor's name c Plan Name		4b EIN 4d PN
5 Total number of participants at the beginning of the plan year		5 559
6 Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines 6a(1) , 6a(2) , 6b , 6c , and 6d). a(1) Total number of active participants at the beginning of the plan year a(2) Total number of active participants at the end of the plan year b Retired or separated participants receiving benefits c Other retired or separated participants entitled to future benefits..... d Subtotal. Add lines 6a(2) , 6b , and 6c e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits. f Total. Add lines 6d and 6e g Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)..... h Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested.....		6a(1) 283 6a(2) 242 6b 94 6c 181 6d 517 6e 12 6f 529 6g 6h 0
7 Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item)		7
8a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions: 1A 3H b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:		
9a Plan funding arrangement (check all that apply) (1) ☐ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor	9b Plan benefit arrangement (check all that apply) (1) ☐ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor	
10 Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)		
a Pension Schedules (1) ☒ R (Retirement Plan Information) (2) ☐ MB (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary (3) ☒ SB (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary	b General Schedules (1) ☒ H (Financial Information) (2) ☐ I (Financial Information – Small Plan) (3) ☐ 0 A (Insurance Information) (4) ☒ C (Service Provider Information) (5) ☒ D (DFE/Participating Plan Information) (6) ☐ G (Financial Transaction Schedules)	

Part III Form M-1 Compliance Information (to be completed by welfare benefit plans)

11a If the plan provides welfare benefits, was the plan subject to the Form M-1 filing requirements during the plan year? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

If "Yes" is checked, complete lines 11b and 11c.

11b Is the plan currently in compliance with the Form M-1 filing requirements? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

11c Enter the Receipt Confirmation Code for the 2022 Form M-1 annual report. If the plan was not required to file the 2022 Form M-1 annual report, enter the Receipt Confirmation Code for the most recent Form M-1 that was required to be filed under the Form M-1 filing requirements. (Failure to enter a valid Receipt Confirmation Code will subject the Form 5500 filing to rejection as incomplete.)

Receipt Confirmation Code _____

SCHEDULE SB (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500 or 5500-SF.	OMB No. 1210-0110 2022 This Form is Open to Public Inspection
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For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022

▶ **Round off amounts to nearest dollar.**

▶ **Caution:** A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan <u>HOUSTON REFINING LP RETIREMENT PLAN FOR REPRESENTED EMPLOYEES</u>	B Three-digit plan number (PN) ▶ <u>061</u>
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF <u>HOUSTON REFINING LP</u>	D Employer Identification Number (EIN) <u>76-0395303</u>
E Type of plan: ☒ Single ☐ Multiple-A ☐ Multiple-B	F Prior year plan size: ☐ 100 or fewer ☐ 101-500 ☒ More than 500

Part I	Basic Information
1 Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2022</u>	
2 Assets:	
a Market value.....	2a <u>86239325</u>
b Actuarial value	2b <u>82675482</u>
3 Funding target/participant count breakdown	(1) Number of participants (2) Vested Funding Target (3) Total Funding Target
a For retired participants and beneficiaries receiving payment	<u>119</u> <u>17608569</u> <u>17608569</u>
b For terminated vested participants.....	<u>164</u> <u>9192565</u> <u>9192565</u>
c For active participants.....	<u>283</u> <u>52662715</u> <u>56841356</u>
d Total	<u>566</u> <u>79463849</u> <u>83642490</u>
4 If the plan is in at-risk status, check the box and complete lines (a) and (b)..... ☐	
a Funding target disregarding prescribed at-risk assumptions.....	4a
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	4b
5 Effective interest rate.....	5 <u>5.53</u> %
6 Target normal cost	
a Present value of current plan year accruals.....	6a <u>4157215</u>
b Expected plan-related expenses	6b <u>448000</u>
c Total (line 6a + line 6b)	6c <u>4605215</u>

Statement by Enrolled Actuary

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE	<u>09/25/2023</u> Date
<u>DAVID ANDERSON</u> Signature of actuary	<u>23-07493</u> Most recent enrollment number
<u>WILLIS TOWERS WATSON US LLC</u> Type or print name of actuary	<u>713-754-5400</u> Telephone number (including area code)
<u>811 LOUISIANA STREET</u> SUITE 2200 HOUSTON, TX 77002 Firm name	
<u>Address of the firm</u>	

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions ☐

Part II Beginning of Year Carryover and Prefunding Balances		
	(a) Carryover balance	(b) Prefunding balance
7 Balance at beginning of prior year after applicable adjustments (line 13 from prior year).....	0	0
8 Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9 Amount remaining (line 7 minus line 8)	0	0
10 Interest on line 9 using prior year's actual return of <u>12.27</u> %	0	0
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year).....		0
b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>5.70</u> %.....		0
b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
c Total available at beginning of current plan year to add to prefunding balance.....		0
d Portion of (c) to be added to prefunding balance.....		0
12 Other reductions in balances due to elections or deemed elections	0	0
13 Balance at beginning of current year (line 9 + line 10 + line 11d – line 12).....	0	0

Part III Funding Percentages		
14 Funding target attainment percentage	14	98.84 %
15 Adjusted funding target attainment percentage	15	98.84 %
16 Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement.....	16	107.61 %
17 If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV Contributions and Liquidity Shortfalls					
18 Contributions made to the plan for the plan year by employer(s) and employees:					
(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
09/11/2023	5250000	0			
			Totals ►	18(b)	5250000
				18(c)	0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:	
a Contributions allocated toward unpaid minimum required contributions from prior years.....	19a 0
b Contributions made to avoid restrictions adjusted to valuation date.	19b 0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date.	19c 4792367
20 Quarterly contributions and liquidity shortfalls:	
a Did the plan have a "funding shortfall" for the prior year?	☐ Yes ☒ No
b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner?	☐ Yes ☐ No
c If line 20a is "Yes," see instructions and complete the following table as applicable:	

Liquidity shortfall as of end of quarter of this plan year			
(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part V	Assumptions Used to Determine Funding Target and Target Normal Cost		
21	Discount rate:		
a	Segment rates:	<div style="display: flex; justify-content: space-around;"> <div>1st segment: 4.75 %</div> <div>2nd segment: 5.18 %</div> <div>3rd segment: 5.92 %</div> </div>	☐ N/A, full yield curve used
b	Applicable month (enter code).....	21b	4
22	Weighted average retirement age	22	62
23	Mortality table(s) (see instructions) ☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute		
Part VI	Miscellaneous Items		
24	Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment. ☒ Yes ☐ No		
25	Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment. ☐ Yes ☒ No		
26	Demographic and benefit information		
a	Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment. ☒ Yes ☐ No		
b	Is the plan required to provide a projection of expected benefit payments? If "Yes," see instructions regarding required attachment ... ☐ Yes ☒ No		
27	If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	27	
Part VII	Reconciliation of Unpaid Minimum Required Contributions For Prior Years		
28	Unpaid minimum required contributions for all prior years.....	28	0
29	Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29	0
30	Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0
Part VIII	Minimum Required Contribution For Current Year		
31	Target normal cost and excess assets (see instructions):		
a	Target normal cost (line 6c).....	31a	4605215
b	Excess assets, if applicable, but not greater than line 31a	31b	0
32	Amortization installments:	Outstanding Balance	Installment
a	Net shortfall amortization installment	967008	89363
b	Waiver amortization installment	0	0
33	If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33	
34	Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)....	34	4694578
	Carryover balance	Prefunding balance	Total balance
35	Balances elected for use to offset funding requirement.....	0	0
36	Additional cash requirement (line 34 minus line 35)	36	4694578
37	Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	37	4792367
38	Present value of excess contributions for current year (see instructions)		
a	Total (excess, if any, of line 37 over line 36)	38a	97789
b	Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	0
39	Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	0
40	Unpaid minimum required contributions for all years.....	40	0
Part IX	Pension Funding Relief Under the American Rescue Plan Act of 2021 (See Instructions)		
41	If an election was made to use the extended amortization rule for a plan year beginning on or before December 31, 2021, check the box to indicate the first plan year for which the rule applies. ☐ 2019 ☐ 2020 ☒ 2021		

<div>SCHEDULE C</div> <div>(Form 5500)</div> <div>Department of the Treasury Internal Revenue Service</div> <div>Department of Labor Employee Benefits Security Administration</div> <div>Pension Benefit Guaranty Corporation</div>	<div>Service Provider Information</div> <div>This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).</div> <div>▶ File as an attachment to Form 5500.</div>	OMB No. 1210-0110
		2022
		This Form is Open to Public Inspection.

For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022	
A Name of plan HOUSTON REFINING LP RETIREMENT PLAN FOR REPRESENTED EMPLOYEES	B Three-digit plan number (PN) ▶ 061
C Plan sponsor's name as shown on line 2a of Form 5500 HOUSTON REFINING LP	D Employer Identification Number (EIN) 76-0395303

Part I	Service Provider Information (see instructions)
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You must complete this Part, in accordance with the instructions, to report the information required for **each person** who received, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of monetary value) in connection with services rendered to the plan or the person's position with the plan during the plan year. If a person received **only** eligible indirect compensation for which the plan received the required disclosures, you are required to answer line 1 but are not required to include that person when completing the remainder of this Part.

1 Information on Persons Receiving Only Eligible Indirect Compensation

- a Check "Yes" or "No" to indicate whether you are excluding a person from the remainder of this Part because they received only eligible indirect compensation for which the plan received the required disclosures (see instructions for definitions and conditions).. ☐ Yes ☒ No
- b If you answered line 1a "Yes," enter the name and EIN or address of each person providing the required disclosures for the service providers who received only eligible indirect compensation. Complete as many entries as needed (see instructions).

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation
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(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

WILLIS TOWERS WATSON US LLC

53-0181291

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
11 50	NONE	79538	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

LIFEWORKS (US) LTD.

52-1883918

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
15 50	NONE	34409	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

Part I Service Provider Information (continued)

3. If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received \$1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	

Part II Service Providers Who Fail or Refuse to Provide Information

4 Provide, to the extent possible, the following information for each service provider who failed or refused to provide the information necessary to complete this Schedule.

(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide

Part III Termination Information on Accountants and Enrolled Actuaries (see instructions)
(complete as many entries as needed)

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

<div>SCHEDULE D (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration</div>	<div>DFE/Participating Plan Information</div> <div>This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).</div> <div>► File as an attachment to Form 5500.</div>	<div>OMB No. 1210-0110</div> <div>2022</div> <div>This Form is Open to Public Inspection.</div>
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For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022		
A Name of plan HOUSTON REFINING LP RETIREMENT PLAN FOR REPRESENTED EMPLOYEES	B Three-digit plan number (PN) ►	061
C Plan or DFE sponsor's name as shown on line 2a of Form 5500 HOUSTON REFINING LP	D Employer Identification Number (EIN) 76-0395303	

Part I	Information on interests in MTIAs, CCTs, PSAs, and 103-12 IEs (to be completed by plans and DFEs) (Complete as many entries as needed to report all interests in DFEs)
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a Name of MTIA, CCT, PSA, or 103-12 IE:	LYONDELLBASELL MASTER TRUST
---	-----------------------------

b Name of sponsor of entity listed in (a):	LYONDELL CHEMICAL COMPANY
--	---------------------------

c EIN-PN 95-4160558-009	d Entity code M	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 55341691
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a Name of MTIA, CCT, PSA, or 103-12 IE:		
---	--	--

b Name of sponsor of entity listed in (a):		
--	--	--

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
----------	---------------	--

a Name of MTIA, CCT, PSA, or 103-12 IE:		
---	--	--

b Name of sponsor of entity listed in (a):		
--	--	--

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
----------	---------------	--

a Name of MTIA, CCT, PSA, or 103-12 IE:		
---	--	--

b Name of sponsor of entity listed in (a):		
--	--	--

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:		
---	--	--

b Name of sponsor of entity listed in (a):		
--	--	--

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
----------	---------------	--

a Name of MTIA, CCT, PSA, or 103-12 IE:		
---	--	--

b Name of sponsor of entity listed in (a):		
--	--	--

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:		
---	--	--

b Name of sponsor of entity listed in (a):		
--	--	--

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)

Part II **Information on Participating Plans (to be completed by DFEs)**

(Complete as many entries as needed to report all participating plans)

a Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN

SCHEDULE H (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	Financial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500.	OMB No. 1210-0110 2022 This Form is Open to Public Inspection
For calendar plan year 2022 or fiscal plan year beginning <u>01/01/2022</u> and ending <u>12/31/2022</u>		
A Name of plan <u>HOUSTON REFINING LP RETIREMENT PLAN FOR REPRESENTED EMPLOYEES</u>	B Three-digit plan number (PN) ►	<u>061</u>
C Plan sponsor's name as shown on line 2a of Form 5500 <u>HOUSTON REFINING LP</u>	D Employer Identification Number (EIN) <u>76-0395303</u>	

Part I	Asset and Liability Statement		
1 Current value of plan assets and liabilities at the beginning and end of the plan year. Combine the value of plan assets held in more than one trust. Report the value of the plan's interest in a commingled fund containing the assets of more than one plan on a line-by-line basis unless the value is reportable on lines 1c(9) through 1c(14). Do not enter the value of that portion of an insurance contract which guarantees, during this plan year, to pay a specific dollar benefit at a future date. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 1b(1), 1b(2), 1c(8), 1g, 1h, and 1i. CCTs, PSAs, and 103-12 IEs also do not complete lines 1d and 1e. See instructions.			
Assets		(a) Beginning of Year	(b) End of Year
a Total noninterest-bearing cash.....	1a		
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions.....	1b(1)	0	5250000
(2) Participant contributions.....	1b(2)		
(3) Other.....	1b(3)		
c General investments:			
(1) Interest-bearing cash (include money market accounts & certificates of deposit).....	1c(1)		
(2) U.S. Government securities	1c(2)		
(3) Corporate debt instruments (other than employer securities):			
(A) Preferred	1c(3)(A)		
(B) All other	1c(3)(B)		
(4) Corporate stocks (other than employer securities):			
(A) Preferred	1c(4)(A)		
(B) Common.....	1c(4)(B)		
(5) Partnership/joint venture interests	1c(5)		
(6) Real estate (other than employer real property)	1c(6)		
(7) Loans (other than to participants).....	1c(7)		
(8) Participant loans.....	1c(8)		
(9) Value of interest in common/collective trusts.....	1c(9)		
(10) Value of interest in pooled separate accounts	1c(10)		
(11) Value of interest in master trust investment accounts.....	1c(11)	85444102	55341691
(12) Value of interest in 103-12 investment entities	1c(12)		
(13) Value of interest in registered investment companies (e.g., mutual funds).....	1c(13)		
(14) Value of funds held in insurance company general account (unallocated contracts).....	1c(14)		
(15) Other	1c(15)		

1d Employer-related investments:		(a) Beginning of Year	(b) End of Year
(1) Employer securities	1d(1)		
(2) Employer real property	1d(2)		
e Buildings and other property used in plan operation	1e		
f Total assets (add all amounts in lines 1a through 1e)	1f	85444102	60591691

Liabilities

g Benefit claims payable	1g		
h Operating payables	1h	4943	6617
i Acquisition indebtedness	1i		
j Other liabilities	1j		
k Total liabilities (add all amounts in lines 1g through 1j)	1k	4943	6617

Net Assets

l Net assets (subtract line 1k from line 1f)	1l	85439159	60585074
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Part II Income and Expense Statement

2 Plan income, expenses, and changes in net assets for the year. Include all income and expenses of the plan, including any trust(s) or separately maintained fund(s) and any payments/receipts to/from insurance carriers. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 2a, 2b(1)(E), 2e, 2f, and 2g.

Income

		(a) Amount	(b) Total
a Contributions:			
(1) Received or receivable in cash from: (A) Employers	2a(1)(A)	5250000	
(B) Participants	2a(1)(B)		
(C) Others (including rollovers)	2a(1)(C)		
(2) Noncash contributions	2a(2)		
(3) Total contributions. Add lines 2a(1)(A) , (B) , (C) , and line 2a(2)	2a(3)		5250000
b Earnings on investments:			
(1) Interest:			
(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)		
(B) U.S. Government securities	2b(1)(B)		
(C) Corporate debt instruments	2b(1)(C)		
(D) Loans (other than to participants)	2b(1)(D)		
(E) Participant loans	2b(1)(E)		
(F) Other	2b(1)(F)		
(G) Total interest. Add lines 2b(1)(A) through (F)	2b(1)(G)		0
(2) Dividends: (A) Preferred stock	2b(2)(A)		
(B) Common stock	2b(2)(B)		
(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)		
(D) Total dividends. Add lines 2b(2)(A) , (B) , and (C)	2b(2)(D)		0
(3) Rents	2b(3)		
(4) Net gain (loss) on sale of assets: (A) Aggregate proceeds	2b(4)(A)		
(B) Aggregate carrying amount (see instructions)	2b(4)(B)		
(C) Subtract line 2b(4)(B) from line 2b(4)(A) and enter result	2b(4)(C)		0
(5) Unrealized appreciation (depreciation) of assets: (A) Real estate	2b(5)(A)		
(B) Other	2b(5)(B)		
(C) Total unrealized appreciation of assets. Add lines 2b(5)(A) and (B)	2b(5)(C)		0

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts	2b(6)		
(7) Net investment gain (loss) from pooled separate accounts	2b(7)		
(8) Net investment gain (loss) from master trust investment accounts	2b(8)		-11718135
(9) Net investment gain (loss) from 103-12 investment entities.....	2b(9)		
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds)	2b(10)		
c Other income	2c		
d Total income. Add all income amounts in column (b) and enter total	2d		-6468135
Expenses			
e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	17888348	
(2) To insurance carriers for the provision of benefits	2e(2)		
(3) Other	2e(3)		
(4) Total benefit payments. Add lines 2e(1) through (3)	2e(4)		17888348
f Corrective distributions (see instructions)	2f		
g Certain deemed distributions of participant loans (see instructions)	2g		
h Interest expense	2h		
i Administrative expenses: (1) Professional fees	2i(1)	79719	
(2) Contract administrator fees	2i(2)	34409	
(3) Investment advisory and management fees	2i(3)		
(4) Other	2i(4)	383474	
(5) Total administrative expenses. Add lines 2i(1) through (4)	2i(5)		497602
j Total expenses. Add all expense amounts in column (b) and enter total	2j		18385950
Net Income and Reconciliation			
k Net income (loss). Subtract line 2j from line 2d	2k		-24854085
l Transfers of assets:			
(1) To this plan	2l(1)		
(2) From this plan	2l(2)		

Part III Accountant's Opinion

3 Complete lines 3a through 3c if the opinion of an independent qualified public accountant is attached to this Form 5500. Complete line 3d if an opinion is not attached.

a The attached opinion of an independent qualified public accountant for this plan is (see instructions):

(1) ☒ Unmodified (2) ☐ Qualified (3) ☐ Disclaimer (4) ☐ Adverse

b Check the appropriate box(es) to indicate whether the IQPA performed an ERISA section 103(a)(3)(C) audit. Check both boxes (1) and (2) if the audit was performed pursuant to both 29 CFR 2520.103-8 and 29 CFR 2520.103-12(d). Check box (3) if pursuant to neither.

(1) ☒ DOL Regulation 2520.103-8 (2) ☒ DOL Regulation 2520.103-12(d) (3) ☐ neither DOL Regulation 2520.103-8 nor DOL Regulation 2520.103-12(d).

c Enter the name and EIN of the accountant (or accounting firm) below:

(1) Name: PRICEWATERHOUSECOOPERS

(2) EIN: 13-4008324

d The opinion of an independent qualified public accountant is **not attached** because:

(1) ☐ This form is filed for a CCT, PSA, or MTIA. (2) ☐ It will be attached to the next Form 5500 pursuant to 29 CFR 2520.104-50.

Part IV Compliance Questions

4 CCTs and PSAs do not complete Part IV. MTIAs, 103-12 IEs, and GIAs do not complete lines 4a, 4e, 4f, 4g, 4h, 4k, 4m, 4n, or 5. 103-12 IEs also do not complete lines 4j and 4l. MTIAs also do not complete line 4l.

During the plan year:

a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program.)

	Yes	No	Amount
4a		X	

	Yes	No	Amount
b Were any loans by the plan or fixed income obligations due the plan in default as of the close of the plan year or classified during the year as uncollectible? Disregard participant loans secured by participant's account balance. (Attach Schedule G (Form 5500) Part I if "Yes" is checked.)			
4b		X	
c Were any leases to which the plan was a party in default or classified during the year as uncollectible? (Attach Schedule G (Form 5500) Part II if "Yes" is checked.)			
4c		X	
d Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a. Attach Schedule G (Form 5500) Part III if "Yes" is checked.)			
4d		X	
e Was this plan covered by a fidelity bond?	X		8500000
f Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?		X	
4f		X	
g Did the plan hold any assets whose current value was neither readily determinable on an established market nor set by an independent third party appraiser?			
4g		X	
h Did the plan receive any noncash contributions whose value was neither readily determinable on an established market nor set by an independent third party appraiser?			
4h		X	
i Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.)			
4i		X	
j Were any plan transactions or series of transactions in excess of 5% of the current value of plan assets? (Attach schedule of transactions if "Yes" is checked and see instructions for format requirements.)			
4j		X	
k Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?			
4k		X	
l Has the plan failed to provide any benefit when due under the plan?			
4l		X	
m If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)			
4m			
n If 4m was answered "Yes," check the "Yes" box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3.			
4n			

5a Has a resolution to terminate the plan been adopted during the plan year or any prior plan year? ☐ Yes ☒ No
If "Yes," enter the amount of any plan assets that reverted to the employer this year _____.

5b If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

5b(1) Name of plan(s)	5b(2) EIN(s)	5b(3) PN(s)

5c Was the plan a defined benefit plan covered under the PBGC insurance program at any time during this plan year? (See ERISA section 4021 and instructions.) ☒ Yes ☐ No ☐ Not determined
If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 485283.

<div>SCHEDULE R (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation</div>	<div>Retirement Plan Information</div> <div>This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code).</div> <div>► File as an attachment to Form 5500.</div>	<div>OMB No. 1210-0110</div> <div>2022</div> <div>This Form is Open to Public Inspection.</div>
For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022		
A Name of plan HOUSTON REFINING LP RETIREMENT PLAN FOR REPRESENTED EMPLOYEES		B Three-digit plan number (PN) ► 061
C Plan sponsor's name as shown on line 2a of Form 5500 HOUSTON REFINING LP		D Employer Identification Number (EIN) 76-0395303
Part I Distributions		
All references to distributions relate only to payments of benefits during the plan year.		
1 Total value of distributions paid in property other than in cash or the forms of property specified in the instructions.....		1 0
2 Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits): EIN(s): 13-7073479		
Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.		
3 Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year.....		3 26
Part II Funding Information (If the plan is not subject to the minimum funding requirements of section 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)		
4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? ☐ Yes ☒ No ☐ N/A If the plan is a defined benefit plan, go to line 8.		
5 If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions and enter the date of the ruling letter granting the waiver. Date: Month _____ Day _____ Year _____ If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.		
6 a Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived).....		6a
b Enter the amount contributed by the employer to the plan for this plan year.....		6b
c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount).....		6c
If you completed line 6c, skip lines 8 and 9.		
7 Will the minimum funding amount reported on line 6c be met by the funding deadline? ☐ Yes ☐ No ☐ N/A		
8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change? ☐ Yes ☐ No ☒ N/A		
Part III Amendments		
9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box..... ☒ Increase ☐ Decrease ☐ Both ☐ No		
Part IV ESOPs (see instructions). If this is not a plan described under section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.		
10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan?..... ☐ Yes ☐ No		
11 a Does the ESOP hold any preferred stock?..... ☐ Yes ☐ No		
b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.)..... ☐ Yes ☐ No		
12 Does the ESOP hold any stock that is not readily tradable on an established securities market?..... ☐ Yes ☐ No		
For Paperwork Reduction Act Notice, see the Instructions for Form 5500.		
Schedule R (Form 5500) 2022 v. 220413		

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that (1) contributed more than 5% of total contributions to the plan during the plan year or (2) was one of the top-ten highest contributors (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

14	Enter the number of deferred vested and retired participants (inactive participants), as of the beginning of the plan year, whose contributing employer is no longer making contributions to the plan for:	
a	The current plan year. Check the box to indicate the counting method used to determine the number of inactive participants: ☐ last contributing employer ☐ alternative ☐ reasonable approximation (see instructions for required attachment).....	14a
b	The plan year immediately preceding the current plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment)	14b
c	The second preceding plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment)	14c
15	Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:	
a	The corresponding number for the plan year immediately preceding the current plan year.....	15a
b	The corresponding number for the second preceding plan year.....	15b
16	Information with respect to any employers who withdrew from the plan during the preceding plan year:	
a	Enter the number of employers who withdrew during the preceding plan year	16a
b	If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers.....	16b
17	If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐	

Part VI Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans

18 If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐

19 If the total number of participants is 1,000 or more, complete lines (a) through (c)

a Enter the percentage of plan assets held as:
 Stock: _____% Investment-Grade Debt: _____% High-Yield Debt: _____% Real Estate: _____% Other: _____%

b Provide the average duration of the combined investment-grade and high-yield debt:
☐ 0-3 years ☐ 3-6 years ☐ 6-9 years ☐ 9-12 years ☐ 12-15 years ☐ 15-18 years ☐ 18-21 years ☐ 21 years or more

c What duration measure was used to calculate line 19(b)?
☐ Effective duration ☐ Macaulay duration ☐ Modified duration ☐ Other (specify): _____

20 PBGC missed contribution reporting requirements. If this is a multiemployer plan or a single-employer plan that is not covered by PBGC, skip line 20.

a Is the amount of unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40 greater than zero? ☐ Yes ☒ No

b If line 20a is "Yes," has PBGC been notified as required by ERISA sections 4043(c)(5) and/or 303(k)(4)? Check the applicable box:

☐ Yes.

☐ No. Reporting was waived under 29 CFR 4043.25(c)(2) because contributions equal to or exceeding the unpaid minimum required contribution were made by the 30th day after the due date.

☐ No. The 30-day period referenced in 29 CFR 4043.25(c)(2) has not yet ended, and the sponsor intends to make a contribution equal to or exceeding the unpaid minimum required contribution by the 30th day after the due date.

☐ No. Other. Provide explanation _____

**HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES**

FINANCIAL STATEMENTS

**As of December 31, 2022 and 2021
and for the years ended December 31, 2022 and 2021**

**HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES**

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Schedules required by 29 CFR 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 ("ERISA") have been omitted because they are not applicable.



Report of Independent Auditors

To the Administrator of the Houston Refining LP Retirement Plan for Represented Employees

Scope and Nature of the ERISA Section 103(a)(3)(C) Audit

We have performed an audit of the accompanying financial statements of the Houston Refining LP Retirement Plan for Represented Employees (the "Plan"), an employee benefit plan subject to the Employee Retirement Income Security Act of 1974 (ERISA), as permitted by ERISA Section 103(a)(3)(C) (ERISA Section 103(a)(3)(C) audit). The financial statements comprise the statements of net assets available for benefits as of December 31, 2022 and 2021, and the related statements of changes in net assets available for benefits for the years then ended and the statement of accumulated plan benefits as of December 31, 2021 and the related statement of changes in accumulated plan benefits for the year then ended, including the related notes (collectively referred to as the "financial statements").

Management, having determined it is permissible in the circumstances, has elected to have the audit of the Plan's financial statements performed in accordance with ERISA Section 103(a)(3)(C) pursuant to 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. As permitted by ERISA Section 103(a)(3)(C), our audit need not extend to any statements or information related to assets held for investment of the plan (investment information) by a bank or similar institution or insurance carrier that is regulated, supervised, and subject to periodic examination by a state or federal agency, provided that the statements or information regarding assets so held are prepared and certified to by the bank or similar institution or insurance carrier in accordance with 29 CFR 2520.103-5 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA (qualified institution).

Management has obtained certifications from a qualified institution as of December 31, 2022 and 2021 and for the years then ended, stating that the certified investment information, as described in Note 8 to the financial statements, is complete and accurate.

Opinion

In our opinion, based on our audit and on the procedures performed as described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report

- the amounts and disclosures in the accompanying financial statements, other than those agreed to or derived from the certified investment information, are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America.
- the information in the accompanying financial statements related to assets held by and certified to by a qualified institution agrees to, or is derived from, in all material respects, the information prepared and certified by an institution that management determined meets the requirements of ERISA Section 103(a)(3)(C).

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (US GAAS). Our responsibilities under those standards are further described in

the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Plan and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our ERISA Section 103(a)(3)(C) audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error. Management's election of the ERISA Section 103(a)(3)(C) audit does not affect management's responsibility for the financial statements.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for one year after the date the financial statements are available to be issued.

Management is also responsible for maintaining a current plan instrument, including all plan amendments, administering the plan, and determining that the plan's transactions that are presented and disclosed in the financial statements are in conformity with the plan's provisions, including maintaining sufficient records with respect to each of the participants, to determine the benefits due or which may become due to such participants.

Auditors' Responsibilities for the Audit of the Financial Statements

Except as described in the Scope and Nature of the ERISA Section 103(a)(3)(C) Audit section of our report, our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with US GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, no such opinion is expressed.

- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for a reasonable period of time.

Our audit did not extend to the certified investment information, except for obtaining and reading the certification, comparing the certified investment information with the related information presented and disclosed in the financial statements, and reading the disclosures relating to the certified investment information to assess whether they are in accordance with the presentation and disclosure requirements of accounting principles generally accepted in the United States of America.

Accordingly, the objective of an ERISA Section 103(a)(3)(C) audit is not to express an opinion about whether the financial statements as a whole are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Pricewaterhouse Coopers LLP

Houston, Texas
September 28, 2023

HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES
STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

	December 31,	
	2022	2021
ASSETS		
Plan interest in the LyondellBasell Master Trust, at fair value	\$ 55,341,691	\$ 85,444,102
Employer contributions receivable	5,250,000	—
Total assets	60,591,691	85,444,102
LIABILITIES		
Accrued administrative expenses	6,617	4,943
Net assets available for benefits	\$ 60,585,074	\$ 85,439,159

The accompanying notes are an integral part of these financial statements.

HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES

STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

	For the Year Ended December 31,	
	2022	2021
Investment (loss) income from the LyondellBasell Master Trust	\$ (11,718,135)	\$ 9,175,128
Employer contributions	5,250,000	—
Benefits paid to participants	(17,888,348)	(21,364,098)
Administrative expenses	(497,602)	(469,009)
Net decrease	(24,854,085)	(12,657,979)
Net assets available for benefits:		
Beginning of year	85,439,159	98,097,138
End of year	<u>\$ 60,585,074</u>	<u>\$ 85,439,159</u>

The accompanying notes are an integral part of these financial statements.

**HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES**

STATEMENT OF ACCUMULATED PLAN BENEFITS

	December 31, 2021
Actuarial present value of accumulated plan benefits:	
Vested plan benefits:	
Participants currently receiving benefits	\$ 14,750,180
Other participants	75,785,140
Total vested plan benefits	90,535,320
Non-vested plan benefits	6,478,958
Total actuarial present value of accumulated plan benefits	\$ 97,014,278

The accompanying notes are an integral part of these financial statements.

HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES
STATEMENT OF CHANGES IN ACCUMULATED PLAN BENEFITS

	For the Year Ended December 31, 2021
Actuarial present value of accumulated plan benefits at beginning of year (January 1, 2021)	\$ 100,015,832
Increase (decrease) during the year attributable to:	
Additional benefits accumulated, including actuarial experience losses	6,723,695
Interest	6,900,499
Benefits paid to participants	(21,364,098)
Change in actuarial assumptions	4,738,350
Net decrease	(3,001,554)
Actuarial present value of accumulated plan benefits at end of year (December 31, 2021)	\$ 97,014,278

The accompanying notes are an integral part of these financial statements.

**HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES**

NOTES TO THE FINANCIAL STATEMENTS

1. Description of Plan

General – The Houston Refining LP Retirement Plan for Represented Employees (the “Plan”) is a noncontributory defined benefit pension plan for represented employees of Houston Refining LP (“HRO” or “Company”), a Delaware limited liability partnership and a wholly owned subsidiary of Lyondell Chemical Company (“Lyondell”). Effective February 1, 2012, the Plan was closed to new hires. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (“ERISA”). Participants should refer to the Plan document for a complete description of the Plan provisions.

Effective July 1, 2022, the Plan was amended for participants who are involuntarily terminated as a result of the decision to cease operations. For those who are eligible to commence a normal or an early retirement benefit on the date of such termination, the Plan will use the more favorable interest rates between the quarterly rates in effect at the time operations cease and the similar rates in effect for the three months ended June 30, 2022. We are not able to reasonably estimate the impact that this amendment will have in the Plan (See Note 13).

Pension Benefits – Participants are entitled to monthly pension benefits upon retiring on or after age of 65, as defined in the Plan document. The Plan also permits early retirement at a reduced benefit level for participants retiring after reaching age 55 with ten or more years of membership service. If a participant terminates employment with at least two years of service but prior to eligibility for normal or early retirement, the participant is eligible for a deferred pension benefit commencing at age 65 or, if the participant terminated with ten or more years of service, as early as age 55, subject to reduction for early commencement. Participants receive their accumulated plan benefits as a monthly benefit or in an optional form available under the Plan.

Death and Disability Benefits – If a participant dies, any death benefits are paid to the participant’s beneficiary, as described in the Plan document. A participant who becomes disabled with ten or more years of service is eligible for disability benefits as described in the Plan document.

Contributions – All contributions are made by the Company and participant contributions are not permitted under the terms of the Plan. The predecessor plan allowed, but did not require, participants to make voluntary contributions through February 1993 (See Note 6).

Administration – The Plan is administered by the Benefits Administrative Committee (“BAC”). LifeWorks is the Plan’s recordkeeper and WTW (formerly, Willis Towers Watson) is the Plan’s actuary. Plan assets are maintained in the LyondellBasell Master Trust (“Master Trust”) under the custody of The Bank of New York Mellon (“Trustee”). Management of portfolio assets is directed by investment managers hired and monitored by the Benefits Finance Committee (“BFC”). Both the BAC and BFC consist of individuals appointed by the Lyondell Board of Directors.

2. Summary of Significant Accounting Policies

Basis of Accounting – The financial statements of the Plan are prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”).

Presentation of Currency – Amounts are expressed in dollars unless otherwise noted.

Use of Estimates – The preparation of the Plan’s financial statements in conformity with U.S. GAAP requires management to make significant estimates and assumptions that affect the reported amounts of net assets available for benefits and accumulated plan benefits at the date of the financial statements, the changes in net assets available for benefits and changes in accumulated plan benefits during the reporting period, and, when applicable, disclosures of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates.

HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES

NOTES TO THE FINANCIAL STATEMENTS

Investment Valuation and Income Recognition – A separate account for the Plan is maintained by the Master Trust reflecting the Plan's share of the Master Trust. Interest in the Master Trust is determined on a monthly basis and is based upon the beginning of the month value of the Plan's interest in the Master Trust plus actual contributions and allocated investment income (loss), less actual distributions and an allocation of administrative expenses. Investments of the Master Trust are stated at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The BFC determines the Plan's valuation policies utilizing information provided by the investment managers and Trustee. See Note 10 for discussion of fair value measurements.

From time to time the Master Trust's investment managers may use derivative financial instruments including forward exchange contracts and future contracts. Derivative instruments are used primarily to mitigate exposure to foreign exchange rate and interest rate fluctuations as well as manage the investment mix in the portfolio. The Master Trust's interest in funds which utilize such financial instruments is not considered significant to the Plan's financial statements.

Purchases and sales of securities by the Master Trust are accounted for on a trade date basis (the date the order to buy or sell is originated). Gains or losses on the sale or distribution of securities are computed on a first-in, first-out basis. Dividend income is recorded on the ex-dividend date. Income from other investments is recorded as earned. The net appreciation or depreciation in the fair value of investments, which consist of the realized gains or losses and the unrealized appreciation or depreciation on those investments, is included in "Investment income (loss) from the LyondellBasell Master Trust" in the Statements of Changes in Net Assets Available for Benefits.

Interest and dividends earned, net appreciation or depreciation in the fair value of investments, and expenses incurred under the collective investment accounts of the Master Trust are allocated to the Plan based upon the average monthly investment balance in the Master Trust of each plan participating in the trust.

Risks and Uncertainties – The Master Trust invests in a combination of common and preferred stock, fixed income securities, bank common and commingled funds, short-term investments, open ended real estate funds, hedge funds, private equity funds, convertible securities, U.S. government securities, and cash and cash equivalents. Investment securities are exposed to various risks, such as interest rate, market and credit risks. Changes in the values of investment securities will continue to occur in the near term and such changes could materially affect the amounts reported in the Statements of Net Assets Available for Benefits.

The actuarial present value of accumulated plan benefits is reported based on certain assumptions pertaining to interest rates, inflation rates and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumption process, it is at least reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements.

Benefits Paid to Participants – Benefits are paid by the Plan and are recorded when paid.

Administrative Expenses – Certain administrative expenses are paid by the Plan and Plan sponsor. Administrative expenses paid by the Master Trust and allocated to the Plan were \$350,352 and \$367,875 for the years ended December 31, 2022 and 2021, respectively, and are included in "Investment income (loss) from the LyondellBasell Master Trust" in the Statements of Changes in Net Assets Available for Benefits.

HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES

NOTES TO THE FINANCIAL STATEMENTS

3. Actuarial Present Value of Accumulated Plan Benefits

Accumulated plan benefits are those future periodic payments, including lump sum distributions, which are attributable under the Plan's provisions to the service that employees have rendered, as of the beginning of the plan year. Accumulated plan benefits include benefits expected to be paid to: (a) retired or terminated employees or their beneficiaries; (b) beneficiaries of employees who have died; and (c) present employees or their beneficiaries. Benefits earned and accrued under the Plan are based upon the employee's years of service and the average of the employee's highest annual eligible earnings for any consecutive three-year period of the employee's service during the employee's last ten years of service. If the employee's total service is less than three years, the benefits are based upon the average annual eligible earnings for the employee's entire period of service. Benefits payable under all circumstances, including retirement, death, and termination of employment, are included to the extent that the circumstances are deemed attributable to employee services rendered up to the valuation date.

The 2021 actuarial present value of accumulated plan benefits was determined by WTW. The actuarial method used to determine the present value of accumulated plan benefits is the unit credit actuarial cost method. The more significant assumptions underlying the actuarial valuation are as follows:

	<u>December 31, 2021</u>
Investment return	7.25% per year
Interest rate	7.25% per year
Mortality table	Pri-2012 separate employee/annuitant/ contingent survivor healthy mortality tables for males and females, projected generationally using sex-distinct Scale MP-2021
Assumed average retirement age	62 years of age

Plan contributions and the actuarial present value of accumulated plan benefits are prepared based upon certain assumptions pertaining to interest rates, inflation rates and employee demographics, all of which are subject to change.

The foregoing actuarial assumptions are based upon the presumption that the Plan will continue. If the Plan were to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated plan benefits.

4. Funding Policy

The funding policy of the Company is to satisfy legal minimum funding requirements, with the discretion to make additional contributions from time to time. Fluctuations in the return (interest, dividends, and net appreciation or depreciation in fair value) on investments of the Plan from the assumed rate serve to reduce or increase the future contributions required to provide for the benefits defined under the Plan.

Contributions for the years ended December 31, 2022 and 2021 were \$5,250,000, and \$0, respectively, as determined by the Plan's actuaries, and met the minimum funding requirements under ERISA and the Internal Revenue Code (the "Code"), each as amended by the Pension Protection Act.

5. Plan Termination

Although it has not expressed any intention to do so, HRO has the right, under the terms of the Plan document, to discontinue benefit accruals at any time and to terminate the Plan, subject to the applicable provisions of ERISA and the Code.

HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES

NOTES TO THE FINANCIAL STATEMENTS

Participants' retirement allowances under the Plan are insured to the extent required by law through the Pension Benefit Guaranty Corporation ("PBGC"). If the Plan were to be terminated, priorities of payment of benefits would be made in accordance with the requirements of ERISA and the Code.

Whether all participants receive their benefits should the Plan terminate at some future time will depend on the sufficiency, at that time, of the Plan's net assets to provide for accumulated benefit obligations and may also depend on the financial condition of the Plan sponsor and the level of benefits guaranteed by the PBGC.

6. Voluntary Contributions

Until February 1993, the predecessor plan allowed, but did not require, participants to make voluntary contributions. Such contributions are either distributed upon termination of employment or, in certain cases, may be converted into an annuity to supplement the regular retirement benefit. Voluntary contributions and the accumulated investment income thereon, held in the Master Trust, totaled \$569,203 and \$915,381 as of December 31, 2022 and 2021, respectively.

7. Tax Status

The Internal Revenue Service ("IRS") has determined and informed the Company by a letter dated July 7, 2014, that the Plan and related trust are designed in accordance with applicable sections of the Code. The Plan has been amended since receiving the determination letter. U.S. GAAP requires the Plan's management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the Plan has taken an uncertain position that more likely than not would not be sustained upon examination by the IRS. The plan administrator has analyzed the tax positions of the Plan, and has concluded that as of December 31, 2022 and 2021, there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress.

The Plan and related Master Trust are designed in accordance with applicable sections of the Code. The BAC believes that the Plan is currently designed and being operated in compliance with the applicable requirements of the Code and, therefore, that the related trust is tax-exempt. Accordingly, no provision is made for federal income taxes.

8. Information Certified by the Plan's Trustee

The plan administrator has elected the method of compliance permitted by Section 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. Accordingly, the Trustee has certified that the following data included in the accompanying financial statements are complete and accurate:

- Plan interest in the Master Trust, at fair value, excluding accrued administrative expenses of \$59,467 and \$124,233 at December 31, 2022 and 2021, respectively
- Investment income from the Master Trust
- Investment amounts as shown in Note 9 and Note 10

9. Interest in LyondellBasell Master Trust

The Master Trust is a pooled investment trust composed of the beneficial interests of certain participating defined benefit plans ("Master Trust Plans") of Lyondell and certain of its subsidiaries and affiliates. The Master Trust consists of a portfolio of investments in a combination of common and preferred stock, fixed income securities, bank common and commingled funds, short-term investments, open ended real estate funds, hedge funds, private equity funds, convertible securities, U.S. government securities, and cash and cash equivalents.

HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES

NOTES TO THE FINANCIAL STATEMENTS

Master Trust Plans do not own specific securities or other assets in the Master Trust but have an undivided interest in the Master Trust. Investment income (loss) related to the Master Trust is allocated to the Master Trust Plans based upon each plan's average monthly investment balance in the Master Trust.

The net assets of the Master Trust as of December 31, 2022 are as follows:

	December 31, 2022	
	Master Trust Balances	Plan's Interest in Master Trust Balances
Assets		
Investments, at fair value:		
Common and preferred stock	\$ 138,722,792	\$ 7,648,657
Fixed income securities	2,200	121
Commingled funds	348,386,471	19,208,729
Real estate	98,838,049	5,449,561
Hedge funds	118,509,582	6,534,176
Private equity	59,562,530	3,284,055
U.S. government securities	206,754,116	11,399,650
Cash and cash equivalents	34,045,245	1,877,128
Total investments	<u>1,004,820,985</u>	<u>55,402,077</u>
Receivables:		
Pending sales of securities	1,564,753	86,275
Accrued interest and dividends	1,394,396	76,882
Total receivables	<u>2,959,149</u>	<u>163,157</u>
Cash – noninterest bearing	(19,166)	(1,057)
Total assets	<u>1,007,760,968</u>	<u>55,564,177</u>
Liabilities		
Pending purchases of securities	1,833,486	101,092
Other payables	1,123,264	61,933
Total liabilities	<u>2,956,750</u>	<u>163,025</u>
Net assets	<u><u>\$ 1,004,804,218</u></u>	<u><u>\$ 55,401,152</u></u>

HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES

NOTES TO THE FINANCIAL STATEMENTS

The net assets of the Master Trust as of December 31, 2021 are as follows:

	December 31, 2021	
	Master Trust Balances	Plan's Interest in Master Trust Balances
Assets		
Investments, at fair value:		
Common and preferred stock	\$ 296,215,953	\$ 14,427,755
Fixed income securities	2,200	107
Commingled funds	535,883,283	26,101,204
Real estate	115,742,912	5,637,477
Hedge funds	170,564,284	8,307,654
Private equity	202,213,314	9,849,180
U.S. government securities	389,739,348	18,982,988
Cash and cash equivalents	58,264,801	2,837,897
Total investments	<u>1,768,626,095</u>	<u>86,144,262</u>
Receivables:		
Pending sales of securities	2,815,055	137,113
Accrued interest and dividends	1,813,960	88,352
Total receivables	<u>4,629,015</u>	<u>225,465</u>
Cash – noninterest bearing	49,080	2,390
Total assets	<u>1,773,304,190</u>	<u>86,372,117</u>
Liabilities		
Pending purchases of securities	2,608,812	127,067
Other payables	117,592	5,727
Total liabilities	<u>2,726,404</u>	<u>132,794</u>
Net assets	<u><u>\$ 1,770,577,786</u></u>	<u><u>\$ 86,239,323</u></u>

HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES

NOTES TO THE FINANCIAL STATEMENTS

The components of total investment (loss) income of the Master Trust for the years ended December 31, 2022 and 2021 are as follows:

	<u>2022</u>	<u>2021</u>
Investment (loss) income:		
Net appreciation (depreciation) in fair value of investments	\$ (245,739,780)	\$ 203,281,599
Interest, dividend and other income:		
Interest income	1,761,123	124,903
Dividend income	3,598,919	6,443,733
Other income/ (loss) ^(a)	(1,318,011)	2,695,105
Total	<u>4,042,031</u>	<u>9,263,741</u>
Total investment (loss) income	<u>\$ (241,697,749)</u>	<u>\$ 212,545,340</u>

^(a) Comprised of income/(loss) generated from the Master Trust's investment in partnership arrangements.

10. Fair Value Measurements

ASC 820, *Fair Value Measurements*, defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. ASC 820 also specifies a fair value hierarchy based upon the observability of inputs used in valuation techniques. Observable inputs (highest level) reflect market data obtained from independent sources, while unobservable inputs (lowest level) reflect internally-developed market assumptions. In accordance with ASC 820, fair value measurements are classified using the following hierarchy:

Level 1 – Quoted prices for identical instruments in active markets.

Level 2 – Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs or significant value-drivers are observable in active markets.

Level 3 – Model-derived valuations in which one or more significant inputs or significant value-drivers are unobservable.

When available, quoted market prices are used to determine fair value and such measurements are classified within Level 1. In some cases where market prices are not available, observable market based inputs are used to calculate fair value, in which case the measurements are classified within Level 2. If quoted or observable market prices are not available, fair value is based upon internally-developed models that use, where possible, current market-based parameters such as interest rates, yield curves and currency rates. These measurements are classified within Level 3.

Fair value measurements are classified according to the lowest level input or value-driver that is significant to the valuation. A measurement may therefore be classified within Level 3 even though there may be significant inputs that are readily observable.

Changes in Fair Value Levels – Management reviews the disclosures regarding fair value measurements annually at year end. If an instrument classified as Level 1 subsequently ceases to be actively traded, it is transferred out of Level 1. In such cases, instruments are reclassified as Level 2, unless the measurement of its fair value requires the use of significant unobservable inputs, in which case it is reclassified as Level 3.

HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES

NOTES TO THE FINANCIAL STATEMENTS

Valuation methodologies used for major investment types measured at fair value include:

Common and preferred stock – Valued at the closing price reported on the active market on which the individual securities are traded.

Fixed income securities – Certain securities that are not traded on an exchange are valued at the closing price reported by pricing services. Other securities are valued based on yields currently available on comparable securities of issuers with similar credit ratings.

Commingled funds – Valued based upon the net asset values of units of such commingled trust funds held by the Master Trust at year end. Unit values are based on the fair value of the underlying assets of the fund derived from inputs principally from, or corroborated by, observable market data by correlation or other means.

Real estate – Valued based upon the net asset value of units of the real estate fund or partnership held by the Master Trust at year end.

Hedge funds – Valued based upon the unit values of such alternative investments held by the Master Trust at year end. Unit values are based on the fair value of the underlying assets of the fund.

Private equity – Valued based upon the unit values of such alternative investments held by the Master Trust at year end. Unit values are based on the fair value of the underlying assets of the fund. Certain securities held in the fund are valued at the closing price reported on the exchange or other established quotation service for over-the-counter securities. Other assets held in the fund are valued based on the most recent financial statements prepared by the fund manager.

Convertible securities – Valued at the quoted prices for similar assets or liabilities in active markets.

U.S. government securities – Certain securities, including Separate Trading of Registered Interest and Principal of Securities (“STRIPS”), are valued at the closing price reported on the active market on which the individual securities are traded.

Cash and cash equivalents – Valued at the quoted prices for identical assets or liabilities in active markets.

The preceding methods described may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the Company believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES

NOTES TO THE FINANCIAL STATEMENTS

The investments of the Master Trust that are measured at fair value as of December 31, 2022 are summarized below:

	December 31, 2022			
	Fair Value	Level 1	Level 2	Level 3
Common and preferred stock	\$ 138,722,792	\$ 138,239,666	\$ —	\$ —
Fixed income securities	2,200	—	2,200	—
Commingled funds measured at net asset value*	348,386,471	—	—	—
Real estate measured at net asset value*	98,838,049	—	—	—
Hedge funds measured at net asset value*	118,509,582	—	—	—
Private equity measured at net asset value*	59,562,530	—	—	—
U.S. government securities	206,754,116	206,754,116	—	—
Cash and cash equivalents	34,045,245	34,045,245	—	—
Total investments in Master Trust	<u>\$ 1,004,820,985</u>	<u>\$ 379,039,027</u>	<u>\$ 2,200</u>	<u>\$ —</u>

The investments of the Master Trust that are measured at fair value as of December 31, 2021 are summarized below:

	December 31, 2021			
	Fair Value	Level 1	Level 2	Level 3
Common and preferred stock	\$ 296,215,953	\$ 294,184,416	\$ —	\$ —
Fixed income securities	2,200	—	2,200	—
Commingled funds measured at net asset value*	535,883,283	—	—	—
Real estate measured at net asset value*	115,742,912	—	—	—
Hedge funds measured at net asset value*	170,564,284	—	—	—
Private equity measured at net asset value*	202,213,314	—	—	—
U.S. government securities	389,739,348	389,739,348	—	—
Cash and cash equivalents	58,264,801	58,264,801	—	—
Total investments in Master Trust	<u>\$ 1,768,626,095</u>	<u>\$ 742,188,565</u>	<u>\$ 2,200</u>	<u>\$ —</u>

* In accordance with Fair Value Measurement Topic 820, Subtopic 10, certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The net asset value (“NAV”), as provided by the Trustee, is used as a practical expedient to estimate fair value. This practical expedient is not used when it is determined to be probable that the fund will sell the investment for an amount different than the reported NAV. The amounts presented in this table are intended to facilitate reconciliation to the Financial Statements.

HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES

NOTES TO THE FINANCIAL STATEMENTS

The following table summarizes investments measured at fair value based on NAV per share as of December 31, 2022 and 2021, respectively:

	December 31, 2022					
	Fair Value	Unfunded Commitment	Remaining Life	Redemption Frequency (if currently eligible)	Trade to Settlement Terms	Redemption Notice Period
Common and preferred stock ^(a)	\$ 483,126	\$ —	N/A	pending market condition	N/A	daily
Fixed income securities ^(b)	—	—	N/A	daily, pending market condition	2 to 5 days	daily
Commingled fund investing in Domestic Equity ^(c)	139,600,261	—	N/A	daily, pending market condition	1 to 3 days	3 to 4 days
Commingled fund investing in International Equity ^(d)	63,707,970	—	N/A	daily, pending market condition	1 to 3 days	3 days
Commingled fund investing in Fixed Income ^(e)	145,078,240	—	N/A	daily, pending market condition	1 to 3 days	3 to 7 days
Real Estate ^(f)	98,838,049	12,603,983	10 years	quarterly, pending market condition	15 to 25 days	45 to 90 days
Hedge Funds ^(g)	118,509,582	—	N/A	monthly, pending market condition	10 to 30 days	20 to 90 days
Private Equity ^(h)	59,562,530	17,671,733	10 years	quarterly, pending market condition	N/A	N/A
Total	<u>\$ 625,779,758</u>	<u>\$ 30,275,716</u>				

HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES

NOTES TO THE FINANCIAL STATEMENTS

December 31, 2021						
	Fair Value	Unfunded Commitment	Remaining Life	Redemption Frequency (if currently eligible)	Trade to Settlement Terms	Redemption Notice Period
Common and preferred stock ^(a)	\$ 2,031,537	\$ —	N/A	pending market condition	N/A	daily
Fixed income securities ^(b)	—	—	N/A	daily, pending market condition	2 to 5 days	daily
Commingled fund investing in Domestic Equity ^(c)	154,151,084	—	N/A	daily, pending market condition	1 to 3 days	3 to 4 days
Commingled fund investing in International Equity ^(d)	131,562,698	—	N/A	daily, pending market condition	1 to 3 days	3 days
Commingled fund investing in Fixed Income ^(e)	250,169,501	—	N/A	daily, pending market condition	1 to 3 days	3 to 7 days
Real Estate ^(f)	115,742,912	12,261,508	10 years	quarterly, pending market condition	15 to 25 days	45 to 90 days
Hedge Funds ^(g)	170,564,284	—	N/A	monthly, pending market condition	10 to 30 days	20 to 90 days
Private Equity ^(h)	202,213,314	72,694,819	10 years	quarterly, pending market condition	N/A	N/A
Total	<u>\$ 1,026,435,330</u>	<u>\$ 84,956,327</u>				

HOUSTON REFINING LP
RETIREMENT PLAN FOR REPRESENTED EMPLOYEES

NOTES TO THE FINANCIAL STATEMENTS

- (a) This category represents a group of preferred stocks and convertible securities that, when combined with other equity securities of like characteristics seeks to achieve greater returns than the MSCI World Index. At December 31, 2022, there were no redemption restrictions on these funds.
- (b) This category represents a group of fixed income securities that, when combined with other securities of like characteristics, seeks to achieve greater returns than a custom Liability Hedge Benchmark (60% Bloomberg Barclays Long Credit Index, 40% Citigroup 20+ STRIPS Index). At December 31, 2022, there were no redemption restrictions on these funds.
- (c) This category represents a commingled trust fund that seeks to approximate the total return of the S&P 500 Total Return Index. At December 31, 2022, there were no redemption restrictions on this fund.
- (d) This category represents a group of commingled trusts that seek to achieve greater returns than the MSCI Emerging Market Net Dividend Index. At December 31, 2022, there were no redemption restrictions on these funds.
- (e) This category represents a group of commingled trusts that seek to achieve greater returns than the Citigroup World Government Bond Index and JP Morgan Emerging Markets Global Bond Index. At December 31, 2022, there were no redemption restrictions on these funds.
- (f) This category represents investments in real estate funds and private real estate limited partnerships that seek to achieve greater returns than the NCREIF Property 1Q in Arrears index. At December 31, 2022, there were no redemption restrictions on these funds. Private real estate partnerships are illiquid investments. As such, the specific redemption restrictions and guidelines are incorporated in a Limited Partnership Agreement, Limited Liability Company Agreement, or other binding agreement as is appropriate for the investment.
- (g) This category represents investments in hedge funds either directly or through fund of funds that seek to achieve greater returns than the HFRI Fund of Funds Diversified Index. At December 31, 2022, there were no redemption restrictions on these funds.
- (h) This category represents capital commitments to private placement limited partnerships that seek to approximate the total return of the Cambridge Associates U.S. Private Equity 1QA Index over a market cycle. Private equity partnerships are illiquid investments. As such, the specific redemption restrictions and guidelines are incorporated in a Limited Partnership Agreement, Limited Liability Company Agreement, or other binding agreement as is appropriate for the investment.

11. Related-Party and Party-in-Interest Transactions

The Plan, through its interest in the Master Trust, holds shares of short-term investment and S&P Index funds managed by Mellon Capital, a subsidiary of The Bank of New York Mellon, the Trustee of the Plan. These transactions fall under the definition of a party-in-interest transaction; however, the Company does not believe that they give rise to prohibited transactions under ERISA.

12. Commitments and Contingencies

The Plan is subject to commitments and contingencies arising from the ordinary course of business to which the Plan is a party. It is management's belief that the ultimate resolution of these commitments and contingencies will not have a material adverse impact on the Plan's financial statements.

13. Subsequent Events

In April 2022, LyondellBasell Industries N.V.'s Board of Directors announced its decision to cease operations of the HRO no later than December 31, 2023. In May 2023, a decision was announced to extend the operations of our Houston refinery to no later than the end of the first quarter of 2025. At this time, the cease of operations is not expected to have an impact on participants' accrued benefits under the Plan.

The Company has evaluated subsequent events through September 28, 2023, the date the financial statements were available to be issued.

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 26a Schedule of Active Participant Data as of January 1, 2022

Attained Age	Attained Years of Credited Service ¹										Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
Under 25	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	2	0	0	0	0	0	0	2
35-39	0	0	5	17	3	0	0	0	0	0	25
40-44	0	3	9	22	12	2	0	0	0	0	48
45-49	0	1	10	18	20	4	2	0	0	0	55
50-54	1	1	3	19	17	1	10	3	0	0	55
55-59	0	1	1	7	6	5	13	6	1	0	40
60-64	0	1	1	7	4	6	7	7	6	7	46
65-69	0	0	0	0	3	0	1	2	2	2	10
70 & over	0	0	0	0	0	1	0	0	1	0	2
Total	1	7	29	92	65	19	33	18	10	9	283

¹ Age and service for purposes of determining category are based on exact (not rounded) values.

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SCHEDULE SB ATTACHMENTS

Schedule SB, Part V Statement of Actuarial Assumptions/Methods

Economic Assumptions

Interest rate basis

- Applicable month September
- Interest rate basis 3-Segment Rates

Interest rates	Reflecting Stabilization	Not Reflecting Stabilization
■ First segment rate	4.75%	1.07%
■ Second segment rate	5.18%	2.68%
■ Third segment rate	5.92%	3.36%
■ Effective interest rate	5.53%	3.04%

As permitted by law, rates reflecting stabilization are used to determine the funding target and target normal cost, and thus the minimum required contribution under IRC §430 for the plan. Because these assumptions are subject to a corridor based on average interest rates over a 25-year period, they may differ from (and currently are higher than) current market interest rates, and may be inconsistent with other economic assumptions used in the valuation.

Annual rates of increase

■ Compensation:	Percentage Salary Increases	
	Attained Age	
	20-29	4.6%
	30-39	5.3%
	40-49	4.7%
	50-59	4.2%
	60-69	3.6%
■ Future Social Security wage bases	3.50%	
■ Statutory limits on compensation / inflation	2.20%	
■ Expected investment return	7.25% for 2021 and 2022	

Plan-related expenses	\$448,000; Expected administrative expenses (assumed to equal prior year administrative expenses but adjusted for PBGC premiums, with current year PBGC premiums replacing prior year)
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discounted with the effective interest rate to the beginning of the year are included in normal cost.

Lump Sum Conversions

- Interest

The lump sum conversion rates based on the IRC 417(e) applicable interest rates are assumed to be equal to the segment rates used to determine the funding target.

- Mortality

IRC 417(e) applicable mortality table for the plan year

Demographic Assumptions

Inclusion date

The valuation date coincident with or next following the date on which the employee becomes a participant.

New or rehired employees

The plan is closed to new entrants. It was assumed there will be no rehired employees.

Mortality

- Healthy and disabled

Separate rates for non-annuitants (based on RP-2014 "Employees" table without collar or amount adjustments, adjusted backward to 2006 with MP-2014, and then projected forward with a static projection as specified in the regulations under §1.430(h)(3)-1 using Scale MP-2020) and annuitants (based on RP-2014 "Healthy Annuitants" table without collar or amount adjustments, adjusted backward to 2006 with MP-2014, and then projected forward with a static projection as specified in the regulations under §1.430(h)(3)-1 using Scale MP-2020).

Termination

Rates varying by age; representative rates are shown below:

Attained Age	Percentage
20	10.0%
25	5.0%
30	5.0%
35	3.5%
40	3.0%
45	3.0%
50	2.0%
55	2.0%
60	2.0%
65	2.0%

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Disability

Rates vary by age and gender; representative rates are shown below:

Attained Age	Percentage	
	Male	Female
20	0.0320%	0.0275%
25	0.0465%	0.0480%
30	0.0670%	0.0825%
35	0.0995%	0.1260%
40	0.1570%	0.1785%
45	0.2525%	0.2610%
50	0.4150%	0.4270%
55	0.7510%	0.7450%
60	1.1330%	0.8965%
65	1.5140%	1.0475%

Retirement

Rates varying by age, average age 62; representative rates are shown below:

Attained Age	Percentage
55	5%
56	5%
57	5%
58	10%
59	10%
60	15%
61	10%
62	20%
63	10%
64	20%
65	25%
66	25%
67	20%
68	20%
69	20%
70 and above	100%

Benefit commencement date:

- Preretirement death benefit
- < 10 years of service - The date the participant would have attained age 65.

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- ≥ 10 years of service - The later of the death of the active participant or the date the participant would have attained age 55.
- Deferred vested benefit
 - < 10 years of service - The later of age 65 or termination of employment.
 - ≥ 10 years of service - The later of age 63 or termination of employment.

■ Disability benefit Upon disablement

■ Retirement benefit Upon termination of employment

Form of payment

Form	<u>Lump Sum</u>	<u>Five Year Certain & Life</u>	<u>100% J&S</u>	<u>50% J&S</u>
Active retirements	90%	3.5%	6.5%	0%
Deferred vested	80%	7%	13%	0%
Future disabilities	90%	3.5%	6.5%	0%
Future deaths	90%	0%	0%	10%

Percent married 85% for male participants; 60% for female participants. Used to value pre-retirement surviving spouse benefits and in determining the optional forms expected to be elected at commencement

Spouse age Male participants: spouse 2 years younger.
Female participants: spouse 3 years older.

Timing of benefit payments Annuity payments are payable monthly at the beginning of the month and lump sum payments are payable on date of decrement.

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Methods

Valuation date	First day of plan year.
Funding target	Present value of accrued benefits as required by regulations under IRC §430.
Target normal cost	Present value of benefits expected to accrue during the plan year plus plan-related expenses expected to be paid from plan assets during the plan year as required by regulations under IRC §430.
Decrement timing	The approach used is called rounded middle of year (rounded MOY) decrement timing. Most events are assumed to occur at the middle of year during which the eligibility condition will be met or the start/end date will occur. For death and disability decrements, the rate applied is based on the participant's rounded age (nearest integer age) at the beginning of the year, to align with the methodology generally used to create those rate tables. For retirement and withdrawal decrements: the age is generally the participant's rounded age at the middle of the year.
Actuarial value of assets	<p>Average of the fair market value of assets on the valuation date and 12 and 24 months preceding the valuation date, adjusted for contributions, benefits, administrative expenses and expected earnings (with such expected earnings limited as described in IRS Notice 2009-22). The average asset value must be within 10% of market value, including discounted contributions receivable (discounted using the effective interest rate for the prior plan year.)</p> <p>The method of computing the actuarial value of assets complies with rules governing the calculation of such values under the Pension Protection Act of 2006 (PPA). These rules produce smoothed values that reflect the underlying market value of plan assets but fluctuate less than the market value. As a result, the actuarial value of assets will be lower than the market value in some years and greater in other years. However, over the long term under PPA's smoothing rules, the method has a significant bias to produce an actuarial value of assets that is below the market value of assets.</p>

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Benefits not valued

All benefits described in the Plan Provisions section of this report were valued. We are not aware of any significant benefits required to be valued that were not.

Sources of Data and Other Information

The plan sponsor, through its third party administrator, furnished participant data as of January 1, 2022 for the Houston Refining LP Retirement Plan for Represented Employees. Information on assets, contributions and plan provisions was supplied by the plan sponsor. Data and other information were reviewed for reasonableness and consistency, but no audit was performed. Assumptions or estimates were made when data was not available. These assumptions were communicated to LyondellBasell Industries in a letter dated July 22, 2022.

We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

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Assumptions Rationale - Significant Economic Assumptions

Discount rate	The basis chosen was selected by the plan sponsor from among choices prescribed by law, all of which are based on observed market data over certain periods of time.
Lump sum conversion rate	As required by IRC §430, lump sum benefits are valued using “annuity substitution”, so that the interest rates assumed are effectively the same as described above for the interest rate.
Plan-related expenses	As required by regulations, plan-related expenses are calculated by estimating the expenses to be paid from the trust during the coming year (including, for example, expected PBGC premiums and actuarial, accounting, legal, administration and trustee fees to be paid from the trust).
Rates of increase in:	
▪ Compensation	The salary increase assumption is based on an experience study undertaken by Mercer using the experience from certain plans from January 1, 2013 through January 1, 2018.
▪ Assumed return for asset smoothing	We understand the expected investment return represents the plan sponsor’s estimate of future experience for the trust asset returns net of plan expenses. The assumed return was chosen by the client with the help of their investment advisers for the 2021 plan year under U.S. GAAP. Although determining the expected rate of return on plan assets was not within the scope of our work, it is the client’s best estimate and we determined that it does not significantly conflict with what would be reasonable based on their asset allocation.

Assumptions Rationale - Significant Demographic Assumptions

Healthy Mortality	Assumptions used for funding purposes are as prescribed by IRC §430(h).
Disabled Mortality	Assumptions used for funding purposes are as prescribed by IRC §430(h).
Termination	Termination rates were based on an experience study conducted by Mercer in 2018, with annual consideration of

Plan Name:	Houston Refining LP Retirement Plan for Represented Employees
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whether any conditions have changed that would be expected to produce different results in the future.

Disability

Disability rates were based on an experience study conducted by Mercer in 2018, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.

Retirement

Retirement rates were based on an experience study conducted by Mercer in 2018, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.

Benefit commencement date for deferred benefits

Deferred vested participants' assumed commencement ages were based on an experience study conducted by Mercer in 2018, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.

Form of payment

Form of payment elections were based on an experience study conducted by Mercer in 2018 combined with best estimates for future experience with consideration given to whether any conditions have changed that would be expected to produce different results in the future.

Percent married

The assumed percentage married were based on an experience study conducted by Mercer in 2018 combined with best estimates for future experience with consideration given to whether any conditions have changed that would be expected to produce different results in the future.

Spouse age

The assumed age differences for spouses were based on an experience study conducted by Mercer in 2018 combined with best estimates for future experience with consideration given to whether any conditions have changed that would be expected to produce different results in the future.

Prescribed Methods

Funding methods

The methods used for funding purposes as described here, including the method of determining plan assets, are "prescribed methods set by law", as defined in the actuarial standards of practice (ASOPs). These methods are required by IRC §430, or were selected by the plan sponsor from a range of methods permitted by IRC §430.

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Changes in Assumptions and Methods

Change in assumptions since prior valuation

The segment interest rates used to calculate the funding target and target normal cost were updated to the current valuation date as required by IRC §430.

The mortality table used to calculate the funding target and target normal cost was updated to reflect the latest mortality improvement scale, as required by guidance issued by IRS under IRC §430. The mortality table was updated to include one additional year of projected mortality improvement as required by guidance issued by IRS under IRC §430.

The assumed plan-related expenses added to the target normal cost were changed from \$451,000 for the prior valuation to \$448,000 for the current valuation to account for lower expected expenses to be paid from the trust.

Change in methods since prior valuation

No method changes have occurred since the January 1, 2021 valuation.

Plan Name: Houston Refining LP Retirement Plan for Represented Employees
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Plan Sponsor: Houston Refining LP
Valuation Date: January 1, 2022

SCHEDULE SB (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500 or 5500-SF.	OMB No. 1210-0110 2022 This Form is Open to Public Inspection
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For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022

▶ **Round off amounts to nearest dollar.**

▶ **Caution:** A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan HOUSTON REFINING LP RETIREMENT PLAN FOR REPRESENTED EMPLOYEES	B Three-digit plan number (PN) ▶ 061
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF HOUSTON REFINING LP	D Employer Identification Number (EIN) 76-0395303
E Type of plan: ☒ Single ☐ Multiple-A ☐ Multiple-B	F Prior year plan size: ☐ 100 or fewer ☐ 101-500 ☒ More than 500

Part I	Basic Information
1 Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2022</u>	
2 Assets:	
a Market value	2a 86,239,325
b Actuarial value	2b 82,675,482
3 Funding target/participant count breakdown	
a For retired participants and beneficiaries receiving payment.....	(1) Number of participants 119 (2) Vested Funding Target 17,608,569 (3) Total Funding Target 17,608,569
b For terminated vested participants.....	164 9,192,565 9,192,565
c For active participants	283 52,662,715 56,841,356
d Total.....	566 79,463,849 83,642,490
4 If the plan is in at-risk status, check the box and complete lines (a) and (b)..... ☐	
a Funding target disregarding prescribed at-risk assumptions	4a
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor.....	4b
5 Effective interest rate	5 5.53%
6 Target normal cost.....	
a Present value of current plan year accruals.....	6a 4,157,215
b Expected plan-related expenses	6b 448,000
c Total (line 6a + line 6b)	6c 4,605,215

Statement by Enrolled Actuary

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE	David Anderson 	9/25/2023
	Signature of actuary	Date
David Anderson	Type or print name of actuary	2307493
		Most recent enrollment number
Willis Towers Watson US LLC	Firm name	713-754-5400
		Telephone number (including area code)
811 Louisiana Street Suite 2200 Houston TX 77002	Address of the firm	

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions ☐

For Paperwork Reduction Act Notice, see the Instructions for Form 5500 or 5500-SF.

Schedule SB (Form 5500) 2022
v. 220413

Part II		Beginning of Year Carryover and Prefunding Balances	
		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	0	0
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9	Amount remaining (line 7 minus line 8)	0	0
10	Interest on line 9 using prior year's actual return of <u>12.27</u> %	0	0
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		0
	b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>5.70</u> %		0
	b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
	c Total available at beginning of current plan year to add to prefunding balance		0
	d Portion of (c) to be added to prefunding balance		0
12	Other reductions in balances due to elections or deemed elections	0	0
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	0

Part III		Funding Percentages	
14	Funding target attainment percentage	14	98.84 %
15	Adjusted funding target attainment percentage	15	98.84 %
16	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	107.61 %
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage	17	%

Part IV		Contributions and Liquidity Shortfalls			
18 Contributions made to the plan for the plan year by employer(s) and employees:					
(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
09/11/2023	5,250,000	0			
Totals ▶			18(b)	5,250,000	18(c) 0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:	
a Contributions allocated toward unpaid minimum required contributions from prior years	19a 0
b Contributions made to avoid restrictions adjusted to valuation date	19b 0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c 4,792,367
20 Quarterly contributions and liquidity shortfalls:	
a Did the plan have a "funding shortfall" for the prior year? ☐ Yes ☒ No	
b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ☐ Yes ☐ No	
c If line 20a is "Yes," see instructions and complete the following table as applicable:	
Liquidity shortfall as of end of quarter of this plan year	
(1) 1st	(2) 2nd
(3) 3rd	(4) 4th

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:				
a Segment rates:	1st segment: 4.75 %	2nd segment: 5.18 %	3rd segment: 5.92 %	☐ N/A, full yield curve used
b Applicable month (enter code)				21b 4
22 Weighted average retirement age				22 62
23 Mortality table(s) (see instructions)	☐ Prescribed - combined	☒ Prescribed - separate	☐ Substitute	

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment.....	☒ Yes ☐ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.....	☐ Yes ☒ No
26 Demographic and benefit information	
a Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.	☒ Yes ☐ No
b Is the plan required to provide a projection of expected benefit payments? If "Yes," see instructions regarding required attachment ...	☐ Yes ☒ No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment.....	27

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a).....	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29).....	30	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):			
a Target normal cost (line 6c)	31a	4,605,215	
b Excess assets, if applicable, but not greater than line 31a	31b	0	
32 Amortization installments:	Outstanding Balance	Installment	
a Net shortfall amortization installment	967,008	89,363	
b Waiver amortization installment	0	0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33		
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)....	34	4,694,578	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	0	0
36 Additional cash requirement (line 34 minus line 35)	36	4,694,578	
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	37	4,792,367	
38 Present value of excess contributions for current year (see instructions)			
a Total (excess, if any, of line 37 over line 36)	38a	97,789	
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	0	
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	0	
40 Unpaid minimum required contributions for all years	40	0	

Part IX Pension Funding Relief Under the American Rescue Plan Act of 2021 (See Instructions)

41 If an election was made to use the extended amortization rule for a plan year beginning on or before December 31, 2021, check the box to indicate the first plan year for which the rule applies. ☐ 2019 ☐ 2020 ☒ 2021
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Schedule SB – Statement by Enrolled Actuary

Plan Sponsor	Houston Refining LP
EIN/PN	76-0395303/061
Plan Name	Houston Refining LP Retirement Plan for Represented Employees
Valuation Date	January 1, 2022
Enrolled Actuary	David Anderson
Enrollment Number	23-07493

The actuarial assumptions that are not mandated by IRC § 430 and regulations, represent the enrolled actuary's best estimate of anticipated experience under the plan, subject to the following conditions:

The actuarial valuation, on which the information in this Schedule SB is based, has been prepared in reliance upon the employee and financial data furnished by the plan administrator and the trustee. The enrolled actuary has not made a rigorous check of the accuracy of this information but has accepted it after reviewing it and concluding it is reasonable in relation to similar information furnished in previous years. The amounts of contributions and dates paid shown in Item 18 of Schedule SB were listed in reliance on information provided by the plan administrator and/or trustee.

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 22 Description of Weighted Average Retirement Age as of January 1, 2022

The average retirement age for Line 22 was calculated by creating a hypothetical life table with retirement as the only decrement, and then computing the average retirement age for the table.

x	q_x^r	l_x	${}_{x-55}p_{55} = l_x / l_{55}$	$q_x^r * l_x / l_{55}$	$x * q_x^r * l_x / l_{55}$
55	0.05	1,000	1.000000	0.050000	2.750000
56	0.05	950	0.950000	0.047500	2.660000
57	0.05	903	0.902500	0.045125	2.572125
58	0.10	857	0.857375	0.085738	4.972775
59	0.10	772	0.771638	0.077164	4.552661
60	0.15	694	0.694474	0.104171	6.250264
61	0.10	590	0.590303	0.059030	3.600846
62	0.20	531	0.531272	0.106254	6.587778
63	0.10	425	0.425018	0.042502	2.677613
64	0.20	383	0.382516	0.076503	4.896207
65	0.25	306	0.306013	0.076503	4.972710
66	0.25	230	0.229510	0.057377	3.786910
67	0.20	172	0.172132	0.034426	2.306572
68	0.20	138	0.137706	0.027541	1.872799
69	0.20	110	0.110165	0.022033	1.520272
70	1.00	88	0.088132	0.088132	6.169220
Average age at retirement					62.148752
Rounded for Schedule SB item 22					62

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Schedule SB, Part V Statement of Actuarial Assumptions/Methods

Economic Assumptions

Interest rate basis

- Applicable month September
- Interest rate basis 3-Segment Rates

Interest rates	Reflecting Stabilization	Not Reflecting Stabilization
■ First segment rate	4.75%	1.07%
■ Second segment rate	5.18%	2.68%
■ Third segment rate	5.92%	3.36%
■ Effective interest rate	5.53%	3.04%

As permitted by law, rates reflecting stabilization are used to determine the funding target and target normal cost, and thus the minimum required contribution under IRC §430 for the plan. Because these assumptions are subject to a corridor based on average interest rates over a 25-year period, they may differ from (and currently are higher than) current market interest rates, and may be inconsistent with other economic assumptions used in the valuation.

Annual rates of increase

■ Compensation:	Percentage Salary Increases	
	Attained Age	
	20-29	4.6%
	30-39	5.3%
	40-49	4.7%
	50-59	4.2%
	60-69	3.6%
■ Future Social Security wage bases	3.50%	
■ Statutory limits on compensation / inflation	2.20%	
■ Expected investment return	7.25% for 2021 and 2022	

Plan-related expenses	\$448,000; Expected administrative expenses (assumed to equal prior year administrative expenses but adjusted for PBGC premiums, with current year PBGC premiums replacing prior year)
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discounted with the effective interest rate to the beginning of the year are included in normal cost.

Lump Sum Conversions

■ Interest

The lump sum conversion rates based on the IRC 417(e) applicable interest rates are assumed to be equal to the segment rates used to determine the funding target.

■ Mortality

IRC 417(e) applicable mortality table for the plan year

Demographic Assumptions

Inclusion date

The valuation date coincident with or next following the date on which the employee becomes a participant.

New or rehired employees

The plan is closed to new entrants. It was assumed there will be no rehired employees.

Mortality

■ Healthy and disabled

Separate rates for non-annuitants (based on RP-2014 "Employees" table without collar or amount adjustments, adjusted backward to 2006 with MP-2014, and then projected forward with a static projection as specified in the regulations under §1.430(h)(3)-1 using Scale MP-2020) and annuitants (based on RP-2014 "Healthy Annuitants" table without collar or amount adjustments, adjusted backward to 2006 with MP-2014, and then projected forward with a static projection as specified in the regulations under §1.430(h)(3)-1 using Scale MP-2020).

Termination

Rates varying by age; representative rates are shown below:

Attained Age	Percentage
20	10.0%
25	5.0%
30	5.0%
35	3.5%
40	3.0%
45	3.0%
50	2.0%
55	2.0%
60	2.0%
65	2.0%

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Disability

Rates vary by age and gender; representative rates are shown below:

Attained Age	Percentage	
	Male	Female
20	0.0320%	0.0275%
25	0.0465%	0.0480%
30	0.0670%	0.0825%
35	0.0995%	0.1260%
40	0.1570%	0.1785%
45	0.2525%	0.2610%
50	0.4150%	0.4270%
55	0.7510%	0.7450%
60	1.1330%	0.8965%
65	1.5140%	1.0475%

Retirement

Rates varying by age, average age 62; representative rates are shown below:

Attained Age	Percentage
55	5%
56	5%
57	5%
58	10%
59	10%
60	15%
61	10%
62	20%
63	10%
64	20%
65	25%
66	25%
67	20%
68	20%
69	20%
70 and above	100%

Benefit commencement date:

- Preretirement death benefit
- < 10 years of service - The date the participant would have attained age 65.

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- ≥ 10 years of service - The later of the death of the active participant or the date the participant would have attained age 55.
- Deferred vested benefit
 - < 10 years of service - The later of age 65 or termination of employment.
 - ≥ 10 years of service - The later of age 63 or termination of employment.

■ Disability benefit Upon disablement

■ Retirement benefit Upon termination of employment

Form of payment

Form	<u>Lump Sum</u>	<u>Five Year Certain & Life</u>	<u>100% J&S</u>	<u>50% J&S</u>
Active retirements	90%	3.5%	6.5%	0%
Deferred vested	80%	7%	13%	0%
Future disabilities	90%	3.5%	6.5%	0%
Future deaths	90%	0%	0%	10%

Percent married 85% for male participants; 60% for female participants. Used to value pre-retirement surviving spouse benefits and in determining the optional forms expected to be elected at commencement

Spouse age Male participants: spouse 2 years younger.
Female participants: spouse 3 years older.

Timing of benefit payments Annuity payments are payable monthly at the beginning of the month and lump sum payments are payable on date of decrement.

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Methods

Valuation date	First day of plan year.
Funding target	Present value of accrued benefits as required by regulations under IRC §430.
Target normal cost	Present value of benefits expected to accrue during the plan year plus plan-related expenses expected to be paid from plan assets during the plan year as required by regulations under IRC §430.
Decrement timing	<p>The approach used is called rounded middle of year (rounded MOY) decrement timing. Most events are assumed to occur at the middle of year during which the eligibility condition will be met or the start/end date will occur. For death and disability decrements, the rate applied is based on the participant's rounded age (nearest integer age) at the beginning of the year, to align with the methodology generally used to create those rate tables. For retirement and withdrawal decrements: the age is generally the participant's rounded age at the middle of the year.</p>
Actuarial value of assets	<p>Average of the fair market value of assets on the valuation date and 12 and 24 months preceding the valuation date, adjusted for contributions, benefits, administrative expenses and expected earnings (with such expected earnings limited as described in IRS Notice 2009-22). The average asset value must be within 10% of market value, including discounted contributions receivable (discounted using the effective interest rate for the prior plan year.)</p> <p>The method of computing the actuarial value of assets complies with rules governing the calculation of such values under the Pension Protection Act of 2006 (PPA). These rules produce smoothed values that reflect the underlying market value of plan assets but fluctuate less than the market value. As a result, the actuarial value of assets will be lower than the market value in some years and greater in other years. However, over the long term under PPA's smoothing rules, the method has a significant bias to produce an actuarial value of assets that is below the market value of assets.</p>

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Benefits not valued

All benefits described in the Plan Provisions section of this report were valued. We are not aware of any significant benefits required to be valued that were not.

Sources of Data and Other Information

The plan sponsor, through its third party administrator, furnished participant data as of January 1, 2022 for the Houston Refining LP Retirement Plan for Represented Employees. Information on assets, contributions and plan provisions was supplied by the plan sponsor. Data and other information were reviewed for reasonableness and consistency, but no audit was performed. Assumptions or estimates were made when data was not available. These assumptions were communicated to LyondellBasell Industries in a letter dated July 22, 2022.

We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

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Assumptions Rationale - Significant Economic Assumptions

Discount rate	The basis chosen was selected by the plan sponsor from among choices prescribed by law, all of which are based on observed market data over certain periods of time.
Lump sum conversion rate	As required by IRC §430, lump sum benefits are valued using “annuity substitution”, so that the interest rates assumed are effectively the same as described above for the interest rate.
Plan-related expenses	As required by regulations, plan-related expenses are calculated by estimating the expenses to be paid from the trust during the coming year (including, for example, expected PBGC premiums and actuarial, accounting, legal, administration and trustee fees to be paid from the trust).
Rates of increase in:	
▪ Compensation	The salary increase assumption is based on an experience study undertaken by Mercer using the experience from certain plans from January 1, 2013 through January 1, 2018.
▪ Assumed return for asset smoothing	We understand the expected investment return represents the plan sponsor’s estimate of future experience for the trust asset returns net of plan expenses. The assumed return was chosen by the client with the help of their investment advisers for the 2021 plan year under U.S. GAAP. Although determining the expected rate of return on plan assets was not within the scope of our work, it is the client’s best estimate and we determined that it does not significantly conflict with what would be reasonable based on their asset allocation.

Assumptions Rationale - Significant Demographic Assumptions

Healthy Mortality	Assumptions used for funding purposes are as prescribed by IRC §430(h).
Disabled Mortality	Assumptions used for funding purposes are as prescribed by IRC §430(h).
Termination	Termination rates were based on an experience study conducted by Mercer in 2018, with annual consideration of

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whether any conditions have changed that would be expected to produce different results in the future.

Disability

Disability rates were based on an experience study conducted by Mercer in 2018, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.

Retirement

Retirement rates were based on an experience study conducted by Mercer in 2018, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.

Benefit commencement date for deferred benefits

Deferred vested participants' assumed commencement ages were based on an experience study conducted by Mercer in 2018, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.

Form of payment

Form of payment elections were based on an experience study conducted by Mercer in 2018 combined with best estimates for future experience with consideration given to whether any conditions have changed that would be expected to produce different results in the future.

Percent married

The assumed percentage married were based on an experience study conducted by Mercer in 2018 combined with best estimates for future experience with consideration given to whether any conditions have changed that would be expected to produce different results in the future.

Spouse age

The assumed age differences for spouses were based on an experience study conducted by Mercer in 2018 combined with best estimates for future experience with consideration given to whether any conditions have changed that would be expected to produce different results in the future.

Prescribed Methods

Funding methods

The methods used for funding purposes as described here, including the method of determining plan assets, are "prescribed methods set by law", as defined in the actuarial standards of practice (ASOPs). These methods are required by IRC §430, or were selected by the plan sponsor from a range of methods permitted by IRC §430.

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Changes in Assumptions and Methods

Change in assumptions since prior valuation

The segment interest rates used to calculate the funding target and target normal cost were updated to the current valuation date as required by IRC §430.

The mortality table used to calculate the funding target and target normal cost was updated to reflect the latest mortality improvement scale, as required by guidance issued by IRS under IRC §430. The mortality table was updated to include one additional year of projected mortality improvement as required by guidance issued by IRS under IRC §430.

The assumed plan-related expenses added to the target normal cost were changed from \$451,000 for the prior valuation to \$448,000 for the current valuation to account for lower expected expenses to be paid from the trust.

Change in methods since prior valuation

No method changes have occurred since the January 1, 2021 valuation.

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Schedule SB, Line 24 Change in Actuarial Assumptions

The assumed plan-related expenses added to the target normal cost were changed from \$451,000 for the prior valuation to \$448,000 for the current valuation to account for lower expected expenses to be paid from the trust.

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Schedule SB, Part V Summary of Plan Provisions

Plan Provisions

Effective date and plan year	Original plan: April 1, 1989 Restated plan: January 1, 2014 Plan year: Calendar year.
Status of the plan	The plan has ongoing benefit accruals. However, new employees hired after February 1, 2012 are not eligible to participate in the plan.
Significant events that occurred during the year	None.

Definitions

Eligible employee	All bargaining unit employees of Houston Refining LP, both full and part time, except Project and Leased Employees, and any division or group of employees excluded by the Board of Directors, hired prior to February 1, 2012.
Participation	Two years of employment.
Membership service	<p>For purpose of calculating benefit amounts, "Membership service" reflects all employment with the Company while a collectively bargained employee including:</p> <ul style="list-style-type: none">(i) Any period during military or other types of leave of absence granted by the Company,(ii) The period of a layoff due to a lack of work for economic or industrial reasons not to exceed one-year, extra service granted through the restoration of Lost Service Agreement. <p>For all other purposes, including membership eligibility, vesting, and eligibility for early commencement of benefits, "Membership service" equals the amount described above for calculating benefit amounts plus service, while a Member participated in another qualified retirement plan maintained by Houston Refining LP and its subsidiaries or affiliates, or a qualified plan of Equistar Chemicals LP, Millennium Chemicals, Inc., Lyondell Chemical Company and their Subsidiaries and Affiliates, the Atlantic Richfield Company and its Subsidiaries and Affiliates, or the Atlantic Richfield Company and its Subsidiaries and Affiliates (but only for periods up to and including September 15, 1997).</p>

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Minimum membership service The sum of:

- (i) Membership service for purposes of calculating benefit amounts
- (ii) Any period of service when a participant is directly or indirectly compensated but it not earning membership service
- (iii) Continuous periods not to exceed 60 days when a participant is not earning membership service due to, for example, a layoff, periods of disability

Vesting service

Prior to July 1, 1976: the greater of membership service or one year for each 12-month period measured from employment date and after age 18 in which at least 1,000 hours are worked.

After June 30, 1976: one year for each 12-month period measured from July 1, 1976 in which at least 1,000 hours are worked.

Annual base pay Base salary wages excluding all extra pay such as overtime, premiums, bonuses, or other allowances.

Average final base pay The average of the highest three consecutive calendar years of annual base pay during the member's last ten years of membership service. Pay during disability is projected at the rate in effect at disability.

Active Transfer-out

Active participants that transfer into another business unit of the plan sponsor continue accruing vesting and membership service for purposes other than calculating benefit amounts, but not membership service for purposes of calculating benefit amounts. Annual base pay earned during this period is accounted for in average final base pay.

Participants who terminated or transferred prior to February 1, 2012 that are rehired into the Company as bargaining unit employees continue to be treated as active transfers-out, even after rehire.

Accumulated contributions Contributions previously required for membership, with interest compounded annually. The accumulated contribution is converted to an annuity using the rates in the following table:

Age at benefit commencement	Annuity factor
70 and older	8.60
69	8.86
68	9.04
67	9.24

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66	9.44
65	9.63
64	9.63
63	9.63
62	9.63
61	9.63
60	9.63
59	10.70
58	10.86
57	11.01
56	11.17
55	11.33

Disability retirement benefit One-twelfth of the smaller of (a) or (b), not less than (c) where:

- (a) 20% of average final base pay
- (b) Amount member would have received as a normal retirement benefit at age 65 based on average final base pay at time of disability retirement,
- (c) \$156 per year of minimum membership service.

Monthly pension benefit One-twelfth of the greater of (a) or (b), not less than (c) where:

- (a) \$156 per year of minimum membership service. The minimum does not apply to participants who terminate prior to retirement for any reason other than death
- (b)
 - (i) 1.18% of average final base pay, not exceeding the Social Security integration level, times years of membership service not in excess of 35 years; plus
 - (ii) 1.54% of average final base pay in excess of the Social Security integration level compensation times years of membership service not in excess of 35 years; plus
 - (iii) 1.45% of average final base pay times membership service in excess of 35 years,
- (c) The member's accrued benefit as of December 31, 1988 under the prior formula.

Social Security integration level \$37,300 in 2022, indexed annually thereafter.

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Supplemental disability allowance One-twelfth of 0.5% of average final base pay, not exceeding the Social Security integration level, times years of membership service.

Social Security benefit The projected amount of the participant's primary Social Security benefit according to the law in effect at the date of termination of employment assuming continuation of then current earnings to age 65.

Eligibility for Benefits

Normal retirement Retirement at or after age 65.

Early retirement Retirement before age 65 after both attaining age 55 and completing ten years of membership service. For this purpose, membership service includes membership service under other LyondellBasell Companies plans and certain predecessor plans.

Deferred vested Termination for reasons other than death or retirement after completing two or more years of vesting service.

Deferred survivor benefit Death while not eligible for normal or early retirement benefits, with two or more years of vesting service.

Survivor benefit Death while eligible for normal or early retirement.

Disability A participant is considered disabled if they completed ten years of membership service and The Benefits Administrative Committee determines, based on supporting medical information, that the Member is totally and permanently disabled for Company Service.

Benefits Paid Upon the Following Events

Normal retirement Monthly pension benefit determined as of retirement date.

Early retirement Monthly pension benefit determined as of early retirement date, reduced 5/12 of 1% for each month that the member's early retirement date precedes age 60.

Termination with deferred vested benefit Monthly pension benefit determined as of termination date, payable from age 65. If member has 10 or more years of membership service, commencement age can be as early as 55 with reduction of 5/12 of 1% for each month that the member's early retirement date precedes age 60.

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Deferred survivor benefit	The amount the member's beneficiary would have received if the member had terminated employment on the date of death, survived to the earliest date that a deferred allowance could have commenced, retired with a 50% joint and survivor annuity with the spouse or other designated beneficiary (or estate, if no designation) if not married. Surviving spouses may elect to receive an annuity or as a lump sum payment, while other designated beneficiaries must receive a lump sum.
Survivor benefit	The amount the member's spouse would have received if the member had terminated employment on the date of death, retired with a 50% joint and survivor annuity with the spouse or other designated beneficiary (or estate, if no designation) if not married. Surviving spouses may elect to receive an annuity or as a lump sum payment, while other designated beneficiaries must receive a lump sum.
Disability retirement	Unreduced disability retirement benefit, payable immediately.
Supplemental disability benefit	Supplemental month benefit payable before any Social Security benefit, but no later than age 62.

Other Plan Provisions

Form of benefits	<p>Deferred survivor and survivor benefits are payable only as described above. The normal form of payment for monthly pension benefits is a life annuity with a 60-payment guarantee if the member has no spouse as of the date payments begin and a 50% joint and survivor annuity if the member is married as of the date payments begin. Optional forms of payment include:</p> <p>Option I: Reserve benefit option Option II: Joint & survivor annuity (100%, 75%, 50%, 25%) Option III: 120- or 240-months certain and life annuity Option IV: Lump sum payment Option V: Level income option</p>
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Actuarial equivalence for alternative forms of payment	Amount of an alternative form of benefit (other than a lump sum) which has a value equivalent to the benefit or benefits otherwise payable under the plan, computed using the rates in the following tables.
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Age at benefit commencement	100% J&S	75% J&S	50% J&S	25% J&S
70	.712	.767	.832	.9125
69	.719	.773	.837	.9150
68	.726	.780	.841	.9175
67	.734	.786	.846	.9200

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66	.741	.793	.852	.9225
65	.749	.799	.857	.9250
64	.757	.806	.862	.9275
63	.765	.813	.867	.9300
62	.772	.819	.871	.9325
61	.779	.825	.876	.9350
60	.787	.831	.881	.9375
59	.793	.837	.885	.9400
58	.800	.842	.889	.9425
57	.807	.848	.893	.9450
56	.813	.853	.897	.9475
55	.819	.858	.900	.9500

Age at benefit commencement	10 Year Certain & Life	20 Year Certain & Life	Social Security leveling income option
70	.900	.800	N/A
69	.901	.800	N/A
68	.910	.800	N/A
67	.918	.800	N/A
66	.927	.800	N/A
65	.934	.800	1.00
64	.941	.800	.92
63	.948	.801	.84
62	.954	.817	.76
61	.959	.832	.68
60	.963	.846	.60
59	.967	.859	.56
58	.970	.871	.52
57	.973	.882	.48
56	.976	.893	.44
55	.978	.902	.40

If member is more than five years older than the joint annuitant, the retirement factor shall be decreased as follows for each year over five that the member is older than the joint annuitant's age:

	100% Benefit	75% Benefit	50% Benefit	25% Benefit
Subtract:	.01	.0075	.0050	.0025

If joint annuitant is more than five years older than the member, the retirement factor shall be increased (but never greater than 1.0) as

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follows for each year over five that the joint annuitant is older than the member:

	100% Benefit	75% Benefit	50% Benefit	25% Benefit
Subtract:	.01	.0075	.0050	.0025

The initial annuity for the reserve option is equal to 88% of the basic allowance.

Actuarial Equivalence for lump sums prior to December 1, 2016 and after December 31, 2018

PPA mortality and interest rates equal to the average of the 3-tiered minimum present value segment rate for the third, fourth, and fifth months immediately preceding the first day of the calendar quarter during which the lump sum payment occurs.

Actuarial equivalence for lump sums after November 30, 2016 and before January 1, 2019

PPA mortality and interest rates equal to the second month immediately preceding the first day of the calendar year during which the lump sum payment occurs (with protection of actuarial equivalence basis above).

Special benefits due to reduction-in-force

Special benefits have periodically been extended to participants affected by a reduction-in-force.

Pension Increases

None

Plan participants' contributions

None

Maximum limits on benefits and pay

All benefits and pay for any calendar year may not exceed the maximum limitations for that year as defined in the Internal Revenue Code. The plan provides for increasing the dollar limits automatically as such changes take effect.

Future Plan Changes

Willis Towers Watson is not aware of any future plan changes that are required to be reflected in determining pension cost or in determining minimum and maximum contributions.

Changes in Benefits Valued Since Prior Year

None.

Plan Name: Houston Refining LP Retirement Plan for Represented Employees
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Schedule SB, Line 26a Schedule of Active Participant Data as of January 1, 2022

Attained Age	Attained Years of Credited Service ¹										Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
Under 25	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	2	0	0	0	0	0	0	2
35-39	0	0	5	17	3	0	0	0	0	0	25
40-44	0	3	9	22	12	2	0	0	0	0	48
45-49	0	1	10	18	20	4	2	0	0	0	55
50-54	1	1	3	19	17	1	10	3	0	0	55
55-59	0	1	1	7	6	5	13	6	1	0	40
60-64	0	1	1	7	4	6	7	7	6	7	46
65-69	0	0	0	0	3	0	1	2	2	2	10
70 & over	0	0	0	0	0	1	0	0	1	0	2
Total	1	7	29	92	65	19	33	18	10	9	283

¹ Age and service for purposes of determining category are based on exact (not rounded) values.

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Schedule SB, Line 32
Schedule of Amortization Bases
as of January 1, 2022

Type of Base	Date Established	Initial Amount	Remaining Amortization Period (Years)	Outstanding Balance	Amortization Payment
1. Shortfall	01/01/2022	967,008	15.00000	967,008	89,363
Total				967,008	89,363

Plan Name: Houston Refining LP Retirement Plan for Represented Employees
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Schedule SB, Line 22 Description of Weighted Average Retirement Age as of January 1, 2022

The average retirement age for Line 22 was calculated by creating a hypothetical life table with retirement as the only decrement, and then computing the average retirement age for the table.

x	q_x^r	l_x	${}_{x-55}p_{55} = l_x / l_{55}$	$q_x^r * l_x / l_{55}$	$x * q_x^r * l_x / l_{55}$
55	0.05	1,000	1.000000	0.050000	2.750000
56	0.05	950	0.950000	0.047500	2.660000
57	0.05	903	0.902500	0.045125	2.572125
58	0.10	857	0.857375	0.085738	4.972775
59	0.10	772	0.771638	0.077164	4.552661
60	0.15	694	0.694474	0.104171	6.250264
61	0.10	590	0.590303	0.059030	3.600846
62	0.20	531	0.531272	0.106254	6.587778
63	0.10	425	0.425018	0.042502	2.677613
64	0.20	383	0.382516	0.076503	4.896207
65	0.25	306	0.306013	0.076503	4.972710
66	0.25	230	0.229510	0.057377	3.786910
67	0.20	172	0.172132	0.034426	2.306572
68	0.20	138	0.137706	0.027541	1.872799
69	0.20	110	0.110165	0.022033	1.520272
70	1.00	88	0.088132	0.088132	6.169220
Average age at retirement					62.148752
Rounded for Schedule SB item 22					62

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Schedule SB – Statement by Enrolled Actuary

Plan Sponsor	Houston Refining LP
EIN/PN	76-0395303/061
Plan Name	Houston Refining LP Retirement Plan for Represented Employees
Valuation Date	January 1, 2022
Enrolled Actuary	David Anderson
Enrollment Number	23-07493

The actuarial assumptions that are not mandated by IRC § 430 and regulations, represent the enrolled actuary's best estimate of anticipated experience under the plan, subject to the following conditions:

The actuarial valuation, on which the information in this Schedule SB is based, has been prepared in reliance upon the employee and financial data furnished by the plan administrator and the trustee. The enrolled actuary has not made a rigorous check of the accuracy of this information but has accepted it after reviewing it and concluding it is reasonable in relation to similar information furnished in previous years. The amounts of contributions and dates paid shown in Item 18 of Schedule SB were listed in reliance on information provided by the plan administrator and/or trustee.

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Schedule SB, Part V Summary of Plan Provisions

Plan Provisions

Effective date and plan year	Original plan: April 1, 1989 Restated plan: January 1, 2014 Plan year: Calendar year.
Status of the plan	The plan has ongoing benefit accruals. However, new employees hired after February 1, 2012 are not eligible to participate in the plan.
Significant events that occurred during the year	None.

Definitions

Eligible employee	All bargaining unit employees of Houston Refining LP, both full and part time, except Project and Leased Employees, and any division or group of employees excluded by the Board of Directors, hired prior to February 1, 2012.
Participation	Two years of employment.
Membership service	<p>For purpose of calculating benefit amounts, "Membership service" reflects all employment with the Company while a collectively bargained employee including:</p> <ul style="list-style-type: none">(i) Any period during military or other types of leave of absence granted by the Company,(ii) The period of a layoff due to a lack of work for economic or industrial reasons not to exceed one-year, extra service granted through the restoration of Lost Service Agreement. <p>For all other purposes, including membership eligibility, vesting, and eligibility for early commencement of benefits, "Membership service" equals the amount described above for calculating benefit amounts plus service, while a Member participated in another qualified retirement plan maintained by Houston Refining LP and its subsidiaries or affiliates, or a qualified plan of Equistar Chemicals LP, Millennium Chemicals, Inc., Lyondell Chemical Company and their Subsidiaries and Affiliates, the Atlantic Richfield Company and its Subsidiaries and Affiliates, or the Atlantic Richfield Company and its Subsidiaries and Affiliates (but only for periods up to and including September 15, 1997).</p>

Plan Name:	Houston Refining LP Retirement Plan for Represented Employees
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Minimum membership service The sum of:

- (i) Membership service for purposes of calculating benefit amounts
- (ii) Any period of service when a participant is directly or indirectly compensated but it not earning membership service
- (iii) Continuous periods not to exceed 60 days when a participant is not earning membership service due to, for example, a layoff, periods of disability

Vesting service

Prior to July 1, 1976: the greater of membership service or one year for each 12-month period measured from employment date and after age 18 in which at least 1,000 hours are worked.

After June 30, 1976: one year for each 12-month period measured from July 1, 1976 in which at least 1,000 hours are worked.

Annual base pay Base salary wages excluding all extra pay such as overtime, premiums, bonuses, or other allowances.

Average final base pay The average of the highest three consecutive calendar years of annual base pay during the member's last ten years of membership service. Pay during disability is projected at the rate in effect at disability.

Active Transfer-out

Active participants that transfer into another business unit of the plan sponsor continue accruing vesting and membership service for purposes other than calculating benefit amounts, but not membership service for purposes of calculating benefit amounts. Annual base pay earned during this period is accounted for in average final base pay.

Participants who terminated or transferred prior to February 1, 2012 that are rehired into the Company as bargaining unit employees continue to be treated as active transfers-out, even after rehire.

Accumulated contributions Contributions previously required for membership, with interest compounded annually. The accumulated contribution is converted to an annuity using the rates in the following table:

Age at benefit commencement	Annuity factor
70 and older	8.60
69	8.86
68	9.04
67	9.24

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66	9.44
65	9.63
64	9.63
63	9.63
62	9.63
61	9.63
60	9.63
59	10.70
58	10.86
57	11.01
56	11.17
55	11.33

Disability retirement benefit One-twelfth of the smaller of (a) or (b), not less than (c) where:

- (a) 20% of average final base pay
- (b) Amount member would have received as a normal retirement benefit at age 65 based on average final base pay at time of disability retirement,
- (c) \$156 per year of minimum membership service.

Monthly pension benefit One-twelfth of the greater of (a) or (b), not less than (c) where:

- (a) \$156 per year of minimum membership service. The minimum does not apply to participants who terminate prior to retirement for any reason other than death
- (b)
 - (i) 1.18% of average final base pay, not exceeding the Social Security integration level, times years of membership service not in excess of 35 years; plus
 - (ii) 1.54% of average final base pay in excess of the Social Security integration level compensation times years of membership service not in excess of 35 years; plus
 - (iii) 1.45% of average final base pay times membership service in excess of 35 years,
- (c) The member's accrued benefit as of December 31, 1988 under the prior formula.

Social Security integration level \$37,300 in 2022, indexed annually thereafter.

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Supplemental disability allowance	One-twelfth of 0.5% of average final base pay, not exceeding the Social Security integration level, times years of membership service.
Social Security benefit	The projected amount of the participant's primary Social Security benefit according to the law in effect at the date of termination of employment assuming continuation of then current earnings to age 65.

Eligibility for Benefits

Normal retirement	Retirement at or after age 65.
Early retirement	Retirement before age 65 after both attaining age 55 and completing ten years of membership service. For this purpose, membership service includes membership service under other LyondellBasell Companies plans and certain predecessor plans.
Deferred vested	Termination for reasons other than death or retirement after completing two or more years of vesting service.
Deferred survivor benefit	Death while not eligible for normal or early retirement benefits, with two or more years of vesting service.
Survivor benefit	Death while eligible for normal or early retirement.
Disability	A participant is considered disabled if they completed ten years of membership service and The Benefits Administrative Committee determines, based on supporting medical information, that the Member is totally and permanently disabled for Company Service.

Benefits Paid Upon the Following Events

Normal retirement	Monthly pension benefit determined as of retirement date.
Early retirement	Monthly pension benefit determined as of early retirement date, reduced 5/12 of 1% for each month that the member's early retirement date precedes age 60.
Termination with deferred vested benefit	Monthly pension benefit determined as of termination date, payable from age 65. If member has 10 or more years of membership service, commencement age can be as early as 55 with reduction of 5/12 of 1% for each month that the member's early retirement date precedes age 60.

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Deferred survivor benefit	The amount the member's beneficiary would have received if the member had terminated employment on the date of death, survived to the earliest date that a deferred allowance could have commenced, retired with a 50% joint and survivor annuity with the spouse or other designated beneficiary (or estate, if no designation) if not married. Surviving spouses may elect to receive an annuity or as a lump sum payment, while other designated beneficiaries must receive a lump sum.
Survivor benefit	The amount the member's spouse would have received if the member had terminated employment on the date of death, retired with a 50% joint and survivor annuity with the spouse or other designated beneficiary (or estate, if no designation) if not married. Surviving spouses may elect to receive an annuity or as a lump sum payment, while other designated beneficiaries must receive a lump sum.
Disability retirement	Unreduced disability retirement benefit, payable immediately.
Supplemental disability benefit	Supplemental month benefit payable before any Social Security benefit, but no later than age 62.

Other Plan Provisions

Form of benefits	<p>Deferred survivor and survivor benefits are payable only as described above. The normal form of payment for monthly pension benefits is a life annuity with a 60-payment guarantee if the member has no spouse as of the date payments begin and a 50% joint and survivor annuity if the member is married as of the date payments begin. Optional forms of payment include:</p> <p>Option I: Reserve benefit option Option II: Joint & survivor annuity (100%, 75%, 50%, 25%) Option III: 120- or 240-months certain and life annuity Option IV: Lump sum payment Option V: Level income option</p>
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Actuarial equivalence for alternative forms of payment	Amount of an alternative form of benefit (other than a lump sum) which has a value equivalent to the benefit or benefits otherwise payable under the plan, computed using the rates in the following tables.
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Age at benefit commencement	100% J&S	75% J&S	50% J&S	25% J&S
70	.712	.767	.832	.9125
69	.719	.773	.837	.9150
68	.726	.780	.841	.9175
67	.734	.786	.846	.9200

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66	.741	.793	.852	.9225
65	.749	.799	.857	.9250
64	.757	.806	.862	.9275
63	.765	.813	.867	.9300
62	.772	.819	.871	.9325
61	.779	.825	.876	.9350
60	.787	.831	.881	.9375
59	.793	.837	.885	.9400
58	.800	.842	.889	.9425
57	.807	.848	.893	.9450
56	.813	.853	.897	.9475
55	.819	.858	.900	.9500

Age at benefit commencement	10 Year Certain & Life	20 Year Certain & Life	Social Security leveling income option
70	.900	.800	N/A
69	.901	.800	N/A
68	.910	.800	N/A
67	.918	.800	N/A
66	.927	.800	N/A
65	.934	.800	1.00
64	.941	.800	.92
63	.948	.801	.84
62	.954	.817	.76
61	.959	.832	.68
60	.963	.846	.60
59	.967	.859	.56
58	.970	.871	.52
57	.973	.882	.48
56	.976	.893	.44
55	.978	.902	.40

If member is more than five years older than the joint annuitant, the retirement factor shall be decreased as follows for each year over five that the member is older than the joint annuitant's age:

	100% Benefit	75% Benefit	50% Benefit	25% Benefit
Subtract:	.01	.0075	.0050	.0025

If joint annuitant is more than five years older than the member, the retirement factor shall be increased (but never greater than 1.0) as

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follows for each year over five that the joint annuitant is older than the member:

	100% Benefit	75% Benefit	50% Benefit	25% Benefit
Subtract:	.01	.0075	.0050	.0025

The initial annuity for the reserve option is equal to 88% of the basic allowance.

Actuarial Equivalence for lump sums prior to December 1, 2016 and after December 31, 2018

PPA mortality and interest rates equal to the average of the 3-tiered minimum present value segment rate for the third, fourth, and fifth months immediately preceding the first day of the calendar quarter during which the lump sum payment occurs.

Actuarial equivalence for lump sums after November 30, 2016 and before January 1, 2019

PPA mortality and interest rates equal to the second month immediately preceding the first day of the calendar year during which the lump sum payment occurs (with protection of actuarial equivalence basis above).

Special benefits due to reduction-in-force

Special benefits have periodically been extended to participants affected by a reduction-in-force.

Pension Increases

None

Plan participants' contributions

None

Maximum limits on benefits and pay

All benefits and pay for any calendar year may not exceed the maximum limitations for that year as defined in the Internal Revenue Code. The plan provides for increasing the dollar limits automatically as such changes take effect.

Future Plan Changes

Willis Towers Watson is not aware of any future plan changes that are required to be reflected in determining pension cost or in determining minimum and maximum contributions.

Changes in Benefits Valued Since Prior Year

None.

Plan Name:	Houston Refining LP Retirement Plan for Represented Employees
EIN / PN:	76-0395303/061
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Valuation Date:	January 1, 2022

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Schedule SB, Line 32
Schedule of Amortization Bases
as of January 1, 2022

Type of Base	Date Established	Initial Amount	Remaining Amortization Period (Years)	Outstanding Balance	Amortization Payment
1. Shortfall	01/01/2022	967,008	15.00000	967,008	89,363
Total				967,008	89,363

Plan Name: Houston Refining LP Retirement Plan for Represented Employees
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Schedule SB, Line 24 Change in Actuarial Assumptions

The assumed plan-related expenses added to the target normal cost were changed from \$451,000 for the prior valuation to \$448,000 for the current valuation to account for lower expected expenses to be paid from the trust.

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